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Trends and Impacts of India's Antidumping Enforcement

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I. Introduction

Over the past decade, India has become the world's leading user of antidumping measures. This paper examines the recent literature and data on trends in Indian antidumping, considering the causes and implications of the increased use of this category of trade remedy for India. Among issues to be addressed are the extent to which this increased antidumping activity can be viewed as substituting for reduced use of other mechanisms for protection (for example is this simply a "release valve" response to tariff liberalization more generally), and the sectoral impacts on US exporters.

India has filed roughly 20 percent of all global antidumping cases, quite disproportionate to its share of global imports of 2%. These cases have been narrowly focused on the chemicals industry, though little evidence suggests a major impact in reducing India's imports of chemical products (either generally or from the U.S.). India's antidumping has been largely aimed at other developing nations, with apparently little impact on U.S. exports.

For years India had a very restrictive import regime. Panagariya (2008, p. 85) notes:

> Until 1976, an import policy was issued every six months in the form of the so-called Red Book. The main part of the policy was a long list of importable products with restrictions stated for each product regarding who could import it, up to what proportion of the need as measured by production capacity, which varieties, and, sometimes, from which source."

Bown and Tovar (2008, pp. 6-7) concisely summarize India's post-war trade policy as follows:

> Between 1947 and the late 1980s, India followed an inward-oriented development strategy. A combination of external shocks in the late 1980s and early 1990s led to large macroeconomic imbalances and as a result, India requested a stand-by arrangement from the International Monetary Fund in August of 1991. Among the conditions for the arrangement was that India had to implement major structural reforms, including trade liberalization, financial sector reform and tax reform.
> ……
> Prior to the IMF arrangement, the 1990-91 Indian import-weighted average tariff was 87 percent, the simple average was 128 percent, and some tariffs were over 300 percent. The maximum tariff fell from 355 percent in 1990-91 to 150 percent in 1991-92 and 30.8 percent in 2002-03.

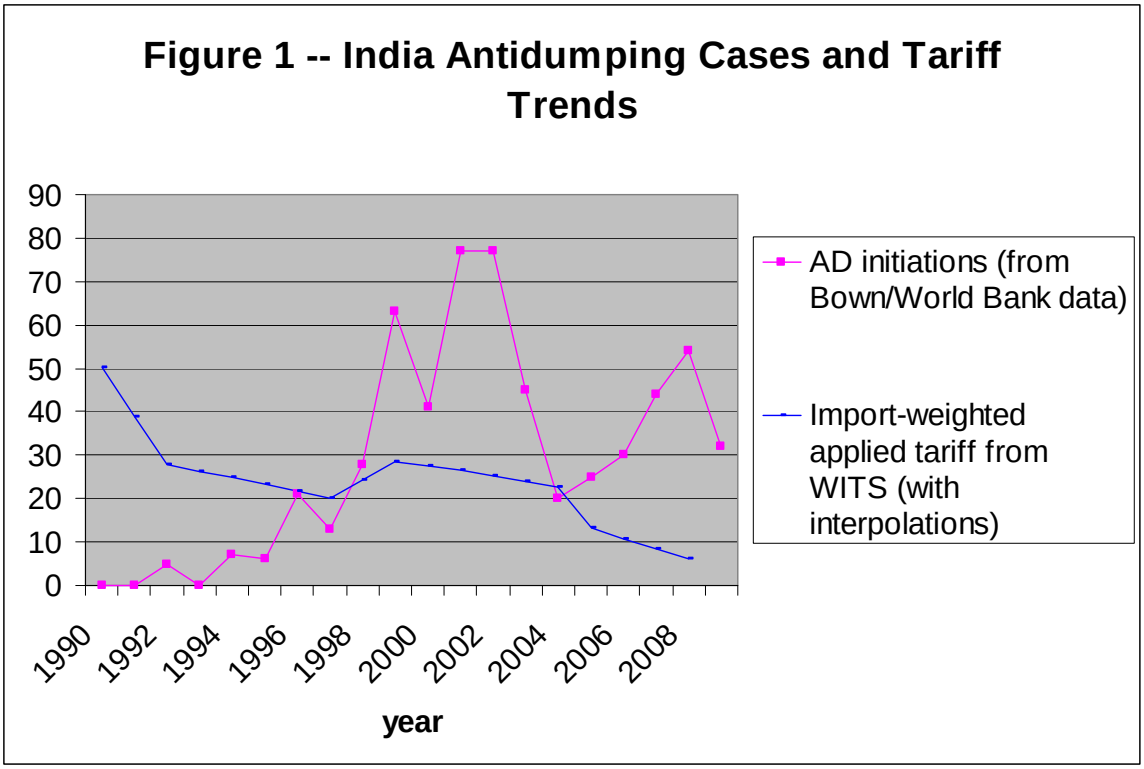
Goldar (2005) states that most quantitative restrictions on manufactured intermediate goods were removed in 1991 and tariff rates fell substantially during Uruguay Round negotiations. He notes, however, that "nearly all consumer goods remained subject to import licensing, in practice an import ban" (p. 2). But, by the end of the 1990s significant liberalization of quantitative restrictions, especially of textile and apparel products, occurred. Along with this, tariffs have continued to fall, with weighted-average applied tariffs as low as 10 percent by now. In recent years India's energetic use of administrative forms of trade protection such as antidumping and safeguard (escape clause) measures, described in some detail below, has raised questions as to the net impact of its trade policy on openness to imports.

