U.S. "facts available" antidumping decisions: An empirical analysis

Michael O. Moore*
[a]*Department of Economics and Elliott School of International Affairs, The George Washington University, Washington, DC 20052, USA*

Abstract: This paper analyzes U.S. implementation of one aspect of antidumping reform agreed to in the Uruguay Round. In particular, evidence is consistent with the view that administrators have not fundamentally improved the application of "facts available" techniques, which is an important contributor to high antidumping margins on U.S. imports. The results suggest that the U.S. has lived up to the letter but not the spirit of one important antidumping reform in the Uruguay Round.

JEL classifications: F13
Key Words: Antidumping; Facts available; Uruguay Round

- Tel +202-994-6157, fax, +202-994-6147, e-mail: mom@gwu.edu.

Acknowledgements
I would like to thank participants at the Leverhulme Centre's Conference on Antidumping, especially Tom Prusa, Chad Bown, and Maurizio Zanardi. Special thanks go to Bruce Blonigen for his role as discussant and for making his antidumping database available.

1. Introduction

Reform of antidumping procedures was one of the most difficult aspects of the Uruguay Round (UR) of multilateral trade negotiations. The United States was a particularly reluctant negotiator on this issue, which was a result of the extraordinary bipartisan support in Congress for the U.S. antidumping system. Nonetheless, negotiators did manage to conclude the "Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994," known unofficially as the "Antidumping Agreement" (ADA). The ADA included detailed descriptions of allowable antidumping procedures as well as important reforms.

This paper will focus on one aspect of U.S. implementation of the ADA. In particular, I will analyze how the U.S. Department of Commerce (DOC) has implemented new restrictions on the use of domestic petitioners' allegations in determining antidumping duties, i.e.," facts-available" (FA) procedures.[1] The use of this kind of information, allowed under the rules of both the General Agreement on Tariffs and Trade (GATT) and its successor organization, the World Trade Organization (WTO), is used in the event that foreign firms do not provide information that domestic authorities deem satisfactory in antidumping investigations. Under such circumstances, administering authorities must rely on secondary sources of information. The DOC has often used domestic firms' allegations about foreigners' costs and sales data, a process that can lead to much higher margins than those calculated based on foreigners' own submissions. These substantially higher margins carry with them the possibility of much greater trade disruption as a consequence of antidumping duties.

[1] These procedures were called "best-information-available" in the pre-Uruguay Round U.S. antidumping system. I will use "facts-available" in this paper for both periods.

The economics literature on facts-available procedures is relatively small despite its practical importance in the administration of the antidumping laws. Some authors have stressed the importance of the use of facts-available methods in U.S. antidumping procedures in the pre-WTO period. Baldwin and Moore (1991), Murray (1991) and Palmeter (1991) focus on how the use of FA to systematically increase antidumping duties. Baldwin and Moore estimate that cases for the 1980 to 1990 period involving FA had dumping margins 38 percentage points higher than those that relied only on respondents' data.

More recent research indicates the continued importance of FA over a longer time frame. Blonigen (2005) studies various discretionary methods that the DOC can use that have led to an increase in dumping margins from 1980 through 2000. He shows that the increased use of FA has been an important contributor to those higher dumping margins. In particular, he finds in one econometric model that the use of FA increased antidumping margins by about 63 percentage points. In other words, firms deemed uncooperative faced almost certainly prohibitive antidumping duties.

This study will focus exclusively on DOC use of FA techniques and extend Blonigen's data to include more recent cases. The data examined below will provide insights into the following specific questions. Has the use of FA been systematically different after 1994, i.e., after the reforms agreed to in the Uruguay Round? If so, are foreign firms less likely to face FA margins in the post-reform world? Are there any differences in the use of FA based on the industry involved or the country of the firm accused of dumping? The answers to these questions will give one insight into whether the US authorities have lived up to commitments made during the Uruguay Round negotiations.

2. US antidumping system

A short review of the U.S. antidumping system is critical to evaluating FA reforms.

The agreements that have formed the basis of the GATT and the WTO system allow industries to petition governments to impose temporary duties on products that are being sold at "less than fair value" and cause "material injury" to the domestic industry producing a like product. An antidumping order on foreign firms' exports is imposed only if agencies rule affirmatively that there is both dumping and material injury.

