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Why Are So Many WTO Disputes Abandoned?

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Why Are So Many Disputes Abandoned[*]

Kara M. Reynolds[**]

Abstract

Previous research on the success of the WTO dispute settlement system may miscalculate the true benefits of the dispute process due to the nature of the datasets used. Approximately 33 percent of all disputes filed at the WTO are classified as pending or inactive, and thus omitted from most studies. Further investigation reveals that many of these inactive cases were actually settled by the countries involved or considered in a similar WTO dispute and, as a result, no further WTO action was taken. This suggests that the WTO dispute settlement process may be more effective in resolving disputes than otherwise thought. For those disputes not successfully resolved, I empirically estimate why countries may choose to initiate WTO dispute settlement action but fail to follow through, thus allowing the offending party to continue with the alleged WTO-illegal activities. The results suggest that developing countries are less likely to resolve their complaints in the WTO dispute settlement system, a troubling implication for the equity of the system.

Key words: WTO Dispute Settlement

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1 Introduction

When implemented in 1995, supporters heralded the World Trade Organization's (WTO) Dispute Settlement Understanding (DSU) as a giant leap forward for the international trading system. Peter Sutherland, the director general of the General Agreements on Tariffs and Trade at the time, said "the whole future of the WTO is inextricably bound up with the success of the dispute-settlement system," adding that the new system provided an assurance that countries would live up to their obligations under all current and future multilateral trade agreements.[1] Unfortunately, it is still unclear to what degree countries have lived up to their WTO obligations under the new dispute settlement procedures. While Busch and Reinhardt (2003) note that countries failed to change their supposed non-WTO compliant laws in one-third of the 154 dispute settlement cases resolved between 1995 and 2000, countries only requested compensation for this non-compliance in 18 of these cases.

Moreover, most researchers compile the statistics used to analyze the success of the WTO dispute settlement process using only a small subset of the total number of disputes brought before the WTO. For example, although Busch and Reinhardt (2003) compile compliance statistics on the 154 disputes resolved between 1995 and 2000, in fact there were 219 disputes brought before the WTO during this time period. Similarly, recent research has noted that many disputes are settled early, pointing to statistics that panels are established in only about half of all disputes initiated at the WTO. However, these researchers gloss over the fact that of those disputes that fail to result in a panel, the WTO is apprised of a settlement in only 25 percent of these cases. In fact, of the 324 disputes brought to the WTO between 1995 and 2004, 33 percent are still classified as pending, with no resolution in sight.

So what has happened to these disputes? Why are so many disputes apparently abandoned during the WTO dispute settlement process? Logic suggests a number of possible explanations. For example, it may be the case that the parties to the dispute have actually reached a settlement but failed to inform the WTO, despite the fact that the DSU specifically

[1] John Zaracostas, "Dispute Process Crucial to WTO, Sutherland Says," *Journal of Commerce,* November 14, 1994, pg. 1A.

states that "mutually agreed solutions to matters formally raised under the [dispute settlement process] shall be notified to the DSB." It may be equally likely that the complaining countries have failed to follow up on their initial complaints because they realize that the issues in question had little merit or because they lacked the resources or knowledge to move forward in the process.[2] The later possibility has particularly troubling implications for the equity of the dispute settlement process for developing countries.

Because WTO members are currently negotiating changes to improve dispute settlement procedures, it is important for policy makers to fully understand the current system's strengths and weaknesses. This research analyzes the disputes brought before the WTO in an effort to determine whether the large number of unresolved disputes are a sign of strength or weakness of the system. If, for example, most of the non-resolved cases have actually resulted in settlements between disputing countries, then the WTO system may be more successful in peaceful resolution than currently thought. If, on the other hand, disputes remain unresolved because developing countries lack the resources or knowledge to move forward in the dispute process, than the large number of unresolved cases may be indicative of a serious bias in the system against the developing world.

The paper proceeds as follows. Section [2] reviews the current WTO dispute settlement process, while Section [3] provides an overview of current research on dispute settlement, focusing on previous studies which analyze the outcomes of cases brought before the WTO. Section [4] summarizes the outcome of dispute settlement cases filed at the WTO between 1995 and 2004, paying particular attention to those cases that have apparently failed to be resolved. Sections [5] and [6] describe the data used in, and results from, an empirical estimation of what factors are significant determinants of whether a dispute is abandoned during the WTO dispute settlement process. Section [7] concludes.

[2]The DSU urges countries to "exercise its judgment as to whether action under the procedures would be fruitful" prior to bringing a case.