II. History of India's use of antidumping

India imposed its first anti-dumping duty in 1992.[1] Narayanan (2006) explains the lack of earlier use of anti-dumping by the highly protectionist trade regime in effect from independence in 1947 through 1991. "On the customs tariff side, the import-weighted average tariff for all imports was as high as 87 percent – for consumer goods as high as 153 percent, and for manufactured goods 92 percent" (p. 1084). Combined with restrictive licensing and quantitative restrictions, there was no need for anti-dumping.

However, with declining protection via tariffs and quotas has come dramatically increased use of antidumping by India. Figure 1 demonstrates the very strong uptrend in Indian AD cases from early 1990s through 2002 (peaking at about 80 cases the latter year); after dropping for two years (though still 20 cases in 2004) there was a strong upswing through 2008 (over 50 cases that year) before dropping some in 2009.

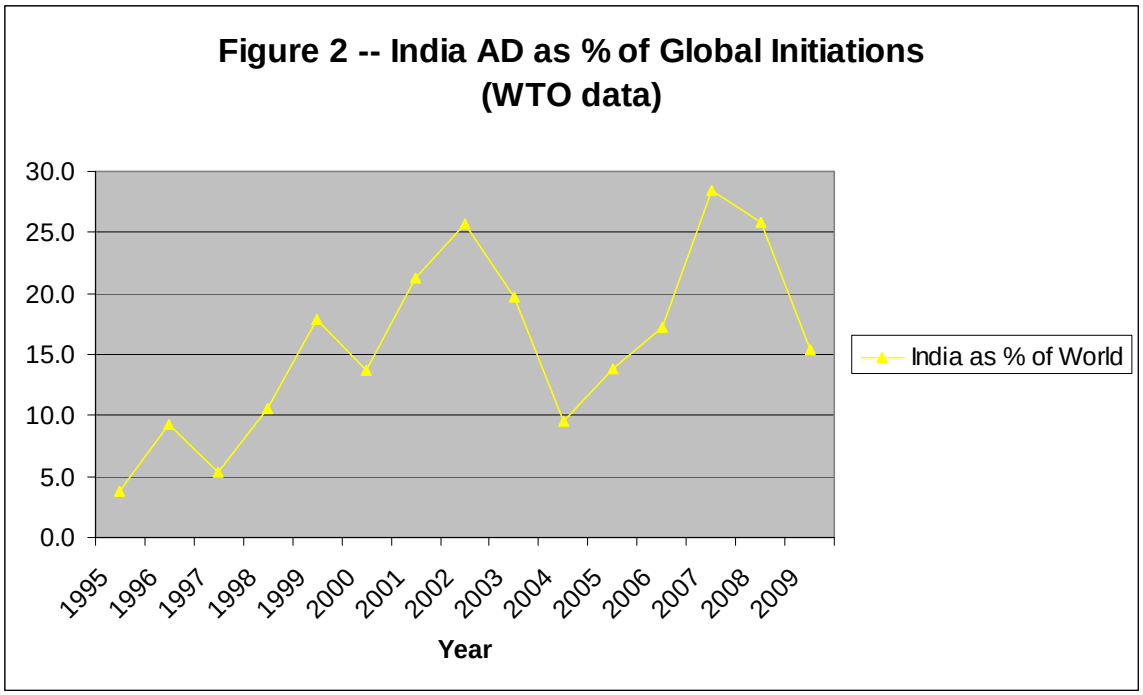
[1] However, Indian Anti-dumping enforcement was first authorized in 1985 (though rules were amended in 1995 for WTO-consistency. Unlike the process in the U.S., a single agency – the Directorate General of Anti-Dumping & Allied Duties (DGAD) – is responsible for investigating and making determinations on all aspects of an antidumping case, that is, both dumping margin and injury determinations.