In the U.S., the International Trade Commission (ITC) investigates the presence of material injury. The Department of Commerce determines whether foreign firms are "dumping," i.e., pricing below the foreign firm home market price, below total average production cost, or, if a "non-market-economy" such as China is involved, below the imputed costs based on prices in a surrogate country and physical factor quantities in the investigated economy. Regardless which of these three methods are used, the resulting comparison between "normal value" and the US export price of individual foreign firms is used to calculate the "dumping margin." If antidumping duties are finally implemented, this calculated dumping margin is the basis for duties collected on the foreign firms' exports. Thus, antidumping duties that might be imposed are based on individual foreign firms' decisions.[2]

The DOC needs information on costs and sales provided by each foreign firm in order to make these assessments. The DOC collects such information through questionnaires sent to foreign firms; this data is consequently verified by DOC investigators. If foreign firms do not provide adequate information to DOC or the DOC determines that respondents are being uncooperative, administrators may use information from other sources to conduct the

[2] Foreign firms not investigated individually are subject to an "all others rate," which is a weighted average of dumping margins for producers in the particular country under investigation.

investigation. Such third-party information is known as "facts-available" or FA. The WTO agreement, and the GATT before it, allows administrators to use domestic petitioners' allegations (called "adverse facts-available" in the United States) if the authorities determine that the foreign firms are deliberately uncooperative, a sanction that supporters such as Stewart (1991) and Mastel (1998) argue is absolutely critical to encourage respondents to cooperate with authorities. It is important to note that the decision to use FA is a result of the interaction between DOC discretion and decisions by foreign firms about providing requested information.[3]

3. Uruguay round Facts Available reform

Prior to the Uruguay Round, administering authorities were allowed to use information provided by domestic petitioners about dumping margins if a foreign respondent did not fully comply with requests for information or provide the information in exactly the prescribed computer format. Thus, GATT procedures did not specifically preclude authorities from throwing out all information provided by foreign respondents unless *all* information was provided in full, in exactly the form requested.

U.S. implementation of FA procedures drew significant criticism in the pre-WTO period. Foreign respondents and domestic critics complained that the DOC sometimes would totally disregard even partially completed questionnaires and use only domestic petitioners' allegations instead. Another DOC practice required foreign firms to provide all information in English, in computer-readable format, using US accounting principles and do so within tight time schedules. These procedures could be applied equally to foreign multinational corporations or "mom-and-pop" manufacturing or agricultural enterprises. If foreign firms

[3] Moore (2005) has developed a theoretical model that explores when and if a foreign firm will cooperate and thereby avoid FA margins. Moore and Fox (2005) investigate this issue empirically.

deviated from DOC procedures, authorities in principle could throw out the entire data submission and resort to total reliance on facts-available, with domestic petitioners' allegations as the principal source of information.

FA reform agreed to in the Uruguay Round directly addressed some of these complaints by: 1) making it harder for authorities to find non-compliance; 2) encouraging the use of all legitimate information provided by respondents; and 3) putting limits on the use of domestic sources when "facts-available" information was invoked. The ADA also stipulated that administering authorities were required to use all verifiable information provided by foreign firms in a timely manner, even if other information was incomplete. Thus, the agreement generally restricted the ability of domestic authorities to set unreasonable barriers to compliance to respondents and encouraged the use of "partial" FA. Despite these reforms, negotiators continued to recognize the right to use domestic competitors' allegations. However, administrators were expected to use domestic allegations "with special circumspection."[4] In short, the international community agreed that domestic authorities should have the flexibility to use FA but adopted language designed to limit its use.

The U.S. changed aspects of domestic law in 1994 (URAA, 1994) to come into compliance with these Uruguay Round obligations. The DOC subsequently adopted final regulations that implemented FA reform, the language of which was broadly consistent with Uruguay Round commitments and included provisions for broader use of partial FA as well as continued application of adverse FA if foreigners were deemed deliberately non-cooperative.[5]

[4] Paragraph 7 of Annex II of the ADA (1994).
[5] See 19 Code of Federal Regulation, section 351.308, May 1997

4. Evaluating US Facts-Available reform

In this section, I focus on the patterns of FA use rather than its specific contribution to higher antidumping duties as in Baldwin and Moore (1991) and Blonigen (2003). I examine the evidence about whether DOC administration of FA procedures changed after 1994 when new WTO rules supposedly constrained the use of FA techniques. If the DOC has changed its procedures as envisaged by trade negotiators, one would expect that FA's use would be less frequent and average margins lower. Otherwise, one might have doubts about whether the Uruguay Round reforms have had their intended consequences.

4.1. Descriptive statistics

Table 1 contains summary statistics for DOC use of FA in antidumping decisions from 1980 through 2002, i.e., a period that begins when the Congress first granted the DOC responsibility for calculating dumping margins and ends eight years after Uruguay Round reforms took place.

The data includes dumping margins reported for individual foreign firms for cases that went to final material injury decisions at the ITC. The calculated dumping margins were either imposed in final antidumping duty orders (949 cases) or were used only as temporary duties until the ITC reached a final negative decision (512 cases). This means that all calculated margins were in place for at least some period thereby affecting international trade flows. The average margin calculated by the DOC in the 1461 individual foreign firm dumping margin decisions was 41 percent, that is, far in excess of the average most-favored-nation tariffs rates of 3 percent for the U.S.

The DOC dumping margins in Table 1 are separated into three subsamples. The first is for the pre-WTO period from 1980 through 1994. The second subsample is for 1990

through 1994, that is, for the five years immediately prior to the Uruguay Round reforms. Finally, eight years of post-WTO decisions (1995-2002) are also analyzed.

