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Phoenix X.F. Cai
University of Denver, pcai@law.du.edu

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THINK BIG AND IGNORE THE LAW: U.S. CORN AND ETHANOL SUBSIDIES AND WTO LAW

Phoenix X. F. Cai*

Introduction

Everyone should care about what happens at the World Trade Organization (WTO) in Geneva. It affects our lives in large and small ways. Decisions made in Geneva affect the price of food on our tables, gas at the pump, and the prices and availability of most of what we buy.

This Article argues that new challenges to U.S. corn and ethanol subsidies are highly likely. Even though at first glance this Article deals with the specialized and esoteric field of international trade law, its sweep is much broader. The subject of this Article is also both timely and salient. The agricultural subsidies debate is highly salient in the current political context of high food costs, high fuel prices and Doha development round sensitivities. The year 2008 saw rocketing food and fuel prices, food rationing in many countries, and the controversial passage of the 2007 Farm Bill over a presidential veto, all of which focused the spotlight on agricultural policies. At the same time, Doha Round ministerial negotiations, which seek to significantly reform the agricultural subsidies regime, resumed in July of 2008. A primary goal in Doha is to ensure that the world trading system more fully benefits developing countries.

This Article explores in depth Brazil’s successful challenge of U.S. cotton subsidies in the Upland Cotton case. The case is significant in a number of ways discussed in detail in this article in Part IV. Moreover, the arguments Brazil raised in the case apply to corn and ethanol subsidies as well. In fact, the Upland Cotton case provides developing nations greater incentive to broadly attack U.S. subsidies by opening the door to a broader range of remedies. Challengers may use the stronger remedies of the Agreement on Subsidies and

*Assistant Professor of Law, University of Denver College of Law; University of California at Berkeley College of Law: Berkeley Law, J.D., 1999, Order of the Coif; Washington University in St. Louis, B.A. 1996. The author is grateful to Professors Alan Chen and Rachel Arnow-Richman for their helpful insights and comments. Particular thanks to Krishma Parsad, Joseph Destafney, and Sunika Pawar for their excellent research assistance. Any errors are mine. © 2009, Phoenix X. F. Cai.
Countervailing Measures (SCM Agreement) as well as the Agreement on Agriculture. As Doha talks continue to stall, challenges by developing or middle-income nations to U.S. corn and other subsidies becomes more likely.

Beyond the exploration of the doctrinal and practical implications of the Upland Cotton case, this Article also makes a number of broad theoretical and policy points. First, the case provides a useful lens through which to view the role of developing nations and their access to the WTO's dispute settlement process. Developing nations are very interested in broadening market access for their agricultural products. There are primarily two methods of achieving this goal in the WTO: negotiation or litigation. Developing nations are actively pursuing the negotiation route in Doha, but many are also considering litigation. The Upland Cotton case will be a linchpin in any litigation strategy. Agricultural subsidies litigation may open the floodgates to greater activism by developing nations in WTO dispute settlement proceedings.

Second, this Article examines the concept of relative judicial power: the idea that the WTO's Appellate Body is powerful relative to other international adjudicative bodies only because the political branch (the WTO General Council consisting of all member-states) has failed to exhibit political leadership. It argues that the General Council has a chance in Doha to reassert itself. Agriculture provides a unique opportunity for the members of the WTO to reverse the trend of political capitulation.

A third and related point is that Doha represents an opportunity for not just the usual players (the United States, the European Union, China, Japan, India, and Russia) but also emerging blocs of developing nations to play a leadership role in agriculture. Both developing and developed nations must yield for a consensus to emerge from future Doha talks. Failure of Doha to achieve meaningful reform would be a devastating blow to the legitimacy and continued viability of the WTO as an institution. However imperfect the WTO may be, it would be a shame to abandon it now to fragmented bilateralism and opportunistic protectionism.

Before proceeding, a few short notes on scope are in order. First, this Article will not focus on U.S. farm policy in general. Rather, farm bills are considered only to the extent that they contribute to an understanding of the potential conflicts between U.S. subsidy policies and WTO rules. Second, this Article focuses primarily on the international regulation of agricultural subsidies and does not consider in any detail the domestic regulatory and legal regime, which is subject to international
The Article proceeds in six parts. Part I explains the multi-layered WTO regime on agriculture and subsidies, with particular emphasis on the delicate interplay among multiple WTO agreements. It also highlights the main ways in which U.S. subsidies programs conflict with WTO rules on agriculture and subsidies. The Doha negotiations are an attempt to address some of these conflicts. However, because Doha’s fate is uncertain, the future of U.S. subsidies is also uncertain. Part II discusses the Upland Cotton case in detail, highlighting in particular the implications for other U.S. commodity subsidy programs, including corn. Part III examines the legal and political likelihood of a new WTO challenge against U.S. corn and ethanol subsidies and suggests that such a challenge is highly probable. Part IV analyzes the significance of the Upland Cotton Case. Part V presents a normative lesson for international governance derived from the cases and agreements considered in this article. Part VI concludes with a call to bring Doha to a successful conclusion.

I. The Regulation of Agricultural Subsidies

A. WTO Rules

Nations often subsidize their domestic agricultural producers. These subsidies have a significant impact on international trade because they reduce production costs, giving subsidized producers an unfair advantage on the international market. Nations have negotiated international trade agreements, many of them under the aegis of the WTO, to facilitate free trade and minimize the harmful effects of subsidies. The WTO legal regime for agricultural subsidies is rather complex. Two different agreements apply and the interplay between them is intricate. The Uruguay Round of negotiations, which created the WTO, subjected agricultural subsidies to serious restrictions under international trade rules for the first time. However, it did so in a bifurcated way,


2. Certain provisions in the GATT did apply to agricultural products prior to the creation of the WTO agreements during the Uruguay Round, such as, to a limited extent, GATT Article XVI. See Fabian Delcros, The Legal Status of Agriculture in the World Trade Organization, 36(2) J. WORLD TRADE 219, 223–24 (2002).
with the SCM Agreement\(^3\) on one hand and the Agreement on Agriculture\(^4\) on the other. The SCM Agreement applies to subsidies and countervailing duties\(^5\) generally, across all industries. Although agriculture has been subject to the GATT from its inception, it was always singled out for special treatment due to its particular social, cultural, and political importance.\(^6\) The Agreement on Agriculture formalized this special treatment by subjecting trade in agriculture to its own regime within the WTO.\(^7\) Subsidies for agricultural products are regulated by both the Agreement on Agriculture and the SCM Agreement.

While the Agreement on Agriculture is the principal document governing trade in agriculture, it does not operate in a vacuum. As a

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5. See infra note 12.

6. Many reasons have been offered for this exceptionalism, many of them rooted in culture, history and politics. See generally Marsha A. Echols, Food Safety and the WTO: The Interplay of Culture, Science, and Technology 29–30 (Springer 2001) (explaining the relationship between agriculture and cultural development throughout history). Agricultural food production has deep cultural and historical significance for all human societies. Many nations cleave to the belief that protecting domestic food supply by assisting domestic farmers is a matter of national interest. For example, American farm policy is still very much driven by notions of “food security” and “food supply autonomy.” See generally Mark Nord and Heather Hopwood, A Comparison of Household Food Security in Canada and the United States, United States Department of Agriculture, Economic Research Service, No. 67 (2008) (demonstrating the importance of food security in both United States and Canadian agriculture policy). In addition, nations that rely extensively on a single food crop, such as rice for many Asian nations, are often reluctant to rely on food imports of that staple crop. See e.g., James R. Moore, Unlocking the Japanese Rice Market: How Far Will the Door Be Opened?, 9 Transnat'l Law 273, 276–79 (1996) (explaining the significance of rice in Japanese culture and Japan’s reluctance to allow rice imports in the interest of preserving the economy in addition to the nation’s well-being overall). Lastly, the farming industry yields significant political clout, even in countries like the United States where agriculture represents only 1% of the GDP. See Christopher K. Leman & Robert L. Paarlberg, The Continued Political Power of Agricultural Interests, in Agriculture and Rural Areas Approaching the Twenty-First Century 32, 34–35 (R.J. Hildreth et al. eds., 1988) (asserting that despite the decline of farm production in the United States, farmers retain substantial political clout).

7. While the Agreement on Agriculture is the principal document governing trade in agriculture, it is linked to other WTO agreements, such as the SCM Agreement, discussed in detail supra note 3.
WTO agreement, it is subject to the dispute settlement procedures of the WTO as well as pre-WTO GATT jurisprudence dealing with agricultural trade. In addition, there are complex linkages to other WTO agreements, such as the SCM Agreement. Agriculture is also subject to special rules under the Agreement on Safeguards, permitting trade restrictions of agricultural products and product standards and health and safety standards under the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).

However, the two agreements are not equal. The SCM Agreement is subservient to the Agreement on Agriculture due to an extraordinary supremacy clause in the Agreement on Agriculture.\(^9\) Article 21 of the Agreement on Agriculture explicitly states that provisions in other WTO agreements are subject to the Agreement on Agriculture.\(^9\) This provision sets the stage for the complicated interplay between the SCM Agreement and the Agreement on Agriculture.

B. The SCM Agreement

The SCM Agreement regulates all subsidies in any economic sector.\(^10\) It differentiates between legal and non-legal subsidies\(^11\) and allows countries to impose WTO-consistent countervailing duties\(^12\) on subsidized imports to offset the effects of illegal or actionable subsi-

8. Agreement on Agriculture, supra note 4, art. 21.
9. Id. art 21.1. Article 21 provides that "[t]he provisions of GATT 1994 and of other Multilateral Trade Agreements in Annex 1A to the WTO Agreement shall apply subject to the provisions of this agreement." See also Delcros, supra note 2, at 249.
11. Actionable, yellow, and non-actionable.
12. Under the WTO system, member states confronted with illegal subsidies may choose between a multilateral solution and a unilateral one, but not simultaneously or cumulatively. The aggrieved party can initiate a WTO dispute settlement procedure to seek the removal of the subsidy by another WTO member. In this situation, the SCM Agreement governs. In the alternative, it can choose to unilaterally impose a countervailing (or offsetting) duty on the subsidized import. The unilateral approach usually begins when a domestic industry injured by subsidized imports from another country initiates a countervailing duty investigation under its own domestic laws. If the investigation finds that the subsidy is present and is more than de minimis (more than 1% of the ad valorem value), then it can impose a duty on the subsidized import that countervails or offsets the financial advantage of the subsidy. The findings of the domestic countervailing duty investigation are also subject to WTO review under the SCM Agreement. The countervailing duty is designed solely to level the playing field by neutralizing the effect of the subsidy. It is not punitive, nor does it require the subsidizing foreign government to remove its
The SCM Agreement generally aims to limit the use of the most trade-distorting subsidies, such as export subsidies.

The SCM originally recognized and distinguished between prohibited and actionable subsidies. Prior to 2000, Article 8 of the SCM Agreement created a safe harbor provision for certain “green light” subsidies. When this article expired in 2000 due to WTO gridlock, the two remaining types of subsidies, prohibited or “red light” and actionable or “yellow light,” remained.

1. Prohibited or Red Light Subsidies

Prohibited—or red light—subsidies are the most trade distorting subsidies. They consist of export subsidies and import substitution subsidies. Export subsidies are those given by a government to domestic producers on the condition that the subsidized product is exported. They are per se illegal due to their direct and serious trade-distorting effects. Import substitution subsidies consist of government payments to private domestic producers that buy domestic goods rather than imported goods for use in domestic manufacturing. They are essentially payments to domestic producers for using domestic, rather than imported, content. They distort trade by lowering the cost of domestic content and suppress competition from foreign imports by making it artificially cheaper to buy domestic content. To give a simple example of both types of prohibited subsidies, imagine that the United States gives a $0.50/bushel subsidy for all corn that is exported as well as a separate $0.50/bushel subsidy to any U.S. ethanol producer that purchases American corn for use in ethanol production. The first would be a red light export subsidy and the second a red light import substitution or domestic content subsidy.

Both export subsidies and import substitution subsidies are presumptively illegal under the SCM Agreement, which does not re-
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quire any further showing of adverse effect or serious prejudice to other countries. This is important to keep in mind when considering the interplay between the Agriculture Agreement and SCM Agreement because the presumption of illegality of red light subsidies applies to agricultural subsidies as well. Annex I of the SCM Agreement provide an illustrative list of red light subsidies, all of which are per se illegal.

