

Classifying, Measuring and Analyzing WTO Domestic Support in Agriculture: Some Conceptual Distinctions

CATPRN Working Paper 2007-2

April 2007

Lars Brink
Agriculture and Agri-Food Canada
Ottawa, Canada

http://www.catrade.org

This paper was prepared for presentation at the Annual Meeting of the International Agricultural Trade Research Consortium (IATRC), St. Petersburg, Florida, 3-5 December 2006, in the session *Policy Distortions in International Agricultural Trade* organized by the Canadian Agricultural Trade Policy Research Network (CATPRN). The helpful comments of David Blandford, Bill Bryson, May Chow, Pam Cooper, and John Finn are gratefully acknowledged. The views expressed in the paper are those of the author alone and not necessarily those of Agriculture and Agri-Food Canada or the CATPRN. This paper has also been published as IATRC working paper 07-02 at www.iatrcweb.org.

Abstract

Much confusion permeates discussions of the domestic support provisions of the WTO Agreement on Agriculture and in the ongoing Doha negotiations. The paper clarifies some conceptual distinctions with a view to dispelling some confusion, enhancing communication, and facilitating the representation of domestic support provisions in economic analysis. It distinguishes between classification of policy measures and measurement of support, between measures and support, among measures classified in various categories, between applied support and commitments, and between applied support that counts towards commitments and applied support that does not. It highlights certain issues, including the role of criteria in classifying policy measures (such as those labelled green box or blue box measures), the role of de minimis rules in measuring certain applied support (such as Current Total AMS), and how the time specificity of applied support may complicate analysis of domestic support provisions. It introduces schematic charts to complement the verbal exposition of classification and measurement rules under the Agreement on Agriculture and as suggested in the 2004 Framework of the Doha negotiations on agriculture.

Key words: WTO, agriculture, domestic support, Doha, AMS, de minimis, commitments, rules.

"On domestic support, there is a lot of confusion: (a) on the difference between the allowed levels (i.e. the maximum levels) that members commit not to exceed, and the applied (or actual) levels of the various subsidies; and (b) on the different types or "boxes" of subsidies" (Khor 2006).

Introduction

The domestic support provisions of the Agreement on Agriculture (AA) and the domestic support issues being considered in the negotiations of the Doha Development Agenda (DDA) or Doha Round of the World Trade Organization (WTO) continue to attract the attention of analysts, negotiators, and the media. The attention given to domestic support sometimes seems greater than would be warranted on the basis of the potential gains from improved global domestic support disciplines, compared to the gains that might be obtained in global market access. Nevertheless, domestic support is where the interest of many is focussed.

Analyzing and understanding the existing domestic support provisions, the improvements that have been suggested and indeed the whole WTO domestic support pillar seem to pose particular challenges. The concepts are different from those used in market access, the terminology is peculiar to the domestic support pillar, and the measurements and data are similar to but still different from those used in other settings, such as the Producer and Consumer Support Estimates of the Organization for Economic Cooperation and Development (OECD) or under the WTO Agreement on Subsidies and Countervailing Measures (SCM). Moreover, the variables and indicators used in domestic support are not easily represented in mainstream economic modelling.

Apart from some of the terminological peculiarities of the AA regarding domestic support there are also some key distinctions which, when ignored, seem to contribute to confusion. They include such distinctions as

- o between measures and support,
- o among measures that are classified in different categories,
- o between applied support and a commitment on support, and
- o between applied support that counts towards the commitment and applied support that does not.

Additional concepts have been introduced in the Doha Round negotiations and related analysis. They require distinguishing between, e.g., the commitment on Overall Trade-Distorting Support (OTDS; referred to in the 2004 Framework as "Overall level of … trade-distorting support"; WTO 2004), on the one hand, and the sum of the parallel commitments and constraints applying to components of the support that counts towards the Overall commitment, on the other.

The purpose of this paper is to clarify these issues and dispel some of the confusion, with a view to facilitating the consideration of domestic support in economic and policy analysis. The approach is to identify and explain the important conceptual distinctions that have proven to be particularly prone to being misunderstood or ignored. The choice of this particular set of distinctions is mainly governed by the experience of having worked with and tried to explain the domestic support provisions of the AA to analytical and technical audiences. It thus represents a personal view and is not a legal interpretation of the AA.

