

World Agriculture & Trade



European Commission

Calculating Damages in WTO Trade Disputes

The establishment of a system to settle disputes among member nations of the World Trade Organization (WTO) represents one of the major achievements of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT). The WTO Dispute Settlement Body (DSB), which provides binding arbitration, marks an improvement over the earlier GATT system, which could mediate disputes but not enforce their resolution. Under the new system, a dispute proceeds through a set of clearly defined and timed stages, which encourages the disputants to settle their differences.

Since its inception in 1995, the WTO dispute settlement system has received over 200 notifications of trade disputes involving distinct matters. Yet only three dispute cases have gone through the final stage of the system, the retaliation stage, where the DSB awards damages for a country's failure to comply with its obligations under the WTO agreements. Two of these three cases involved agricultural trade and received much media attention in the late 1990s—the *Bananas* dispute and the *Hormones* dispute—and both involved the U.S. and the European Union (EU).

Those rare cases that reach the retaliation stage shed light on the WTO's rationale in determining the level of damages. The WTO methodology is very similar to other dispute resolution systems and is best viewed from a law and economics perspective. The principles reflected in the *Bananas* and *Hormones* damage determinations may carry important lessons for resolution of future trade disputes. Indeed, these principles could be immediately relevant, since the WTO may have to determine the damage amount in the current dispute between the EU and the U.S. over *Foreign Sales Corporations*. The EU may petition the WTO to award damages in this case if an agreement on compensation cannot be reached.

The General Agreement on Tariffs and Trade (GATT) is a multilateral agreement on rules governing the kinds of tariffs and trade policies that parties to the agreement can use. The GATT, established in 1947, was to be enforced by the International Trade Organization (ITO), but the U.S. and other countries opposed the ITO. Thus, from 1947 until the formation of the World Trade Organization (WTO) in 1994, the GATT existed as an agreement without an independent institution to enforce discipline on its members.

The WTO System: Dispute Resolution in Action

If one WTO member claims to suffer damages as a result of another member's failure to abide by its WTO obligations, it can notify the DSB of its complaint. Although the process encourages members to settle disputes bilaterally, the DSB will hold hearings and make rulings to resolve the dispute if bilateral settlement is not possible.

If the DSB finds a member's policies to be noncompliant with the WTO agreements, it allows a "reasonable period of time," usually about 15 months, for the member to bring its domestic policies into compliance. If the member does not comply, the complainant country can "retaliate" by petitioning the DSB for the right to suspend its tariff concessions (i.e., raise tariffs) on imports from the non-compliant member. A DSB arbitration panel ensures that the amount of trade damages awarded is equivalent to the level of damage or impairment suffered.

While much is made of the "retaliation" stage, the WTO dispute settlement system is designed so that very few cases ever reach this final stage. Most trade disputes are settled bilaterally during initial consultations or after the initial panel body ruling. As in civil courts, "pre-trial" settlement is the common outcome; relatively few cases or disputes are actually brought to trial.

In the dispute settlement process, each subsequent stage increases the incentives for the two parties to reach a resolution. This results in a "funnel-shaped" pattern of settlement, which has a strong economic rationale. First, each successive stage is costly: it increases expected cost for the defendant and reduces expected net compensation for the plaintiff (the complainant). Second, each stage forces the disputants to exchange or disclose more information about the facts of the case. A formal dispute continues to the next stage only if the plaintiff and defendant have substantially different subjective expectations of the alleged damage. As more information is disclosed, the facts of the case become clearer and expectations typically converge.

Usually—more than 95 percent of the time in DSB cases—the value of the difference in expectations becomes less than the costs of moving to the next formal step, so settlement occurs. The only *economically* rational basis for the disputants to persist to the trial phase is if their perceptions of the facts of the case remain divergent. (Of course, economic rationality may be only one of several determinants of disputant decisionmaking; for example, political considerations may also play a role.)

Calculating the Level Of Impairment

While no explicit methodology is mentioned in the WTO agreements for calculating the level of impairment, some observations on the rationale can be made from reviewing the DSB panel decisions in the *Hormones* case and, to a lesser extent, the *Bananas* case.

The DSB considers only gross trade.