Given the changes noted above, one might expect that the Uruguay Round reforms would be reflected in a reduction in the average dumping margins calculated by the DOC in the third subsample.[6] In fact, one sees a statistically significant rise (at a one percent level) in the average dumping margins (for both FA and non-FA cases) from 36 percent for the 1980-1994 period to 50 percent for the 1995-2002 sample. However, the overall dumping margins did fall slightly from 52 percent in the immediate pre-WTO period (1990-1994) to 50 percent in the 1995-2002 period but this difference is not statistically significant. Thus, there is little evidence that overall dumping margins have declined systematically after the introduction of UR reforms.

Recent U.S. reforms have not led to decreased use of FA. FA was used in 29 percent (279 out of 960) of all cases from 1980 to 1994 compared to 45 percent (224 out of 501 cases) in the post-WTO time frame. The average FA margin rose slightly over these two sub-periods (from 70 to 74 percent) but not in a statistically significant way. In addition, the percentage of FA cases that resulted in final antidumping duties was unchanged before and after the reforms (69 percent affirmative in for 1980-1994 and 1995-2002).

One also sees that the use of FA increased slightly if one looks only at the post-1990 period---the DOC used FA in 143 of 333 cases (43 percent of cases) during the 1990-1994 period compared to 45 percent (224 out of 501 cases) in the post-WTO era. The average FA margin did fall from 80 percent in the earlier period compared to 74 percent in the latter period. However, we can reject the hypothesis that the post-WTO FA margins are less than the pre-reform FA margins, contrary to the expectations if UR reform was materially

[6] This expectation presumes that foreign behavior remains unchanged. Antidumping law supporters might argue that a rise in margins over time would reflect more "unfair" trade practices.

affecting DOC-calculated FA margins. It is also important to note that even if one could accept the hypothesis that margins were lower in the post-reform era, there may be little economic difference between margins of 80 percent and 74 percent since both are likely to yield prohibitive duties.

One Uruguay Round reform that could be very important for calculated margins was the potential for increased use of "partial" FA if foreign firms provided at least some useful information. Moreover, the Uruguay Round Antidumping Agreement mandated changes that should lead to less frequent use of adverse FA (e.g., acceptance of information provided in different types of computer formats). The expectation is that a reformed system would lead to a reduction in the use of adverse FA and an increase in the use of partial FA, holding foreign behavior constant.

Table 2 depicts the use of adverse and partial FA. One sees a broad pattern of increased use of partial FA over time. The use of partial FA was relatively constant in the pre-reform period and was used in only 43 out of 279 FA cases (or 15 percent) from 1980 through 1994 and 25 out of 143 FA cases (or 17 percent) in the immediate pre-reform period. In the post-WTO period, this percentage rose to 21 percent (or 61 out of 224 cases). These results are consistent with effective reform of the U.S. antidumping system since foreign-provided information was more likely to be used in the post-WTO time frame. In the pre-WTO period, many of the firms in these cases might have had all of the information they provided thrown out in favor of domestically-provided data.

However, other data show that foreigners still faced problems with partial FA, despite its more frequent use. In particular, DOC-calculated margins using these procedures actually rose in a statistically significant degree[7] subsequent to the "reform" from an average margin

[7] The formal hypothesis that the pre-WTO (1990-1994) average partial FA margins are higher than in the post-WTO period has a marginal significance level of 91 percent.

of 30 percent (in both pre-WTO samples) to 50 percent in the 1995 to 2002 period. These results dull any benefits that foreign firms may have experienced as the DOC used more of the information that they provided.

The DOC's frequency of adverse FA use (i.e., utilizing information provided by domestic petitions as punishment for non-compliance) also rises over time, contrary to what one might have expected with reformed DOC procedures. In particular, 56 and 76 percent of all FA cases used adverse inferences for the entire pre-WTO period and 1990-1994 periods, respectively, compared to79 percent in the 1995-2002 period. However, unlike partial FA margins, the average adverse FA margin fell from 87 percent in the 1980-1994 period to 84 percent in 1995-2002, though this difference is not statistically different.

4.2. Econometric analysis of US Facts-Available use

The simple cross tabulations in the previous section indicate that FA has been used more frequently over time, despite the implementation of changes in the U.S. legal and administrative environment mandated by the Uruguay Round agreements. This holds true for overall FA use, as well as adverse and partial FA. It is only this last change—increased use of partial FA—that would hearten those hoping for reform of US antidumping procedures but even this must be tempered by the notable increase in average margins calculated using these methods.

These results, however, should be evaluated by controlling for other factors important for individual cases. For example, it could be that the types of cases used before and after the Uruguay Round reforms were systematically different. The formal analysis in this section consequently uses a standard probit procedure to predict when FA is used by controlling for potential differences in pre- and post-reform cases through the use of various dummy variables.

Table 3 contains results when the dependent variable takes on a value of 1 if the DOC uses any type of facts-available procedures (designated as "overall FA use") and a 0 otherwise. Table 4 contains a similar model when the dependent variable indicates use of "adverse" FA while Table 5 displays results when "partial" FA is used.