Though use of antidumping globally increased quite a bit through 2002 as well, Figure 2 illustrates that India's ***share*** of cases initiated grew strongly to more than on-quarter of all global cases in 2002, and after a dip grew again to 29 percent in 2007 before dropping some to 26 percent in 2008 and 15 percent in 2009.[2] While correlation is not causation, note (in Figure 1) the clear inverse correlation between various measures of tariff protection and AD enforcement – at least through 2002 and again after 2004. It is worth noting that India's share of global antidumping enforcement is far disproportionate to its share of global trade. Over the past decade India's share of global imports has more than doubled but remains (as of 2009) at just over 2 percent. [3]

[2] As more than 80 percent of Indian cases initiated have led to measures imposed, the share of global measures imposed has been even higher in most years.

[3] Of course, given the tremendous growth in global trade over the past decade, this increase in India's share of global imports is consistent with even stronger growth in its import value relative to GDP (which has tripled to about 30%) over this period.



III. Previous Literature on Causes and Effects of Indian antidumping

In putting the Indian antidumping regime in international perspective, Baruah (2007) notes (p. 1170) that "until the 1980s its use was confined to only a few traditional users such as the USA, the EU, Australia, Canada and New Zealand." In seeking to explain why AD has increased so dramatically in India, Baruah looks at growth in imports and import penetration, performance of the domestic industry (in terms of both profitability and capacity utilization), and political/rent-seeking motivations (proxied by market concentration of the domestic industry), finding these all to play roles (through a somewhat descriptive discussion of patterns in the data).

Baruah attempts a statistical (logit) analysis of the decision to impose duties, *given initiation of a case*, but finds little in the way of clear-cut results (though some weak evidence that industries with many firms are more likely to get measures imposed). However, the failure to obtain strong results is not surprising as there is relatively little variation in the dependent variable (85% of cases in his sample had duties imposed).

Bown and Tovar (forthcoming) conduct a somewhat more sophisticated econometric analysis to explain Indian antidumping usage (they include safeguard cases as well, but these are relatively small in number relative to the antidumping cases). They observe (p. 2) that "… products that subsequently sought antidumping protection in the early 2000s, on average, started with higher tariffs and received larger tariff cuts over the 1990s." Overall, they claim to show that (p. 3) "… the larger the good's initial tariff cut, the more antidumping and safeguards protection the Indian producers of that good subsequently demanded and received ex post."; and their interpretation is that " … India used new product-specific protection in the early 2000s to escape from 1990s trade liberalization announcements that, ex post, it

found too deep to sustain."[4] However, this pattern is not found across-the-board; somewhat surprisingly they find (pp. 4-5) "… no evidence of a link between 1990s tariff cuts and subsequent resort to antidumping by India's dominant sectoral user of antidumping – the industrial chemicals sector…." Instead their major explanation for antidumping usage in this sector is retaliation for prior antidumping by trading partners targeting Indian chemical producers.[5]