2. Actionable or Yellow Light Subsidies

All other subsidies, other than export and import substitution subsidies, are actionable subsidies. Actionable—or yellow light—subsidies may or may not be illegal under the SCM Agreement depending on their trade-distorting effect. Under Article 5 of the SCM Agreement, they can be illegal if they result in "adverse effects" to other countries. Article 5 provides several ways for aggrieved countries to prove adverse effects, but in practice the most relevant one is a showing of "serious prejudice" either in the form of price suppression or market share loss. A subsidy is actionable if it significantly lowers the price for the subsidized commodity in an applicable market. Alternatively, a subsidy

17. SCM Agreement, supra note 3, Annex I.
18. Id., art. 5.
19. Id. ("No Member should cause, through the use of any subsidy... adverse effects to the interests of other Members..."). Article 5 identifies three types of adverse effects: "(a) injury to the domestic industry of another Member; (b) nullification or impairment of benefits accruing directly to other Members under GATT 1994...[and] (c) serious prejudice to the interests of another Member").
22. See SCM Agreement, supra note 3 arts. 6.3(a)–(d). Serious prejudice in the sense of paragraph (c) of Article 5 may arise in any case where one or several of the following apply:
(a) the effect of the subsidy is to displace or impede the imports of a like product of another Member into the market of the subsidizing Member;
(b) the effect of the subsidy is to displace or impede the exports of a like product of another Member from a third country market;
(c) the effect of the subsidy is a significant price undercutting by the subsidized product as compared with the price of a like product of another Member in the same market or significant price suppression, price depression or lost sales in the same market; or
(d) the effect of the subsidy is an increase in the world market share of the subsidizing Member in a particular subsidized primary product or commodity as compared to the
is actionable if the aggrieved party can show that the subsidy enabled a country to take a portion of the aggrieved party's market share for that commodity.

For example, assume that the U.S. $0.50/bushel for corn subsidy we saw earlier consists of a simple direct payment of $0.50/bushel to all U.S. corn growers instead of being tied to exports or domestic content for manufacturing. Assume also that Mexico wished to challenge the subsidy. Mexico could not argue that this subsidy is per se illegal because it is not linked to exports or domestic content. It is a yellow light subsidy, but Mexico would need to show serious prejudice. Mexico would prevail if it succeeded in proving that either (a) the price of corn in the United States fell substantially after the subsidy was imposed, or (b) the percentage of corn sold by Mexican farmers in the United States fell by a significant percentage after the creation of the subsidy.

C. The Agreement on Agriculture

It is important to keep in mind that drafters of the Agreement on Agriculture intended it to be the first step in a series of meaningful reforms. The preamble describes the Agreement as beginning "a process of reform of trade agriculture" leading to a trade regime as free from intervention, distortions and restrictions as possible. The Doha Development Agenda (DDA) of 2001 was meant to be the second step in this process. Even though agriculture is only one among many contentious trade issues, by placing it at center stage the DDA has staked its success on achieving meaningful reforms in agriculture.

average share it had during the previous period of three years and this increase follows a consistent trend over a period when subsidies have been granted.


Therefore, it is of critical importance that Doha yields results on agriculture.

The Agreement on Agriculture favors transparency, an overall goal of the world trading regime. Transparency means preferring tariffs above other forms of regulation. The Agreement on Agriculture admonishes members to convert all non-tariff barriers into tariffs,26 which are initially set (bound) at generous levels, but which will be reduced by percentages to be agreed upon in future negotiations like Doha. Because the Agreement on Agriculture failed to specify a timetable for tariff reductions, negotiators at Doha must now grapple with how deeply to cut agricultural tariffs.27 In addition to lowering tariffs, members promised to reduce levels of subsidies from 1992 levels, the year chosen as the baseline for the Agreement on Agriculture. This means that the subsidies commitments in the Agreement on Agriculture represent “the ceiling, the upper bound of permissible protection to farm goods.”28

Like the SCM Agreement, the Agreement on Agriculture also distinguishes between export subsidies and domestic support, and domestic support is further divided into sub-categories, known by their vernacular names as Amber Box, Blue Box and Green Box.29

1. Export Subsidies

Unlike the SCM Agreement, the Agreement on Agriculture does

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26. Agreement on Agriculture, supra note 4, art. 4.2.
28. Mitsuo Matsushita, Thomas J. Schoenbaum & Petros C. Matrovidis, The World Trade Organization: Law, Practice, and Policy 301 (2006); see also Article 3.2 of the Agreement on Agriculture, supra note 4, which provides, “[s]ubject to the provisions of Article 6, a Member shall not provide support in favour of domestic producers in excess of the commitment levels . . . of its Schedule.” Article 6 exempts certain domestic measures from the calculation of its support and asserts that “a Member shall be considered to be in compliance with its domestic support reduction commitments in any year in which its domestic support in favour of agricultural producers . . . does not exceed” levels specified in that Member’s commitment schedule. See Agreement on Agriculture, supra note 4, art. 6.1, 6.3.
29. WTO lawyers and policy-makers clearly love colors. The terms Amber Box, Blue Box and Green Box do not appear in the Agreement on Agriculture, but are used ubiquitously, both within the WTO and the academic literature. See World Trade Organization, Backgrounder, Domestic Support in Agriculture: The Boxes, http://www.wto.org/english/tratop_e/agric_e/agboxes_e.htm (last visited Mar. 23, 2009) [hereinafter The Boxes].
not deem any export subsidies to be *per se* illegal. Rather, they are subject to limits on both value and quantity of products to be subsidized. Developed nations committed to cut export subsidies 36% by value and 21% by quantity of exported products over a six year period.\(^3\) Developing nations agreed to similar cuts of 24% and 14%, respectively, but over a ten year period.\(^3\) The least developed countries (LDCs) were not required to commit to any reductions as most do not have the resources to significantly subsidize exports.\(^3\) At the Hong Kong Ministerial Conference in 2005, WTO members reached an agreement in principle to eliminate all agricultural export subsidies by 2013.\(^3\) However, the implementation of such an agreement is left to the Doha Round to resolve, and so far it has been mired in controversy over myriad issues, such as market access, special safeguard mechanisms and subsidies.\(^3\)

Agricultural export subsidies were immune from WTO challenge under the Peace Clause of the Agreement on Agriculture.\(^3\) The Peace Clause shielded challenges under both the Agreement on Agriculture and the SCM Agreement. However, now that the Peace Clause has expired, they ought to be subject to the general terms of the SCM Agreement. Even though they are not *per se* illegal,\(^3\) they ought to be subject to the same serious prejudice analysis for yellow light subsidies under the SCM Agreement. Furthermore, it is quite clear that they would count against a country's overall subsidy reduction commitments.\(^3\)

Historically, the WTO treated agricultural export subsidies with greater laxity than other export subsidies. However, three recent events reversed the trend. The expiration of the Peace Clause, the *Upland Cotton* case, and the Hong Kong Ministerial Conference commitment

\(^3\) Agreement on Agriculture, *supra* note 4, arts. 3.3 & 8–9.
\(^3\) Id.
\(^3\) Id. art 15.2.
\(^3\) Id. arts 3.3 & 8–9.
\(^3\) Id. art 15.2.
\(^3\) Id. art 15.2.
\(^3\) Id. arts 3.3 & 8–9.
\(^3\) See Cho, *supra* note 25, at 174–76; *see also* discussion *infra* in Part I.C.
\(^3\) See discussion *infra* in Part I.C.
\(^3\) The Hong Kong Ministerial Conference agreement for the complete elimination of export subsidies in agriculture suggests that members view them as prohibited.
\(^3\) All subsidies count towards a country's total agricultural subsidy reduction commitments. See Agreement on Agriculture, *supra* note 4, arts. 6–7 (noting exemptions for a limited number of minimally distorting Green Box subsidies, referenced in Annex 2, and providing exceptions for developing nations).
to eliminate agricultural subsidies by 2013 ushered in an era of greater scrutiny. The first two factors opened the door to the oversight of the SCM Agreement for the first time. The third factor brought agricultural export subsidies under the aegis of the Doha negotiations. The era of special and differential treatment has come to an end.

2. Domestic Support Subsidies

The Agreement on Agriculture limits domestic subsidies to differing degrees, depending on how much they distort production and trade. While the SCM Agreement takes a definitional approach to subsidies, distinguishing between prohibited export-related and actionable domestic subsidies, the Agreement on Agriculture uses an effects approach. It examines the total trade-distorting effect of a subsidy and caps the most damaging. The Agreement on Agriculture distinguishes among highly trade-distorting subsidies (Amber Box), minimally trade-distorting subsidies (Blue Box), and non-trade-distorting subsidies (Green Box).

a. The Amber Box

Amber Box subsidies are considered to be the most trade-distorting. They include price support subsidies tied to the current market price of a product or subsidies directly related to production quantities. Article 6 of the Agreement on Agriculture defines Amber Box subsidies as all subsidies that do not fall into the Blue and Green Boxes. For example, a subsidy that calculates payments to corn farmers based on the difference between the guaranteed price (say $1.00/bushel) and the market price (say $0.80/bushel), resulting in a subsidy of $0.20/bushel, would be an Amber Box subsidy. Amber Box subsidies are subject to two important restrictions under the Agreement on Agriculture: \textit{de minimis} limitations and Total Aggregate Measure of Support (Total AMS). Countries are allowed to make \textit{de minimis} payments at agreed upon levels: 5% of agricultural production for developed countries, 10% for developing countries, and no limitation for LDCs.\textsuperscript{38} In addition, each country also agreed to slow down or reduce the use of these subsidies. Developed countries agreed to reduce their annual domestic support of their Total AMS (based on 1986-88 levels) by 20% over a six year implementation period beginning in 1995. Developing nations agreed to Total AMS reductions of 13% over a ten year period. LDCs were

\textsuperscript{38} Agreement on Agriculture, \textit{supra} note 4, art. 6.4.
again exempt. For the United States, the Total AMS for Amber Box subsidies at the end of the six year implementation period was approximately $19.2 billion. Any Amber Box spending by the United States in excess of $19.2 billion is vulnerable to WTO challenge. In determining the total amount of allowable subsidies, the characterization of the subsidy at issue as Amber, Blue or Green Box is therefore quite important.

b. **The Blue Box**

Blue Box subsidies are Amber Box subsidies that have been modified to lessen the trade-distorting effects as much as possible by imposing requirements for farmers to limit production. As such, they are often referred to as Amber Box with conditions. They are considered less trade-distorting than Amber Box subsidies because they limit rather than encourage production, and therefore are less likely to lower prices. For example, a subsidy that gives corn farmers a direct payment of $0.05 per acre, provided that they cap corn production at X bushels per acre or leave a fixed percentage of their acreage fallow, would be a Blue Box subsidy. Under the Agreement on Agriculture, Blue Box subsidies are also not subject to any caps or limits on spending. However, there is always the risk that Blue Box subsidies might be re-characterized as Amber Box and thus count against the Total AMS reduction commitments.

Blue Box subsidies are a hot topic of negotiation in the Doha Round. Some countries believe that keeping the Blue Box unchanged is critical for easing the transition away from Amber Box subsidies without too much hardship on farmers. Other countries want to impose limits or reduction commitments on Blue Box subsidies. Still others believe the category should be eliminated and all Blue Box subsidies should

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40. See Agreement on Agriculture, supra note 4, art. 6.5.

count as Amber Box.\textsuperscript{42} The United States is pursuing a strategy that would expand the ambit of Blue Box subsidies. The United States eliminated the use of production limiting subsidies in the 1996 Farm Bill, but is currently pursuing the strategy of ensuring that counter-cyclical payments are shielded as Blue Box subsidies, either by creating a new category or by re-defining the existing definition of Blue Box subsidies.\textsuperscript{43}

c. The Green Box

Green Box subsidies are those that are not at all, or only minimally, trade-distorting.\textsuperscript{44} As such, they have to be completely decoupled from, or not contingent on, the production of any crop. They also may not provide any price support or be linked to price levels.\textsuperscript{45} An example would be emergency payments to all farmers in an area devastated by flooding. Green Box subsidies are not subject to any caps or limits. Thus, countries should structure their subsidies as Green Box to the fullest extent possible because they are unlimited and may increase over time, unlike Amber Box subsidies. Examples of common Green Box subsidies include conservation and environmental measures, rural school construction or other rural improvement projects, disaster relief, research and education, regional development programs, disease and pest control, agricultural training and extension services, and other programs not tied to the production of any given crop.\textsuperscript{46}

The concept of Green Box subsidies as such is not under attack in the current round of negotiations. However, certain types of Green Box payments are contentious. Some countries have argued in Doha that some Green Box subsidies may not meet the minimally trade-distorting test, either because of the large amounts paid or because of the nature of the subsidies themselves. Examples of subsidies that may be reclassified or limited as a result of the Doha Round include

\textsuperscript{42} See The Boxes, \textit{supra} note 29.