2 WTO Dispute Settlement Procedures

Although the General Agreement on Tariffs and Trade has included dispute settlement procedures since its inception in 1947, these procedures have changed dramatically over the years. The current system was first conceptualized in the 1979 Understanding on Dispute Settlement, but was strengthened by both the 1989 Dispute Settlement Procedure Improvements Agreement and, most recently, the 1994 Dispute Settlement Understanding (DSU). The discussion below outlines current WTO procedures, while noting major changes made since the 1979 Understanding.

The dispute settlement process begins when a complainant country requests consultations with another WTO member over a particular trade policy issue. According to Parlin (2000), this request often follows unsuccessful efforts to resolve the dispute through bilateral diplomatic efforts. The consultation request must identify the measures of the other member that are being challenged and provide at least some indication of the WTO provisions that the member has allegedly violated. Although most requests are made by a single member, WTO regulations do allow for complaints by multiple members. Moreover, third parties with a substantial trade interest in the dispute can request to participate in the consultations and all subsequent actions. The respondent country, or defendant, must respond to the request within 10 days, and must begin the consultations within 30 days.

If the consultations fail to produce a mutually satisfactory agreement, the complaining party may file a request for the establishment of a dispute settlement panel.[3] Although the 1979 agreement allowed the defendant to block the formation of a panel, both the 1989 Dispute Settlement Procedure Improvements Agreement and 1994 DSU give complainants the right to a panel. Current regulations specify that the panel should attempt to issue a report within six months, and must issue its report within nine months.[4]

[3]A panel may be established in less than 60 days if both parties agree that consultations have failed. The complainant can alternatively use alternative dispute settlement procedures such as mediation, but few members have utilized these alternative measures.

[4]The DSU includes a shortened time line for "urgent" cases, typically those that involve perishable

Although the 1989 agreement continued to allow a single country to block the adoption of a panel report, one of the major improvements of the 1994 DSU requires the dispute settlement body (DSB) to adopt panel reports within 20 to 60 days after its circulation unless the DSB decides by consensus not to adopt the report or a party to the dispute formally notifies the body of its decision to appeal the decision. If the decision is appealed, the WTO Appellate Body must review the decision and produce its report within no more than 90 days. The Appellate Body report must be adopted by the DSB within 30 days of circulation unless the body as a whole decides against adoption.

A second major improvement of the 1994 DSU strengthened the enforcement capabilities of the WTO. If applicable, the defendant must inform the DSB of its intentions to implement the panel or Appellate Body recommendations and rulings at a DSB meeting within 30 days of the adoption of the panel or Appellate Body report. Members are given a reasonable amount of time to implement the recommendations, typically either a period proposed by the member and approved by the DSB, a period mutually agreed upon by the parties of the dispute, or a period determined through binding arbitration. The DSU specifies that this reasonable amount of time should not exceed 15 months, unless all parties involved in the dispute agree upon a longer time. Should the member fail to implement the recommendations within the agreed upon amount of time, the complaining party has the right to compensation. If the parties to the dispute cannot agree upon compensation, then the complaining party can request permission from the DSB to suspend concessions equivalent to the level of nullification or impairment, as determined by an arbitrator.

Members agreed to conduct a review of the DSU by December 31, 1999. The DSB began their review in 1997; during the review many members expressed dissatisfaction with the agreement and proposed changes to improve the process. For example, Hungary and Japan proposed strengthening the consultation process by requiring at least two consultation meetings, while the United States suggested shortening the consultation process. However, WTO members could not reach a consensus by the 1999 deadline. Instead, in November 2001,

products.

WTO members agreed to improve and clarify the Dispute Settlement Understanding during the Doha Ministerial Conference. These negotiations, which are unrelated to the larger negotiations on the Doha Round, continue without a deadline. Negotiators are considering, among other things, third-party rights, panel composition, time-savings and transparency. Prior to reaching an agreement, however, negotiators should consider outcomes under current dispute settlement procedures and, particularly, why so many cases are abandoned.

3 Literature Review

Filings and outcomes of dispute settlement cases at both the GATT and WTO have been of interest to a number of researchers. In particular, three primary questions have emerged in the previous literature. Obviously, the determinants of the actual policy outcomes of disputes and, in particular, the level of concessions made by the defendant, is of primary interest to many researchers. However, this research is more closely tied to two questions regarding the filing and escalation of disputes: what determines whether a country brings a complaint to the GATT/WTO dispute settlement system and why are countries able to settle some disputes while others escalate to a dispute settlement panel ruling.[5]