While not a large literature, there have been studies examining the trade and welfare impacts of antidumping actions. Morkre and Kelly (1994), in a comprehensive study of U.S. antidumping and countervailing duty cases from 1980 through 1988, found fairly modest welfare implications. However, following up on and extending the methodology and data in USITC (1995), Galloway et al. (1999) used a CGE model to estimate a significant welfare loss ($4 billion) from antidumping (and countervailing duty orders) in place in 1993. Prusa (2001) found that U.S. antidumping duties led to more than a 30 percent reduction in the value of protected imports – estimated quantity effects were considerably larger (and cases filed which were rejected led to significant reductions in trade flows as well); given that the median duty imposed was 16 percent (and that the industries filing for protection had MFN tariffs of 4 percent on average), a significant impact is not surprising.

Vandenbussche and Zanardi (2010), estimating a gravity equation using bilateral aggregate trade data for all relatively new uses of antidumping, find that a country's total usage of antidumping reduces its imports even from countries not subject to antidumping measures (what they call a "chilling effect") – simply *adopting* an antidumping law or its *bilateral usage* seems not to have a significant import-reducing effect. Based on their estimated impacts, they conclude that Indian imports are about 10 percent lower than they would be in the absence of antidumping activity, eliminating virtually all gains from trade liberalization.

In a study specific to the Indian experience, Bown and Tovar (forthcoming), try to get at this issue indirectly by matching antidumping usage and imports and find that between 9 and 13 percent of Indian manufacturing imports (between 1992 and 2004) were in 6-digit HS categories involved in antidumping or safeguard initiations . But they acknowledge this is clearly an upper bound on influence as AD investigations are typically targeted much more narrowly than the HS-6 level. Ganguli (2008) more directly studies impacts of Indian antidumping cases on trade flows from targeted countries into India as well as *trade diversion* due to these cases on trade from non-subject countries. Using trade data at the HS 6-digit level, he applies a GMM instrumental panel estimator to explain subject and non-subject country trade flows to India across products and the years 1992 to 2002. The findings are that antidumping actions cause a drop in import values from subject countries of as much as 74% in the three years after initiation of the typical case (not surprising given an average final duty of 77 percent); non-subject import values rise, but considerably less (about

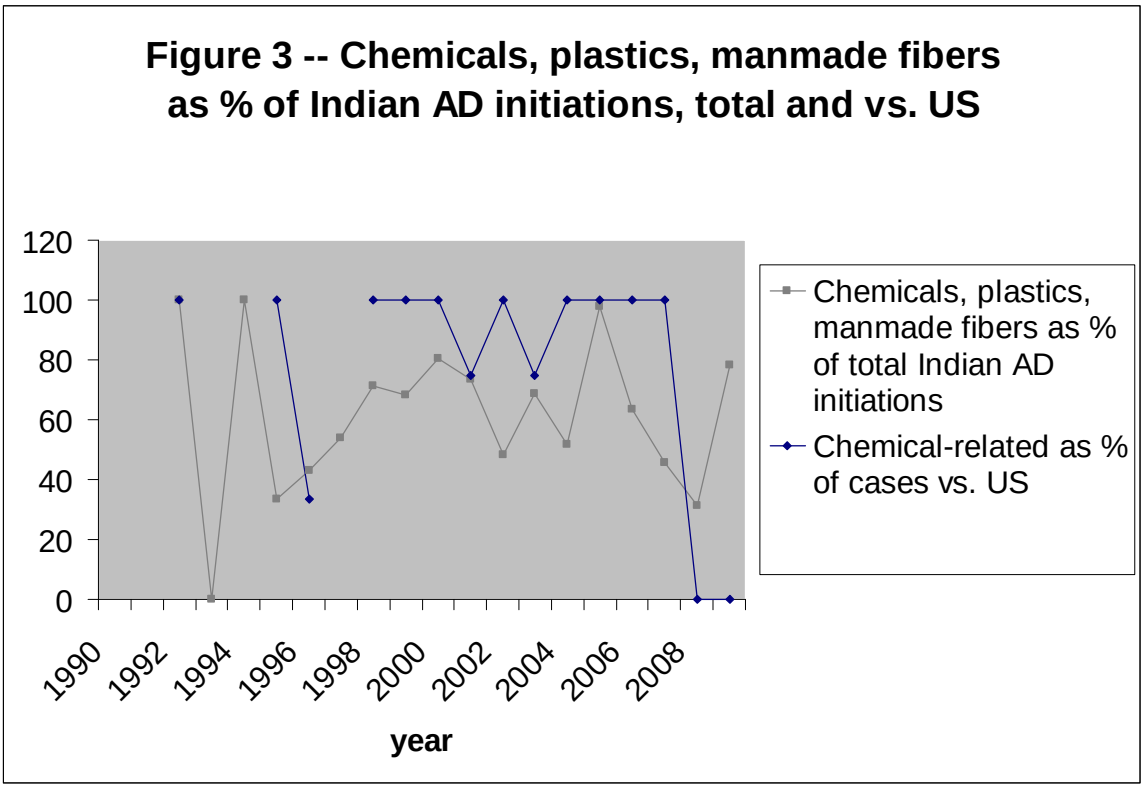
[4] They find this to be especially true for the iron and steel sector, consistent with the more general results in Feinberg and Reynolds (2007), where the interpretation is somewhat different – the (domestic political) requirements for trade liberalization were that future antidumping actions would be more readily available as needed..