Classification of Measures

Measure and support. A common perception is that the AA requires countries to classify farm support into amber, blue and green boxes and there is also de minimis which complicates the

classification but is disposed of by calling it a loophole. In reality it is of course both clearer and more complicated than that.

It facilitates the discussion to first distinguish between measures and support. The AA imposes discipline on all "domestic support measures in favour of agricultural producers", with some exceptions (Article 6.1). The discipline takes the form of a ceiling commitment on the amount of support that these measures provide in a year. Measures are thus usefully understood according to one of the dictionary meanings: a measure is "a step planned or taken as a means to an end; specifically: a proposed legislative act" (Merriam-Webster 2006). The AA makes a clear distinction between measures and support in several places, but it also uses different expressions for an amount of certain domestic support, such as "level of support, expressed in monetary terms" (Article 1), support (Article 6.2 and Article 7), and value of payments (Article 6.5).

The AA exempts some kinds of domestic support measures from commitment. Distinguishing between exempt measures and non-exempt measures is the driving force behind what has become popularly known as a system of coloured boxes: green, blue and amber. The AA does not refer to any boxes or colours.³ Nevertheless, it is universally understood that Annex 2 defines the green box and Article 6.5 defines the blue box. The WTO website adopted at an early point the depiction of categories of domestic support measures by means of boxes coloured amber, blue and green (illustrated by what looks like treasure chests). No box is shown for Article 6.2 measures. Depicting an amber box on a par with the green and blue boxes makes it difficult to convey the idea that the AA uses criteria to define blue box measures, green box measures and Article 6.2 measures as three subsets of the all-encompassing set of "domestic support measures in favour of agricultural producers" and leaves the residual subset of measures undefined.

The most fundamental exemption is that of green box measures: measures that conform with the criteria in Annex 2 of the AA. The AA refers to green box measures in several ways. Article 6 refers to them in terms of the criteria set out in Annex 2 of the AA. Article 7 refers to them as those that qualify under the criteria set out in Annex 2. Annex 2 itself requires green box measures to meet the fundamental requirement that they have no, or at most minimal, trade-distorting effects or effects on production. Annex 2 also requires exempt measures to conform to basic criteria and to policy-specific criteria and conditions.⁴

The common shorthand for measures exempted on green box grounds is that they are not tradedistorting. This shorthand of course ignores those measures that have some, but only minimal, tradedistorting effects or effects on production. The distinction is really between measures that are exempt on green box grounds, including those that have only minimal trade-distorting effects or effects on production, and all other measures. These other measures are then, by the same shorthand, considered to be trade-distorting.

¹ Unless otherwise indicated, references to articles and annexes refer to the AA (WTO 1995b).

² This meaning hints at the role of government, which supports the common use of "policy measures" as a synonym for "measures". The General Agreement on Tariffs and Trade and its related agreements do not seem to provide a definition of measures. The General Agreement on Trade in Services essentially indicates that, for the purposes of that agreement, measures means measures taken by or on behalf of governments (WTO 1995b, Annex 1B, Part I, Article I.3(a)).

³ Blandford (2001) may have been among the first to point this out.

⁴ The basic criteria of Annex 2 are: "(a) the support in question shall be provided through a publicly-funded government programme (including government revenue foregone) not involving transfers from consumers; and, (b) the support in question shall not have the effect of providing price support to producers." Clause (a) thus sees the support through the lens of a government program, i.e., a sort of measure, while clause (b) sees the support in terms of its effects, not as a measure.

Article 6.2 specifies the criteria that measures need to meet in order to be exempt from commitment on grounds of being part of the development programs of developing countries. Such measures include certain investment subsidies and input subsidies. The corresponding applied support is not counted towards the commitment. Article 6.5 (so-called blue box) specifies the criteria to be met by measures, specifically direct payments, that are exempt from commitment on certain other grounds. The value of those direct payments is not counted towards the commitment.