\textsuperscript{44} Agreement on Agriculture, \textit{supra} note 4, Annex 2, \textsection 1.

\textsuperscript{45} Agreement on Agriculture, \textit{supra} note 4, Annex 2.

\textsuperscript{46} \textit{Id.}
direct payments to farmers, decoupled income support, and government support for income insurance and income guarantee or safety-net programs.

3. Expiration of the Peace Clause

The Agreement on Agriculture contains an extraordinary due restraint clause in Article 13, known as the Peace Clause. The Peace Clause shielded agricultural subsidies from legal challenge under the SCM Agreement for a nine year period beginning in 1992, so long as such subsidies did not exceed levels in 1992. The clause expired on January 1, 2004.

The Appellate Body held that the Peace Clause did not bar a suit against U.S. subsidies provided prior to 2004 if those subsidies exceeded limits set out in the Agreement on Agriculture. The Appellate Body's interpretation of the Peace Clause conforms to general principles of treaty interpretation. The WTO dispute settlement bodies have made clear that they follow customary norms of treaty interpretation as enshrined in the 1969 Vienna Convention on the Law of Treaties. One such customary norm is to interpret treaties so as to not

47. Id., ¶ 5.
49. Id., ¶ 7. Government supported insurance programs that did not generate enough revenue to cover expenses were struck down in Upland Cotton, see discussion infra Part II.A.4.
50. Article 13 of the Agreement on Agriculture is entitled "Due Restraint." See Agreement on Agriculture, supra note 4, art. 13.
51. Id.
52. Agreement on Agriculture, supra note 4, art. 1(f) ("implementation period" means the six-year period commencing in the year 1995, except that, for the purposes of Article 13, it means the nine-year period commencing in 1995).
53. Id.
54. See Appellate Body Report Upland Cotton, supra note 1, ¶ 363.
55. See discussion infra Part II.
render any provision unnecessary or redundant.\textsuperscript{57} Extending the protection of the Agreement on Agriculture to agricultural subsidies even with the expiration of the Peace Clause would render the Peace Clause both unnecessary and redundant. It follows that a specifically negotiated\textsuperscript{58} provision like the Peace Clause, added at the last minute in the Blair House Accord,\textsuperscript{59} would not be mere verbiage.\textsuperscript{60}

The special immunity agricultural subsidies enjoyed disappeared with the expiration of the Peace Clause. The expiration of the Peace Clause opens up the possibility for two categories of potential suits: (1) those alleging pre-Peace Clause violations (such as Brazil’s argument in \textit{Upland Cotton} that U.S. Amber Box subsidies exceeded agreed upon 1992 levels in the Agreement on Agriculture) and (2) those alleging post-Peace Clause violations (such as claims of “serious prejudice”\textsuperscript{61} or “adverse effects”\textsuperscript{62} under the SCM Agreement).

\footnotesize{(noting problems with the incorporation theory, including that the Vienna Convention predates GATT, that the United States is not party to the Convention, and that the Convention may not be a codification of general international law).}


\textsuperscript{58} Another example of the specifically negotiated terms of the Peace Clause is its nine year implementation period, whereas all other provisions of the Agreement on Agriculture have a six year implementation period. See \textit{Agreement on Agriculture}, \textit{supra} note 4, arts. 1(f), 13.

\textsuperscript{59} See Desta, \textit{supra} note 25, at 179.

\textsuperscript{60} See also, Porterfield, \textit{supra} note 20, at 1010.

\textsuperscript{61} SCM Agreement, \textit{supra} note 3, art. 5.

\textsuperscript{62} Id.
D. U.S. Subsidies Regimes under Farm Bills

1. Pre-2007 Farm Bills

The United States revisits its subsidies regime every five years by passing a new farm bill. The 1996 Farm Bill was the first to seriously grapple with WTO subsidies rules, marking a clear break with previous farm bills that paid little heed to international regimes. While it is beyond the scope of this article to describe in detail the various U.S. farm bills, it is important to have a basic understanding of their structure to understand both the Upland Cotton case and the current debate in the Doha Rounds about the 2007 Farm Bill. From the 1930s to the 1990s, U.S. farm policy developed autonomously with little reference to world trade rules. The object of U.S. farm bills during this period was to maintain the stability of commodity crop prices through a system of production restrictions and price-contingent loan and payment programs.

The 1996 Farm Bill was the first to integrate WTO rules, including the commitment the United States made in the 1994 Agreement on Agriculture to cap Amber Box spending at $19.1 billion. This marked a drastic change in U.S. farm policy. More than any other previous farm bills, the 1996 Farm Bill was an experiment with a free-market approach. Subsidies under the 1996 Farm Bill for the same five commodity crops (wheat, corn, upland cotton, rice, and soybeans) decreased over a seven year implementation period to keep Amber Box spending...
under the $19.1 billion limit. This gradual reduction in subsidies payments was politically acceptable because most believe, that the increased revenues from agricultural exports under the Agreement on Agriculture’s reduced tariffs would more than offset the loss of the subsidies.

The 2002 Farm Bill reversed the course of reducing farm subsidies undertaken in the 1996 Farm Bill. Compliance with WTO rules did not seem to be a large motivating factor behind the 2002 Farm Bill. The 2002 Farm Bill reversed the free-market experiment of the 1996 Farm Bill and reinstated prior direct payment programs.

Importantly, the 2002 Farm Bill formalized the temporary emergency payments Congress had appropriated under the 1996 Farm Bill as counter-cyclical payments. They are calculated using the same base acreage as for direct payments, but are tied to the difference between a target price for each commodity and the “effective price” for that commodity. The “effective price” is defined as the higher of the average market price or the marketing loan rate added to the direct payment rate for the commodity. In essence, counter-cyclical payments function as price guarantees that shield U.S. farmers from

68. See 1996 Farm Bill, supra note 66, at § 113(a) (imposing a gradual reduction in production flexibility contract payments, which replaced deficiency payments under the prior Farm Bill for the same commodity crops, ending in fiscal year 2002).


72. Rather than decreasing subsidies support, the 2002 Farm Bill increased spending by $73 billion, of which $51 billion went to subsidies. See Nick J. Scuilo, “This Woman’s Work” in a “Man’s World”: A Feminist Analysis of the Farm Security and Rural Investment Act of 2002, 28 WHITTIER L. REV. 709, 715 (2006). However, the 2002 Farm Bill did contain a provision that requires the U.S. Secretary of Agriculture to modify or restrict commodity payments to avoid exceeding WTO domestic subsidies ceilings per U.S. commitments. See STEVEN ZAHNISER, ED YOUNG & JOHN WAIDNO, RECENT AGRICULTURAL POLICY REFORMS IN NORTH AMERICA 8 (2005), http://www.ers.usda.gov/publications/WRS0503/wrs0503.pdf.

73. See U.S DEP’T OF AGRIC., RISK MANAGEMENT PAPER, supra note 71, at 19.

74. 2002 Farm Bill § 1104.

75. 2002 Farm Bill § 1104.

76. 2002 Farm Bill § 1104.
market fluctuations. If the market price is high, counter-cyclical payments will be low or *de minimis*. If the market price is low, payments will be high. As with direct payments, the same planting restrictions for fruits, vegetables, and wild rice apply. Brazil attacked the price-contingency and planting restriction provisions in the *Upland Cotton* case.

2. The 2007 Farm Bill

After much delay, the 2007 Farm Bill was enacted into law on June 17, 2008. As a policy matter, the 2007 Farm Bill did not depart from its predecessor. Then-President Bush vetoed the 2007 Farm Bill for failing to achieve the fiscal policies set by his administration.

The 2007 Farm Bill as enacted runs afoul of WTO rules in several ways. Initially, both draft Senate and House versions of the bill contained provisions to bring the export credit program into WTO compliance. However, neither bill addressed the problem of counter-cyclical payments and their price-contingent nature. The 2007 Farm Bill gives producers the option of remaining in the 2002 counter-cyclical payments program or selecting “a new counter-cyclical program that is triggered when the actual national revenue per acre for each program crop falls below a national revenue target.”

The new program, called the Average Crop Revenue Election Program or ACRE, was initiated on December 29, 2008. The program will be in effect beginning with the 2009 crop year until the 2012 crop year. It allows for counter-cyclical payments when revenues for a particular crop fall below the guaranteed revenue for that crop. Guaranteed revenue is “based on the five-year state average yield and the

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77. 2002 Farm Bill § 1106.
79. See id.
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two-year national average price.

ACRE is the United States’ attempt to bring counter-cyclical payments into WTO compliance by basing them on yields as opposed to prices. However, WTO members are not satisfied with ACRE. Some have argued that ACRE payments are still Amber Box and must count against the United States’ total amount of support. Even though the main consideration is historical yields, payments are still too tied to price and total revenue. Thus, the new ACRE still has price-contingent aspects that are problematic from a WTO perspective.

The WTO had found that certain price-contingent subsidies (direct payments and counter-cyclical payments) of the 2002 Farm Bill caused serious prejudice in the form of both market loss and price suppression to the upland cotton market. The final 2007 Farm Bill also failed to change the problematic aspects of these price-contingent subsidies.

For Congress to be serious about WTO compliance, it needs to engage in a meaningful restructuring of the subsidies programs. The political will might not be present for such deep reforms. Some members of Congress are openly hostile to the idea of WTO compliance. In contrast, the Bush Administration was committed to reforming the farm bill both to avoid further WTO challenge and to ensure the 2007 Farm Bill’s compatibility with Doha Round agricultural reforms.

The international community has been watching the progress of the 2007 Farm Bill closely. Developing countries negotiating at Doha justifiably feel that they have a great stake in the outcome. Why should they bother to negotiate new agricultural subsidies terms if the United


85. See discussion infra Part II.

86. House Agriculture Chairman Colin Peterson even went as far as to say “I want a bill that is good for agriculture. If somebody wants to sue us (at the WTO), we’ve got a lot of lawyers in Washington.” See INSTITUTE FOR AGRICULTURE AND TRADE POLICY, A Fair Farm Bill for the World, available at http://www.agobservatory.org/library.cfm?refId=97624 (last visited Mar. 23, 2009); see also Institute for Agriculture and Trade Policy, Understanding the US Farm Bill: US WTO Commitments and the Farm Bill, available at http://www.iatp.org/iatp/publications.cfm?accountID=258&refId=99970 (last visited Mar. 23, 2009) (stating that some members of Congress have claimed they will disregard WTO commitments in drafting the farm bill).

States will ignore them for another five years, until the 2012 Farm Bill? Many countries view the 2002 Farm Bill as an abdication of WTO responsibilities. A 2007 Farm Bill that is not WTO compliant is extremely unwelcome to many. Brazil, for example, has been patient in pursuing retaliatory trade sanctions for the United States’ failure to fully implement the Upland Cotton decision in part because the 2007 Farm Bill was pending. The United States has used the legislative process as an excuse for foot-dragging. It has the incentive to delay because the contested subsidies remain in effect pending a final compliance determination. Once it became clear that the 2007 Farm Bill would not make the requisite changes to U.S. farm subsidies, Brazil had all the incentives it needed to move forward on WTO authorization for $4 billion in retaliatory trade sanctions.

E. Why the United States and the WTO are on an Inevitable Collision Course

The complexity of the WTO regulatory regime and the existence of the Peace Clause both help explain the dearth of challenges to agricultural subsidies in the period from 1995–2004. However, we can expect to see an upswing in future litigation in the area for four reasons. First, the Peace Clause expired in January of 2004, thereby bringing

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91. Id.


93. See Agreement on Agriculture, supra note 4, art. 13; see also Porterfield, supra note 20, at 1008.
an end to the negotiated freeze on litigation for most agricultural subsidies. Second, the suspension of negotiations in the Doha Round in July 2006\(^{94}\) and the subsequent lack of an agreement on some key agricultural issues,\(^ {95}\) and the disappointing breakdown of negotiations in the revived Doha Round talks of July 20 to July 30, 2008, mean that frustrated parties are more likely to turn to litigation in the face of stymied negotiations. There is evidence that states were holding off litigation so long as prospects for a successful conclusion to Doha remained good.\(^ {96}\) Third, the 2007 Farm Bill is not fully compliant with WTO rules\(^ {97}\) and will therefore be vulnerable to WTO challenge.