All versions of the analysis contain three broad types of explanatory variables, each of which takes on a value of one or zero.

Most relevant for the fundamental question posted in this paper is a dummy variable ("Pre-WTO") that is equal to one for cases in the 1980-1994 period (66% of all cases) and a zero otherwise. The reforms would be performing as expected if the coefficient on "Pre-WTO" is positive, that is, changed DOC procedures have made it less likely to impose FA margins in the post-WTO period. On the other hand, if the coefficient can be accepted as statistically insignificant then pre- and post-WTO cases are treated in a similar fashion, which would be evidence of inconsequential reform. A negative coefficient would suggest that FA is more likely to be used in the post-WTO period, i.e., contrary to reformers' expectations and desires.

I include a dummy variable ("Experience") that takes on a value of one if a particular firm has been involved with another antidumping case prior to disposition of the case in question (21% of all cases) and a zero otherwise. This variable is potentially important since the DOC does not make the decision to use FA in a vacuum; the foreign firm can decide on its own not to cooperate. A positive coefficient suggests that foreign firms may be learning from past experience that expending resources in the DOC part of the antidumping process may not be cost-effective and that they should not cooperate in subsequent petitions. A negative coefficient suggests that the firms have learned from earlier experience that it is

worthwhile to cooperate in the DOC phase of the antidumping process in order to avoid FA duties.

The models also control for differences in the use of FA based on characteristics of the respondents. Ideally, one would control for firm-specific data but these are unavailable. One can observe, however, the country source of the imports subject to an antidumping investigation as well as the particular industry involved.

Dummies therefore are included for six industry categories that make up 86.9% of all cases in the sample (chemicals (8.8% of all cases), manufactures (21.1%), steel (28.6%), steel products (17.8%), electronics (5.1%), and basic commodities (5.3%)). The excluded category for the empirical analysis is food/agriculture (13.1% of all cases). I also control for the country involved in the specific case; dummy variables are created for firms from Canada (5.6% of all cases), Mexico (1.8%), non-Mexican Latin America (9.6%), European Union countries (15.7%), Japan (14.1%), Korea (9%), Taiwan (11.3%), China (16%), "Other Asian" countries (8%), and USSR/former-USSR countries (1.9%).[8] Positive (negative) coefficient estimates for any of these industry- or country-specific effects suggests a higher likelihood for the use of FA than the base category.

Each model for FA has three versions. The first includes the entire sample for antidumping cases filed from 1980 through 2002. The second and third versions are estimates for the entire pre-WTO period (i.e., 1980 through 1994) and the post-WTO reform period (1995-2002). These samples will be used to assess whether there is evidence that the post-WTO period cases are treated in a way that reflects a reformed system as well as to investigate some of the determinates of FA use.

4.3 Overall Facts Available use

[8] Excluded countries are Australia, Austria, Czechoslovakia, Egypt, Finland, Hungary, Israel, New Zealand, Norway, Poland, Romania, South Africa, Sweden, Trinidad, and Turkey. These countries make up a total of

Table 3 contains the estimation results when the dependent variable is the use of any type of facts-available procedures.

The central question of this research---is there evidence that overall FA use has declined in the post-reform- period----seems to be answered with a strong "no." The results in column 1 of Table 3 show that the "Pre-WTO" dummy is negative and significantly different from zero at a 1 percent level, even when controlling for industry and country types as well as prior experience with antidumping cases. The point estimate translates into a 15% lower probability of observing the use of FA in the pre-"reform" period, when the estimate is converted to a marginal change in probability evaluated at sample means. This result is not consistent with the view that U.S. administration of FA reforms has resulted in a systematically "improved" use of information provided by foreign firms, at least from the standpoint of antidumping reformers.

This same column shows a positive and significant coefficient for "Experience." The point estimate means that firms previously involved in an antidumping case are 11% more likely to face FA than those coming into contact with the process for the first time. Thus, experience with the U.S. antidumping process results in less cooperation, despite the very credible threat that DOC will impose high duties on those firms' exports if they decline to provide the information.

The results for the whole sample also indicate that there are important differences among the different industry categories.[9] Most notably, the dummy variables for cases involving chemicals, steel products, and steel have marginal significance levels of 2.1, 2.9 and less than 0.1 percent, respectively. The associated increase in probabilities of observing FA use for these industries compared to the base group of food/agricultural products are 22%

9.3% of all cases in the sample.

[9] The formal test that the industry dummies are jointly zero yields a Chi-squared statistic of 31.3, indicating a

(steel), 12% (steel products), and 15% (chemicals), respectively. These results are particularly interesting given all three industries' long history with U.S. antidumping procedures. For example, foreign steel firms from around the world have extensive experience with antidumping U.S. going back to the early 1980s.