[5] This result has been noted in a number of recent studies of global antidumping usage more generally, e.g., Feinberg and Reynolds (2007).

53 percent in two years, more than 60 percent over three, thought the third year impact is not quite statistically significant). On net overall imports fall by around 50 percent over three years post-initiation, suggesting antidumping has been quite effective at providing protection to Indian manufacturers in the narrow categories in which it has been applied. Some evidence is also presented suggesting price (import unit value) increases during the first few years post-initiation.

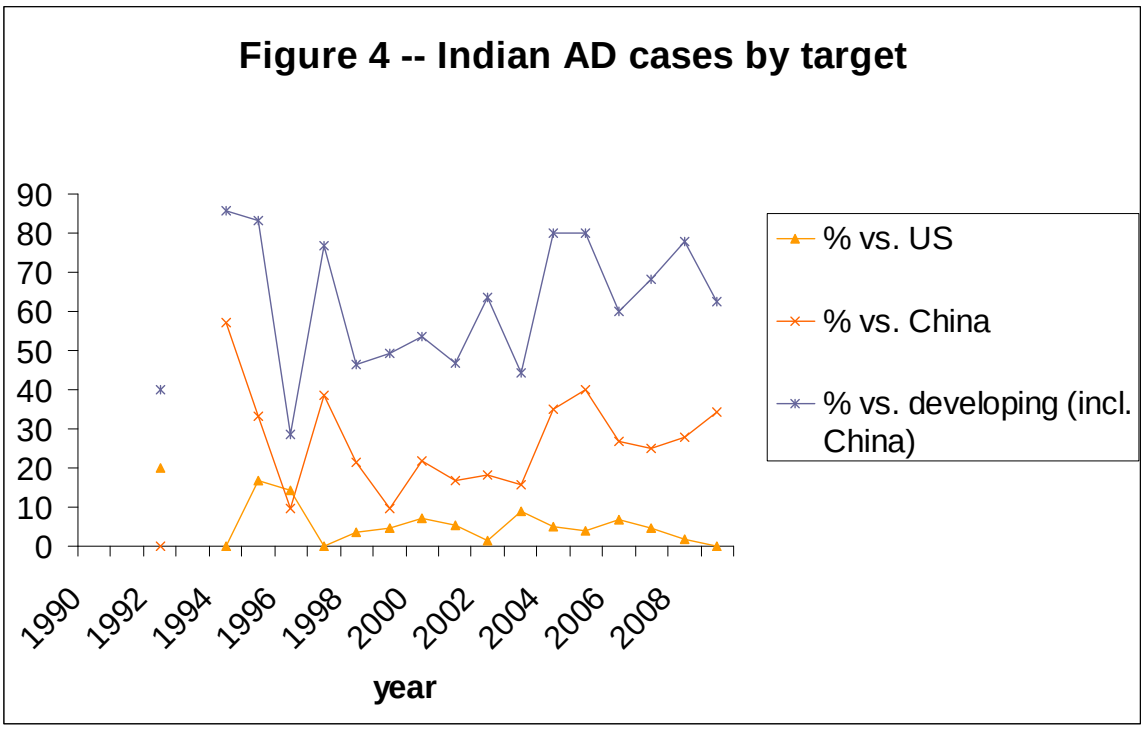
IV. Sectoral Targeting of Antidumping

Note that while AD cases are typically focused on quite narrow tariff lines, each with very small shares of all Indian imports, the four 2-digit HS sectors (chemicals, plastics, rubber) responsible for more than half of all Indian AD cases (and almost 80% of Indian cases filed against the US) had more than 10% of all Indian imports in 1996 and 1997, prior to the surge of Indian cases; this percentage fell quickly by 2000 (after 125 cases were filed in the 96-99 period) to 7.3% and has shown little variation since then (as high as 7.7%, as low as 6.8%). But the particular narrow categories in which AD cases are filed tend not to be a large part of India's foreign trade: e.g., the 5 leading 6-digit categories within the chemicals, plastics, rubber sectors in terms of their involvement in AD petitions together had imports valued at $223 million in 2000, just 6% of total Indian imports in those sectors and 0.44% of all Indian imports that year (and of course, the antidumping petitions often involve less than a complete 6-digit category and only selected foreign exporters).



Source: Bown/ World Bank data

Figure 3 illustrates the strong sectoral focus of Indian AD, protecting their chemical and related industries; over the entire period almost two-thirds of cases initiated were in chemicals, plastics, rubber, and manmade fibers. For purpose of comparison, fewer than 40% of all global cases have been in these sectors. The focus in cases targeting US exporters is more strongly in those sectors with over 80% of such cases in these chemical-related areas.



Source: Bown/World Bank data

However, it is clear that the US has never been a primary target of India's AD enforcement. Figure 4 shows that since the late 1990s, India has initiated fewer than 10% of their cases against the US, in fact overall since 1992 less than 5% of these cases have targeted US exporters. In contrast more than 20% (and in the past 5 years about 30%) have targeted China, about 60% (higher in recent years) targeting developing countries, including China.

