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## Imposing WTO Disciplines on Domestic Support: An Assessment of the Doha Round Approach

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**SUMMARY:** The elements of the approach to disciplining domestic support for agriculture in the Doha round of WTO negotiations are evaluated using data for a selection of OECD countries. Despite a substantial increase in complexity in comparison to the Uruguay Round Agreement, the new approach is unlikely to require real reductions in trade-distorting support. As a result it is unlikely to stimulate further reforms in domestic agricultural policies in OECD countries.

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**KEYWORDS:** International trade, Agriculture, Domestic support, WTO.

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**JEL classification:** F02, F13, F14.

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### El establecimiento de reglas de la Organización Mundial de Comercio sobre la ayuda interna. Una evaluación del enfoque de la Ronda de Doha

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**RESUMEN:** En este artículo se evalúan los instrumentos del enfoque utilizado en la Ronda de Doha de la Organización Mundial de Comercio para establecer disciplinas en relación con la ayuda interna a la agricultura. El análisis se lleva a cabo para un conjunto de países de la OCDE. A pesar de la mayor complejidad de la Ronda de Doha, en comparación con el Acuerdo de la Ronda Uruguay, es improbable que el nuevo enfoque reduzca las ayudas que distorsionan el comercio. En consecuencia, también resulta poco probable que la Ronda de Doha estimule reformas adicionales en las políticas agrarias internas de los países de la OCDE.

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**PALABRAS CLAVE:** Comercio internacional, Agricultura, Ayuda interna, OMC.

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## 1. Introduction

Domestic support to agriculture in wealthy countries has become an increasingly contentious issue, particularly for relations with developing countries. The current round of trade negotiations being conducted through the World Trade Organization (WTO) is attempting to reduce the amount of trade-distorting domestic support that can be provided.

This paper reviews the approach that is being used in the Doha Round and assesses its limitations. Data for a range of representative countries are used to identify changes in support entitlements that would be needed to constrain domestic policies. The likely implications of an agreement for future agricultural policies are assessed.

## 2. Treatment of domestic support in the WTO

The conclusion of the Uruguay Round negotiations in 1994 under the General Agreement on Tariffs and Trade (GATT) was the first serious attempt to impose disciplines on domestic support provided to agriculture. It was recognized that subsidies that are linked directly to production can distort international trade by reducing imports or increasing exports. These subsidies, whose levels were to be subject to restriction and negotiated reductions, were popularly categorized as “Amber Box” subsidies to distinguish them from other forms of support.

The Agreement on Agriculture (AoA) embodied the central concept of the Aggregate Measure of Support (AMS). This was derived from the earlier measure of the Producer Subsidy Equivalent (PSE) developed by Josling (FAO 1975), and used by the Organization for Economic Cooperation and Development (OECD) in its influential study of the relationship between domestic agricultural policies and trade distortions (OECD 1987)<sup>1</sup>. The AoA provided for the calculation of a Total AMS (TAMS) for a base period (1986-88) to include three elements: market price support, non-exempt direct payments and other subsidies that were not exempt from reduction commitments. Countries agreed to reduce the base period TAMS by 20 percent to a final bound level by the year 2000 (2004 for developing countries), and to maintain their actual TAMS below the bound level in subsequent years. Policies that were judged to have no or minimally distorting effects on trade or production were exempt from reductions (so-called Green Box payments) as were payments under production-limiting programs (so-called Blue Box payments).

<sup>1</sup> The key difference between the AMS and the PSE (now renamed the Producer Support Estimate) is that annual calculations of the former are made using a fixed set of world reference prices for the period 1986-88. The PSE uses world prices prevailing in the actual year the calculation is made.

An important feature of the approach used to evaluate whether countries meet their TAMS commitment is the exclusion of certain subsidies under the *de minimis* provisions. Trade-distorting support for a given commodity that is less than 5 percent of its value of production is not counted against the TAMS commitment. Support that cannot be allocated to individual commodities that amounts to less than 5 percent of the total value of agricultural production is also not counted against the TAMS commitment. Developing countries were given 10 percent exemptions under both *de minimis* provisions<sup>2</sup>.

The Ministerial Declaration that launched the Doha round of negotiations calls for “substantial reductions in trade distorting domestic support” (WTO 2001). The Framework document for the negotiations (WTO 2004a) specifies the following:

1. A substantial reduction in the overall level of trade-distorting support (defined as the bound TAMS, plus permitted *de minimis*, plus Blue Box support) from base period levels in developed countries with harmonization, in which higher levels of support will be subject to deeper cuts.
2. A substantial reduction in the bound TAMS and permitted *de minimis* levels; the capping of Blue Box support at 5 percent of the average value of total agricultural production for an historical period; and the capping of product-specific AMS at average levels according to a methodology to be agreed.
3. Special and differential treatment (S&D) for developing countries to include longer implementation periods and lower reduction coefficients for all types of trade-distorting domestic support, plus continued access to the provisions under Article 6.2 of the AoA (exemption for direct or indirect assistance for agriculture and rural development). The Least-Developed Countries (LDCs) are not required to make any reduction commitments.

The Framework contains provisions relating to the following elements:

1. The overall reduction in the OTDS.
2. The final bound TAMS.
3. Product specific AMS.
4. *De Minimis* support.
5. Blue Box support.
6. Green Box support.
7. Special and differential treatment for developing countries (S&D).

The analysis in this paper focuses on the first six of these elements. It relies primarily on the Framework, but also draws on selected elements from the First Draft of Modalities (WTO, 2003). Those modalities are generally associated with the name of the then-chairman of the WTO Committee on Agriculture, Stuart Harbinson, and are referred to as the Harbinson Modalities.

<sup>2</sup> In China’s accession agreement to the WTO in 2001, its *de minimis* exemption was set at 8.5 percent of the relevant production values.

### 3. The starting point for reductions in domestic support

The final bound TAMS represents a commitment on the maximum amount of support that a country can provide through the Amber Box, calculated using conventions established in the AoA. The actual Amber Box support measured using those conventions can be larger than that under the bound TAMS due to the *de minimis* provisions. The final bound TAMS plus the *de minimis* allowances can therefore be interpreted as maximum support entitlements. The amount of support that is counted against the TAMS entitlement is determined by computing the current AMS for each commodity, using the rules set out in the AoA. If the AMS is more than 5 percent of the value of the production for that commodity, it is included in the current TAMS. If it is not, it is excluded by virtue of the commodity specific *de minimis*. In addition, a calculation is made of the non-commodity specific AMS. If that is greater than 5 percent of the total value of production it is included in the current TAMS. If it is less than 5 percent of the total value of agricultural production, it is excluded under the non-commodity specific *de minimis* provision.

It is important to note that the amount of support for an individual commodity calculated under the provisions of the AoA in a given year may differ from the actual amount of support provided for that commodity. One of the principal reasons for this is that fixed external reference prices (world prices) for the period 1986-88 are used to calculate market price support for commodities for which price comparisons can be made. Because the base period reference prices may not correspond to actual world prices in the current year, the calculated level of support for the AMS can differ from the actual level of support.