Only gross trade revenue—the gross value of exports affected or impaired by the alleged WTO violation—is calculated. Effects from substitute or complement products, other trade concessions, or multilateral trade are not considered. For example, in the *Hormones* case, the DSB estimated the gross value of U.S. beef exports to the EU impaired by the EU ban on imports of beef produced with growth hormones. However, a portion of the export revenue lost to the EU was made up by increased U.S. exports to other countries, particularly to Asia. The lost U.S.-EU trade caused an increase in the excess supply of beef in the world market. This depressed world prices and allowed the U.S. to export additional quantities of beef to other countries.

The gross value of U.S. beef exports lost to the EU overestimates the actual damage to net U.S. export revenue. However, the DSB, in its assessment of the trade damage in the *Hormones* case, did not consider such net effects.

The DSB considers only bilateral trade.

The DSB considers only bilateral trade damages imposed on the complainant by the defendant: no third country effects are considered nor are indirect effects considered. For example, in the *Bananas* case,

GATT vs. WTO Dispute Settlement Systems: The *Hormones* Dispute

The WTO dispute settlement system has several advantages over the GATT dispute settlement system that existed before the Uruguay Round. Under the GATT system, a country could simply block the formation of a panel to address a dispute against it or veto an adverse ruling from the panel. Moreover, there was no way for the GATT to enforce a panel ruling even if it was adopted.

The WTO avoids these problems by establishing a set of clearly defined stages to the dispute process, deadlines for pushing disputes through these stages, and an enforcement procedure that allows the WTO to award damages for failure to comply with panel rulings. As a result, the WTO succeeded in addressing several high-profile trade disputes that were stalled under the GATT system, one of the most famous of which is the *Hormones* dispute.

The *Hormones* dispute centered on opposition by the U.S. and Canada to a 1989 ban by the European Union (EU) on imports of beef produced with growth hormones. The main claim of the U.S. against the EU hormone ban was that it had no scientific justification and was therefore illegal under the GATT agreements. When the U.S. attempted to create a GATT panel to address its claim, the EU simply refused formation of the panel. The U.S. retaliated by placing restrictions on exports of EU agricultural products. The EU then tried to form a panel to address these retaliatory measures, which was blocked by the U.S. As a result, the *Hormones* dispute was never fully addressed by the GATT.

In May 1996, the U.S. challenged the EU hormone ban under the WTO dispute settlement system. After initial consultations failed, a Dispute Settlement Body (DSB) panel was created, eventually ruling in August 1997 that the EU ban violated the WTO Agreement on Sanitary and Phytosanitary Measures. The EU appealed the panel ruling, which was upheld by a WTO Appellate Body in January 1998. Since only one appeal is allowed, the DSB gave the EU a period of 15 months (until May 1999) to comply with the appellate body ruling.

After the deadline expired, the U.S. sought WTO authorization to impose retaliatory tariffs. In July 1999, a DSB arbitration panel calculated the level of impairment to U.S. producers caused by the ban to be \$116.8 million a year and the WTO authorized U.S. retaliatory tariffs in that amount. While the *Hormones* dispute still remains to be settled, the WTO created a reasonable end-game to the dispute, which had not been accomplished under the GATT dispute procedure.

the U.S. argued that it should be compensated for the loss of transportation, packaging, and other forms of revenue that U.S. companies suffered from the lost banana exports to the EU. The WTO rejected this claim, since the lost exports came from countries in Central America, not the U.S. The DSB argued that only gross trade directly between the exporting and importing country can be considered.

The DSB panel focuses on determining the “facts” of the case. In hearings, the DSB is interested mainly in receiving a convincing story of exactly how the violation in question affected trade. In the *Hormones* case, for example, the DSB panel

cross-examined each country's account of what happened to trade as a result of the EU hormone ban and generally did not rely on results from complex economic methodologies or models to make its determination of damages. Such results can be useful only when accompanied by supporting facts and a convincing economic analysis.

The DSB final damage award appears to approximate the average of the two parties' estimates. In the *Hormones* dispute, the average of the U.S. and EU estimates of the damage to exports of High-Quality Beef (HQB) was US\$32.4 million. The final damage award determined by the

World Agriculture & Trade

DSB was US\$32.7 million. The average of the two parties' estimates of damage to exports of Edible Beef Offal (EBO) was US\$85.6 million; the final damage award was \$84.1 million. In the *Bananas* case, the final damage award of US\$191.4 million was close to half of the U.S. base estimate of US\$362.4 million.

Underlying Rationale for Determinations: Transparency...