Law and economics. Annex 2 does not define the "trade-distorting effects or effects on production" mentioned in the fundamental requirement, nor is there any jurisprudence on its legal meaning. The legal character of the AA and its Annex 2 may define trade-distorting effects differently from how an economic analyst would define them. Where an economic analysis of a measure finds distorting effects on trade, a legal analysis under Annex 2 may fail to find such effects. The measure would then be exempt from domestic support commitment, in spite of the economic evidence of its trade-distorting effects. Likewise, where economic analysis finds that a measure has no or minimal trade-distorting effects or effects on production, a legal analysis may find that the measure does not meet all the requirements of Annex 2 and is therefore not exempt.

Headings and criteria. The green box is sometimes invoked to exempt a measure from commitment along the following lines. The measure is described as, for example, payments for relief from natural disasters. This is the wording (somewhat abbreviated) of the heading of paragraph 8 of Annex 2. The argument then goes that the measure is eligible to be exempt from commitment because it is a payment for relief from a natural disaster and therefore is a green box measure. This argument fails to note the operational difference between paragraph headings in Annex 2 and the "policy-specific criteria and conditions" referred to in the first paragraph of Annex 2 and which are articulated under the respective paragraph headings.

It is not enough for a measure to be generally described using the same words as a paragraph heading or having an objective similar to that of the heading. What matters is that the measure must conform to each and every criterion expressed in the relevant paragraph. In the example of payments for relief from natural disasters, five separate sub-paragraphs express the specific criteria that need to be met in order for the measure to be exempt (assuming that the basic criteria and fundamental requirement are also met). These criteria have to do with such things as the conditions under which eligibility for payments arises and the size of the payment.

Exempt and non-distorting and exempt and distorting. Two kinds of measures are exempt from commitment if they meet criteria or conditions that are spelt out in Article 6 itself and not in Annex 2. These measures do not need to meet the fundamental requirement in Annex 2 of having at most minimal trade-distorting effects or effects on production.

The first kind of such trade-distorting measures are those that meet the criteria of Article 6.2. There is no commonly used colour or box that encompasses these measures. They are sometimes mentioned as being in the development box, but this term is also often used to describe a larger set of provisions than only those relating to domestic support (e.g., in market access). The notification formats of the Committee on Agriculture require them to be reported under the heading "special and differential treatment" (WTO 1995a). Measures that are exempt on grounds of meeting the Article 6.2 criteria include investment subsidies that are generally available to agriculture in developing countries and agricultural input subsidies that are generally available to low-income or resource-poor producers in developing

countries (and also support to encourage diversification from illicit narcotic crops).⁵ Article 6.2 does not mention and does not limit the extent to which these measures may distort trade. This means that developing countries are able to exempt from commitment the kind of measures – input subsidies – that economic analysis has found to be the most distorting among five kinds that were analyzed: market price support, output subsidies, input subsidies and two kinds of area payments (OECD 2001).⁶

The second kind of trade-distorting measures that are exempt from commitment are direct payments under production-limiting programs if such payments meet certain criteria or conditions. These are listed in Article 6.5 and relate to the fixity of area, yields, and livestock heads, and the level of production on which payments are made, relative to a base level. Measures meeting these criteria are said to be placed in the blue box.

The classification of measures thus generates three distinct kinds of domestic support measures: green box measures, Article 6.2 measures, and blue box measures, and a non-distinct or residual category of all other measures. The upper left-hand side of Figure 1 illustrates these distinctions. A measure qualifies for inclusion in a distinct category by meeting that category's criteria or conditions. The so-called amber box has no such distinguishing criteria or conditions: it consists of the measures that do not