There are at least three interpretations of these industry results. On the one hand, the positive and significant coefficients could mean that the DOC makes it more difficult for firms in these industries to be found "cooperative." A more benign interpretation is that the foreign firms in these three industries have decided on their own that the legal costs of participating in the DOC process outweigh any expected benefits of cooperating. Supporters of the U.S. antidumping process might suggest that foreign firms in these industries have more to hide than other firms and therefore do not want to open up their books to the eyes of DOC investigators. Thus, there may be some aspects of self-selection: those industries that have higher expected dumping margins if they cooperate may be less likely to provide data that would allow them to avoid facts-available procedures.

Controlling for the country involved in the cases also provides important explanatory power.[13] The most interesting results involve Japan and China.

The coefficient for Japanese firms has a marginal significance level of 2.3 percent, the largest positive point estimate, and a corresponding higher probability (14%) of facing FA procedures. This result for Japanese is striking, because they have long-standing experience with the U.S. antidumping process, just as foreign chemical, steel, and steel products firms. In particular, antidumping cases involving Japanese firms easily are the most common in this data and represent 206 of the 1461 cases (or 14%). Of these, over 50% (or 105 cases) involved facts available.

---

rejection of the hypothesis at a 1 percent level.

In sharp contrast, evidence suggests that Chinese firms are systematically *more* likely to cooperate than the base set of countries. This may at first seem surprising since Chinese firms increasingly have been the targets of U.S. antidumping actions and trade with China has become an important source of political controversy within the U.S. However, perhaps an even more important danger for Chinese firms is the use of "non-market-economy" (NME) techniques, which applies surrogate country prices to Chinese physical inputs. Chinese firms can have strong incentives to cooperate in thee AD process since NME margins are sometimes even higher than those alleged by domestic petitioners.

As noted above, the results for the indicator of "Pre-WTO" cases suggest that the other indicator variables may differ for pre- and post-reform sub-samples; these differences may not just be a question of shifting the intercept but may reflect broader differences across the two time periods. Consequently, the data was separated based on cases adjudicated pre- and post-January-1995 and probit runs conducted. Columns (2) and (3) of Table 3 depict the estimation outcomes for those two periods.

There are indications of different patterns of facts-available use in the two periods. The most important results have to do with possible learning behavior by foreign firms. For example, the coefficient for "Experience" continues to have statistically significant explanatory power in the pre-WTO period (see column 2 of Table 3) but loses its significance in the post-WTO period (column 3). This suggests that, broadly speaking, previous experience is not as important in recent years for foreign firms deciding whether or not to cooperate.

Estimates for country dummies tell a slightly different story about learning. Japanese firms are no more or less likely to cooperate than others in the pre-reform period but are far more likely to face FA in the post-reform period (with a higher marginal probability of 40%

than the base set of countries). Similarly, the coefficient for "Other Asia" countries is insignificant in the earlier period but positive and significant in the latter (with a marginal increased probability of 30%).

The results for Japan are particularly notable given their extensive antidumping experience; they may be becoming more cynical about the antidumping process over time and therefore may have decided that expending resources to fight for lower margins at the DOC is simply not worth the expense. In contrast, Chinese firms become more likely to cooperate with the DOC over time. In the 1980-1994 period, there are no systematic differences between them and the base cases while in the latter period, they are less likely to face facts-available duties.

Controlling for industry categories continues to be important in explaining FA outcomes in the 1980-1994 period. The same set of industries dummies (chemicals, steel, and steel products) that were positive and significantly different from zero in the whole sample are significant and positive in the pre-reform period. Once again, the dummy for steel (the industry most frequently involved in antidumping petitions) has the largest estimated coefficients for the earlier sub-sample and a corresponding 27% greater probability of observing the use of facts-available. The post-1994 period indicates that only steel and steel products firms are systematically more likely to face facts-available duties.

4.4 Adverse Facts Available use

As noted above, there is an important potential distinction between "adverse" facts-available from other uses of this technique. Since the DOC uses such procedures only when it deems foreign firms deliberately uncooperative, this is explicitly a punishment device used by U.S. authorities to sanction those who stand in the way of an investigation. Consequently,

one might expect that different patterns of DOC practice might emerge in the 334 cases of adverse facts-available use compared to the 503 total cases of FA.

Table 4 contains estimation results for cases in which "adverse" facts-available was used by the Department of Commerce. Once again, the dependent variable takes on a 1 if adverse inferences are used and a zero otherwise.

The results for adverse FA broadly mirror those for overall FA use, especially for estimates for the entire sample period. The pattern of coefficient sign and statistical significance are broadly similar in columns 1 of Tables 3 and 4. This is perhaps not surprising since adverse inferences were used in about two-thirds of all FA cases.

The most important consistency is that the coefficient for "Pre-WTO" cases in column 1 of Table 4 is once again negative and significant for adverse FA. This means that in the cases most important to those seeking reform (i.e., when the DOC is actively punishing "non-cooperation") the DOC has been more, rather than less, likely to use adverse FA in the post-WTO period. The other notable consistency is that Japanese firms are still much more likely to have decided in the latter period not to cooperate.