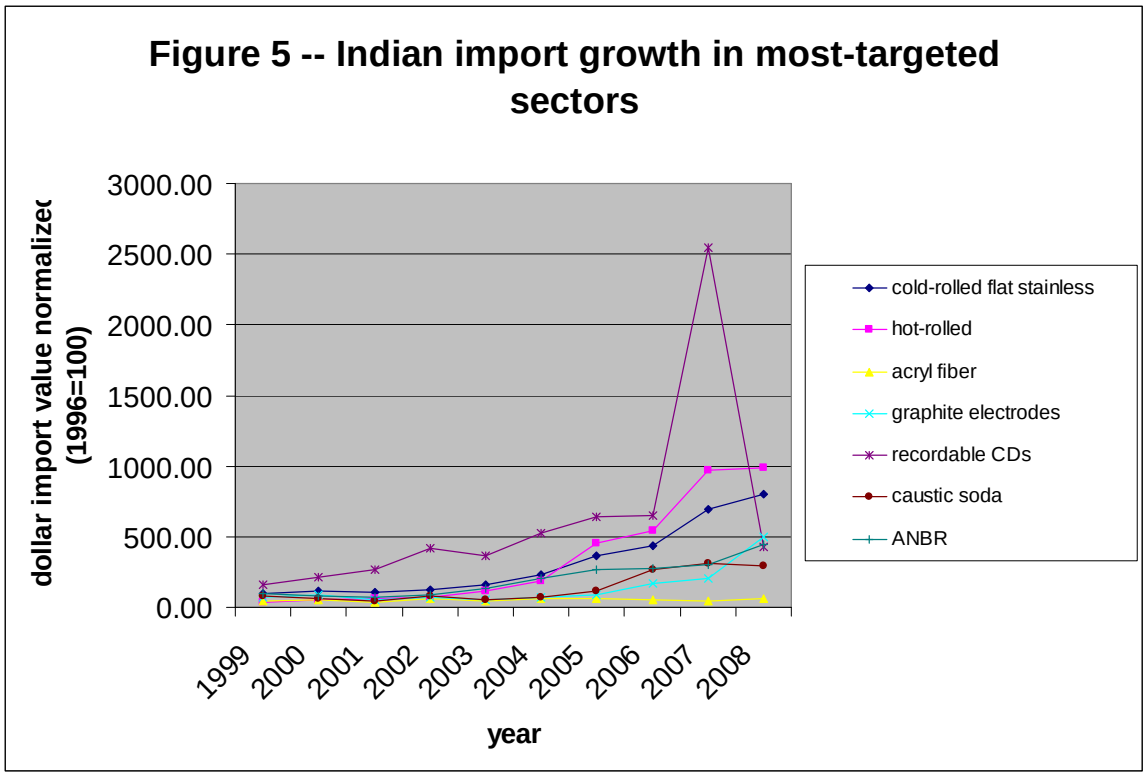
Table 1 lists all 28 cases initiated by India against US exporters between 1992 and 2009; 22 of these had antidumping duties imposed (14 of these orders remain in place); 10 of these cases are in 2-digit HS code 29 (Organic Chemicals), another 4 cases each in HS code 28 (Inorganic Chemicals) and HS code 39 (Plastics and Plastic Products) – these three categories represent 64% of all US-directed cases. Yet if we look at the trend in US exports of these HS categories to India, we find that over the period 1996 to 2008 US exports of Organic Chemicals more than tripled (to almost $600 million in value in 2008) while US exports to India of Inorganic Chemicals in 2008 were almost 18 times what they were in 1996 (at $366 million), and exports of Plastics (and related products) were almost 5 times their 1996 value (at $500 million). Of course, these are nominal figures –growth in real terms was not quite as robust –and it is quite likely that stronger growth in exports of these US industries to India would have resulted in the absence of antidumping measures.

Nevertheless, the impact on the US of Indian antidumping seems modest (duties imposed were specific in nature, making determining ad valorem equivalents difficult)..

Table 1. All Indian Antidumping Cases vs. U.S. Exporters (initiated through 2009)

PRODUCT	HS	Initiation Date	Still in place?
Vitamin AB2D3K	23099000	7/02/2001	NO (NEGATIVE)