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94. See Doha Round Suspended Indefinitely after G-6 Talks Collapse, BRIDGES-WEEKLY TRADE NEWS DIGEST, July 26, 2006 (“The Doha Round of trade negotiations was put into deep freeze on 24 July, after a meeting of ministers from six key trading nations collapsed over divisions on how to cut farm subsidies and tariffs.”); see also In the Twilight of Doha, ECONOMIST, July 29, 2006, at 63. Pascal Lamy, the Director General of the WTO commented on the suspension, “Today there are only losers . . . . The feeling of frustration, regret and impatience was unanimously expressed by developing countries this afternoon.” Pascal Lamy’s statements are available at http://www.wto.org/english/news_e/news06_e/mod06_summary_24july_e.htm (last visited Mar. 23, 2009). Little progress was made in 2007, but Pascal Lamy, the Director General of the WTO, believes that the round may be concluded in 2008 following the issuance of new draft framework deals from the chairs of the WTO negotiating committees on agriculture and industrial goods trade expected in late January of 2008. These reports should contain proposals, called modalities, for expanding market access for agricultural and industrial products by developing nations. On December 18, 2007, Pascal Lamy stated in his report to the General Council that “If we agree on modalities early next year, I believe that we should be able to conclude the Round before the end of 2008.” Available at http://www.wto.org/english/news_e/news07_e/tnc_chair_report_dec07_e.htm (last visited Mar. 23, 2009). Negotiators did agree on a draft framework of modalities for subsidies reduction on February 8, 2008. See World Trade Org., Draft Blueprints Issued for Final Deal on Agricultural and Non-Agricultural Trade, (Feb. 8, 2008), available at http://www.wto.org/english/news_e/news08_e/ag_draft_modalities_feb08_e.htm (last visited Mar. 23, 2009). The initial response to the draft framework has not been very promising, however. Press Release, Institute for Agriculture and Trade Policy, New WTO Agriculture Text Falls Short-Again (Feb. 8, 2008), available at http://www.iatp.org/iatp/press.cfm?refid=101542 (last visited Mar. 23, 2009); see also David Blandford et al., Implications of the WTO February 2008 Draft Agricultural Modalities for the United States, at 5, available at www.ifpri.org/events/seminars/2008/20080501/20080501USLabordeetal.pdf (last visited Mar. 23, 2009).

95. See generally Cho, supra note 25.

96. See GLOBAL SUBSIDIES INITIATIVE, Brazil Files Another WTO Complaint against U.S. over Farm Subsidies, (2007), available at http://www.globalsubsidies.org/en/subsidy-watch/news/brazil-files-another-wto-complaint-against-us-over-farm-subsidies (last visited Mar. 23, 2009) (stating that “[T]he latest Brazilian move comes as the United States and Brazil have locked horns in negotiations aimed at concluding the Doha Round of WTO talks . . . Negotiations on these two issues between the G-4—the United States, the EU, India and Brazil—fell apart last month, resulting in the group itself being disbanded.”).

97. See supra Part I.D.
Moreover, subsidy programs under the 2002 Farm Bill remain subject to WTO challenge because no statutes of limitations apply. Lastly, Brazil successfully mounted a challenge to numerous U.S. subsidies programs for cotton in the *Upland Cotton* case in a 2004 panel decision[^98] that was upheld by the Appellate Body in March of 2005.[^99] In doing so, Brazil blazed a trail for other states to follow in attacking U.S. subsidies for other commodity crops, including corn. We now turn to a detailed examination of that case.

II. TACKLING A GIANT: BRAZIL'S UPLAND COTTON VICTORY AGAINST THE UNITED STATES

A. Brazil Won on Five Counts in its Challenge

In summary, Brazil made five distinct principal arguments against the U.S. subsidies regime for upland cotton under the 1996 and 2002 Farm Bills.[^100] This Article will discuss each of the five arguments and their ultimate disposition by the Appellate Body in its final decision.[^101]

1. The Peace Clause Does Not Bar the Suit

As a threshold matter, Brazil had to show that the Peace Clause of the Agreement on Agriculture[^102] did not bar its challenge even though the dispute involved subsidies that were provided from 1999 to 2002, prior to the expiration of the Peace Clause. Brazil argued that the Peace Clause should not bar the suit because the United States had forfeited the protection of the Peace Clause by exceeding its negotiated reduction commitments under the Agreement on Agriculture.[^103] Brazil argued that the Peace Clause only shielded a small subset of exempt subsidies, those that fell under pre-negotiated set commitments.[^104] In other words, the Peace Clause did not function as a complete shield to litigation.

Brazil also argued that U.S. cotton subsidies for the 2001 marketing year were greater than they were in the baseline marketing year of

[^98]: See Panel Report *Upland Cotton*, supra note 1, ¶ 1.77
[^99]: See Appellate Body Report *Upland Cotton*, supra note 1, ¶ 763.
[^100]: See Panel Report *Upland Cotton*, supra note 1.
[^102]: See Agreement on Agriculture, *supra* note 4, art. 13; see also *supra* notes 61–70 and accompanying text.
[^103]: See Panel Report *Upland Cotton*, supra note 1, 2–3.
[^104]: See Agreement on Agriculture, *supra* note 4, art. 13(b)(ii).
Recall that the Agreement on Agriculture set floors on subsidies support based on 1992 levels. The United States defended on the basis that the Peace Clause still preempted any actions based on the 1992 marketing year, when the Peace Clause was in effect. The WTO panel concluded that Brazil had successfully proven that current U.S. subsidies exceeded 1992 levels and thus were no longer shielded by the Peace Clause. The Appellate Body affirmed.

The decision on the Peace Clause, which accords with the interpretation offered in this Article, is not surprising when one considers the relevant precedent. A previous panel decision in Canada—Milk explored the relationship between the Agreement on Agriculture’s Peace Clause and the SCM Agreement. The panel ruled that “[t]he use of export subsidies beyond such scheduled limits is, in principle, also actionable under the prohibition of Article 3 of the SCM Agreement.” Although Canada—Milk dealt specifically with export subsidies, it also affirmed the principle that any subsidy that exceeds the commitment levels of the Agreement on Agriculture is both subject to, and actionable under, the SCM Agreement. The panel and Appellate Body reports in Upland Cotton affirm this interpretation and apply it beyond export subsidies to all agricultural subsidies generally. The interpretation makes clear that the remedies of the SCM Agreement, in particular the unilateral imposition of countervailing duties, are available for actionable agricultural remedies. As discussed below in Part IV, the SCM Agreement remedies enable developing nations, in particular, to protect against harmful subsidies without bringing an action before the WTO first. Thus, this aspect of the Upland Cotton case, while not doctrinally surprising, is of particular importance to developing na-

106. See Agreement on Agriculture, supra note 4, arts. 6.1, 6.3.
108. See Panel Report Upland Cotton, supra note 1, ¶ 3.1(i).
110. See infra discussion, Section II.A.1.
112. Id. ¶ 7.21.
113. The panel in Canada—Milk also went on to note “[h]owever, by virtue of Article 13(c)(i) [the Peace Clause], of the Agreement on Agriculture, export subsidies that conform fully to Part V of the Agreement on Agriculture are exempt from actions based on Article 3 of the SCM Agreement for the duration of the ‘implementation period.’” This confirms the interpretation that the protected afforded by the Peace Clause lasts only for the implementation period, which expired in January 2004. Id. See also MATUSHITA ET AL., supra note 28, at 297.
2. Direct Payments Are Not Green Box Subsidies

The United States and Brazil disputed the classification of direct payments to U.S. upland cotton producers under the 2002 Farm Bill. The United States believed that direct payments qualified as Green Box subsidies and as such were unlimited by the Agreement on Agriculture. Brazil contended that direct payments should be classified as Amber Box subsidies subject to the reduction and de minimis limits of the Agreement on Agriculture. The critical WTO text for settling this dispute is Annex 2 of the Agreement on Agriculture, which sets forth the requirements for Green Box classification and gives a non-exhaustive list of examples that qualify. The most important of the Annex 2 requirements is that Green Box subsidies must be decoupled, or not linked to production. One scholar has succinctly explained that decoupling generally requires:

[T]hat the amount of income support payments should not be related to the type or volume of production, the domestic or international price of products, or the factors of production employed in any year after the base period. Furthermore, no production should be required in order for the producer to receive such payments.

In order to qualify as Green Box subsidies, payments must be decoupled not only from price but also from production. They cannot, in other words, be crop-based or production volume based. The U.S. government cannot say to farmers that they get these payments only if they either grow cotton or a fixed acreage of cotton.

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114. See infra Part IV and accompanying footnotes.
115. See infra Part I.D.1 for a description of the direct payments program under the 2002 Farm Bill.
116. See infra Part I.C.2(c) for a description of Green Box subsidies.
117. See supra note 29.
118. See supra Part I.C.2(a) and accompanying notes for a description of Amber Box subsidies.
119. Id.
120. See Agreement on Agriculture, supra note 4, Annex 2; see also Desta, supra note 25, at 176–77.
121. See Desta, supra note 25, at 177.
122. See id.
It is important to recall that if a subsidy does not qualify as Green Box, then it is an Amber Box subsidy by default. This means that any subsidy that does not satisfy the classification requirements of Annex 2 is an Amber Box subsidy that counts against a country's reduction commitments and \textit{de minimis} limits. Moreover, Amber Box subsidies are fixed at 1992 levels, while Green Box subsidies may increase over time. Thus, proper classification is critical.

Brazil argued that direct payments could not be classified as decoupled because they were reduced or even eliminated if fruits, vegetables, and wild rice were planted on the covered acreage. Thus, Brazil argued, "the effect of the [planting] restriction is to funnel production on base acreage into particular types of crops." The United States made two arguments in its defense. First, it pointed out that under the direct payments program, "there was no requirement that the farmer engage in any production to receive payment or that the base acreage be used for production." Second, it argued that by calculating direct payments on the basis of past acreage, it had satisfied Annex 2 by completely decoupling payments from either current production or market price.

The WTO panel ruled in Brazil's favor. The panel found that because direct payments were contingent on farmers not producing certain crops (fruits, vegetables, and wild rice), they were production contingent and thus could not qualify as Green Box subsidies. In its decision, the panel focused on both the plain language of the direct payments program in the 2002 Farm Bill and its actual effect on production, which was to encourage the production of cotton by "the overwhelming majority" of recipients. The Appellate Body affirmed

\begin{itemize}
  \item 123. See Agreement on Agriculture, supra note 4, art. 7; see also Panel Report Upland Cotton, supra note 1, ¶ 7.358; see also Kevin C. Kennedy, \textit{The Incoherence of Agricultural, Trade, and Development for Sub-Saharan Africa: Sowing the Seeds of False Hope for Sub-Saharan Africa's Cotton Farmers}, 14 \textit{WTR KAN J. L. \\& PUB. POL'Y} 307, 317 (2005).
  \item 124. See Panel Report Upland Cotton, supra note 1, ¶ 7.358.
  \item 125. See Panel Report Upland Cotton, supra note 1, ¶ 7.360.
  \item 126. See supra Part II.A.2 (description of direct payments).
  \item 127. See Panel Report Upland Cotton, supra note 1, ¶ 7.360.
  \item 128. See Panel Report Upland Cotton, supra note 1, ¶ 8.1(c).
  \item 129. See Panel Report Upland Cotton, supra note 1, ¶ 8.1(c).
  \item 130. See Panel Report Upland Cotton, supra note 1, ¶ 11 7.384–7.387 (concluding that limitations based on the planting of specific crops or the choice of planting nothing nonetheless significantly constrained farmer choices).
\end{itemize}
on essentially the same grounds.132

3. The Step-2 Program is an Illegal Export Subsidy

The Step-2 Program was the only subsidy at issue in *Upland Cotton* that applied solely to cotton, and not any other commodity crops.133 The Step-2 Program involved direct payments to American cotton growers under certain market conditions. It provided price supports to ensure that U.S. cotton remained competitive even when the price of U.S. cotton exceeded world market prices.134 It paid exporters and domestic mill users to keep buying U.S. cotton when U.S. upland cotton prices were high. The effect was to create an economic incentive for both export and domestic consumption of U.S. upland cotton that would not have existed otherwise.135

When domestic prices are high, one would expect U.S. cotton millers to buy cheaper non-U.S. cotton if it is available. Step-2 payments removed the incentive to do that by giving direct payments to make up the higher cost of buying domestic cotton. When U.S. cotton prices are higher than the world market price, one would also expect to see a decrease in U.S. exports. The Step-2 program inoculated against either outcome. The net effect depressed the market for non-U.S. cotton.