There are however important differences. The results indicate that steel and steel products are no more likely to face adverse inferences than the base industry category during the post-reform period (although they are more likely in the 1980-1994 period). We also see that "Experience" plays no systematic role in the adverse facts-available cases for any of the periods. Despite earlier exposure to the rules and regulations promulgated by the DOC, firms are no more likely to cooperate when they are later faced with onerous adverse FA margins.

4.5 Partial Facts-Available use

The earlier discussion about reform made clear that signatories to the Antidumping Agreement agreed to make it easier to face "partial" facts available by encouraging domestic

authorities to accept valid data reported by foreign firms even if some data were missing. In spite of this, simple tabulations indicated that this technique was more commonly used in the post-reform period. Consequently, we now turn to assessing DOC practices involving partial facts available (PFA) after controlling for experience as well as industry and country dummies.

Table 5 contains Probit estimates for cases involving PFA. As in previous models, results for the whole sample are reported in column 1, while estimates for the pre- and post-reform subsamples are found in columns 2 and 3, respectively.

One sees evidence once again in column 1 that cases in the pre-reform period were less likely to have PFA applied to them than in the post-WTO period, even when controlling for industry and country effects. The point estimate translates into a 5 percent lower probability of PFA use in the pre-reform sample. The result for this dummy variable has a far different interpretation than those above----increased use of partial facts-available in the post-reform period is exactly what one might hope for if the reform efforts are having an effect.

The other most notable result is the strong evidence that prior experience with the antidumping process was positively related to the use of PFA. Unlike the models for adverse FA, "Experience" is significant and positive in the full sample as well as the two sub- periods (with a marginal probability increase of 8.1 percent). This is consistent with a world in which foreign firms are more likely to learn about the antidumping process and then convince the DOC to use at least some of the information that they provide in subsequent cases. This may indicate that foreign firms (or perhaps their lawyers) may be learning better how to navigate through the system, at least in avoiding total reliance on domestic firms' allegations.

Another striking difference between the results for partial FA and both the overall and adverse FA estimates is that controlling for industry categories do not help explain outcomes in any of the partial FA estimations (with "Chemicals" as the one exception when the sample is split into pre- and post-WTO samples). Thus, there is little systematic pattern related to industry that would indicate when the DOC determines that partial FA is appropriate. Perhaps most noteworthy is that foreign firms in the steel and steel products categories are no more likely to have duties based on partial FA than the base case of agriculture/food.

5. Conclusions

The United States agreed during Uruguay Round negotiations to reform the use of allegations of domestic petitioners in the calculation of dumping margins. Critics of earlier U.S. procedures wanted to make it less likely that the Department of Commerce would use information provided by self-interested domestic competitors of the foreign firms under investigation and more likely that incomplete, but nonetheless reliable, information provided to the Department would not be discounted. This paper's goal is to investigate whether there is evidence that the Department of Commerce has lived up to these expectations.

The analysis provides few indications that facts-available use has "improved" (at least from the standpoint of foreign firms and hopeful reformers) after 1994. Average dumping margins recently calculated by U.S. authorities in cases involving facts-available have increased over the years prior to the "reform." In addition, the percentage of antidumping cases subject to facts-available procedures has risen in the post-Uruguay Round period. Both results are consistent with the view that the Department of Commerce has not implemented the changes in way that has led to a fundamentally improved situation for foreign respondents.

Econometric analysis also suggests that, contrary to the expectations of reformers, foreign firms are more, rather than less, likely to face facts-available procedures in the post-"reform" period than prior to the Uruguay Round negotiations, even when one controls for country- and industry-fixed effects. This result holds true whether one is analyzing the overall use of facts-available or the use of "adverse" inferences, when the Department of Commerce is using domestic firms' allegations as a way to punish foreign firms it deems to be intentionally uncooperative.

One also finds at least some evidence that foreign firms may be learning over time that cooperation with the Department of Commerce has become less, rather than more, attractive. Japanese firms, one of the most frequent targets of antidumping petitions in the United States, are more likely to face adverse facts-available techniques in the post-"reform" period. This is all the more striking given the very high antidumping duties that these firms are likely to face if they are found to be intentionally uncooperative. The fact that firms with familiarity with Department of Commerce procedures may choose to withhold information and face such high margins (an average of 87 percent for Japanese firms) suggests that these firms have little faith that cooperating will actually help their situation.

There are some reasons to believe that reform has had some small effect. There is strong evidence that the use of partial facts available, i.e., when Commerce accepts incomplete but accurate information provided by foreign firms, has increased in the post-1994 era, just as reformers might have hoped. But this result is tempered by indications that cases involving such techniques have resulted in much higher average dumping margins (50%) than average margins in similar cases before the reforms (30%).

In short, the evidence suggests that reforms enacted as a consequence of Uruguay Round commitments have resulted in only marginal liberalization of facts-available

techniques by the U.S. Department of Commerce. This suggests that negotiators considering antidumping reforms in future World Trade Organization rounds should be extremely vigilant about spelling out required legislative and regulator changes. Otherwise, liberalization efforts may be thwarted through half-hearted implementation by domestic administering authorities.