In discussing the approach being taken in the current round of negotiations, it is important to distinguish between bindings or commitments on the various elements of support (i.e., maximum permitted values) which define allowable amounts of support (entitlements) and the actual support provided. The impact of potential reductions in the OTDS entitlement cannot be determined without considering how the components of the OTDS will be treated and how that treatment relates to an individual country's actual use of its components. In terms of the OTDS entitlement, key factors are: the percentage reduction in the bound TAMS; limitations on the AMS for individual commodities; the value of production limits placed on support that can be excluded from reductions under the *de minimis* provisions; and limitations on Blue Box support. The impact of the rules established for each of these components on individual countries will largely be determined by the extent to which countries actually make use of the various elements in supporting agriculture.

To examine the issues, WTO data for a selection of countries are used. The countries covered are: Canada, the European Union, Japan, Norway, and the United States<sup>3</sup>. These represent a range of member countries of the WTO. Members are required

<sup>3</sup> As large countries and key players in the negotiations, the inclusion of the EU, Japan and the United States is self evident. Canada and Norway provide insights into the potential impact of support reductions on smaller countries with substantially different levels and compositions of domestic support.

to provide data (notifications) relating to the various elements of the AoA, including the amount of domestic support they provide in a given year.

#### 4. Base period data and what they reveal

It would highly desirable to be able to compare potential changes in domestic support resulting from a new WTO agreement with respect to a common base period for all countries. Unfortunately, member countries vary in the timeliness of their notifications to the WTO. As a result, the base periods that can be used for analysis vary. I have chosen to employ an average of the latest three years of data available. These are: 1998-2000 for Canada, 1999-2001 for the European Union, Norway and United States, and 2000-2002 for Japan. For the sake of brevity, I shall refer to “the base period” for these data, recognizing the fact that the actual years can differ among countries. It should also be noted that some country notifications do not contain data on the value of agricultural production —which is key information in conducting the analysis. In such cases, figures on the total value of production were obtained from the OECD’s PSE/CSE database.

Table 1 contains base data on domestic support. The first row contains the final bound TAMS resulting from the Uruguay Round Agreement. The second row is the current average TAMS reported to the WTO for the base period. It excludes the product specific and non product specific *de minimis* elements given in the table. The remaining rows provide information on Blue and Green Box support and the OTDS.

The first point to note is the substantial variation in the degree to which countries use their TAMS entitlement. Norway and the United States were within 10 percent and 20 percent, respectively of their bound levels in the base period. The European Union had a 35 percent margin of difference. Canada and Japan were both substantially below their bindings.

The second point to note is the substantial variability in the relative importance of the *de minimis* exclusions. Norway and Canada represent two extremes in this regard. Norway reported no *de minimis* exemptions in the base period. In contrast, Canada’s total *de minimis* (product and non product specific) was larger than the current base period TAMS. Among the large countries in the WTO, the *de minimis* exemptions were particularly significant for the United States, being equivalent in size to 45 percent of the current TAMS. For Canada and the United States, the non product specific exemption is the more significant component.

The Blue Box category of support was of major importance for the European Union and Norway in the base period. The magnitude of Blue Box support in the EU was half the size of its current TAMS. In Norway it was equivalent to 70 percent of the current TAMS. Recent changes in policy will affect the future size of Blue Box support in both the European Union and the United States. This complicates the interpretation of any analysis based on historical data. The issues are discussed in greater detail in the section below that deals with the Blue Box.

The final category of support —the Green Box— is extremely important for several countries. The value of support under this category is more than three times as

TABLE 1  
Base Data for Domestic Support

|  | Canada     | EU        | Japan     | Norway  | US         |
|--|------------|-----------|-----------|---------|------------|
|  | 1998-00    | 1999-01   | 2000-02   | 1999-01 | 1999-01    |
|  | Million \$ | Million € | Billion ¥ | Mill Kr | Million \$ |
| Bound TAMS                             | 4,301      | 67,159    | 3,973     | 11,449  | 19,103     |
| Current TAMS                           | 983        | 43,607    | 717       | 10,593  | 16,026     |
| Current TAMS/Bound TAMS                | 23%        | 65%       | 18%       | 93%     | 84%        |
| Product specific <i>de minimis</i>     | 205        | 110       | 15        | 0       | 102        |
| Non product specific <i>de minimis</i> | 1,009      | 467       | 20        | 0       | 7,171      |
| Blue Box                               | 0          | 21,914    | 90        | 7,558   | 0          |
| Green Box                              | 1,788      | 20,812    | 2,472     | 4,076   | 50,159     |
| Value of production                    | 29,705     | 241,159   | 8,978     | 17,430  | 190,919    |
| Current OTDS                           | 2,196      | 66,098    | 843       | 18,151  | 23,299     |
| As percent of production value         | 7%         | 27%       | 9%        | 104%    | 12%        |
| Maximum permitted OTDS                 | 8,757      | 113,188   | 5,320     | 20,750  | 47,741     |
| As percent of production value         | 29%        | 47%       | 59%       | 119%    | 25%        |
| Ratio to Bound TAMS                    | 2.04       | 1.65      | 1.34      | 1.81    | 2.50       |
| Current TAMS/current OTDS              | 45%        | 66%       | 85%       | 58%     | 69%        |

The bound Total AMS is the final value under the Uruguay Round Agreement. Other figures relate to actual averages for the period indicated (the base period). The current OTDS is current Total AMS + actual *de minimis* (product and non product specific) + actual Blue Box.

Source: Country notifications to the WTO [www.wto.org](http://www.wto.org). Additional data on production values from the OECD PSE/CSE database (2004) [www.oecd.org](http://www.oecd.org).

large at the current TAMS in Japan and the United States. It is relatively less significant in comparison to the current TAMS in Canada, the European Union and Norway, although total Green Box payments exceeded the current TAMS by more than 50 percent in Canada.

As noted earlier, an important innovation in the Doha Round is a widening of the support that is to be disciplined, beyond that counted in the TAMS. The concept of the Overall Trade Distorting Support is the embodiment of this broader coverage. Under a new agreement countries will undertake commitments on the maximum OTDS, as well as its components. The fulfillment of those commitments will be monitored on the basis of the evolution of the actual OTDS. As a starting point for the comparison of future options for reductions, the current OTDS (actual TAMS plus *de minimis* plus Blue Box payments) in the base period for each of the countries is given in Table 1.

The size of the current OTDS in the base period relative to the value of production varies considerably. The most startling case is Norway, for which the current OTDS exceeds the value of production in the base period. This is due to the relatively large amount of both Amber and Blue Box support provided to Norwegian agriculture (as depicted in the table) With the exception of the European Union, for which the OTDS was 27 percent of the value of production in the base period, the

other countries in Table 1 had ratios of the actual OTDS to production of around 10 percent.

What is potentially significant is the extent to which limitations on the OTDS will potentially exert greater discipline on the **actual** support provided by individual countries. Some insight into this can be obtained by comparing the ratio of the current support subject to WTO disciplines (as reflected by the current TAMS) to the current OTDS (Table 1). Other things being equal, the smaller the percentage the greater the potential for disciplining support through the use of OTDS reductions. Whether that potential actually applies in practice will depend on the nature of the conditions imposed by a new agreement (specifically the reduction percentages for the OTDS and its components) and whether these are actually binding. In Canada's case, a key issue is whether reduced caps on *de minimis* will have a significant impact. The same is true for the United States, since the difference between the current OTDS and the current TAMS is attributable to *de minimis* exclusions. For the European Union and Norway, a major factor is the inclusion of Blue Box support in the OTDS. The likely shift of some of the support provided by the United States to the Blue Box under current agricultural legislation means that the future of that component of support will also be of importance of the United States.