Brazil argued that Step-2 payments should be characterized as export subsidies, which are *per se* illegal under the SCM Agreement.136 Brazil bolstered its argument by pointing out that U.S. exporters are eligible to receive Step-2 payments only if they provide documentary evidence that they have exported upland cotton.137 As such, the payments are clearly export contingent. The United States asserted that because Step-2 payments are available to both domestic mill users as well as exporters, they should be classified as Amber Box subsidies.138

Once again, the WTO panel and the Appellate Body sided with

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133. *See 2002 Farm Bill § 1207.*
135. SCHNEPF, *supra* note 134; *see also* Panel Report *Upland Cotton*, supra note 1, ¶ 7.732.
136. *See supra Part I.B.1.*
138. *See Panel Report Upland Cotton*, *supra* note 1, ¶ 3.5; *see also* Appellate Body Report *Upland Cotton*, *supra* note 1, ¶ 47-55.
Brazil. The panel found that Step-2 payments were in effect given to exporters based on proof of export, and as such were export contingent.\textsuperscript{139} The panel also decided that the payments to domestic users constituted an import substitution subsidy, also prohibited under the SCM Agreement because it explicitly required the use of domestically produced upland cotton as a pre-condition for receipt of the payments.\textsuperscript{140} The Appellate Body affirmed and took the opportunity to expound on how export contingency would be analyzed, in light of past precedent, such as the \textit{U.S.—Foreign Sales Corporations}\textsuperscript{141} case.\textsuperscript{142}

The Appellate Body also elaborated on the relationship between the Agreement on Agriculture and the SCM Agreement in its analysis of the Step-2 program.\textsuperscript{143} The Appellate Body applied the international law treaty interpretation principle of "effective interpretation," which holds that treaties are to be interpreted to give effect, whenever possible, to all the provisions of the treaty. In its defense of the Step-2 subsidies, the United States alleged that because those subsidies complied with the Agreement on Agriculture’s terms on domestic support, they were exempt from the SCM Agreement’s Article 3.1(b) prohibition on import substitution subsidies.\textsuperscript{144} The Appellate Body rejected the argument, noting that:

\begin{quote}
[A] treaty interpreter must read all applicable provisions of a treaty in a way that gives meaning to all of them, harmoniously . . . . Article 3.1(b) of the SCM Agreement can be read together with the Agreement on Agriculture provisions relating to domes-
\end{quote}

\begin{flushleft}
\textsuperscript{139} See Panel Report \textit{Upland Cotton}, supra note 1, \textsuperscript{11} 7.749.


\textsuperscript{142} See Appellate Body Report \textit{Upland Cotton}, supra note 1, \textsuperscript{11} 578–81.

\textsuperscript{143} Id. at \textsuperscript{11} 529–52.

\textsuperscript{144} See supra note 57 and accompanying text. See also Steinberg & Josling, supra note 21, at 375; Didier Chambovey, \textit{How the Expiry of the Peace Clause (Article 13 of the WTO Agreement on Agriculture) Might Alter Disciplines on Agricultural Subsidies in the WTO Framework}, 36(2) J. World Trade 305, 308–09 (2002).

\textsuperscript{145} See SCM Agreement, supra note 3, art. 3.1(b); see also supra Part I.B.1 (export subsidies of SCM Agreement).
\end{flushleft}
tic support in a coherent and consistent manner which gives full and effective meaning to all of their terms.\textsuperscript{146}

The only interpretation that gives "full and effective meaning\textsuperscript{147}" to the Peace Clause takes into account its time-limited implementation period, after which the terms of the SCM Agreement apply. Any other interpretation would render its specific and differentiated\textsuperscript{148} nine year implementation period redundant and ineffective.

4. Export Guarantee Programs Are Not WTO Compliant

The 2002 Farm Bill contains a number of programs designed to finance exports of U.S. agricultural products, including cotton and corn.\textsuperscript{149} The programs increase the demand for U.S. agricultural exports by providing offsets to tariffs levied on the exports by the importing country.\textsuperscript{150} As we have seen, the WTO regime scrutinizes export subsidies more closely than domestic subsidies because of the greater trade-distorting potential.\textsuperscript{151}

The \textit{Upland Cotton} panel examined two groups of export subsidies:\textsuperscript{152} (1) the Export Credit Guarantee Programs, also known as GSM 102 and GSM 103, and (2) the Supplier Credit Guarantee Program,\textsuperscript{153} or SCGP. Each of the GSM 102, GSM 103, and the SCGP is designed to "ensure that credit is available to finance commercial exports of U.S. agricultural products"\textsuperscript{154} and the programs differ primarily in the duration of the credit guarantee. Because payment is guaranteed by the U.S. government, financial institutions can offer a much lower interest rate to foreign importers of U.S. cotton who applied for the

\begin{itemize}
\item 146. Appellate Body Report \textit{Upland Cotton}, supra note 1, ¶ 549 (internal quotation marks omitted).
\item 147. \textit{Id}.
\item 148. See Agreement on Agriculture, supra note 4, art. 1(f) (the "implementation period means the six-year period commencing in the year 1995, except that, for the purposes of Article 13, it means the nine-year period commencing in 1995").
\item 149. See \textit{Matsushita et al.}, supra note 28, at 261.
\item 150. \textit{Id}.
\item 151. See supra Part I.B.1.
\item 154. \textit{Id}.
\end{itemize}
credit guarantees. These credit guarantees reduce foreign importers' financing costs, which encourage the purchase of U.S. cotton. The program is particularly helpful to importers of U.S. agricultural products in developing countries, where credit would be scarce or too costly without such guarantees.

The panel in *Upland Cotton* found the funding mechanisms and risk allocation of the export guarantee programs most troubling. First, the panel concluded that the programs were subsidies because they were backed "by the full faith and credit of the United States government" and "are not designed to avoid a net cost to the government." Simply put, the guarantees were a net government benefit for exporters. The SCM Agreement prohibits direct export subsidies. Second, the panel was disturbed by the lack of risk-based premiums and the lack of loan criteria setting an appropriate risk level to qualify for a credit guarantee. This allowed the Commodity Credit Corporation "to provide large amounts of guarantees to high-risk countries with a resulting high rate of default," which was compensated by the United States government. Thus, both the panel and the Appellate Body characterized the programs as prohibited export subsidies within the meaning of the SCM Agreement unless the programs were modified to include a risk-based premium structure, one in which the operating costs of the programs would be covered by the premiums, as well as risk assessment criteria.

155. The U.S. did not defend its export guarantee programs on substantive grounds. Rather, it relied on a procedural defense which neither the panel nor the Appellate Body found persuasive. The U.S. argued that as Brazil had not adequately raised the issue during the consultation phrase, it should be barred from raising it before the panel. Both the panel and the Appellate Body rejected the procedural defense. See Panel Report *Upland Cotton*, supra note 1, ¶ 3.5; Appellate Body Report *Upland Cotton*, supra note 1, ¶¶ 56–57, 62–69.

156. See Panel Report *Upland Cotton*, supra note 1, ¶ 7.858.


158. See SCM Agreement, supra note 3, art. 3.1.

159. "[T]he premiums are not risk based, either with respect to country risk or the creditworthiness of the borrower in an individual transaction." See Panel Report *Upland Cotton*, supra note 1, ¶ 7.861.


163. See Panel Report *Upland Cotton*, supra note 1, ¶¶ 7.863–69; Appellate Body Report *Upland Cotton*, supra note 1, ¶¶ 609–11; see also SCM Agreement, supra note 3, art. 10.1.
5. Cotton Subsidies Caused Brazil Serious Prejudice

Lastly, Brazil argued that U.S. actionable cotton subsidies164 “suppressed upland cotton prices in the U.S., world[,] and Brazilian markets” during the 1999–2002 marketing years.165 The effect of the price suppression166 was that U.S. upland cotton garnered a share of the world cotton market “beyond its equitable share.”167 The United States claimed that the increase in U.S. cotton exports was not due to an increase in subsidies, but rather to a decrease in U.S. domestic textile consumption and manufacturing.168

The panel decision’s lack of clarity has made it vulnerable to criticism.169 The lack of analytical clarity in the panel report makes it harder to tease out the most important considerations in the case.

The logical place to begin is the analysis of serious prejudice based on price suppression. The panel’s price suppression analysis can be divided into three distinct strands.170 Substantively, the panel seemed to focus on the magnitude of the subsidies, the price contingent nature of the subsidies, and the effect in terms of limiting production.171 Each of these elements contributed to the ruling that significant price suppression did occur,172 which was affirmed by the Appellate Body.173

164. The price suppression argument applies to all actionable or yellow-light subsidies, which excludes the prohibited export subsidies and import subsidies discussed supra in Parts I.B.1,2. See also SCM Agreement, supra note 3, art. 5.
165. See Panel Report Upland Cotton, supra note 1, ¶ 3.1(vi)-(viii); Appellate Body Report Upland Cotton, supra note 1, ¶ 94–96, 496.
166. See infra Part I.B.2 for a description of how a price suppression analysis generally proceeds; see also SCM Agreement, supra note 3, art. 5.
167. Id.
169. “[W]e believe that, in its reasoning, the Panel could have provided a more detailed explanation of its analysis of the complex facts and economic arguments arising in this dispute. The Panel could have done so in order to demonstrate precisely how it evaluated the different factors bearing on the relationship between the price-contingent subsidies and significant price suppression.” See Appellate Body Report Upland Cotton, supra note 1, ¶ 458. See also Richard H. Steinberg, United States—Subsidies on Upland Cotton, 99 AM. J. INT’L L. 852, 860 (2005) (“[T]he panel’s causation analysis […] lacked rigor and specificity, which may diminish the persuasiveness and effectiveness of the decision.”).
170. The Panel describes the “significant price suppression” analysis as being comprised of three separate inquiries: (1) whether price suppression exists; if so, (2) whether it is significant; and (3) whether the price suppression is the effect of the subsidies. Panel Report Upland Cotton, supra note 1, ¶¶ 7.1275–7.1315 (“price suppression”); ¶¶ 7.1316–7.1333 (“significant”); ¶¶ 7.1334–7.1363 (“effect of the subsidy”).
171. See infra Part III.B for an application of these factors to corn.
172. See Panel Report Upland Cotton, supra note 1, ¶ 8.1(g)(ii).
Overall, four price contingent subsidy programs, counter-cyclical payments, Step-2 payments, marketing loan program payments, and market loss assistance payments were found to cause significant price suppression.

B. Status of U.S. Compliance with U.S.—Upland Cotton Decision: A Study in Recalcitrance

1. U.S. Options After Upland Cotton Ruling

The panel and the Appellate Body both mandated the immediate withdrawal or revision of offending U.S. cotton subsidies and gave the United States a reasonable time to do so. Because WTO decisions are not self-executing, they require congressional implementation through legislation to eliminate, alter, or amend the subsidies programs. Prohibited or per se illegal subsidies generally have to be withdrawn without delay. Alternatively, in the case of actionable subsidies, the United States could choose either withdrawal or the payment of negotiated compensatory damages to Brazil to offset the injury suffered. If the United States chooses to do nothing or does not give full relief, Brazil may seek authorization to suspend concessions or impose retaliatory trade sanctions.

The United States has fully complied with only one aspect of the Upland Cotton decision. It withdrew the Step-2 Program on August 1, 2001.
2006. With respect to the direct payments, counter-cyclical payments, export guarantees, and marketing loan provisions that were found to have caused serious prejudice to Brazil, the panel mandated that the United States take appropriate steps to remove the adverse effects of these subsidies or to withdraw them. On July 1, 2005, the U.S. Department of Agriculture instituted a temporary fix to the export guarantee program by creating a risk-based fee structure for two of these programs and eliminating one of them. The risk-based fee structure is responsive to the problem identified by the panel in Upland Cotton that the financial returns of these programs did not cover the operating costs, thereby making them more like subsidies than insurance programs. The WTO may be called upon to assess whether the 2007 Farm Bill has effected full compliance with Upland Cotton.