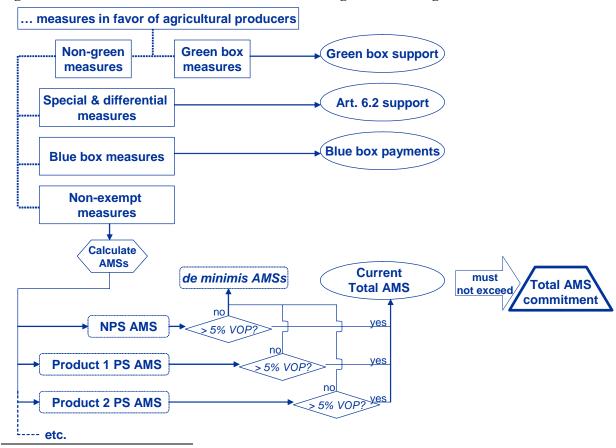


Figure 1. Classification and measurement under the Agreement on Agriculture

⁵ The attention given in Article 6.2 to measures having to be "generally available" parallels in a sense the mention in Article 1(a) of "non-product-specific support provided in favour of agricultural producers in general". It also seems a counterpoint to the important role played by "specificity" in the rules about subsidies in the Agreement on SCM.

⁶ Some kinds of input subsidies in developing countries, such as the promotion of technology transfer, may have different characteristics than those analyzed by the OECD.

qualify for any of the distinct categories.⁷ A relatively popular document issued by the WTO introduces the idea that there are basically two categories of domestic support: non-distorting or green box, on the one hand, and distorting support on the other: "(often referred to as "Amber Box" measures)" (WTO 2000a). While clearly the result of tackling a communications challenge, it illustrates the prevalence of not distinguishing between measures and support and of using the imprecise term "amber".

Measurement of Support

Ceiling commitment and applied support. One of the most significant distinctions of the AA is the one between a ceiling commitment on distorting support and the measured applied support that counts towards that ceiling. This is also a distinction that has proven to be particularly difficult to articulate in popular media, where both the ceilings on support and the applied support amounts are often referred to simply as support. A bound tariff and the applied tariff in market access relate to each other in a similar way as the bound ceiling commitment and the measured support in domestic support. However, the measured support that counts towards the commitment is more complicated to express than an applied tariff. The support needs to be measured in certain ways, and there are exemptions from what needs to be counted towards the ceiling commitment. Exemptions under the *de minimis* rules even derive partly from the relative amount of support itself and not only from exogenous criteria.

Article 6.1 refers to a Member's domestic support commitment and how it is expressed, i.e., in terms of Total Aggregate Measurement of Support (Total AMS) and "Annual and Final Bound Commitment Levels". The latter is simply the heading of one column in a Member's Schedule of Concessions and Commitments (Part IV, Section I). In that column are inscribed the yearly commitment levels, which from 2000 onwards is a constant yearly amount (constant from 2004 for developing countries). Article 3 of the AA stipulates that, subject to the provisions of Article 6, which allows for the exemption of certain measures as discussed above, support in favour of domestic producers must not exceed the commitment level of the Schedule. In other words, the commitment level is a ceiling commitment and, as stipulated in Article 6.1, it is expressed in terms of Total AMS.

AMS and Total AMS. The measurement of applied support that counts towards the Total AMS commitment derives from a number of Aggregate Measurements of Support (AMSs). The distinction between an AMS and a Total AMS is critical. The AA defines both AMS and Total AMS. The definition of AMS essentially says that it is the annual level of support, expressed in monetary terms, provided in favour of producers, other than support provided through green box measures. An interesting aspect of this definition is that only support provided through green box measures is excluded from AMS, which means that, technically, support provided through Article 6.2 measures and blue box measures is regarded as AMS support.

⁷ While Annex 3 of the AA (Domestic Support: Calculation of Aggregate Measurement of Support) is helpful in understanding what kinds of measures need to be accounted for in measuring AMS support, Annex 3 is not exhaustive nor is it a definition of the so-called amber box.

⁸ A commitment is "a legally binding undertaking specific to a country under one of the agreements administered by the WTO" (Goode 1997). Article 3 of the AA makes the domestic support commitments an integral part of the GATT 1994, which is administered by the WTO. Bound tariffs are legally binding in the same way.

⁹ Article 3 refers to *domestic* producers while Article 6.1 refers to *agricultural* producers. The significance of this difference is unclear.