## 5. Key factors in a future agreement

Key factors with respect to reductions in domestic support in the Framework are the application of separate and complementary reduction formulas for the OTDS, TAMS, and *de minimis*, but not for Blue Box payments and a commitment that the reduction of the OTDS will not to be applied as a ceiling, should the separate formulas for reductions in the TAMS and *de minimis* apply a greater total cut in the OTDS. One implication of these factors is that options for countries to behave strategically in responding to reductions in the OTDS (in particular, to reduce the impact of reductions on Blue Box payments) may be limited, depending on the nature of the individual reduction requirements for the components of the OTDS.

### 5.1. Overall trade-distorting domestic support

The OTDS is defined as the sum of the final bound TAMS, permitted *de minimis*, and capped Blue Box. In the Framework, the capped Blue Box value was defined as 5 percent of the value of domestic production. However, there is a special provision for countries whose Blue Box payments are particularly large, the importance of which will be illustrated subsequently.

The Framework agreement indicates that "Members having higher levels of trade-distorting domestic support will make greater overall reductions in order to achieve a harmonizing result". This implies the use of a tiered approach to the reduction percentage; it appears to imply that the tiers will be based on the absolute level of support in a base period. Countries with a larger total OTDS entitlement in the



base period will be subject to a larger total reduction. To the extent that a larger total value of support equates with a larger absolute effect of that support on the volume of trade, this would place the emphasis on achieving the greatest reductions in the entitlements to support for countries that *ceteris paribus* would account for the largest distortions in world trade. One characteristic of such an approach is that small developed countries that do not contribute significantly to the absolute level of distortion in world trade, but have an entitlement to provide a large amount of trade-distorting support relative to the value of their domestic production (e.g., Norway and Switzerland), may be less affected, since they would presumably be in a lower tier. Norway is a particularly vivid example of this, since the value of its OTDS is larger than the value of production (Table 1). As we shall see, this would not necessarily mean that such countries would be less affected, in practice.

## 5.2. *The final bound total AMS*

The Framework specifies the use of a tiered formula with greater reductions for larger values of the bound TAMS in order to achieve a harmonizing effect. Greater than formula reductions are possible in order to achieve a given overall reduction in trade distorting support. The Framework also indicates that Members that have a higher bound TAMS will make larger reductions in the bound TAMS.

An important issue is whether the reduction percentage for the bound TAMS differs from that for the OTDS. If the TAMS percentage is larger than that for the OTDS entitlement, this reduces the adjustment that would have to be made in other components of the OTDS entitlement in order to meet the OTDS commitment. It can mean that the reduction percentage in the OTDS is not binding, i.e., that the reduction in the bound TAMS and *de minimis* exceeds the required reduction in the OTDS. Conversely, if the reduction percentage for the bound TAMS is lower than that for the OTDS, the OTDS reduction would likely be binding, and this could force a country to reduce its actual TAMS below the bound level in order to meet the OTDS reduction commitment. The implications of separate reduction percentages for the various components of the OTDS and for the OTDS as a whole are relatively complex for future entitlements to support. Their actual impact is further complicated by how these entitlements relate to the actual level of support provided and its composition. Some of the complexities are illustrated subsequently.

## 5.3. *Product-specific AMS limitations*

The Framework specifies that the product-specific AMS will be capped at average levels to be agreed. A key argument for the capping of the product-specific AMS is that it prevents an escalation of support for individual commodities. Countries whose current TAMS is substantially less than the bound level (Table 1) have substantial flexibility to increase the Amber Box support for individual commodities. In the absence of policy reform, countries that face substantial variation in the AMS for individual commodities could find that they may violate these caps, simply because



of variations in production. For example, if a product-specific AMS cap based on average actual values for 1999-2001 had been in place for the United States during the period since the conclusion of the Uruguay Round (1995-2001) that cap would have been exceeded on at least one occasion for all but one of the 38 products for which an AMS was calculated. In 19 cases the cap would have been exceeded two more times. A major contributing factor is the average annual variability of 17 percent in the volume of production for AMS commodities in the United States.

It is also worth noting that the use of fixed reference prices for the calculation of market price support has interesting implications for “large” countries — those whose production volumes can be expected to influence world prices, particularly when their production is subject to random fluctuations due to weather conditions. The use of a fixed reference price is likely to overstate the actual amount of support in such countries if poor weather causes their domestic production to fall and world prices to rise; and to understate support if good weather causes production to rise and world prices to fall. Since market price support is calculated as the difference between a domestic support price and a world reference price multiplied the volume of production eligible for support, all countries, both large and small, could find that they breach a product specific AMS cap without any change in the per unit support provided, simply because domestic production is higher than normal. This may add to the difficulty that countries may face in meeting their commitments with commodity-specific AMS caps.

It could certainly be argued that the creation of tighter discipline on the amount of support that can be provided for individual commodities would be desirable, particularly from the perspective of producers of those commodities in other countries who are trying to compete with subsidized production. A major advantage of product specific caps is that they prevent the escalation of subsidies for individual commodities. However, as noted above it might be difficult for policymakers to stay within these caps due to year-to-year fluctuations. The establishment of a discipline which policymakers might be unable to satisfy might not make a positive contribution to the WTO process, unless one were to judge the value of that process in terms of the volume of litigation. For this reason, an alternative would be to focus on aggressive reduction percentages for the OTDS entitlement and tightening the rules for the calculation of support to force a reorientation of policies in countries that provide significant support to agriculture.

#### **5.4. *De minimis***

The Harbinson Modalities proposed that the 5 percent *de minimis* exemptions for developed countries be reduced to 2.5 percent in equal installments over a period of five years. As noted earlier, there are two components to the *de minimis* — a product specific component and a non product specific component. The importance of these varies among countries, as illustrated by the data in table 1. For most countries, a reduction in the *de minimis* cap for non product specific support is likely to be potentially more significant.

The use of separate *de minimis* calculations for product and non product specific support implies that in the limit a country can maintain a support level of just under 10 percent (5 percent for each category of support) without such support being counted against its commitments. With a cap of 2.5 percent for each *de minimis* category, the total level of support that can be maintained under this provision would be just under 5 percent.

Countries have greater flexibility in the use of the non-product specific *de minimis* than the product specific category. Since the non product specific *de minimis* is an aggregate of various forms of support the composition of that support can be varied substantially within the capped level. The situation is different for product specific *de minimis*, since the amount of support that can be provided for each commodity is disciplined by the product specific cap. For the countries examined in this paper the non product specific *de minimis* exceeded 2.5 percent of the value of production for only a few commodities in the base period. Thus relatively few commodities would be affected by a reduction in the *de minimis* percentage. As note above with respect to product-specific AMS caps, countries with greater production variability are likely to encounter the most problems since commodities can move into and out of the *de minimis* category from year to year depending on the level of support and changes in the value of production.