References

ADA , 1994. Agreement on implementation of article VI of the General Agreement on Tariffs and Trade 1994. http://www.wto.org/english/docs_e/legal_e/final_e.htm, Accessed 20 May 2004.

Baldwin, R. E., Moore, M. O., 1991. Administration of the unfair trade laws by the Department of Commerce: A political economy analysis. In: Boltuck, R., Litan R. (Eds.), 'Down in the Dumps'- Administration of U.S. Trade Remedy Law, Brookings Institution, Washington D.C., pp. 253-280.

Blonigen, B., 2006. Evolving discretionary practices of US antidumping activity, Canadian Journal of Economics, forthcoming.

Mastel, G., 1998. Antidumping Laws and the US Economy. M.E. Sharpe, Armonk, New York.

Moore, M. O., 2005. 'Facts available' dumping allegations: When will foreign firms cooperate in antidumping petitions?, European Journal of Political Economy 21, 185-204.

Moore, M. O., Fox, A., 2005. Why don't foreign firms cooperate in antidumping investigations?: An empirical analysis. George Washington University, mimeo.

Murray, T., 1991. Administration of the unfair trade laws by the Department of Commerce. In: Boltuck, R., Litan R. (Eds.), 'Down in the Dumps'- Administration of U.S. Trade Remedy Law, Brookings Institution, Washington D.C., pp. 23-56.

Palmeter, D. T., 1991. The antidumping law: A legal and administrative nontariff barrier. In: Boltuck, R., Litan R. (Eds.), 'Down in the Dumps'- Administration of U.S. Trade Remedy Law, Brookings Institution, Washington D.C., pp. 288–230.

Stewart, T., 1991. Administration of the antidumping law: a different perspective. In: Boltuck, R., Litan R. (Eds.), 'Down in the Dumps'- Administration of U.S. Trade Remedy Law, Brookings Institution, Washington D.C., pp. 288–230.

URAA (1994), Uruguay round agreements act of 1994, Public Law 103-465.

Table 1: Use of Best-Information-Available (BIA) in Pre- and Post-WTO Periods

	Entire Data Set (1980-2002)	Pre-WTO (1980-1994)			Immediate Pre-WTO (1990-1994)			Post-WTO (1995-2002)		
		Total	BIA	Non-BIA	Total	BIA	Non-BIA	Total	BIA	Non-BIA
Number	1461	960	279	681	333	143	190	501	224	277
Average dumping margin (standard deviation)	41% (56)	36% (49)	70% (66)	22% (32)	52% (63)	80% (78)	31% (38)	50% (60)	74% (67)	32% (44)
Number of affirmative decisions (% of total cases in the column)	949 (65%)	599 (61%)	193 (69%)	406 (60%)	197 (59%)	92 (64%)	105 (55%)	350 (70%)	154 (69%)	196 (71%)

Sources: US Antidumping Database (http://darkwing.uoregon.edu/~bruceb/adpage.html) for 1980-2000 data and Federal Register antidumping notices (http://ia.ita.doc.gov/frn/index.html) for subsequent years.

Table 2: Use of "Partial" and "Adverse" BIA

	Pre-WTO (1980-1994)		Immediate Pre-WTO (1990-1994)		Post-WTO (1990-1994)	
	Adverse	Partial	Adverse	Partial	Adverse	Partial
Number (% of total FA cases in the period)	157 (56%)	43 (15%)	109 (76%)	25 (17%)	177 (79%)	61 (21%)
Average dumping margin (standard deviation)	87% (75)	30% (30)	93% (83)	30% (31)	84% (67)	50% (69)

See Table 1 for data sources. Note that "partial" and "adverse" facts-available are not mutually exclusive.

Table 3: Probit Results for Overall Use of Facts Available			
	Column 1	Column 2	Column 3
	Full Sample (1980-2002)	Pre-WTO (1980-1994)	Post-WTO (1995-2002)
Constant	-0.51 (.18)***	-0.89(0.22)***	-0.39 (0.29)
Pre-WTO dummy	-0.39 (0.09)***		
Experience	0.30 (0.09)**	0.40 (0.12)***	0.02 (0.15)
Chemicals	0.39 (0.17)**	0.47 (0.23)**	0.25 (0.28)
Manufactures	0.19 (0.15)	0.24 (0.20)	0.20 (0.24)
Steel	0.57 (0.14)***	0.74 (0.20)***	0.36 (0.22)**
Steel products	0.32 (0.15)**	0.37 (0.20)**	0.51 (0.28)**
Electronics	0.09 (0.21)	0.28 (0.27)	-0.03 (0.39)
Commodities	-0.01 (0.20)	-0.51 (0.28)	0.07 (0.33)
Canada	-0.69 (0.23)***	-0.59 (0.28)**	-0.98 (0.40)**
Mexico	0.26 (0.29)	0.31 (0.33)	-0.23 (0.62)
Other Latin America	0.07 (0.18)	-0.05 (0.21)	0.19 (0.36)
EU	-0.13 (0.16)	-0.30 (0.20)	0.28 (0.28)
Japan	0.37 (0.16)**	0.07 (0.20)	1.10 (0.30)***
Korea	-0.44 (0.18)**	-0.58 (0.22)***	-0.26 (0.32)
Taiwan	0.23 (0.17)	0.27 (0.21)	-0.13 (0.30)
China	-0.34 (0.17)**	-0.10 (0.23)	-0.58 (0.27)**
Other Asia	0.36 (0.17)**	-0.07 (0.23)	0.78 (0.29)***
USSR	0.16 (0.28)	0.42 (0.58)	0.13 (0.35)
Observations	1461	954	501
Likelihood	–853.3	-539.9	-285.1

*, **, ***: Significantly different from zero at 1, 5, and 10 percent, respectively.