Previous research indicates that a number of country-specific factors significantly impact the likelihood of a country filing a dispute with the WTO. For example, Reinhardt (2000) finds that democracies initiate, and are targeted in, more disputes than other countries, particularly developing countries. His estimates also indicate that countries that have a high degree of trade reliance on the defendant country are more likely to initiate disputes and that countries appear to retaliate against those countries that have initiated disputes against them in the past by initiating their own disputes. Bown (2004) specifically looks at country's decisions to bring antidumping cases to the WTO dispute settlement system and finds that the size of the economic market in the defendant country as well as the complainant's capacity

[5]Although this literature review includes only a subset of the studies most pertinent to this research, Busch and Reinhardt (2002) provides a more comprehensive overview of this research.

to retaliate using DSU-authorized sanctions significantly impact the likelihood of bringing a dispute to the WTO. Using all dispute settlement cases, Bown (2005) finds that the size of exports at stake due to the WTO-inconsistent policy significantly impacts the decision to participate in dispute settlement, however the country's retaliatory and legal capacity as well as its political-economic relationship with the defendant country also matter.

A number of papers have attempted to investigate why so many dispute settlements under both the GATT and WTO are settled, particularly in light of the fact that GATT has little enforcement power.[6] Reinhardt (2001), for example, develops a theoretical model in which the defendant wants to avoid retaliation by the complainant, and thus often concedes prior to a panel ruling with a settlement offer that may be less costly than the potential result if the case proceeds to a panel.

Using disputes filed under the GATT 1947 agreement, Busch (2000) estimates the determinants of the probability of requesting a formal dispute settlement panel, as well as the probability of the defendant offering concessions at the consultation stage and at the panel stage. The author is particularly interested in whether the 1989 improvements to the GATT dispute settlement process, in which the defendant could no longer block the formation of a panel, resulted in more concessions and whether democratic regimes are more likely to request a panel or offer concessions. He finds, surprisingly, that the 1989 improvements had little impact on the dispute settlement process. Democratic countries are more likely to offer concessions prior to the formation of a panel and more likely to request a formal panel should bargaining fail. Busch also finds that the likelihood of concessions falls with the number of complainants in a particular case and the level of openness of the defendant. Moreover, cases brought by developing countries are more likely to result in a formal panel, while the probability of concessions made at the panel stage falls with the ratio of the complainant's to the defendant's bilateral trade dependence. Busch and Reinhardt (2003) also find that developing countries are less likely to reach a settlement in their disputes, which is one reason

[6]Recall that although the 1994 DSU strengthened the enforcement capabilities of the system, countries still have the option to ignore WTO panel rulings although they may face retaliatory measures.

why these countries are less likely to secure concessions from the defendant. They conclude that developing countries are less able to argue legal points during the consultation phase, thus failing to signal that the issue will be pushed to a successful conclusion at a dispute settlement panel.

Guzman and Simmons (2002) argue that settlement will be more difficult when the nature of the dispute is discontinuous. In other words, if the dispute centers around an issue in which the only possible settlement offer is complete compitulation on the part of the defendant, high transaction costs will prevent a settlement. The authors test this hypothesis using an empirical model similar to that used in Reinhardt (2000) and Busch and Reinhardt (2003) and find democratic countries are less likely to settle disputes of this discontinuous nature, although the nature of the dispute does not seem to retard the ability of non-democratic countries from reaching a settlement. Most recently, Busch and Reinhardt (2006) find that the inclusion of third-parties in the consultation phase makes early settlement less likely. The result supports the author's theories that third parties increase the bargaining costs during consultations, thus disputes are more likely to end in a panel ruling. The inclusion of third parties does significantly influence the final outcome of panel decisions. The authors also find that settlement is likely in disputes between the United States and European Union, and the probability of reaching a settlement increases with the size of the defendant's economy. Finally, politically sensitive cases are less likely to be settled.

Although the research described above claims to investigate why some countries are able to settle their trade disputes, in fact the dependent variable used in the empirical analysis is whether a WTO dispute settlement panel released a ruling. In other words, the research implicitly assumes that countries reached mutually satisfactory settlements in all disputes that failed to reach the panel ruling stage.[7] An analysis of the outcomes of actual disputes filed at the WTO between 1995 and 2004 reveals that this might not be the case.

[7]Specifically, Guzman and Simmons (2002) define any case that had been pending for more than three years as "settled."

4 WTO Disputes, 1995-2004

As noted above, between 1995 and 2004 WTO members formally requested consultations in 324 disputes. As can be seen in Table [1], a panel was established in slightly more than half of these cases. Many researchers have concluded from this fact that the WTO dispute settlement process is particularly successful in encouraging countries settle their agreements.[8] In fact, countries reported reaching mutually acceptable settlement agreements prior to the release of a panel report in nearly 25 percent of all disputes initiated between 1995 and 2004. However, of more interest to this research is the fact that countries have failed to report a resolution of 33 percent of all disputes, yet they have also taken no further action by requesting a formal dispute settlement panel.