One important implication of the inclusion of a product specific *de minimis* in the OTDS entitlement is an issue of “double counting” (Roberts, 2005). This relates to the fact that the *de minimis* allowance in the base OTDS refers to 5 percent of the total value of production, rather than to the value of production for those commodities for which a product specific *de minimis* exemption is claimed in the base period. While the eligibility of each particular commodity for the exemption is evaluated on a year-to-year basis with respect to its value of production in that year, and this imposes some discipline on its use, the use of the 5 percent figure provides some extra “padding” in the base period OTDS. It should be noted that this is only the case if the TAMS is non-zero. In the limit, if the TAMS were reduced to zero, all product specific support would be *de minimis*, the support for each product would not exceed the allowable *de minimis* percentage, and total support would be less than the permitted percentage of the value of total production. It is not clear whether Roberts is suggesting that the aggregate value of production used in determining the total product specific *de minimis* in the OTDS commitment should be variable, rather than fixed, but that would mean that the level of the product specific *de minimis* included in the OTDS commitment (or the value of the bound TAMS) would have to change through time in line with changes in the composition of products included in the TAMS and the product specific *de minimis*. Such a provision might be difficult to implement.

While the reduction in the maximum *de minimis* from 5 percent of the value of production to 2.5 percent would impose a greater constraint on its use than under the AoA, the inclusion of two separate allowances for each category means that these are a significant proportion of the base period OTDS entitlement (twice the value of the Blue Box for countries that are allowed the standard 5 percent blue box cap). Countries that do not use their *de minimis* exemptions may still benefit from their inclu-

sion, since this may dilute the effective reduction required in other elements of the OTDS for any given reduction in the overall OTDS entitlement. Conversely, an aggressive reduction percentage for the OTDS could force additional reductions in actual *de minimis* support, regardless of the nominal entitlement.

### 5.5. *Blue Box*

The Framework calls for the capping of Blue Box support at 5 percent of the average value of total agricultural production for an historical period. However, it does not indicate that a specific reduction formula will be used for this category of support. This is in contrast to the Draft Modalities which proposed that Blue Box payments be capped at their most recent notified level and reduced by 50 percent in equal installments over a period of five years. Subsequent negotiating proposals by the European Union and the United States appear to indicate a movement in that direction. In calculating the reduction in the OTDS entitlement, the measurement of the Blue Box component will be the higher of existing payments in a representative period or the capped value. It is important to note that all countries, whether or not they currently use Blue Box payments, will be entitled to include the 5 percent Blue Box cap in their OTDS entitlement. This provides some additional padding for countries that do not use Blue Box payments. It is unclear whether countries that are forced to change existing policies by virtue of reductions in their bound TAMS or the product specific caps on the AMS would find it attractive to modify existing programs to qualify for the Blue Box to take advantage of the support entitlement under that category, but there is clearly a possibility for such strategic behavior.

The Framework extends the definition of Blue Box payments to those made under production limiting programs or payments that do not require production (to be negotiated). It also specifies that such payments must be made on “fixed and *unchanging*” areas or number of animals. This expansion of the Blue Box definition is intended to capture the Counter-Cyclical Payments (CCPs) introduced by the United States as part of the 2002 Farm Act.

CCPs vary with current market prices, but not with current production. They differ from the deficiency payments used by the United States prior to the 1996 Farm Act in a key aspect. Those payments, and the EU compensatory payments which are covered by the Blue Box, had a production limitation condition attached (e.g., a compulsory set-aside of part of the area that would otherwise be planted to the supported crop) or were made on the basis of a fixed number of animals (in the EU case). The logic was that such restrictions could help to offset the potential production enhancing effect of the payment. However, it should be noted that there is no actual requirement that the production requirement should be non-zero or that the restriction should be at such a level that it would offset the output-enhancing effect of payments. Furthermore, a payment linked to a fixed number of animals would likely distort trade if there is a requirement to produce in order to receive the payment. Consequently, the extent to which such payments are actually implemented in such a way as to minimize their impact on trade is unclear.

It is difficult to determine the potential impact of CCPs on production, and how that effect compares to the earlier U.S. deficiency payment scheme. Abler and Blandford (2005) review a range of empirical studies of the effects of so-called decoupled payments under the 1996 U.S. Farm Act and related legislation. Some of those payments, the Marketing Loss Assistance (MLA) payments, operated in a similar way to the CCPs. The key difference is that the CCPs are explicitly included in continuing legislation (the Farm Act that runs through 2007) whereas the MLAs were legislated on a year-to-year basis. One could therefore argue that the availability of CCPs is considered to be more certain by producers than were the MLAs and that this might affect their response to the payments. Abler and Blandford conclude that empirical evidence provides some support for the view that so-called U.S. decoupled payments had some impact on production (this is relevant to the Green Box discussion below) even though the estimated impacts are modest in comparison to conventional price supports. Nevertheless, it is probable that CCPs have some impact on production and trade.

One might argue that this is not such an important issue given that a new agreement will impose some discipline on Blue Box payments for the first time. As noted earlier, Blue Box payments are to be included in the OTDS entitlement. Even if they are not subject to a negotiated reduction percentage, they are likely to be affected by the reduction requirement for the OTDS. In addition, they are subject to the 5 percent cap on the value of agricultural production. From a U.S. perspective there is a clear advantage in the expansion of the Blue Box definition to include CCPs, since otherwise they would be included in the TAMS (providing they do not qualify for a *de minimis* exemption). Other things being equal, that would impose more immediate and explicit discipline on such payments since they would have to be accommodated within the TAMS ceiling of \$19.1 billion. At 5 percent of the value of production, the separate Blue Box provision adds an additional \$9.5 billion of support entitlement for the base period considered in table 1. Again, as demonstrated subsequently, the application of an aggressive OTDS reduction percentage or reduction percentage in the Blue Box entitlement could substantially reduce the flexibility open to the United States in using CCPs.

Other countries that use Blue Box payments under the existing AoA provisions would be affected by the 5 percent limitation in different ways. For Japan, the limitation does not seem to be much of an issue if recent policies continue, since in the base period its Blue Box payments only amounted to roughly 20 percent of the capped value. EU payments were more than 80 percent above the capped value, but the European Union is in the process of changing its policies which should result in switching much of the support previously provided under the Blue Box to the Green Box category. The greatest challenge seems to face Norway. Its Blue Box support was more than eight times the size of the 5 percent production cap in the base period. The Framework allows for some flexibility in cases where an exceptionally large percentage of trade-distorting support is in the Blue Box to avoid "a wholly disproportionate cut". If this category of support is going to continue to be of importance for Norway, it would appear that some relaxation of the 5 percent cap would have to be granted to that country.

Finally, it should be noted that criteria for inclusion in the Blue Box have been tightened. The requirement that payments be based on fixed and unchanging areas, yields or number of animals is designed to prevent rebasing (which occurred under the 2002 U.S. Farm Act). Rebasing expectations have been identified as a possible reason for rigidity in production response since farmers keep more of their area in supported crops in order to maintain their future entitlement to payments. The new requirement will introduce some rigidity into the distribution of payments (although the payment rates for the various commodities could presumably be varied), but if the payments are only a transitional measure “in promoting agricultural reforms” (as indicated in the Framework), this may not be a source of concern. One possibility would be to tighten the rules that apply to payments that involve production restrictions, to ensure that the restrictions are actually binding and of sufficient magnitude to offset the production-enhancing effect. As noted above, this is not currently required under the Uruguay Round Agreement

## 6. Implications of a formula approach to reductions

The use of the OTDS as the basis for determining reductions in support has the effect of increasing significantly the amount of eligible support in the base period. Table 1 shows the ratio of the base period OTDS entitlement to the Bound TAMS. The inclusion of the *de minimis* and Blue Box allowances means that that the support entitlement for the United States more than doubles. The smallest impact of the switch from the TAMS to the OTDS is Japan, but as will be seen from subsequent analysis that country is likely to be the least affected by required reductions in the OTDS entitlement.