These DSB guidelines for determining trade impairment may at first seem capricious or even erroneous. The observation that final damage awards are close to a simple average of the two parties' estimates could cause one to conclude that the DSB is simply "splitting the difference" between estimates. The guidelines also seem to ignore some of the economic effects from trade-distorting measures. In the *Hormones* dispute, third-country trade effects made up for some of the lost U.S. export revenue as a result of the EU hormone ban and might have decreased the total damage award if they were included in the assessment of damages.

However, there is a method to the WTO's reasoning. An extensive body of literature on dispute resolution systems, combined with knowledge of WTO principles, suggests a rationale for the DSB guidelines.

Dispute resolution panels employ methodologies that measure damages not only accurately but also simply and transparently. Methods must be relatively easy to understand for panel members and countries, as well as easy to explain to outsiders. Complex economic simulation models may provide greater accuracy, but arbitrators tend to prefer straightforward calculations, even if they are somewhat less theoretically satisfying than more complex methods.

The preference for simple and transparent methods probably explains why the DSB excludes third-country or indirect effects not directly related to the dispute in question. Each WTO dispute has covered trade only in specific products between specific countries. The inclusion of other products or countries can cloud the issue and even lead to further debate and controversy, something that the DSB and all dispute settlement systems wish to avoid. While

the methodology used in the *Hormones* case was not very sophisticated, it was straightforward in approximating the amount of damages.

...& Deterrence

Legal dispute settlement panels are charged with upholding the rule of law. In the case of the DSB, the law is the relevant WTO agreement. When calculating damages, dispute panels do not merely consider the economic cost caused by the violation in question—they also consider whether the damage award will deter future violations.

To compare this with a familiar situation, the fine for illegally parking in a space reserved for the disabled is probably much larger than the economic cost of the violation. However, if the fine were low, it would not be an adequate incentive to deter future violations. Panels that calculate damages must weigh the economic costs of individual violations against how such violations will affect the incentives of others.

For the DSB, damage awards that are too low can provide an incentive for countries to violate their obligations as WTO members. Low damage awards may occur if the DSB considers third-country effects, effects from other products, or indirect effects in its assessment of damages. The total economic effects of a trade-distorting measure such as a ban, tariff, or tariff-rate quota are usually much smaller than the gross effects of such measures on bilateral trade. If countries violate WTO agreements because the expected penalty is low, it could undermine confidence in the enforcement ability of the DSB.

At the same time, the DSB—in common with all formal dispute settlement systems—encourages parties to settle their disputes bilaterally. Expectation of unusually high damage awards might reduce a complainant's incentive to settle. Thus, the DSB must strike a balance between awarding damages that are too low or too high, to avoid creating the wrong incentives. Recognition that the DSB will work to strike this balance creates an incentive for the parties not to excessively overestimate or underestimate the amount of damages; if excessive differences lead to a failure to settle bilaterally, the parties know

that DSB scrutiny of the estimates will quickly identify unjustifiable damages and determine an award in line with amounts supported by the evidence. As a result, parties are likely to provide estimates that strengthen their credibility with the panel, leading to convergence, rather than divergence, of damage estimates. Thus, the final damage award is likely to approximate an average of the two parties' estimates, which may give the appearance that the DSB is simply "splitting the difference" when determining damages.

Finally, dispute resolution systems must abide by the principles under which the corresponding legal agreements were created. Trade concessions in the WTO agreements adhere to the principle of reciprocity under which countries have liberalized their markets over the past 53 years. The reciprocity principle implies that during rounds of negotiations for tariff reductions, each country should make *equivalent* tariff concessions. Since tariff concessions are negotiated as blocks of trade, this should also be the case for the suspension of tariff concessions (i.e., trade damages). Therefore, the DSB considers only gross trade (i.e., blocks of trade) when assessing trade damages.

Based on the *Hormones* and *Bananas* cases, the DSB settlement system appears to function like any other arbitration process: the arbitrators' job is to determine the amount of damage, and to make that determination, they want to hear a factual account of the case and employ a simple and transparent calculation or estimate of direct damages.

A party in a trade dispute would likely benefit from attending to this line of reasoning—by constructing qualitative arguments to support their damage calculation and by preparing answers to questions from the DSB panel to support those arguments. Complex methodologies or results from forecasting models might best be used only if the model assumptions are reasonable and the model results support, rather than replace, solid qualitative arguments. **AO**

Jason Bernstein (202) 694-5165 and
David Skully (202) 694-5236
jasonb@ers.usda.gov
dskully@ers.usda.gov