Countries may still be negotiating the outcomes of some of these disputes. Recall, however, that countries are allowed to request the formation of a panel after 60 days of consultations. Moreover, of those cases either settled before the establishment of the panel or in which a panel was established, the average number of days before one of these actions occurred was 447 days, slightly more than one year.[9] As Figure [1] illustrates, the cases that remain unresolved are distributed fairly evenly between 1995 and 2004. It seems unlikely that countries are continuing negotiations on a case brought over 10 years ago.

Further analysis of the pending cases reveals that many of these cases have actually been resolved, as illustrated in Table [2]. Approximately five percent of pending cases were resolved in alternative dispute settlement venues, including the U.S. Court of International Trade, the North American Free Trade Agreement (NAFTA) dispute settlement system, and the WTO's customs valuation committee. Similarly, the issues involved in 27 percent of the DSB cases listed as pending have been or are under consideration in other DSB cases. For example, in 2004 Thailand filed a case against the United States over a specific aspect of U.S. antidumping law commonly known as "zeroing." However, this same issue has already

[8] See, for example, Reinhardt (2001) and Busch and Reinhardt (2000).

[9] One case was settled within 44 days, while the maximum number of days prior to further action was four years.

gone before a dispute settlement body due to a 2003 case initiated by the European Union, and the United States has announced that it intends to comply with the DSB Appellate Body Ruling.

I conducted an exhaustive search for possible resolution of all of the remaining pending dispute settlement cases. Specifically, I searched newspapers, periodicals, and government publications for possible outcomes. In some cases, I also called government officials in departments involved in the case to confirm whether or not the issue had been resolved.[10] This research reveals that as much as 43 percent of "pending" dispute settlement cases have in fact been resolved in some way. However, in many cases it is unclear to what extent these "resolutions" represent a victory for the countries that initiated the dispute rather the natural expiration of defendant country's WTO-illegal regulations over what is sometimes a lengthy period of time. For example, often dispute settlement cases involving the imposition of antidumping duties become inconsequential when the defendant country later removes the antidumping duties in annual reviews. There is no way to tell whether the removal of the duties was a concession on the part of the defendant or would have happened regardless of the case.[11] Other domestic regulations targeted in DSB cases have limited shelf-life, such as temporary safeguard measures, thus the cases automatically become obsolete. Cases filed by Hungary against the Czech Republic and Slovakia became irrelevant when all parties joined the European Union.

Finally, my analysis suggests that approximately one-quarter of all "pending cases" at the World Trade Organization are truly pending; the countries have failed to resolve the

[10]Notes from this search are available from the author upon request.

[11]For example, India lifted antidumping duties in three of the seven antidumping cases targeted by the European Union in a dispute filed in 2004. In 2002 Argentina filed a dispute against Peru after Peru imposed preliminary antidumping duties on Argentinian vegetable oil. This case became obsolete when Peru imposed final antidumping duties on the same product, but this certainly does not represent a concession on the part of Peru. Cases such as these suggest that some disputes may be filed solely to pressure the defendant to rule a certain way in upcoming antidumping or countervailing duty cases, and not necessarily because the country has violated WTO provisions.

issues involved in the case but the complainants apparently lack the resources or the will to pursue the case by requesting the establishment of a panel.[12]

A review of those cases that are truly pending and those that have become irrelevant reveals some noteworthy patterns. As can be seen from the two-sample difference in means test statistics reported in Table [3], disputes filed by both developing and high-income countries are more likely to languish in the WTO dispute settlement process when they target developing countries when compared to those targeting high-income countries. There are a number of possible explanations for this pattern. For example, it is possible that cases filed against developing countries are more likely to be harassment suits–designed to extract some concessions despite having little legal merit. Alternatively, the benefits of pursuing a case against a developing country may be lower than pursuing a case against a high-income country because of the size of the market. The summary statistics do not, however, provide evidence that developing countries lack the resources or knowledge to pursue a dispute settlement case at the WTO; developing countries successfully pursued 85.5 percent of the disputes they filed against high-income countries. The statistics suggest that further exploration of why some complaints languish in the WTO dispute settlement system is warranted.

5 Empirical Model and Data

To explain the likelihood of a dispute languishing in the WTO dispute settlement process, I estimate a binary choice probit model of the complainant country's decision *not* to pursue a particular dispute. The dataset includes the 299 disputes filed at the WTO between 1996 and 2004.[13] I employ two different forms of the dependent variable; in the first specification, I consider the dispute to be languishing, thus setting the dependent variable to equal one, in all of the 105 disputes that the WTO currently considers "pending." In the remaining specifications, I define those disputes that have been considered in an alternative venue or an

[12]For example, a U.S. official noted that U.S. complaints over the European Union's cheese subsidies which were filed in 1997 "died off."