Table 2 contains two examples of the application of a formula approach to the reduction in the domestic support entitlement that helps to illustrate some of the issues involved. The first example, which is termed an “equal reduction approach”, provides a point of reference for a tiered example. The equal reduction approach assumes that each country would be required to reduce its OTDS entitlement and bound TAMS by 60 percent. It assumes that the *de minimis* components would be reduced from 5 to 2.5 percent of production. The Blue Box value included in the base OTDS is 5 percent of the value of production, except for the European Union and Norway in which it is the actual value of Blue Box payments in the base period. As noted above, the Framework called for the OTDS to include the higher of 5 percent of the value of production or actual Blue Box payments in the base period for the purposes of calculating reductions. In both the European Union and Norway, Blue Box payments exceeded 5 percent of the value of production in the base period.

The first block of figures in the table contains the maximum allowable amount for each type of support. The second block of figures indicates the cuts required in each component from actual base period values. If the required cut is negative, no actual reduction would be required.

TABLE 2  
Domestic Support Reduction Scenarios for Selected Countries

|                               | Canada                | EU                   | Japan                | Norway             | US                    |
|-------------------------------|-----------------------|----------------------|----------------------|--------------------|-----------------------|
|                               | 1998-00<br>Million \$ | 1999-01<br>Million € | 2000-02<br>Billion ¥ | 1999-01<br>Mill Kr | 1999-01<br>Million \$ |
| <b>Equal Reduction</b>        | 60%                   | 60%                  | 60%                  | 60%                | 60%                   |
| Maximum OTDS                  | 3,503                 | 45,275               | 2,128                | 8,300              | 19,096                |
| Bound Total AMS               | 1,720                 | 26,864               | 1,589                | 4,580              | 7,641                 |
| Maximum PS <i>de minimis</i>  | 743                   | 6,029                | 224                  | 436                | 4,773                 |
| Maximum NPS <i>de minimis</i> | 743                   | 6,029                | 224                  | 436                | 4,773                 |
| Maximum permitted Blue Box    | 1,485                 | 12,058               | 449                  | 871                | 9,546                 |
| Maximum OTDS/production       | 12%                   | 19%                  | 24%                  | 48%                | 10%                   |
| Actual maximum Blue Box       | 1,485                 | 12,058               | 449                  | 871                | 6,580                 |
| <b>Cuts required to meet:</b> |                       |                      |                      |                    |                       |
| Maximum OTDS                  | -1,307                | 20,823               | -1,285               | 9,851              | 4,202                 |
| Bound Total AMS               | -738                  | 16,743               | -872                 | 6,014              | 8,385                 |
| Required % cut in AMS         | 0%                    | 38%                  | 0%                   | 57%                | 52%                   |
| Maximum PS <i>de minimis</i>  | -538                  | -5,919               | -209                 | -436               | -4,671                |
| Maximum NPS <i>de minimis</i> | 266                   | -5,562               | -204                 | -436               | 2,398                 |
| Actual maximum Blue Box       | -1,485                | 9,856                | -359                 | 6,686              | -6,580                |
| <b>Tiered Reduction</b>       | 50%                   | 70%                  | 60%                  | 50%                | 60%                   |
| Maximum OTDS                  | 4,378                 | 33,957               | 2,128                | 10,375             | 19,096                |
| Bound Total AMS               | 2,151                 | 20,148               | 1,589                | 5,725              | 7,641                 |
| Maximum PS <i>de minimis</i>  | 743                   | 6,029                | 224                  | 436                | 4,773                 |
| Maximum NPS <i>de minimis</i> | 743                   | 6,029                | 224                  | 436                | 4,773                 |
| Maximum permitted Blue Box    | 1,485                 | 12,058               | 449                  | 871                | 9,546                 |
| Maximum OTDS/production       | 15%                   | 14%                  | 24%                  | 60%                | 10%                   |
| Actual maximum Blue Box       | 1,485                 | 12,058               | 449                  | 871                | 6,580                 |
| <b>Cuts required to meet:</b> |                       |                      |                      |                    |                       |
| Maximum OTDS                  | -2,182                | 32,141               | -1,285               | 7,776              | 4,202                 |
| Bound Total AMS               | -1,168                | 20,148               | -872                 | 4,869              | 8,385                 |
| Required % cut in AMS         | 0%                    | 54%                  | 0%                   | 46%                | 52%                   |
| Maximum PS <i>de minimis</i>  | -538                  | -5,919               | -209                 | -436               | -4,671                |
| Maximum NPS <i>de minimis</i> | 266                   | -5,562               | -204                 | -436               | 2,398                 |
| Actual maximum Blue Box       | -1,485                | 9,856                | -359                 | 6,686              | -6,580                |
| <b>Assumptions</b>            |                       |                      |                      |                    |                       |
| Base maximum permitted OTDS   | 8,757                 | 113,188              | 5,320                | 20,750             | 47,741                |
| Value of production           | 29,705                | 241,159              | 8,978                | 17,430             | 190,919               |

The equal reduction approach assumes a cut of 60 percent in the maximum OTDS and Bound Total AMS and a *de minimis* of 2.5 percent for each of the product and non product specific components.

The tiered approach assumes reductions of 70 percent in the maximum OTDS and Bound Total AMS for the EU; 60 percent for Japan and the United States; and 50 percent for Canada and Norway, with a *de minimis* of 2.5 percent for each of the product and non product specific components

Source: Computed from data in country notifications to the WTO. www.wto.org Additional data on production values from the OECD PSE/CSE database (2004) www.oecd.org.



It should be recalled that Blue Box payments are subject to a cap of 5 percent of the value of production, but the maximum allowable payments can be less depending on the net effect of the reductions in other components. If the reductions in allowable payments for other components are generally binding, then the percentage reduction in the OTDS will have a significant impact on the amount of permitted Blue Box support. Conversely, if a country has a lot of “unused credits” in the other components, these will then be applied to the Blue Box residual. It follows from this that the actual maximum permitted Blue Box payments can be less than the capped value.

In order to calculate the maximum Blue Box payment entitlement, the following methodology is applied:

1. If a reduction in the Total AMS or either of the *de minimis* components yields an entitlement that is less than that actually applying in the base period, the reduction is assumed to be binding.
2. If a reduction in the Total AMS or either of the *de minimis* components results in an entitlement that is greater than that actually applying in the base period, the unused amount of support (difference between the maximum allowed and that actually applying in the base period) is assumed to be potentially transferable to the Blue Box entitlement.
3. The components under 1 and 2 are summed and then subtracted from the OTDS entitlement. The smaller of that figure or 5% of the value of production is assumed to define the actual Blue Box entitlement. This is denoted by “Actual Maximum Blue Box” in the table.