¹⁰ The exact wording is: "Aggregate Measurement of Support' and 'AMS' mean the annual level of support, expressed in monetary terms, provided for an agricultural product in favour of the producers of the basic agricultural product or non-product-specific support provided in favour of agricultural producers in general, other than support provided under programs that qualify as exempt from reduction under Annex 2 to this Agreement ...", and the AA goes on to make the crucial distinction between base year support and current support (Article 1(a)).

The definition of Total AMS essentially says that it is the sum of all AMSs ("all aggregate measurements of support"). While the AA explicitly refers to AMSs in plural, this expression is rarely used in descriptions of the AA. The idea of plural AMSs was explicit, however, in the 2004 Framework (WTO 2004). The definition of Total AMS hinges on the distinction between "aggregate" and "total". The "aggregate" in AMS refers to the aggregation of support across a variety of policies or measures, such as direct payments, input subsidies, and market price support. The "total" in Total AMS refers to the summation of many AMSs into one single Total AMS.

The AA distinguishes between AMSs that were specified in calculating support for the base period, on the one hand, and AMSs calculated for a current year (i.e., any year from 1995 onwards), on the other. The calculations for the base period are incorporated into the Member's Schedule by a reference in Part IV, Section I. That referenced material is often referred to as the Member's AGST material, in line with the document identification code assigned to it by the WTO Secretariat. According to Article 1(a), the calculations of AMSs for the current year need to take "into account the constituent data and methodology" of the referenced material, as well as being "calculated in accordance with" the rules of Annex 3 of the AA.

Total AMS commitment and Current Total AMS. While the AA mentions the support provided in the "base period", it also introduces the perhaps more important "Annual and Final Bound Commitment Levels". The bound commitment level, or Total AMS commitment, is a ceiling amount that limits the applied yearly support that is calculated according to given rules. In most cases it is possible to trace a Member's present commitment on Total AMS back to the calculations of support in the referenced supporting material for the base period.

The AA makes the crucial distinction between the Total AMS commitment and the Current Total AMS. The Current Total AMS is the level of support actually provided in a year, i.e., an applied amount. Under Article 1(h) it is "calculated in accordance with" both the rules of the AA and the constituent data and methodology in the referenced material. Article 6.3 says that if the Current Total AMS does not exceed the scheduled Total AMS commitment, the Member is considered to be in compliance with its commitment. The Member's obligation not to exceed the Total AMS commitment is stated in Article 3.2.

Calculating Current Total AMS in accordance with the rules of the AA means that some support is not accounted for in Current Total AMS. Green box support is excluded from AMSs because green box measures are not subject to reduction commitment. Article 6.2 measures are exempt from and blue box

¹¹ The definition also refers to Equivalent Measurements of Support (EMSs), which are calculated somewhat differently from AMSs but are summed, along with the AMSs, into the Total AMS. Only the EU now notifies EMS support so for ease of exposition they are assumed here to mean the same as AMSs.
¹² The Committee on Agriculture's notification formats refer to the policies or measures as "measure types" (WTO)

The Committee on Agriculture's notification formats refer to the policies or measures as "measure types" (WTO 1995a). The idea of aggregation also arises in the Agreement on SCM (Annex IV, paragraph 6): "In determining the overall rate of subsidization in a given year, subsidies given under different programmes and by different authorities in the territory of a Member shall be *aggregated*" (emphasis added).

¹³ Part IV, Section I, of the Schedule of Members that have acceded to the WTO since 1995 refers to the final set of calculations for the relevant base period, identified differently than with an AGST code.

¹⁴ The Current Total AMS is thus "calculated in accordance ... with the constituent data and methodology" of the AGST material. An AMS is calculated only by "taking into account the constituent data and methodology" of the AGST material, but an AMS is also "calculated in accordance with the provisions of Annex 3" of the AA. Annex 3 is thus more authoritative than the constituent data and methodology when calculating an AMS, as explained by the Panel and the Appellate Body in the dispute about *Korea -Beef* (WTO 2000b). (All quotes in this footnote are from Article 1(a) and 1(h) of the AA).

payments are not subject to reduction commitment, and the corresponding support is therefore not included in Current Total AMS.¹⁵

De minimis AMS and non-de minimis AMS. The Current Total AMS may be affected by a Member's use of the *de minimis* rules of Article 6.4. These rules essentially say that if an AMS is small enough, it need not be included when summing AMSs across products and any non-product-specific AMS to form the Current Total AMS. ¹⁶ The idea of "small enough" has parallels, in different contexts, in the Agreement on SCM. ¹⁷ The AA also specifies what it takes for an AMS to be small enough to be ignored in the Current Total AMS: no more than 5 percent of the product's value of production or, for the non-product-specific AMS, the value of total agricultural production. For developing countries the threshold is 10 percent (8.5 percent for China).