[13]I exclude those disputes filed in 1995 in order to construct the *Tit for Tat* variable described below.

alternative DSU case as resolved. This reduces the number of disputes that are languishing, or truly pending, in the data sample to just 73.

I include in the empirical estimation a number of explanatory variables that attempt to measure the potential costs and benefits of pursuing a case at the World Trade Organization. These are many of the same variables that the studies described above have found to be important determinants of the outcome of disputes. For example, one might expect that the greater the complainant's trade dependence on the defendant, *Trade Importance to Complainant*, the less bargaining power the complainant will have in the dispute settlement process. Therefore, the lower both the benefits from the settlement offer and the potential benefits from pursuing the case with a panel. In contrast, the greater the defendant's trade dependence on the complainant, *Trade Importance to Defendant*, the less bargaining power the defendant will have and the higher the potential returns from pursuing the case. I measure the trade importance as the sum of total bilateral trade between the countries involved in the dispute in the year the dispute was filed divided by the nominal Gross Domestic Product of either the complainants or the defendant. Bilateral trade data is from the United Nation's Commodity Trade Statistics Database, while nominal Gross Domestic Product is from the World Bank's World Development Indicators.

As noted above, WTO dispute settlement rules allow countries to petition to be a "third-party" in disputes. Third-party status affords countries the right to deliver written and oral testimony before panels and receive the submissions of the complainants and defendants in the dispute. Third-parties also have the informal right to participate in consultations prior to the establishment of a panel. Busch and Reinhardt (2006) find that third-parties undermine pre-trial negotiations, making it less likely that countries can reach a settlement in a particular dispute. In this analysis, I include the total *Number of Countries Involved*, including both third-party participants and complainants, as a possible explanatory variable for the likelihood that a case will languish at the WTO. The impact of this variable on the probability of languishing is ambiguous. The larger the number of participants, the higher the potential benefits of resolving the case and the more likely that at least one country will

press forward with the case to ensure its resolution. On the other hand, coordination costs and the potential for free-riding may rise with the number of participating countries which may make it less likely that the countries will be able to reach a settlement or pursue the dispute further.

Busch (2000) argues that democracies make greater use of the dispute settlement process and, more specifically, that democracies are more likely to request a panel in part because democracies are more used to legal norms of conflict resolution. I therefore include measures of the democratic tendencies of both the defendant and the complainants in the dispute settlement case, *Democracy, Defendant* and *Democracy, Complainant*. The Polity IV project's Political Regime Characteristics and Transitions, 1800-2002 Dataset creates a composite ranking each country's level of "Institutionalized Democracy" on a scale of 0 to 10.[14] The *Democracy, Complainant* variable is the maximum democratic ranking of all countries requesting consultations in the individual case.

Developing countries may have less bargaining power in the dispute settlement system. They may also have higher costs of participation due to less developed legal systems, or resource constraints that prevent them from pursuing a case at the WTO. I include two variables, *GDP per Capita, Defendant* and *GDP per Capita, Complainant*, that measure the level of development of the defendant and complainant, respectively. One might expect the greater the ratio of the size of the complainant's to the defendant's economy, the more bargaining power held by the complainant and the higher the expected returns from pursuing the case. I include the *Complainant to Defendant GDP Ratio* to account for this possibility. All three variables are from the World Bank's World Development Indicators.

Earlier studies have found that countries are more likely to file a dispute against a country that has previously targeted it in an earlier dispute settlement case. I expect that retaliatory disputes have less merit than others, and are more likely to languish in the WTO dispute

[14] "Institutionalized Democracy" is defined by three key characteristics: the presence of institutions and procedures through which citizens can express their preferences, institutionalized constraints on executives, and the guarantee of civil liberties. See Marshall and Jaggers (2002) for more detailed information on this variable.

settlement process. I construct a variable, *Tit for Tat*, to capture this possibility. This dummy variable equals 1 if the defendant country targeted the complainant country in a WTO dispute settlement action the year prior to the case.[15]

I include three case-specific dummy variables. The first, *Agriculture*, should capture whether cases involving politically-sensitive agriculture industries are more likely to languish under the WTO dispute settlement process. The other two, *AD/CVD* and *Safeguards*, should capture the unique attributes involving antidumping, countervailing duty, and safeguard cases. I suspect that antidumping and countervailing duty disputes may be more likely to languish at the WTO dispute settlement process because WTO regulations require countries to review the imposition of antidumping and countervailing duty cases automatically every five years; moreover, most countries review the level of antidumping duties on an annual basis at the request of interested parties. Therefore, countries may be more likely to resolve these cases outside of the dispute settlement process.