Table 4: Probit Results for Use of Adverse Facts Available			
	Column 1	Column 2	Column 3
	Full Sample (1980-2002)	Pre-WTO (1980-1994)	Post-WTO (1995-2002)
Constant	-0.62 (.19)***	-1.68 (0.28)***	0.05 (0.30)
Pre-WTO	-0.59 (0.09)***		
Experience	0.04 (0.10)	0.14 (0.14)	-0.22 (0.16)
Chemicals	0.50 (0.18)***	0.93 (0.28)**	-0.16 (0.31)
Manufactures	-0.27 (0.18)	0.23 (0.26)	-1.01 (0.33)
Steel	0.49 (0.15)***	0.91 (0.25)***	-0.06 (0.23)
Steel products	0.20 (0.16)	0.50 (0.25)**	0.19 (0.29)
Electronics	0.11 (0.22)	0.62 (0.32)	-0.43 (0.40)
Commodities	0.10 (0.21)	0.57 (0.31)	-0.52 (0.35)
Canada	-0.65 (0.26)**	-0.41 (0.35)	-1.23 (0.41)***
Mexico	-0.14 (0.35)	0.10 (0.42)	-0.85 (0.70)
Other Latin America	0.09 (0.19)	0.16 (0.25)	-0.10 (0.35)
EU	-0.03 (0.18)	0.01 (0.23)	-0.17 (0.28)
Japan	0.59 (0.18)***	0.37 (0.24)	1.05 (0.29)***
Korea	-0.44 (0.21)**	-0.54 (0.29)**	-0.30 (0.33)
Taiwan	0.22 (0.19)	0.26 (0.25)	-0.40 (0.31)
China	-0.44 (0.21)**	-0.10 (0.27)	-1.11 (0.29)***
Other Asia	0.57 (0.18)**	0.56 (0.26)	0.33 (0.29)
USSR	-0.17 (0.39)	NA	-0.16 (0.35)
Observations	1461	954	501
Likelihood	–672.8	-391.9	-254.0

NA= Adverse facts available was not used in any USSR case in the pre-WTO period.
*, **, ***: Significantly different from zero at 1, 5, and 10 percent, respectively.

Table 5: Probit Results for Use of Partial Facts Available			
	Column 1	Column 2	Column 3
	Full Sample (1980-2002)	Pre-WTO (1980-1994)	Post-WTO (1995-2002)
Constant	-1.14 (0.24)***	-1.71 (0.36)***	-1.40 (0.41)***
Pre-WTO	-0.44 (0.13)***		
Experience	0.60 (0.13)***	0.71 (0.20)***	0.63 (0.19)***
Chemicals	0.27 (0.24)	0.42 (0.45)**	0.60 (0.33)**
Manufactures	-0.37 (0.25)	0.24 (0.41)	-0.90 (0.49)
Steel	-0.07 (0.19)	0.50 (0.38)	-0.32 (0.27)
Steel products	-0.13 (0.22)	0.48 (0.38)	-0.65 (0.43)
Electronics	-0.12 (0.22)	0.39 (0.48)	-0.38 (0.60)
Commodities	0.37 (0.26)	0.95 (0.44)	0.04 (0.39)
Canada	0.15 (0.26)	0.19 (0.31)	-0.09 (0.38)
Mexico	-0.42 (0.50)	NA	0.80 (0.72)
Other Latin America	-0.60 (0.29)**	-0.96 (0.38)***	-0.02 (0.51)
EU	-0.18 (0.22)	-0.85 (0.30)***	0.63 (0.37)
Japan	-0.48 (0.24)**	-0.75 (0.31)**	-0.19 (0.40)
Korea	-0.11 (0.25)	-0.36 (0.30)	-0.11 (0.48)
Taiwan	-0.35 (0.28)	-0.68 (0.35)***	-0.08 (0.49)
China	-0.68 (0.25)***	NA	-0.27 (0.39)
Other Asia	0.43 (0.23)**	-0.45 (0.35)	1.17 (0.38)***
USSR	0.21 (0.33)	0.43 (0.63)	0.48 (0.46)
Observations	1461	854	501
Likelihood	–325.10	-148.6	-153.6

NA= Partial facts available was not used for this country in this subsample.
*, **, ***: Significantly different from zero at 1, 5, and 10 percent, respectively.