However, compliance with the WTO's findings on counter-cyclical payments remains an ongoing issue. Counter-cyclical payments are given to eligible producers (based on historical planted acreage) whenever the baseline price of their commodity falls below a target price. The price and production contingency aspects of the counter-cyclical payments lie at the heart of the controversy. The newly enacted 2007 Farm Bill does not address the issue in a satisfactory manner. It not only retained the price and production aspects of counter-cyclical payments, but extended coverage to include new crops, like lentils and chickpeas. Counter-cyclical payments are structured in much the same way as they were in the 2002 Farm Bill and are therefore non-compliant. The 2007 Farm Bill does not include ways to decouple counter-cyclical payments from price and production, thereby making it vulnerable to WTO challenge on that front as well. One of the negotiating strategies the United States is pursuing in Doha is to lobby for the creation of a new Blue Box definition that would shield...
counter-cyclical payments.\textsuperscript{189} However, thus far, this effort has been met with resistance, particularly from the most influential bloc of developing nations, the G-20, led by Brazil and India.\textsuperscript{190} As negotiations are deadlocked again as of July 31, 2008, the U.S. strategy has not succeeded. Thus, counter-cyclical payments remain vulnerable to WTO challenge. The 2007 Farm Bill also failed to address the disqualification of direct payments as Green Box subsidies.\textsuperscript{191}

Thus far, Brazil has been patient in pursuing legal remedies during the negotiation of the 2007 Farm Bill in Congress in the hope that the 2007 Farm Bill would fix or remove the problematic aspects of U.S. subsidies. However, Brazil's patience has been running out. It has already initiated steps to seek $4 billion in retaliatory trade measures in compensation,\textsuperscript{192} consisting of $3 billion in suspended tariff concessions as well as obligations under the Agreement on Trade-Related Intellectual Property Rights\textsuperscript{193} and the General Agreement on Trade in Services.\textsuperscript{194}

2. WTO Review of U.S. Compliance

The WTO recently reviewed the \textit{Upland Cotton} case to determine whether or not recent changes in U.S. agricultural policy were in compliance with the original rulings. The review was based upon 2006 amendments to the 2002 Farm Bill.\textsuperscript{195} The panel concluded that the U.S. marketing loan provisions and counter-cyclical payments still

\textsuperscript{189} USTR Implications, \textit{supra} note 43 at 2. Counter-cyclical payments, like direct payments, are based on historic production and do not require current production of any specific commodity for eligibility. \textit{See infra Part I.C.}

\textsuperscript{190} See \textit{Porterfield} \textit{supra} note 20, at 1025; \textit{see also} \textit{GROUP OF 20, DRAFT ELEMENTS FOR DISCUSSION—BLUE BOX} (2005), http://www.sagpya.mecon.gov.ar/new/04/programas/negociaciones/Omc/g20_06.pdf, 1–2 (last visited Mar. 23, 2009); \textit{see generally} \textit{Cho, supra} note 25, at 170–72 (describing the strong role played by the G-20 on agricultural negotiations at the Cancun Ministerial Conference).

\textsuperscript{191} \textit{See Schnepp, supra} note 134, at 6.

\textsuperscript{192} \textit{Id.} at 4.


\textsuperscript{195} Appellate Body Report, \textit{United States—Subsidies on Upland Cotton, Recourse to Article 21.5 of the DSU by Brazil}, ¶ 328, WT/DS267/AB/RW (June 2, 2008).
failed to comply with Article 7.8 of the Agreement on Agriculture.\(^1\)

The panel also found that the United States failed to comply with Articles 8 and 10.1 of the Agreement on Agriculture because of its continued use of export guarantees resulting in “the circumvention of United States’ export subsidy commitments.”\(^1\)

Unsurprisingly, the National Cotton Council of America was disappointed by the decision, which did not take into account the new counter-cyclical payment program and the elimination of the long-term export credit program implemented in the 2007 Farm Bill to bring the United States into compliance with the Upland Cotton decision.\(^1\)

Even so, other observers, such as the Institute for Agriculture Trade and Policy, find that the new 2007 bill undertakes only minor adjustments to the 2002 Farm Bill that will do little to remedy the problems raised in the Upland Cotton case.\(^1\)

While the new measures may change prospects in the short-term, the long-term impact remains uncertain.\(^1\)

Brazil, Canada, and Australia have also voiced concerns that the new 2007 Farm Bill continues to support illegal cotton subsidies as well as the continued use of trade-distorting subsidies in general.\(^1\)

Overall, the bill increases support to cotton farmers and fails to address the concerns articulated in Upland Cotton and the recent report from the Appellate Body reviewing that decision.

III. THE IMPLICATIONS FOR U.S. CORN AND ETHANOL SUBSIDIES

A. U.S. DOMINION OF WORLD CORN MARKETS

The United States is not only the largest producer of corn in the world, but also the largest exporter.\(^1\)

Over 20% of all corn grown in

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196. Id. at ¶ 448 (c) (i).
197. Id. at ¶ 448 (b) (iv).
199. See supra note 84, at 3.
200. Id.
the United States is exported.\textsuperscript{203} The United States accounts for an impressive share of the world corn market. For example, in the 2003-2004 marketing year, the United States was responsible for 65\% of the world's corn exports.\textsuperscript{204} Corn receives generous subsidy support. From 1995-2005, total U.S. support for corn was over $56 billion, compared to $21 billion for cotton.\textsuperscript{205} Ethanol subsidies, an indirect subsidy for corn, totaled between $5.1 and $7 billion in 2006.\textsuperscript{206} This Part will assess the applicability of the \textit{Upland Cotton} case holdings to corn subsidies as well as discuss the likelihood of a challenge to corn subsidies.

B. \textit{Is Corn Next?}

Each of the subsidy programs analyzed in the \textit{Upland Cotton} case applies to corn, except for the Step-2 program,\textsuperscript{207} which has already been withdrawn.\textsuperscript{208} The support for corn in terms of direct payments, counter-cyclical payments, export credit guarantees, marketing loan assistance, and LDP programs, are also substantially similar to the programs for cotton.\textsuperscript{209} All the same objections to these programs raised in the \textit{Upland Cotton} case would apply with equal force. Any challenger would, of course, need to meet the burden of proof with respect to establishing serious prejudice. This analysis turns on three factors: the magnitude of the subsidies, the price contingency nature of

\textsuperscript{203} See U.S. Grains Council, \textit{supra} note 202.
\textsuperscript{204} \textit{Id.}
\textsuperscript{208} See \textit{infra} Part II.B.1.
the subsidies, and the effect on limited production. The analysis would be a case-specific one, based on economic data on prices and market shares.

However, based on the three criteria, a challenger should have little difficulty establishing serious prejudice. With respect to the magnitude of the subsidies, corn receives over two-and-a-half times as much in support as cotton in absolute terms. This, combined with the fact that the United States is responsible for a staggering 65% of corn exports worldwide, makes it relatively easy to show that U.S. corn subsidies have an effect on world prices.

Several obstacles to a corn challenge must be overcome. One potential problem is that corn is less subsidized (as a percentage of cash receipts) at 25% than cotton at 58%. However, while this may have an effect on the magnitude of harm, it is not likely to be dispositive on the question of serious prejudice because that question involves a holistic analysis of the net economic effect of the subsidies. The relevant timeframe and timing of a challenge to corn subsidies may also be problematic. Both the global food market and the U.S. corn market have been extremely volatile. In the first half of 2008, commodity prices spiked due to shortages worldwide, unusual weather volatility in the American Midwest, and an increased demand, in the case of corn, for ethanol due to the unprecedented high cost of gasoline. Later in

210. See supra note 170 and accompanying text.
211. See Farm Subsidy Database supra note 205 and accompanying text.
212. See supra note 2 and accompanying text.
213. See SCHNEPP, supra note 178, at 3.
2008, the global economic recession brought down both commodity and fuel prices. High volatility presents difficult evidentiary obstacles for a potential WTO challenger to overcome. Not only would it be harder to meet the burden of proof for serious prejudice as a statistical matter, but the timing of the suit becomes more sensitive. As a political matter, it is difficult to undertake a challenge based on price suppression at a time of depressed prices.

Thus, it is possible that 2008 may be excluded from a WTO suit based on a showing of significant price suppression or serious prejudice to non-U.S. commodity crop growers. However, this does not necessarily mean that a challenge would not be brought. As we saw in *Upland Cotton*, one can challenge subsidies selectively by culling out the years in which significant price suppression did occur or can be most easily proven. Brazil did this for 1999–2002 in the *Upland Cotton* case. For example, if 2008 was too volatile to sustain proof of price suppression, a challenger could simply exclude 2008 from the WTO dispute.

C. **U.S. Ethanol Policies—Increasing Incentives for a Corn Challenge**

1. **Overview**

Ethanol is no stranger to controversy. Public debate in the United States on ethanol policies is contentious. It is beyond the scope of this Article to canvass the myriad political, economic and environmen-

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219. See supra note 165.

tal arguments for and against ethanol. The literature on this question is already extensive, and by no means conclusive.\textsuperscript{221} Nonetheless, it may be helpful to delineate some of the major arguments in the domestic policy debate to better understand the international policy debate.

Ethanol's proponents argue that it is necessary to decrease dependence on fossil fuels.\textsuperscript{222} They argue is a cheaper alternative to oil and gas.\textsuperscript{223} Ethanol is also environmentally friendly because it relies on plentiful renewable plant resources rather than non-renewable fossil fuels.\textsuperscript{224} Ethanol is also less polluting than conventional fuel.\textsuperscript{225} Others

\begin{footnotesize}
\textsuperscript{221} See generally Marcel De Armas, Misleadingly Green: Time to Repeal the Ethanol Tariff and Subsidy for Corn, 7 SUSTAINABLE DEV. L. & POL’Y 25 (Spring 2007) (arguing that corn-based ethanol produces large amounts of pollution); James A. Duffield et al., Ethanol Policy: Past, Present, and Future, 53 S.D.L. REV. 425 (2008) (analyzing ethanol's positive economical and environmental qualities and the positive political aura surrounding ethanol); Brandon E. Durrett, The New Organic "Texas Tea"?: National Energy Security Implications of "Clean Fuel" Regulatory Ban on Texas Biodiesel, 40 TEX. TECH L. REV. 1001 (2008) (arguing that biodiesel, including corn-based fuels, reduces dependence on fossil fuels and helps the environment); Peter Z. Grossman, If Ethanol is the Answer, what is the Question?, 13 DRAKE J. AGRIC. L. 149 (2008) (arguing that the political frenzy over ethanol is unfounded because ethanol will not make a major contribution to energy and large scale production would severely damage the economy); Robert W. Hahn, Ethanol: Law, Economics, and Politics, 19 STAN. L. & POL’Y REV. 434 (2008) (examining the widespread support for ethanol by politicians and argues that the policy rationales for ethanol do not justify its support); Michael W. Lore, Subsidies for Corn-Derived Ethanol May Leave us Thirsty, 8 SUSTAINABLE DEV. L. & POL’Y 53 (2007) (discussing ethanol's substantial negative impact on the US water supply); Lisa Novins, Switch grass: A New Energy for the Future?, 7 SUSTAINABLE DEV. L. & POL’Y 30 (2007) (analyzing the benefits of switch grass ethanol, including its ability to reduce greenhouse gas emissions and fossil fuel use); Andrew Strong, Corn-Based Ethanol Drives the Food v. Fuel Debate, 46-DEC Hous. Lw. 94 (2008) (arguing that ethanol production increases the costs of food and has a significant negative impact on the US economy).


\end{footnotesize}
concede that ethanol is imperfect, but is a critical first step in building infrastructure for other alternative renewable energy resources. Ethanol opponents argue that it is in fact not cheaper once one takes into account the full costs of ethanol production. The environmental benefits disappear if the costs of farming, conversion, and transportation are added. Still others decry ethanol as a sop to powerful political forces. These detractors point out that ethanol can be produced much more cheaply from switch grass, sugarcane, and other crops besides corn. These critics point to the $0.54 per gallon tariff on Brazilian sugarcane based ethanol as proof that the main impetus behind U.S. ethanol policy is protectionism of its domestic corn-based industry. This Article does not ultimately take a position on the political, economic and environmental benefits of ethanol from a domestic policy perspective. However, this Article argues that U.S. ethanol policies are very problematic from an international trade policy perspective. Corn is king in U.S. ethanol policy. Because U.S. ethanol subsidies are overly skewed towards corn, they heighten the risk of a WTO challenge against corn.

The structure of ethanol subsidies heightens the likelihood of a future corn challenge in two major ways. First, U.S. ethanol policy increases the total amount of corn subsidies, thereby giving corn growing nations a reason to sue at the WTO. These complainants would challenge the effect of these subsidies on the world market,

225. See Novins, supra note 221 (switch grass reduces both greenhouse gas emissions and fossil fuel use); Hahn, supra note 221, at 435–36 (ethanol is likely to reduce carbon monoxide emissions and air toxins).


227. See Duffield et al., supra note 221, at 426 (noting the higher production cost of ethanol compared to gasoline and how ethanol pushes livestock and food costs higher); Hahn, supra note 2, at 436–37 (ethanol is costly compared to gasoline due to production costs, lower energy output, and the resources required for its production).

228. See Hahn, supra note 221, at 435–36 (ethanol has a high carbon footprint due to the resources needed for production, including land, water, electricity and natural gas); Armas, supra note 221 (arguing that corn-based ethanol is not environmental friendly and actually produces as much pollution as the fossil fuels it replaces).

229. See e.g., Novins, supra note 221 (arguing that switch grass is economically and environmentally advantageous over corn-based ethanol and has a more favorable energy balance).