The United States and European Community are by far the leading patrons of the WTO's dispute settlement system; disputes between these two trading partners accounted for 13 percent of all cases filed at the WTO between 1996 and 2004. To ensure that cases involving the United States and European Community are not biasing the results, I include in some specifications a dummy variable *US-EC Dispute*. Finally, I include an annual time-trend variable to capture whether cases filed early in the WTO's history are inherently different than those filed in later years. This time-trend variable should capture whether those cases filed late in the sample period are more likely to be unresolved simply because countries have not had enough time to request a panel or reach a settlement agreement. Summary statistics on each of the explanatory variables are presented in Table [4].

[15]This is, admittedly, an imperfect measure as retaliatory cases may be filed within the same year as a particular case or several years after a particular case. Moreover, a dummy variable cannot capture the degree to which two cases may be tied together for retaliatory reasons.

6 Results

The marginal effects from the binary choice probit model are reported in Table [5]. Specification [1] defines all those disputes that the WTO currently lists as pending as "unresolved," while the second and third specifications reduce the number of unresolved disputes by considering those disputes that have been examined in another venue or WTO dispute settlement case as successfully resolved. Results from the two definitions of the dependent variable are quite different, as discussed below.

Specification [1] shows that several of the variables that I hypothesized would be important determinants of the decision to abandon a dispute are significant and of the expected sign. For example, I expected that the greater the importance of the trade relationship to the defendant country, the less bargaining power the defendant country would have, and the higher the potential returns from the complainant pursuing the case to either a settlement or a dispute settlement panel. Marginal effect estimates confirm that a one-standard-deviation increase in the importance of the bilateral trade relationship relative to the size of the defendant's economy reduces the likelihood that a dispute will languish at the WTO by slightly over seven percent.

The estimates also suggest that the less developed the defendant country, the more likely the dispute will be abandoned; specifically, a $1,000 decrease in the per capita GDP of the defendant country results in a 1 percent increase in the likelihood that the dispute will never be resolved. This result could be driven by two possible explanations. First, the returns from pursuing a dispute with a developing country may be lower, thus more of these complaints are abandoned. Second, and more troubling for the dispute settlement system, complainants may file more frivolous disputes against developing countries, hoping to force an early settlement with countries with fewer resources to fight claims.

As expected, the estimates imply that complaints that are filed to retaliate for earlier dispute settlement action, or *Tit for Tat* disputes, are 12 percent more likely to languish in the dispute settlement system, suggesting that these complaints may be more frivolous

than other disputes. Complaints involving antidumping and countervailing duty actions are approximately 14 percent less likely to be resolved in the dispute settlement system, confirming that these disputes are more likely to become irrelevant as countries reconsider antidumping actions in five-year sunset reviews, annual administrative reviews, or domestic court cases. Finally, complaints involving the agricultural sector are less likely to be resolved in the dispute settlement system.

Other variables that previous studies have shown to be important determinants in the outcome of disputes prove not to be significant in this analysis, including the level of democracy of the defendant and complainant and the number of countries involved in the dispute. Also insignificant in Specification [1] are the estimates associated with variables capturing the relative size of the complainant to defendant's economy and the level of development of the complainant.

The final two columns in Table [5] present the marginal effects from specifications using the alternative, more restrictive definition of an unresolved case. Note that although Specification [3] controls for potentially unique characteristics of the high number of disputes between the United States and European Community using the *US-EC Dispute* dummy variable, the results are virtually identical to those presented in Specification [2].

As noted above, the results using the alternative definition of an unresolved case are significantly different from those from Specification [1]. In fact, none of the variables that were shown to be significant in Specification [1] prove to be significant in the empirical analysis using the more restrictive definition. This may indicate that the variables that are significant in Specification [1] are not actually explaining the likelihood that a dispute will remain unresolved. Rather, these variables may be the important determinants explaining the likelihood that more than one WTO dispute will be filed regarding a particular issue, or that countries will choose to pursue the issue in an alternative dispute settlement venue.

Three variables prove to be significant determinants of the likelihood that a dispute will truly remain unresolved. First, note that I exclude the variable *Number of Countries Involved* from the estimations using the alternative definition of the dependent variable.

This is because the marginal effect associated with the number of countries involved cannot be identified because *all* of the complaints that truly remain unresolved were filed by a single complainant. In other words, the raw data indicates that there is a zero percent probability that complaints brought by more than one country will languish in the WTO dispute settlement system.