The *de minimis* rules of the AA apply to a product's whole AMS, i.e., an aggregation of support across several measures (and similarly for the non-product-specific AMS). They do not apply to individual subsidies or support on a measure by measure basis. This means that there is no classification of policy measures into *de minimis* measures and non-*de minimis* measures. A *de minimis* AMS may of course consist of support provided through only one measure, in which case the measure can be thought of as providing only *de minimis* support.

De minimis support is generated by measures in the non-green, non-blue, non-Article 6.2 category of measures (i.e., amber, using one of the colour codes not in the AA). It is exemptible from Current Total AMS only because it is so relatively small. However, while some observers hold that "de minimis" is amber, others submit that "de minimis" is not amber. Table 1 illustrates some of these differences in opinion (the purpose of Table 1 is to underscore the confusion in communications, not to highlight de minimis as amber or not as a major conceptual distinction.) The root of the labelling problem seems to be uncertainty about the amber colour: does it attach to a category of measures, similar to the so-called green and blue boxes, or to a commitment (Total AMS) and/or a measurement of support (Current Total AMS)?

De minimis allowance and de minimis threshold. The AA does not use the terms de minimis allowance or de minimis threshold, but both terms haven proven useful in discourse about the de minimis rules. The two terms refer to the same monetary amount. As a de minimis allowance, it could be thought of as the amount within which an AMS is excludable from Current Total AMS as de minimis. As a de minimis threshold, it could be thought of as the amount at which an AMS switches from being de minimis into having to be included in Current Total AMS.

^{1.}

¹⁵ The apparent contradiction between the requirements to include blue box payments in AMSs but exclude them from Current Total AMS (a sum of AMSs) may at some point need to be reconciled by legal experts. A similar issue would arise with respect to Article 6.2 support.

¹⁶ A dictionary meaning of *de minimis* is "lacking significance or importance: so minor as to merit disregard" (Merriam-Webster 2006). The *de minimis* idea also parallels the idea of tolerance in engineering. Tolerance is defined as "the allowable deviation from a standard" (Merriam-Webster 2006). Consider the Total AMS commitment as the standard for allowed AMS support in the absence of any *de minimis* provisions. The *de minimis* rules allow for a certain upward deviation from that standard in the sense that the sum of all applied AMS support can exceed the Total AMS commitment. This is because some applied support, whether product-specific AMSs or the non-product-specific AMS, does not count in Current Total AMS as long as that applied support is small enough.

¹⁷ In the Agreement on SCM, for example, the amount of a subsidy is *de minimis* if the subsidy is less than 1 percent *ad valorem* (Article 11.9), a 5 percent threshold for total *ad valorem* subsidization of a product is specified in Article 6, and other threshold percentages are indicated in Article 27.