Phenol	27079900	01/11/2007	YES
Caustic Soda	28150000	5/26/2000	YES
Hydroxyl Amine Sulphate (HAS)	28251003	3/03/2000	NO (5 YEARS)
Potassium Carbonate	28364000	08/07/2007	NO (WITHDRAWN)
Sodium cyanide	28371100	3/08/1999	YES
Oxo Alcohols	29050000	7/29/1999	NO (7 YEARS)
Isopropyl Alcohol (IPA)	29051201	6/12/2000	NO (NEGATIVE)
Isopropyl Alcohol (IPA)	29051201	11/21/2001	NO (1 YEAR)
Propylene Glycol	29053200	8/22/2003	YES
Bisphenol-A	29072300	11/20/1995	NO (5 YEARS)
Acetone	29141100	09/07/2006	YES
Cyclohexanone	29142200	10/08/2003	NO (NEGATIVE)
Aniline	29214101	9/13/1999	YES
Toluene Di-Isocyanate	29291002	10/20/2003	NO (NEGATIVE)
Vitamin-C	29362700	8/14/2002	NO (3 YEARS)
Mica Pearl Pigment	32061100	12/23/2003	YES
Certain Rubber Chemicals (MOR; PX13 and TDQ)	38123000	8/17/2004	YES
Styrene Butdiene Rubber (SBR)	39039000	4/07/1998	YES
Poly Vinyl Chloride (PVC) - Suspension Grade	39042110	06/28/2006	YES
PVC Paste Resin	39042210	06/10/1992	NO (5 YEARS)
Flexible Slabstock Polyol of molecular weight 3000 to 4000	39072000	9/21/2001	YES
Ethylene-Propylene-non-conjugated Diene Rubber (EPDM)	40027000	04/28/2005	YES
Newsprint	48010000	12/20/1996	NO (no duties imposed)
Acrylic Fibre	55033000	9/13/1996	YES
Cold Rolled Flat Products of Stainless Steel	7219 (part)	8/21/2001	NO (5 YEARS)
Cold-Rolled Flat Products of Stainless Steel	7219 (part)	11/25/2008	YES
Graphite Electrodes	85455190	9/30/1996	NO (7 YEARS)