The other two variables that are significant suggest that complaints brought by smaller, less developed countries are more likely to languish in the dispute settlement system. Specifically, a one-standard-deviation decrease in the size of the complainant's economy relative to the defendant's economy, *Complainant to Defendant GDP Ratio*, increases the likelihood that a dispute will remain unresolved by 81 percent. Similarly, a $1,000 decrease in the per capita GDP of the complainant country increases the likelihood that the dispute will remain unresolved by 0.4 percent. One possible explanation for these results is that smaller, developing countries are more likely to file frivolous complaints that they do not follow up upon.

However, the more troubling implication is that the results may instead be due to resource constraints on the part of developing countries in the dispute settlement process. Smaller, developing countries may have less bargaining power and, therefore, lower potential returns from pursuing a complaint to either a settlement or a dispute settlement panel. Alternatively, these countries may lack the legal knowledge or resources to pursue the complaint through the dispute settlement system. Unfortunately, the results from this analysis cannot shed light on which of these potential explanations may be driving the results. Nevertheless, I believe that WTO members should at least consider the possible implication that developing countries are at a disadvantage in the dispute settlement system in their current review of the DSU.

7 Conclusion

As noted in the introduction, 33 percent of all disputes filed at the WTO are classified as pending or inactive, and thus omitted from most studies analyzing the effectiveness of the dispute settlement system. This could significantly bias estimates of the effectiveness if the "inactive" cases have actually been resolved and, thus, misclassified.

My research suggests that approximately five percent of pending cases were resolved in alternative dispute settlement venues, including the U.S. Court of International Trade, the North American Free Trade Agreement (NAFTA) dispute settlement system, and the WTO's customs valuation committee. Similarly, the issues involved in 27 percent of the DSB cases listed as pending have been or are under consideration in other DSB cases.

As many of 43 percent of the pending dispute settlement cases have been resolved in some way. However, in many cases these resolutions do not represent a victory for the countries that initiated the dispute but rather the natural expiration of defendant country's WTO-illegal regulations over what is sometimes a lengthy period of time. Finally, my analysis suggests that approximately one-quarter of all pending cases at the World Trade Organization are truly pending, languishing in the dispute settlement system without resolution.

The empirical results analyzing the determinants of the likelihood that a dispute will fail to be resolved in either the WTO or some alternative dispute settlement body suggest that complaints brought by smaller, less developed countries are less likely to be resolved. If this result is being driven by resource constraints or a lack of bargaining power on the part of developing countries, it has troubling implications for the fairness of the WTO dispute settlement system. Countries should take these results into consideration during their review of the current WTO Dispute Settlement Understanding.

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Figure 1: Outcome of WTO Dispute Settlement Cases, 1995-2004