Table 1. Examples of considering de minimis as amber or not

De minimis is amber	De minimis is not amber
"The WTO assigns all subsidies outside of the	"The WTO classifies domestic support into
green and blue boxes and development	measures which are disciplined and thus
measures such as support prices, direct	subject to reduction commitments (also
production subsidies, and input subsidies,	known as <i>Amber box</i> payments) Support
including those permitted under the de minimis	which is not subject to reduction
rules to an 'amber' box." (Panagariya 2005)	commitments consists of the following:
	de minimis payments." and "Figure 2. WTO
	Measures of Domestic Support" (Baffes and
	de Gorter 2005)
"De minimis amber supports are allowed to be	"Figure 1: Schema for Reporting of
5 percent of the value of agricultural	Domestic Support Commitments" (Josling
production for developed countries and 10	2003) clearly separates amber box and de
percent for developing countries." (Sumner	minimis exemptions. Later writings reveal a
2005)	more inclusive view of "amber box"
	(Josling 2006).
"a) the Amber Box, comprising de-minimis	"Remember, the de minimis and the Amber
support and AMS, " (G20 2004; G33 2005)	Box are mutually exclusive categories."
	(Deputy Assistant USTR 2006)
"All domestic support measures considered to	"De minimis provisions. This refers to Art.
distort production and trade (with some	6.4 of the WTO Agreement on Agriculture
exceptions) fall into the amber box, defined in	(AoA) which allows WTO Members to
Article 6 of the Agriculture Agreement as all	exempt from the calculation of the "amber
domestic supports except those in the blue and	box" (i.e. AMS) product-specific and non-
green boxes These supports are subject to	product-specific support below a certain
limits: 'de minimis' are allowed (up to 5 % of	threshold level." (South Centre 2006)
agricultural production for developed countries,	
10 % for developing countries)." (EC 2005)	

Note: these quotes are examples only. Authors and institutions may at different times have revealed different views.

The threshold defined by the *de minimis* rules is different in nature from a commitment. The idea of a threshold is that an AMS can increase from zero without any particular consequence until it reaches the threshold level. However, the consequence of the AMS exceeding that level is immediate: the whole AMS (not just that part of the AMS that exceeds the threshold) is included in Current Total AMS. There is no obligation to keep the AMS at or below the threshold, in contrast to the obligation not to exceed the Total AMS commitment. Moreover, the *de minimis* threshold or allowance is variable because it is a fixed proportion of the value of production, which varies from year to year. If a country's nominal value of total agricultural production grows over time, even through inflation or currency depreciation, the *de minimis* threshold or allowance grows in nominal terms, in contrast to the fixity of the Total AMS commitment. If the value of production declines, so does the *de minimis* threshold or allowance.¹⁸

_

¹⁸ The market price support component of an AMS can be reduced by reducing the applied administered price. In some situations the reduction of the applied administered price would also reduce the domestic price used to estimate the value of production, thus lowering the *de minimis* threshold.

The AA uses a concept similar to a variable allowance when it refers to Members who do not have a scheduled Total AMS commitment. In such cases the support to agricultural producers must not exceed the "de minimis level set out in paragraph 4 of Article 6" (Article 7.2(b)). However, since Current Total AMS in such cases has to be zero, there is no threshold effect, only the range or de minimis allowance within which AMS support must be kept.

Support and subsidies. The terms support and subsidies are often used interchangeably (see, e.g., the quote from Khor (2006) above). However, the AA defines AMS as a measurement of support, not explicitly as a measurement of subsidies. A subsidy has a connotation of a budgetary payment by government, while support encompasses a broader meaning for many observers. The rules for calculating AMS in Annex 3 require the inclusion of market price support in AMS. This component of AMS is based on a price gap, not a budgetary payment. In this sense an AMS is akin to the OECD Producer Support Estimate (see below).

Including market price support in AMS is not merely a quibble about words: it demarcates the boundaries of the set of support measures that are subject to the AA domestic support discipline. This is why the distinction between subsidy and support matters. The explicit inclusion of market price support in the measured support under the AA is consistent with how some other WTO agreements treat price support: both the GATT (Article XVI) and the Agreement on SCM (Article 1.1(a)(2)) make a point of including price support in what they mean by a subsidy (WTO 1995b). This seems to indicate a desire to have these rules apply to a wider set of measures than those captured in the dictionary meaning of subsidy.

Measuring support for WTO purposes and for other purposes. Applying the AA rules for classification of measures and measurement of support is essential in the context of "the long-term objective of substantial progressive reductions in support and protection resulting in fundamental reform" (Article 20). The AA requires the Committee on Agriculture to carry out a review of the implementation of commitments based on notifications submitted by Members. The information submitted by a Member for the Committee review can be used, along with other information, in the settlement of disputes and is also of some use for economic analysis.