231. See infra, Part C.2.
either through a price suppression or loss of market share analysis. Second, by supporting corn-based ethanol more than other biofuels based on sugarcane or switch grass, U.S. ethanol policy gives non-corn based biofuel producing nations a reason to sue at the WTO. Thus, U.S. ethanol policies create added incentives for a corn challenge by expanding the pool of potential challengers to U.S. subsidies.

2. Current Ethanol Subsidies Too Focused on Corn

In addition to subsidizing corn as a commodity crop, the United States also provides significant federal support for ethanol production. U.S. support of biofuels through tax incentives, initially motivated by volatile oil prices, began in 1978. Ethanol leads other biofuels in terms of total support. Support is given both to blenders and producers. Currently, the American Jobs Creation Act of 2004 provides incentives, in the form of an excise tax credit, to ethanol blenders. Under the Volumetric Ethanol Excise Tax Credit (VEETC), ethanol blenders receive an excise tax credit of $0.51 per gallon of ethanol used. This provision is scheduled to expire in 2010, but is likely to be renewed, if not expanded. The VEETC is unlimited, detached from gasoline prices, and applies to both domestic and imported ethanol.

Support is also given to ethanol producers. Established by the Omnibus Budget Reconciliation Act of 1990, the Small Ethanol Producer Credit program provides a tax credit of $0.10 per gallon of ethanol produced. Each producer may receive the credit for the first

232. Subsidies, tax credits and other support mechanisms for ethanol production exist at both the federal and state levels. Due to the focus of this article on the WTO regime, discussion shall center primarily on the federal support scheme. However, the concerns raised in this section apply with equal force to state schemes. It is just more likely that any potential challenge would target federal programs, in conjunction with an attack on corn subsidies.


236. Id. at § 301.

237. Id.


15 million gallons of ethanol produced. The Energy Policy Act of 2005 expanded the standard for qualification as a small producer from production of 30 million gallons or less to production of 60 million gallons or less of ethanol. The expiration date of the provision appears to have been extended from December 31, 2007 until December 31, 2010.

The Omnibus Budget Reconciliation Act of 1980 established a 2.5% ad valorem tax and a $0.54 per gallon tariff on ethanol imports into the United States, with exceptions for most Caribbean Basin Initiative nations. Supporters of the tariff assert that it is necessary for the survival of the domestic ethanol industry in the face of competition from the cheaper, sugar-based ethanol from Brazil. The tariff also prevents the tax credit provided by VEETC, which makes no distinction between domestic and foreign ethanol, from subsidizing foreign ethanol producers at the expense of domestic tax payers. Opponents of the tariff assert that it results in lower domestic supply by suppressing cheap imports, thereby increasing domestic fuel prices.

The U.S. Treasury estimated that it would lose $2.6 billion in tax revenue annually because of the tax credits provided by the VEETC program during the years 2005–2011. During 2006, demand for ethanol exceeded the estimates and a 2007 report predicted actual losses to exceed estimates. Unless tax incentives are reduced, the goals set by the Energy Independence and Security Act of 2007 (EISA) will cause the amount of revenue lost from the incentives to continue increasing. The EISA increased the mandated Renewable Fuel Standard (RFS) established by the Energy Policy Act of 2005. The Energy Policy Act of 2005 created an RFS that mandated the use of 7.5 billion

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240. Id.
244. See John A. Sautter et al., supra note 230.
245. See Lytle, supra note 233, at 703.
246. Id. at 705.
247. See Koplow, supra note 238, at 24.
248. Id.
gallons of ethanol in 2012 and increasing to a level of 8.6 billion gallons in 2022.\textsuperscript{249} The new standard under EISA requires 9 billion gallons in 2008 and increases to 36 billion gallons by 2022, all of which will be subject to the VEETC tax credit under current legislation.\textsuperscript{250} In addition to federal support, many states subsidize their ethanol industries through various programs, including direct payments to producers and tax incentives.\textsuperscript{251}

\section*{3. Economic and Environmental Concerns}

Ethanol proponents highlight both “energy security” and “environmental benefits”\textsuperscript{252} as major advantages of U.S. ethanol policy. By providing a domestic substitute for foreign oil, the United States would be less susceptible to the fluctuations of world oil markets.\textsuperscript{253} A reduction in oil consumption by the United States, one of the world’s largest oil consumers, would decrease world demand for oil and lower world prices, allowing the United States to purchase the oil it uses, in addition to ethanol, at lower prices.\textsuperscript{254} The economic costs associated with the regime are increased production and distribution costs, and deadweight loss associated with government regulation of the industry.\textsuperscript{255}

The environmental benefits are a reduction in greenhouse gases and improved air quality, resulting from the cleaner emissions of ethanol relative to gasoline.\textsuperscript{256} To realize the goal of reduced emissions, biofuel policies must consider the emissions and soil erosion and infertility associated with forest conversion.\textsuperscript{257} The Hahn and Cecot study estimated the benefits, in terms of average health and benefit value, of ethanol displacement of gasoline to range from $300 million to $600 million.\textsuperscript{258} The environmental costs of the support program stem from...
increased emissions required for ethanol production and distribution.\textsuperscript{259} The study concluded that costs of the ethanol subsidy programs developed through U.S. legislation exceed the benefits by $1 billion to $3 billion annually.\textsuperscript{260}

The primary reason that the costs of support exceed the benefits so dramatically is that ethanol, when made of corn or soy, has almost negligible environmental benefits.\textsuperscript{261} Soybeans and corn are both input-intensive row crops.\textsuperscript{262} They require heavy levels of fertilizer and pesticides, which are carried off, along with soil, by precipitation.\textsuperscript{263} Fertilizer and pesticides "are the major cause of nitrogen runoff—the harmful leakage of nitrogen from fields when it rains—of the type that has created the so-called dead zone in the Gulf of Mexico, an ocean area the size of New Jersey that has so little oxygen it can barely support life."\textsuperscript{264} The billions of dollars in subsidies combined with the pollution associated with corn and soy-based ethanol seem to greatly outweigh the modest efficiency advantage it carries over fossil fuels.\textsuperscript{265}

There is a consensus that corn alone is not energy efficient enough to one day produce ethanol at levels to ensure energy independence for the United States.\textsuperscript{266} However, though corn is not the most efficient energy source, when oil prices are high enough, it becomes a competitive alternative to oil.\textsuperscript{267} The immediate effect of high oil prices and tax incentives for ethanol is to encourage the use of corn ethanol. Continued use of corn ethanol as fuel, which is only feasible through subsidization of the industry,\textsuperscript{268} will further commit the alternative energy industry to corn-based ethanol through the creation of infrastructure and market, likely at the expense of development of more efficient energy sources.\textsuperscript{269} If the current programs continue, there are two
possible outcomes. The programs may provide the necessary jump-start to create the infrastructure and technologies to allow the ethanol industry to function without government support. Alternatively, if corn-based ethanol is simply economically inefficient, the industry will require increasingly greater governmental support for survival.

4. Additional Policy and Equity Concerns

The use of commodities traditionally used for food, such as corn, for fuel creates a tighter link between fuel and food markets. As oil prices increase, alternative fuels become more competitive and demand for them increases. When oil prices reach $60/barrel levels, biofuels become competitive in some countries, even with existing technologies. As demand for alternative fuels increases, the prices of the input commodities also rise. Rises in commodity prices resulting from biofuel expansion "[are] also accompanied by a net decrease in the availability of and access to food, with calorie consumption estimated to decrease across all regions compared to baseline levels." 

"[S]ubsidies for biofuels that use agricultural production resources are extremely anti-poor because they implicitly act as a tax on basic food, which represents a large share of poor people's consumption expenditures, and food becomes even more costly as prices increase." An increase in the price of a commodity such as corn increases food prices generally. As the price of corn increases, more land will be used to produce corn at the expense of other commodities, which decreases the supply of those commodities, and ultimately increases the price of the commodities whose production has been replaced by corn. The increased use of corn-based ethanol in the United States has been identified as a major contributor to the current

271. Sautter et al., supra note 230, at 29.
274. Meyers et al., supra note 272, at 11.
275. Von Braun, supra note 257, at 8.
276. Id. at 9.
277. See Meyers et al., supra note 272, at 13.
global food crisis.\textsuperscript{278} The new close relationship between oil prices and corn demand created by the surge of corn-based ethanol has not only increased the global price of corn and food prices generally, but some argue that it has transferred the volatility of the oil market to the corn market and other commodity markets.\textsuperscript{279}

D. Likelihood of a Corn/Ethanol Challenge

Brazil has some special incentives to challenge U.S. ethanol subsidies. Brazil's alternative energy program, focused on sugar-based ethanol, is considered to be the most successful in the world.\textsuperscript{280} Sparked by oil crises in the 1970s, the United States and Brazil both initiated ethanol programs during the same time period.\textsuperscript{281} However, domestically produced ethanol currently accounts for much more of Brazilian energy than that of the United States, and the Brazilian ethanol industry is much less dependent on governmental support.\textsuperscript{282} Currently, renewable energy comprises forty percent of Brazilian consumption.\textsuperscript{283}

Brazil's success is often attributed to the ability of the dictatorial government to mandate minimum ethanol requirements, which provided a consistent demand.\textsuperscript{284} The government also invested in ethanol infrastructure, such as ethanol pumps at almost all filling stations, making distribution feasible and ethanol accessible throughout the country.\textsuperscript{285} Another reason for Brazilian success is its focus on sugar, from which it produces ethanol today at about half of the cost of the corn-based ethanol produced in the United States.\textsuperscript{286} Brazil also used similar incentives to those currently used by the United States to make ethanol competitive with gasoline, subsidizing sugarcane producers

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\textsuperscript{278} Runge & Senaur, \textit{supra} note 261 ("The enormous volume of corn required by the ethanol industry is sending shock waves through the food system. (The United States accounts for some 40 percent of the world's total corn production and over half of all corn exports.) In March 2007, corn futures rose to over $4.38 a bushel, the highest level in ten years. Wheat and rice prices have also surged to decade highs, because even as those grains are increasingly being used as substitutes for corn, farmers are planting more acres with corn and fewer acres with other crops.").

\textsuperscript{279} See Meyers et al., \textit{supra} note 272, at 16.


\textsuperscript{281} Id. at 331.

\textsuperscript{282} Id. at 334.

\textsuperscript{283} Id.

\textsuperscript{284} Id. at 336.

\textsuperscript{285} Id.

\textsuperscript{286} Id.
and taxing ethanol at rates significantly lower than gasoline.287 During periods of low gasoline prices during the 1980s and 1990s, subsidies that would have allowed ethanol to compete with gasoline became too expensive and were reduced.288 However, the government maintained minimum ethanol content requirements, which allowed Brazil to retain ethanol infrastructure.289 With infrastructure established, the ethanol industry experienced resurgence with the recent rise in gasoline prices, currently producing enough ethanol to replace 460 million barrels of oil per year.290 Despite Brazil’s success, its access to U.S. ethanol markets is currently blocked by prohibitive U.S. tariffs against imported ethanol.291 This provides yet another incentive for Brazil to challenge U.S. ethanol and corn policies.

IV. ASSESSING THE SIGNIFICANCE OF U.S—UPLAND COTTON

Brazil’s successful challenge to U.S. upland cotton subsidies is extremely significant for a number of reasons. It is the first WTO decision to apply the rules and remedies of the SCM Agreement to agricultural subsidies that cause serious prejudice. Prior to the case, it was thought that the Peace Clause of the Agreement on Agriculture preempted any challenge under the SCM Agreement. This interpretation, rejected in the case, meant that the remedies of the SCM Agreement are available for agricultural subsidies for the first time. The SCM Agreement provides stronger remedies, including the unilateral imposition of a duty to offset the effect of a subsidy (a countervailing duty). Thus, the case stands for the proposition that a complainant can levy countervailing duties, per the SCM Agreement, against any subsidies that do not comply with the terms of the Agreement on Agriculture.

The decision implies that developing nations may now avail themselves of a powerful new remedy against trade-distorting agricultural subsidies, by imposing countervailing duties to offset their effect. Moreover, an injured party may do so unilaterally under the SCM Agreement.292 The WTO is likely to uphold countervailing duties levied in response to trade-distorting subsidies. Short-term benefits accrue even if countervailing duties do not survive WTO challenge.

288. Id. at 697.
289. Id.
290. Id. at 698.
291. See supra note 230 and accompanying text.
292. See supra note 12 and accompanying text.
The preferred WTO remedy is the timely withdrawal of an illegal subsidy, on a prospective basis. However, WTO disputes are lengthy, and foot-dragging in compliance is common. Therefore, countervailing duties, even if imposed on a temporary basis, mitigate a subsidy's harm. Injured WTO members may now respond quickly to a subsidy without resort to the costly and time-consuming dispute settlement process. Such a remedy is particularly beneficial to developing nations that may not have the resources or expertise to pursue a dispute before the WTO. Prior to the Upland Cotton case, it was not clear if the countervailing duty remedy of the SCM Agreement was applicable to any agricultural subsidies because of the Peace Clause. This point in itself makes Upland Cotton a landmark decision.