It should be noted that this methodology may underestimate permitted Blue Box payments because the reduction in the product specific *de minimis* could cause some support that was previously under that category to move into the AMS (if the AMS for those products is above the relevant production percentage). This would generate some additional Blue Box credits. The only country actually affected by this in Table 2 is the United States, since its Blue Box entitlement is less than the capped value.

From Table 2 it may be observed that the separate reduction formulas for overall domestic support and its components have differential effects across countries. For example, only three of the countries (the EU, Norway and the United States) would face a binding reduction in the OTDS. These three countries would face a binding reduction in the Total AMS. Only two countries (Canada and the United States) would face a binding reduction in the non product specific *de minimis*. The figures in the table suggest that no country would face a binding reduction in the product specific *de minimis*, but as noted above that is not necessarily accurate since some commodities may move from that category to the Total AMS as result of the reduction in the allowable production percentage. Two countries (the EU and Norway) would be required to make reductions in their Blue Box payments.

With respect to the Blue Box it should also be noted that only one country (the United States) would face a payment maximum that is less than the 5 percent produc-



tion value cap on the basis of its expenditures in the base period. The Blue Box cap would give a maximum level of payments of roughly \$9.5 billion. However, the binding reduction in the OTDS for the United States implies that it would reduce the maximum permissible payments to around \$6.6 billion. As noted in the Framework, countries would have the option of reducing other elements of the OTDS below the required bindings in order to protect their Blue Box entitlement. It is unclear whether the United States would choose to reduce the other components of support by the roughly \$3 billion that would be needed to do this.

For an OTDS entitlement reduction to be potentially binding on the non Blue Box components, its reduction percentage must exceed those applied to the components. If that is not the case, the OTDS entitlement reduction merely has the potential to determine the reduction in the Blue Box component. The sequencing of reductions in the OTDS entitlement (e.g., the suggested 20 percent reduction in the first year in the Framework) could accelerate reductions in the actual TAMS and *de minimis* in some countries, but the final reduction percentage in the OTDS entitlement is likely to have no additional impact on them.

The second two blocks of figures in table 2 present a tiered approach to the reduction in the OTDS entitlement and the bound TAMS. In this scenario, the reduction percentage of 70 percent is applied to the European Union; Japan and the United States have reduction percentages of 60 percent and Canada and Norway have a 40 percent reduction. The lower reduction percentages for Canada and Norway, compared to the earlier scenario, provide some additional flexibility, while the EU's policy flexibility is reduced.

The percentage OTDS entitlements relative to the value of production indicate that the tiered approach leads to some harmonization in relative support entitlements across the countries considered. Entitlements vary from a low of 10 percent in the United States to a maximum of 60 percent in Norway. The more aggressive reduction percentage for the European Union brings its support entitlement in percentage terms closer to that of the United States. For the three major countries (EU, Japan and the United States) the ratio varies from 10 to 24 percent.

A major point is that the reductions in support entitlements have very different impacts across the countries. This is illustrated graphically in figure 1 which shows the percentage reduction from the actual OTDS in the baseline that is required in each country to meet the OTDS entitlement ceiling under the tiered approach. It may be seen that since Canada and Japan are below their entitlement ceiling, they would not be required to make any reduction in actual support (that provided in the base period). Norway, the European Union and the United States were all above their entitlement ceilings in the base period and would be required to make such reductions. The largest (over 40 percent) applies in Norway.

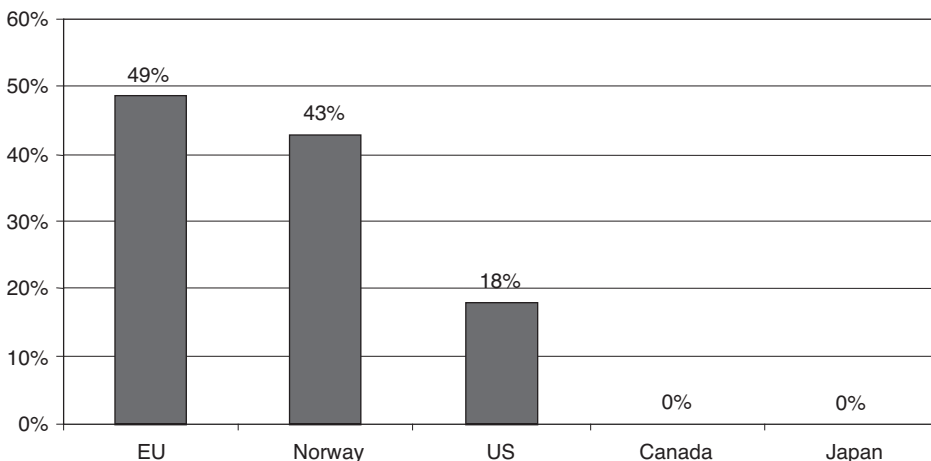
A second point to note is that even with the magnitude of reductions assumed, Norway's Blue Box payments in the base period would still be substantially above the entitlement of 5 percent of the value of production (actually in excess of 20 percent). The EU's Blue Box entitlement would be roughly 29 percent of the base period value of those payments — which should be more than sufficient to accommodate re-

cent changes in EU policy<sup>4</sup>. The U.S. entitlement of \$6.6 billion would be sufficient to accommodate CCPs in recent years, but might not be so if prices in the United States declined significantly<sup>5</sup>.

Figure 2 sheds some additional light on the implications of a tiered approach. This shows the percentage reduction in the base period OTDS entitlement that is required before actual reductions in the base period OTDS are necessary. In other words, it shows when those reductions would actually become binding on the provision of support to agriculture. The graph illustrates clearly the policy flexibility that countries like Canada and Japan appear to have in comparison to a country like Norway. A reduction of roughly 13 percent in the bound OTDS would become binding in that country, whereas a reduction of more than 80 percent would be required in Japan. As has been the case under the Uruguay Round Agreement, the initial starting conditions (i.e., the level of allowable support) that apply to each individual country are crucial in determining whether an agreement is likely to have any effect on the levels of support actually provided to agriculture.

FIGURE 1

**Percentage reductions from the Baseline OTDS under the 70/60/50 Reduction Formula**

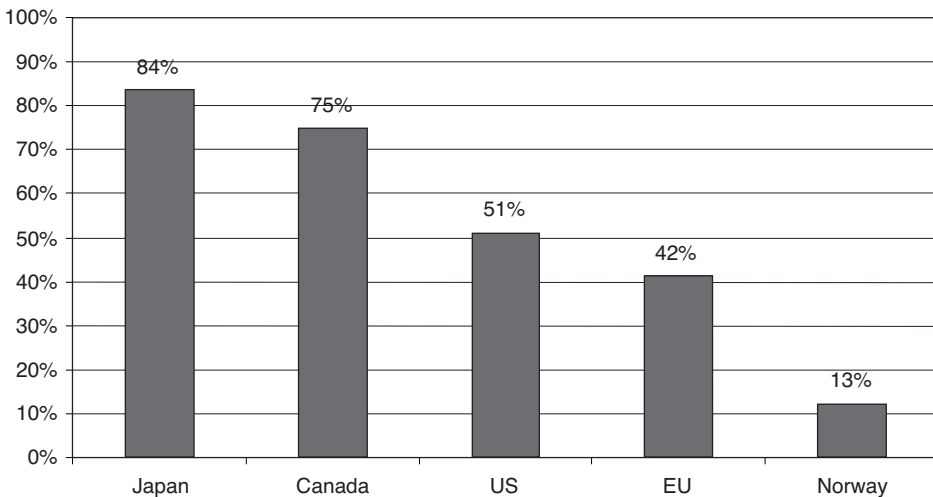


*Note:* Data relate to 1998-2000 for Canada, 1999-2001 for the EU, Norway and the United States, and 2000-2002 for Japan.