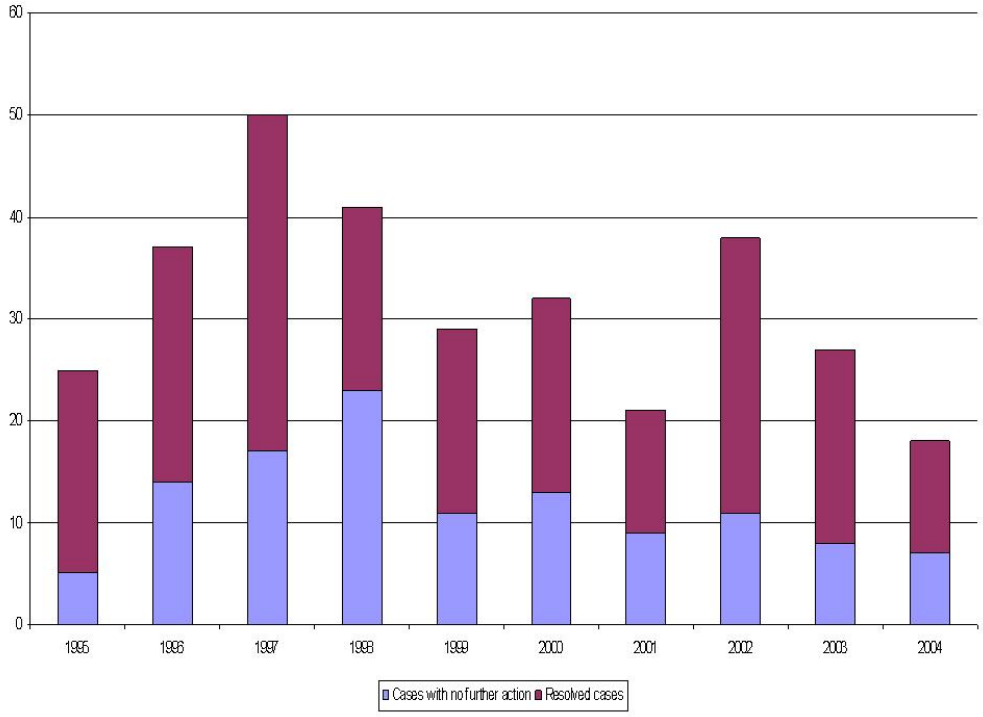

Table 1: Outcome of WTO Dispute Settlement Cases, 1995-2004

	Number	Percentage of Total
Total Cases Filed	324	100.0
Cases with No Further Action	107	33.0
Cases Settled Prior to Establishment of Panel	43	13.3
Cases Withdrawn	8	2.5
Panel Established	166	51.2
Settled Before Panel Report Circulated	37	11.4
Panel Report Adopted	129	39.8

Table 2: Outcome of Pending WTO Dispute Settlement Cases, 1995-2004

	Number	Percentage of Total
Total Pending Cases	107	100.0
Case Brought to Alternative Venue	5	4.7
Issue Taken up in Alternative DSB Case	29	27.1
Issue Partially Resolved or Expired	46	43.0
No Known Outcome	27	25.0

Table 3: Resolution of Disputes, 1995-2004

	Developing Complainants	All Other Cases	T-Test*
Total Cases	110	214	-0.882
Percentage Unresolved	25.5	21.0	(0.379)
Cases Against Developing Countries	55	66	-0.878
Percentage Unresolved	36.4	28.8	(0.382)
Cases Against High-Income Countries	55	148	0.527
Percentage Unresolved	14.5	17.5	(0.599)
T-Test	-2.688	-1.744	
	(0.008)	(0.080)	

*T-statistic associated with the hypothesis that the percentage of unresolved cases are equal across the two groups. P-values are reported in parentheses.

Table 4: Summary Statistics

	Mean	Std. Error	Min	Max
Pending Cases	0.35	0.48	0.00	1.00
Number of Countries Involved	1.07	0.64	1.00	9.00
Trade Importance to Complainant	0.04	0.11	0.00	0.54
Trade Importance to Defendant	0.03	0.09	0.00	0.53
Complainant to Defendant GDP Ratio	57.96	810.46	0.00	14,008.51
GDP per Capita, Defendant (thousands)	17.66	13.19	0.39	39.19
Max GDP per Capita, Complainants (thousands)	17.95	12.34	0.39	39.19
Democracy, Defendant	8.78	1.89	0.00	10.00
Max Democracy, Complainant	8.98	1.45	0.00	10.00
AD/CVD	0.21	0.41	0.00	1.00
Agriculture	0.30	0.46	0.00	1.00
Safeguards	0.10	0.30	0.00	1.00
Tit-for-Tat	0.29	0.45	0.00	1.00
US-EU Dispute	0.13	0.34	0.00	1.00

Table 5: Determinants of Abandoning A Dispute
Marginal Effects from Probit Estimation

	(1)	(2)	(3)
Number of Countries Involved	-0.046		
	(0.060)		
Trade Importance to Defendant	-0.799*	-0.282	-0.275
	(0.449)	(0.279)	(0.283)
Trade Importance to Complainant	0.222	-0.169	-0.162
	(0.310)	(0.231)	(0.237)
Complainant to Defendant GDP Ratio	-0.000	-0.001*	-0.001*
	(0.000)	(0.001)	(0.001)
GDP per Capita, Defendant	-0.010**	-0.004	-0.004
	(0.003)	(0.003)	(0.003)
Max GDP per Capita, Complainants	-0.004	-0.004*	-0.004*
	(0.003)	(0.002)	(0.002)
Democracy, Defendant	0.028	0.009	0.010
	(0.020)	(0.012)	(0.013)
Max Democracy, Complainant	-0.003	0.045	0.046
	(0.025)	(0.029)	(0.029)
AD/CVD	0.139*	0.103	0.104
	(0.082)	(0.070)	(0.071)
Agriculture	0.163**	0.028	0.028
	(0.071)	(0.045)	(0.046)
Safeguards	-0.031	-0.058	-0.058
	(0.099)	(0.060)	(0.061)
Tit for Tat	0.122*	0.073	0.071
	(0.072)	(0.058)	(0.060)
US-EC Dispute			0.010
			(0.072)
Time Trend	-0.010	-0.006	-0.007
	(0.012)	(0.008)	(0.008)
Pseudo R-Squared	0.086	0.086	0.087

Standard errors reported in parentheses. **,* indicate those parameters significant at the 5 and 10 percent significance level, respectively.