In addition, the case is a classic David versus Goliath— the first case in which a developing nation, albeit a middle-income agricultural giant, successfully challenged the agricultural subsidy programs of a powerful developed nation. It is the first dispute in WTO history to challenge domestic subsidies for the production of cotton and the first WTO decision involving export subsidies for agricultural products. It is also the first WTO case to rule on the legality of agricultural export credit guarantees. Lastly, it is the first WTO case to clarify the meaning

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293. See e.g., Phoenix X.F. Cai, Aid for Trade: a Roadmap for Success, 36 DENVER J. INT'L. L. & POL'Y 100 (2008), available at http://findarticles.com/p/articles/mi_hb3262/is_3-4_36/ai_n28580139 (highlighting the resources currently lacking but required for developing countries to pursue suit at the WTO).

294. See e.g., Douglas Ierley, Defining the Factors that Influence Developing Country Compliance with and Participation in the WTO Dispute Settlement System: Another Look at the Dispute over Bananas, 33 LAW & POL'Y INT'L BUS. 615, 616 (2002) (arguing that developing nations do not use the WTO dispute settlement regime very often and presenting five principal factors cited by diplomats as influencing developing country participation in and compliance with WTO panel and Appellate Body decisions). See also Robert E. Hudec, The Adequacy of WTO Dispute Settlement Remedies for Developing Country Complainants, in DEVELOPMENT, TRADE and the WTO: A HANDBOOK 81, 81 (Bernard Hoekman et al. eds., 2002) (critiquing the conventional wisdom that developing nations do not pursue complaints against industrialized nations as overly simplistic); Marc L. Busch & Eric Reinhardt, Developing Countries and General Agreement on Tariffs and Trade/World Trade Organization Dispute Settlement, 37 J. WORLD TRADE 719 (2003) (arguing that developing countries are no better served under the WTO than they were under GATT); Gregory Shaffer, How to Make the WTO Dispute Settlement System Work for Developing Countries: Some Proactive Developing Country Strategies, International Centre for Trade and Sustainable Development, Resource Paper No. 5, Mar. 2003, available at http://www.ictsd.org/pubs/ictsd_series/resource_papers/DSU_2003.pdf (last visited Mar. 23, 2009).

295. Canada—Milk had made it clear that this was the case for export subsidies, but did not consider agricultural subsidies in general. See Canada—Milk, supra note 111 and accompanying text.

296. See 1 Samuel 17 (Old Testament).
of Green Box subsidies.

The *Upland Cotton* case is also a landmark case as a normative matter on two distinct levels. First, it suggests a number of criteria for WTO member nations to follow in structuring their farm subsidies programs. Factors that should be taken into account include the magnitude of the subsidies, price contingency, production contingency, and the actual effect and impact of the subsidies in influencing production. Second, *Upland Cotton* suggests important lessons to guide the Doha Round of negotiations on agricultural subsidies and beyond. The next section will detail the international governance lessons that can be distilled from the case, lessons which transcend agricultural subsidies, the WTO, and apply to all fields of public international law.

V. **Normative Lessons for International Governance: The Opportunity to Reverse Political Capitulation**

A. **Litigation or Negotiation**

Agricultural subsidies are the subject of heated debate in the current Doha Round of negotiations. Negotiators convened on July 21, 2008 to consider, among many other agenda items, a new set of draft formulas for cutting subsidies.\(^{297}\) Those talks failed to achieve a consensus due in large part to an impasse on special safeguard mechanisms for developing nations to impose higher tariffs in some circumstances, such as a large import surge.\(^{298}\) Even though some significant gains were made, and no one seems prepared to throw in the towel on the Doha Round, this recent collapse represents a tremendous lost opportunity. Not only is more litigation guaranteed, but the very legitimacy of the WTO may be in jeopardy.\(^{299}\)

The failure to reach a final agreement during last summer's restart of the Doha Round has several important ramifications. First, developing countries are likely to feel more acutely that the WTO has little to offer...
them if the so-called Doha Development Round is not brought successfully to a close. The fact that this round stalled over safeguard measures for developing nations is indicative of the mood of disillusionment by some powerful developing nations. Failure of Doha and the mood of recalcitrance, if continued, are virtually certain to lead to more litigation.

Increased litigation, particularly against developed nations like the United States, comes with significant systemic costs. The remedies available for victorious challengers include the imposition of higher tariffs and other import restrictions on the products of the losing nations. The remedies are not limited to the subject of the original litigation. Thus, a victory in a case against corn subsidies may well mean higher tariffs on U.S. cars and other manufactured goods. If the United States begins to lose more cases, the result may contract U.S. exports, thereby increasing the American trade deficit. In a time of recession or economic contraction, this can hardly be a desirable outcome.

Complainants also undertake significant costs. Litigation at the WTO is complex, lengthy, and costly. It requires dedicating resources that may be needed elsewhere, such as expanding trade capacity or negotiations. Moreover, even if litigation were successful, in the sense of resulting in a winning WTO decision, it may be minimally effective in terms of enforceable remedies. The lack of meaningful remedies is particularly problematic for small developing nations and may dampen their enthusiasm to initiate litigation. However, the problem is less pronounced for middle-income or large developing nations like Brazil or India.

More litigation in the WTO will inevitably mean more litigation on agriculture. Brazil’s Upland Cotton victory will become a blueprint for many developing countries to use in their individual or collective challenges to subsidies programs. While greater resort by developing nations to the WTO’s dispute settlement system is beneficial in many ways, it also comes at a cost to the system. It is beyond the scope of this Article to canvass all the costs and benefits of more litigation. However, one aspect of the trend merits closer study because it goes to

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302. See e.g., Phoenix Cai, Aid for Trade: A Roadmap for Success, supra note 293.
the very heart of the balance between judicial and political power. The question may be posed as “What effect would greater litigation in the area of agricultural subsidies have on the power of the WTO dispute settlement body vis-à-vis the political branch, the General Council, which consists of all member nations?”

B. Balancing Judicial and Legislative Power

Tomer Broude advances a very useful descriptive model of WTO governance, with an emphasis on relative judicial power.\textsuperscript{303} He shows convincingly that the WTO’s dispute settlement mechanisms and the Appellate Body in particular were designed to be relatively weak as an institutional matter. Most of the power, including the power to adopt decisions by the dispute settlement bodies, vested in the political body, the general membership wearing the hat of the Dispute Settlement Body. Nonetheless, the Appellate Body is powerful relative to other supranational adjudicative bodies, only because the General Council has failed to exhibit political leadership at critical times and has effectively ceded power to the Appellate Body to make decisions the General Council should have tackled.

Political capitulation is exemplified most recently by the failure to reach a final agreement in the July 2008 round of negotiations at Doha. Failure, for example, to finalize clearer definitions of and caps on Blue Box and Green Box subsidies means that the Appellate Body will eventually have to give such “clarifications” and “interpretations,” much in the same way it did in \textit{Upland Cotton} with respect to Green Box subsidies.

The resulting shift in the balance of power from the General Council or Ministerial Conferences, the political branch of the WTO, to the Appellate Body, the judicial branch, is problematic on a number of different levels. First, it was not the intended outcome.\textsuperscript{304} The WTO’s constitutive documents, the WTO Agreement and other agreements reached in the Uruguay Rounds, contemplate a relatively weak judicial branch. Most of the important power is vested in the General Council and the Ministerial Conference.

The intended outcome argument can be exaggerated, however. It is descriptive of how the dispute settlement process was supposed to work, but not necessarily prescriptive. A strictly “originalist” interpret-
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tion of WTO constitutive documents would preclude the flexibility to adapt to circumstances. Some commentators view the WTO judicial bodies’ ability to assume new roles as a positive attribute that is necessary to fulfill the constitutional promise of the WTO. These commentators argue that such flexibility enables the WTO to play a role not just in international trade, but in other areas like human rights and environmental protection. 305

While these broader constitutional arguments in favor of WTO judicial flexibility and expansion are compelling, they do not apply with equal force to the area of agricultural subsidies. There are two main reasons why the problems with agricultural subsidies discussed in this Article can not be resolved by litigation alone. The first reason stems from the very nature of agricultural subsidies and the second reason relates to political sensitivities of Doha.

First, the regulation of agricultural subsidies is complex, and the analysis of their effect on trade is so economically and factually specific, that piecemeal adjudication is not ideal. Because nations structure their agricultural subsidies very differently, it would take numerous WTO cases to provide definitive guidance on which subsidies are legal and which ones are not. As we have seen for U.S. corn and ethanol subsidies, a country often applies dramatically different subsidies structures for the same commodity crop. The result is that it is very difficult to affect broad reforms through litigation alone. For example, one can easily imagine a situation in which one WTO suit attacks U.S. direct payments to corn growers while another tackles U.S. subsidies to ethanol distillers who purchase corn.

Second, agricultural subsidies are very politically sensitive for developing nations. Many developing nations view agricultural subsidies as a litmus test for the WTO’s relevance and responsiveness to their needs. 306 Due to resource restraints, litigation cannot be the primary strategy for change for the majority of developing nations. Nonetheless, these nations need reassurance that their voices will be heard in the WTO negotiation process. They are placing a lot of weight on the Doha Round culminating in a good negotiated result.

Trade ministers meeting at the Doha Round certainly have the power

305. See e.g., Ernst-Ulrich Petersmann, The WTO Constitution and Human Rights, 3. J. INT’L ECON. L. 19, 20–21 (2000) (arguing that the legitimacy, democratic acceptability and legal consistency of WTO law would be enhanced by inclusion of human rights); Marco Bronckers, More Power to the WTO? 4 J. INT’L ECON. L. 41, 44 (2001) (pointing out that the WTO has the potential to play a key role in environmental, labor, investment and competition law issues).

306. See Cho, supra note 25, at 170.
to make all the problems with agricultural subsidies discussed in this article disappear by reaching an agreement on new rules and limits on agricultural subsidies. However, they have thus far failed to do so. Negotiations stall due to deadlock. By their inaction and capitulation of their constitutional role, the political body leaves thorny questions for panels and ultimately the Appellate Body to decide. For example, rather than agreeing on new definitions of Blue Box and Amber Box subsidies that would resolve some of the issues raised in *Upland Cotton*, those questions remain for panels and the Appellate Body to address in subsequent cases.

Such a result is not optimal. First, it can take years for these issues to be resolved through litigation, as most cases take years to resolve. Some notoriously difficult issues have been pending before the WTO for twenty years or more, left over from the GATT era. Even as these issues are resolved in cases, the disposition is likely to be piecemeal as panels and the Appellate Body are always careful to address only questions directly before them.

Moreover, the balance of power issues are even more intractable. States may well object to the piecemeal resolutions of these issues as judicial overreaching. After all, they ought to be resolved through political agreement. Over-reliance on judicial determinations may also undermine transparency, democratic input and accountability. All of these goals are important to all branches of the WTO. On the other hand, litigation and political negotiation may not be binary choices. They can complement each other. As this Article has argued, future litigation on corn and ethanol subsidies is highly probable. Additional litigation may push political actors to the negotiation table and achieve consensus at Doha. On the other hand, prolonged failure to bring difficult negotiations to successful closure is highly problematic. For these reasons, trade ministers must take the opportunity to reach agreement on at least agricultural subsidies and market access issues in Doha. It is simply too valuable a chance to reverse the current trend of political capitulation to pass up.

VI. CONCLUSION

As the world becomes increasingly integrated, the webs that link us become more and more intricate. Thus, rice shortages and rising prices in Asia lead to rationing in American Costco and Sam's Club stores.307

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Subsidized kerosene (similar to jet fuel) used for cooking fuel by the poor in India and Indonesia contribute to the rising costs of plane tickets worldwide. In such a brave new world, an appreciation of complexity and inter-connectedness is indispensable. Equally indispensable is an understanding of the complex international regime that governs agriculture and subsidies. In a world of food shortages, high fuel costs and global warming, it is impossible to remain ignorant of the WTO's impact on such issues through regulation of food and other subsidies. Cases such as *Upland Cotton* will have an impact well beyond the esoteric field of international agricultural trade law. This Article situates the *Upland Cotton* case in a broad global context, showing how it can extend to corn and ethanol subsidies, and frames the case as an important development in the debate regarding the balance of power between developed and developing nations, supranational and domestic regulation, and WTO judicial and political power.