Source: Bown/World Bank data



Source: GTIS import data

While not a rigorous test of the impact of India's antidumping on trade, Figure 5 suggests a somewhat more limited impact. The 7 products (at varying degrees of disaggregation) considered there represent those involved in the largest number of antidumping cases filed by Indian petitioners – ranging from 9 cases for Acrylonitritle Butadiene Rubber (ANBR) to 26 cases for hot-rolled steel products. With the exception of Acrylic Fiber (18 cases), all other products ended had significantly higher import values (in dollar terms, normalized to their 1996 value) in 2008 than before the surge in Indian antidumping filings.[6] This is not to say that antidumping has no impact, and it most likely does divert trade from subject countries to others and from subject products within HS categories to others. But as a broad form of protection, it has its limits.

V. Changing mix towards safeguards and away (relatively at least) from AD

In part because of the limits to the protective role of antidumping, there has been a movement globally in recent years towards safeguard (or escape clause) cases; these cases have the advantage (from the standpoint of the petitioning country) of potentially targeting all imports within a product category without the need to specify particular exporters, and often are broader in their product scope than antidumping filings. India filed its first such case in 1997 – over the 1997-2004 period, it filed 15 safeguard cases (11 in the same broad chemical-

[6] The explanation for the 2007 surge and 2008 crash in recordable CD imports is unclear, though perhaps related to technology/product lifecycle issues (i.e., the movement to digital music downloaded to directly to mp3 players and iPods).

related sectors which has dominated its antidumping usage, 9 leading to measures imposed). No safeguard cases were filed from 2005-2007. However since the start of the recent financial crisis and global recession through 2009 India has filed 11 new safeguard cases (broadly targeting all exporters) and 5 new China-specific safeguard cases. The scope of protection seems to be somewhat broader than in it use of antidumping as only about half of these 15 new safeguard cases are in the chemical-related sectors. While there has been an increase world-wide in antidumping petitions since 2007, the larger increase in trade remedies seems to be in the safeguard area, suggesting perhaps that in the major recession the world is facing antidumping measures are seen as too narrowly focused to be of significant use (and more stringent notions of injury causation harder to prove).

VI. Conclusion and Possible Hypotheses for Future Investigation

India has clearly become the dominant world-wide source of antidumping enforcement, and seems to be expanding its focus towards other types of "administrative protection" as well. Nevertheless, the fact remains that it has experienced a significant liberalization of its import regime over the past 20 years and is now well-integrated into the global economy. Whether the heavy use of antidumping was *necessary* to accomplish these goals is impossible to tell. Regardless, it is obvious that focusing only on tariff reductions overstates the extent of liberalization of the Indian economy, given the relatively easy access domestic interests seem to have to antidumping and safeguard duties.

The discussion presented in this paper suggests a number of hypotheses worth exploring in future work:

(1) Given the more recent and somewhat more dramatic liberalization in consumer goods imports, does the relationship between the post-Uruguay Round gains in openness and future antidumping usage by India differ between consumer and producer goods industries?

(2) What is the impact of Indian antidumping enforcement on import growth (and domestic welfare), and how fully does this offset ongoing trade liberalizing effects?

(3) To what extent is the surge of Indian antidumping adversely affecting the development experience of less-developed economies (which have been the target of many of these enforcement actions)?

Data Sources

Source: Bown, Chad P. (2010) "Global Antidumping Database," available at **http://econ.worldbank.org/ttbd/gad/**
WTO Antidumping Gateway, Statistics on Antidumping
World Bank, Trade, Production and Protection Database
Tariff Data from IndiaStat
WITS Tariff Data by 2-digit HS
Global Trade Atlas

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