<sup>4</sup> These changes mean that a large proportion (in excess of 75 percent) of former Blue Box payments will move to the Green Box. This assumes that the Green Box compatibility of the new Single Farm Payment scheme in the Union is not challenged or alternatively that the rules for the receipt of payments are changed to conform to the results of the ruling in the Cotton Case (see the discussion of the Green Box below).

<sup>5</sup> CCC net outlays on CCPs were \$1.7 billion in Fiscal year (FY) 2002 (October 2001-September 2002) and \$0.8 billion in FY 2003. Budget estimates for FY2005 assume expenditures of \$6.0 billion.

FIGURE 2  
Binding Percentage Reductions in the OTDS



Note: Data relate to 1998-2000 for Canada, 1999-2001 for the EU, Norway and the United States, and 2000-2002 for Japan.

The effects of the reductions assumed in table 2 might be overstated since they are based on historical data. The future evolution of domestic support policies could affect the actual adjustments that would be necessary as a result of a new WTO agreement. To evaluate this would require assumptions about the future impact of changes in policies on the variables in Table 2. This paper does not attempt to derive such projections. However, an analysis of this type has been performed by Brink (2005). He assesses the impact of a reductions in the OTDS entitlement across four country tiers — Tier 1 (EU) 90 percent; Tier 2 (Japan and the United States) 80 percent; Tier 3 (Canada as an example) 70 percent; Tier 4 (Brazil as an example<sup>6</sup>) 60 percent. Brink indicates that cuts of this magnitude would constrain the future ability of the European Union and the United States to increase trade-distorting support, but would not require major changes in existing policies<sup>7</sup>.

Brink estimates that the European Union and the United States could make reductions of 76 percent in their OTDS entitlement without having to change their policies significantly in the future. The projections take into account the changes in the EU

<sup>6</sup> He notes that China, which has no AMS commitment would maintain a very large OTDS entitlement if this method were to be applied — 2.5 times larger than that for the US and almost twice as large as that for the EU by the end of the reduction period.

<sup>7</sup> The US could face problems in low-price years through expanded loan deficiency payments and counter-cyclical payments. This could require discretionary adjustments in loan rates and payment rates by the Secretary of Agriculture. Note also that Brink's analysis is for the EU15; there may be potential implications for future payments resulting from the recent enlargement of the Union, or from potential future enlargement.

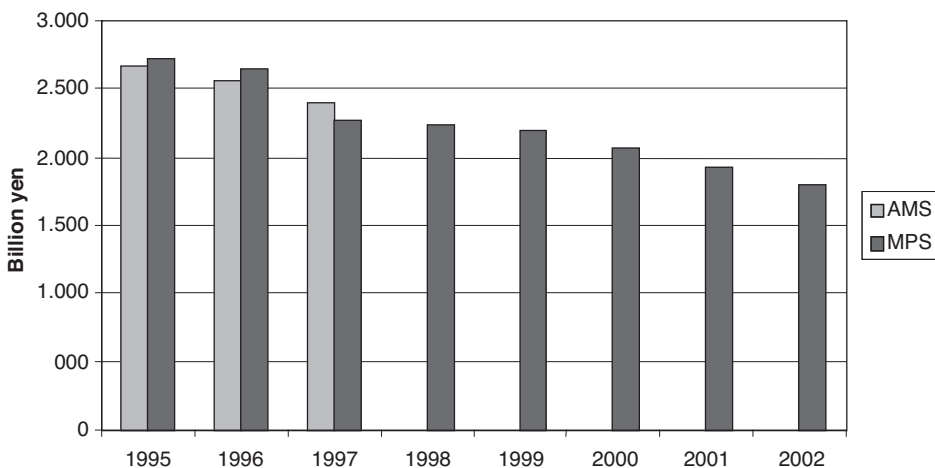
agricultural programs under the Mid-term review, in particular the shift from Blue Box to Green Box payments, and the continuation of the current U.S. Farm Act beyond 2007 (with CCPs being included in the Blue Box). Using market price projections developed by the U.S. Department of Agriculture, Brink concludes that the European Union and the United States could absorb 72 percent and 61 percent cuts, respectively, in their total AMS commitment without a significant change in policies. Brink's results support the conclusion reached through an analysis of recent historical data in this paper, that aggressive reduction percentages in the bound TAMS and the OTDS entitlement would be required in order to generate the need for significant changes in support policies in these countries.

Conclusions about the impact of reduction formulas on policies need to be qualified in the light of inherent weaknesses in the measurement of the AMS. These may provide countries a means of avoiding the apparent discipline of an aggressive reduction in allowable support. The problem is illustrated by the case of rice in Japan. Figure 3 shows the notified AMS for rice and the corresponding market price support (MPS) calculation from the OECD PSE/CSE database.

The reported AMS for rice was reduced to zero from 1998 onwards. This was because Japan changed its rice policy in that year, announcing that future purchases of rice would only be made for the purposes of maintaining food security stocks, rather than to support market prices (Fukuda *et al.* 2003). As a result of this change, Japan has not included an AMS for rice in any of its subsequent notifications to the WTO. OECD data for market price support, as calculated in the Producer Support Estimate (Figure 3), suggest that support (measured on the basis of the difference between domestic and world prices) for rice declined over the relevant period (1995-2002), but remained significant.

FIGURE 3

**Japanese Rice: AMS and the Market Price Support Component of the PSE**



Data from WTO notifications and the OECD PSE/CSE database 2004.

This illustrates that countries may be able to stay within the current rules for calculating the AMS but manage to avoid effective reductions in support. In the specific case of Japan significant reductions in rice tariffs could offset the effects of the redefinition of domestic policy, by causing reductions in internal market prices. The same approach could be used for protected commodities in many other countries. However, if there is a desire to ensure that negotiated AMS reductions are potentially binding, there may need to be a change in the agreed methodology, for example, requiring countries to calculate the AMS using either an administered support price or an internal reference market price.

## 6. Treatment of the Green Box

The AoA exempted certain types of payments from reduction if they meet “the fundamental requirement that they have no, or at most minimal trade-distorting effects or effects on production.” Policy specific criteria and conditions are specified in Annex 2 of the AoA. As may be noted from Table 2 and Figure 3, Green Box payments are of considerable significance for a number of countries. The Framework indicates that a review and clarification of criteria will be conducted to ensure no, or at most minimal, trade-distorting effects or effects on production and to provide for improved monitoring and surveillance of Green Box payments. The Harbinson Modalities suggested amendments to Annex 2 of the Agreement on Agriculture, clarifying the characteristics of payments with respect to income insurance and safety-net programs; disaster payments; structural adjustment assistance; and payments under environmental programs (with these to be extended to include animal welfare payments). There are clearly concerns among some countries that payments that are currently declared by countries as falling under the Green Box heading may be less than minimally distorting with respect to production and trade.

The future of Green Box payments is currently uncertain because of the recent ruling under the Cotton Case in the WTO. In that case, Brazil brought a complaint against certain aspects of the cotton policies of the United States. A key aspect of the complaint, for the purposes of the current discussion, was the panel’s finding that U.S. direct payments and the legislative and regulatory provisions which establish and maintain the direct payments program do not fully conform to the conditions set out in Annex 2 of the AoA (WTO, 2004b). Following an appeal by the United States, the Appellate Body upheld the original panel decision.

A key issue in the decision was whether the payments provided by the United States actually have an impact on production. Annex 2 of the AoA states that the amount of decoupled income support payments in a given year shall not be related to, or be based on, the type or volume of production undertaken in any year after the base year used in establishing the payments. The panel concluded that since the payments were conditional on producers not planting certain commodities (specifically fruits and vegetables) on the land upon which payments were based, and that producers were subject to penalties if they chose to do so, there was indeed a link to pro-

duction decisions after the base period. This is an important decision not only for the United States, but also for the European Union, whose single farm payment (SFP), which is currently being introduced as a result of the Mid-term review in 2003, involves a similar requirement. One might conclude that a simple solution to this problem would be to relax the restriction on the ability of producers to devote their land to other crops, and that may indeed be the case. However, the decision appears to open up a broader set of issues.

In both the European Union and the United States there appears to be a desire to link the provision of income support for agriculture to *specific uses* of agricultural land. The conditions for the SFP, for example, involve a definition of arable land that involves land cultivated for crop production, under set-aside or maintained in good agricultural and environmental condition. Although the implication of these particular conditions was not considered in the Cotton Case, such requirements might be interpreted as linking the provision of payments to agricultural activity (i.e., to production). To the extent that it could be demonstrated that such a requirement increases agricultural output directly or indirectly (the emphasis in the Green Box is on marketable agricultural output), the requirement might be challenged on the basis that it does not satisfy the condition of being minimally production and trade distorting. The broader implications of the Cotton Case for the provision of income support to agriculture remain to be determined, but may put into question support that is linked in any way to the continuance of agricultural activities that lead (directly or indirectly) to additional marketable output by the recipients of such support.

A separate element of the Green Box that appears to recognize the legitimacy of such a linkage relates to the provision of payments under environmental programs. Annex 2 acknowledges that producers may be required to meet certain conditions relating to production methods or inputs as part of such a program, but specifies that the amount of any payment made must be limited to the extra costs or loss of income involved in complying with the conditions of the program. The underlying assumption appears to be that governments may provide payments in order to secure the supply of environmental benefits associated with agriculture's use of the land, but it is unclear whether some of the environmental programs that are being developed would conform to the Green Box conditions. The thrust of those conditions appears to be on programs that compensate producers for the private costs of complying with environmental regulations or conditions set by the government, they do not appear to condone an approach that would reward producers for the social value of those services, i.e., on the basis of what the general public would be prepared to pay for the provision of such services if there were actually a market for them.

The underlying assumption behind the concept of multifunctionality (agriculture as a source of both commodities and non-commodity outputs), seems to be that the optimal supply of agriculture's non-commodity outputs, such as landscape, wildlife habitat, biodiversity, and cultural heritage can only be guaranteed by providing farmers a sufficient economic incentive to provide those attributes. That incentive may need to cover the opportunity costs faced by farmers (their potential earnings in non-agricultural activities or use of the land for alternative purposes), rather than simply covering the additional costs that environmental programs may impose due to their

impact on specific agricultural or land-use practices. Blandford and Boisvert (2005a) argue that payments for such services that are established through competitive bids, as in the Conservation Reserve Program of the United States, may satisfy the income foregone condition of the AoA, since it can be argued that farmers' individual bids will be related to the opportunity costs of the use of their land, i.e., to income foregone. However, it is by no means clear that incentive payments that are set by governments for producers to participate in environmental schemes or the provision of direct income payments that have environmental conditions attached to them would conform to current Green Box rules.

A more general and difficult issue with the Green Box, as currently defined, is that some categories of payments may, of necessity, have an impact on production. This is particularly true for environmental payments and proposed animal welfare payments. These are often designed to help support a particular production process or level of output in order to generate positive externalities or public goods. While considerable confusion exists in the policy debate on these issues, there is little doubt that the correction of market failures associated with agriculture (where they exist) will affect land use and production, either positively or negatively (Blandford and Boisvert, 2005b). The concern is that such payments will become a new mechanism for supporting otherwise agriculturally uncompetitive activities under an environment of freer trade. The domestic redistributive effects of Green Box payments may be an issue for the countries involved (e.g., because of the efficiency implications of deadweight taxation losses and equity concerns), and such payments may generate "subsidy envy" among countries that are not able to afford them, if such payments can indeed be made minimally distorting one might question whether it would be worth the effort to try to cap them in a new agreement.

What is clear is that the current Green Box includes many different types of payments, some of which are likely to be more distorting than others. One might argue that there should be an attempt to move some of these payments that *a priori* are likely to have the greatest impact on production (in particular, those relating to direct income supports, income insurance and income safety-net programs, and crop insurance) into a more conditional Box that will be subject to reduction – perhaps into the Blue Box<sup>8</sup>. As noted earlier, in connection with the discussion of other Blue Box measures, so-called decoupled payments may indeed have an impact on production that cannot be justified on the grounds of correcting for market failure.

Even with a clearer elaboration of the characteristics of Green Box payments, the ability to impose greater discipline on the types of payments provided will be problematical. One problem is that the AoA refers to payments not programs — there is considerable flexibility to change payment names and forms (e.g., the changes in U.S. payments between the 1996 and 2002 Farm Acts) while keeping the fundamental instruments the same.

A final issue is how to improve monitoring and surveillance, as called for in the Framework. One option would be to have a formal WTO review process for new payments with a panel to review their conformity with the minimally distorting require-

<sup>8</sup> This is the suggestion made for direct income payments by de Gorter *et al.* (2003).



ment. In such a process the responsibility would rest on the country proposing to create a new program to demonstrate that it is minimally distorting (Blandford 2001). If it were judged not to be so, the support under such a program would be included in the Amber Box and counted against the OTDS commitment.

## 7. Conclusions

The introduction of the concept of Overall Trade Distorting Support in the current WTO negotiations appears to be a positive development for those who would like to see a reduction in distortions in international agricultural trade created by domestic agricultural policies. The OTDS brings forms of support that were previously exempt from reduction commitments, specifically *de minimis* and Blue Box support, under WTO disciplines. Questions still remain over the workability of product specific caps on the AMS, the method used to calculate the AMS, and the future of the Green Box — at the very least there will need to be a significant improvement in the monitoring and surveillance of payments made under that category of support.

The implications of a formula approach to the reduction of permitted support are complex. As has been illustrated in this paper, the final effects of a reduction formula will depend on the initial permitted levels of support and how these relate to the actual support provided, as well as on the percentages applied. One of the major conclusions from this analysis of data from recent country notifications is that aggressive reduction percentages of at least 60 percent will be required in the OTDS entitlement and bound TAMS if an agreement is to translate into an effective constraint on future levels of domestic support provided to agriculture in many countries. In the absence of such an approach, OECD countries will be able to conduct their agricultural policies on a “business as usual” basis.

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