The Committee has decided on the formats of such notifications, which in many ways resemble the formats used in the Uruguay Round for the AGST material (WTO1995a). A Member reports its domestic support separately for each kind of measure ("measure type"): support under green box measures in one table, support under Article 6.2 measures in a second table, blue box payments in a third, and the calculation of Current Total AMS, allowing for *de minimis* AMSs, in a system of linked tables. If a Member claims that support is to be excluded from Current Total AMS, Members sometimes ask for a justification for such classification of the underlying measure. A Member may then realize that the particular classification is not justified and submits a revised notification showing a different classification. Contrary to the impression of some, it is thus not the WTO or the WTO Secretariat that classifies a Member's measures by coloured box.

A dictionary meaning of price support is "artificial maintenance of prices (as of a raw material) at some predetermined level usually through government action" (Merriam-Webster 2006). The meaning in WTO agreements may of course be different.

11

¹⁹ One meaning of subsidy is "a grant or gift of money: ... a grant by a government to a private person or company to assist an enterprise deemed advantageous to the public" (Merriam-Webster 2006). One meaning of the noun support is "the act of supporting ..." and two meanings of the verb support are "to pay the costs of" and "to maintain (a price) at a desired level by purchases or loans" (Merriam-Webster 2006).

AMSs and Current Total AMS are measured for the purpose of comparing the amount of certain applied support against the bound Total AMS commitment.²¹ Support to farmers is also measured for other purposes using different methods. The most recognized measurement is the Producer Support Estimate (PSE) along with its related indicators (OECD 2005). The OECD relies on these indicators for its annual monitoring and evaluation of agricultural policies and they are not used in the context of binding commitments. The PSE includes market price support and budgetary payments. The market price support in PSE is measured differently than market price support in the AA, but both are based on a price gap. The price gap in PSE is based on a current border reference price and a domestic market price, which means that it tends to vary more from year to year than the price gap in AMS.

A country's PSE usually includes support resulting from a larger set of policy measures than does the Current Total AMS. This is because the PSE does not apply the exemptions from Current Total AMS, i.e., green box, blue box, and Article 6.2, and there are no *de minimis* provisions for PSE. Preparing the PSE estimate can still be of some help to a Member in calculating its Current Total AMS. PSE is measured for numerous Members of the WTO, which facilitates the review in the Committee on Agriculture of Members' implementation of their commitments under Article 18. It may help Members to identify the policy measures they would expect to see reported in a Member's notification and it may provide information on the size and nature of the associated support.

2004 Framework Provisions on Domestic Support

The 2004 Framework introduces new kinds of commitments in domestic support and changes certain rules and criteria, as follows:

- Continued from AA:
 - o Current Total AMS to stay within Total AMS commitment
 - note: green box support, Article 6.2 support, blue box payments and *de minimis* AMSs remain outside of Current Total AMS
- o New:
 - o Reduce Total AMS commitment
 - o Reduce de minimis percentage for some Members to below its setting in the AA
 - o Expand criteria for blue box payments
 - note: exempts support under more kinds of policy measures from being counted in Current Total AMS
 - o Introduce commitment on sum of blue box payments
 - o Introduce commitments on the individual product-specific AMSs
 - note: as in AA, any product's applied product-specific AMS is also an element of the Current Total AMS if it exceeds the *de minimis* threshold of that product.
 - note: the non-product-specific AMS is not individually constrained but a *de minimis* threshold applies
 - o Introduce commitment on Overall Trade-Distorting Support (OTDS)
 - note: requires introduction of Current OTDS, i.e., the sum of Current Total AMS, de minimis AMSs (whether product-specific or non-product-specific), and blue box payments
 - note: Current OTDS to stay below OTDS commitment
 - note: Article 6.2 support may not be subject to this commitment.

²¹ Because of differences in measurement methods, comparing a product's AMS across countries is often relatively meaningless.

All of these constraints apply separately and simultaneously and thus overlap to some extent. Figure 2 illustrates the additional constraints beyond those of the AA There is also the practical constraint of not being able to fully utilize the sum of the individually constrained components of distorting support, i.e., the constraint in the form of Maximum Usable Components (Brink 2006). The introduction of the bound commitment on OTDS requires introducing also a measurement that is not explicit in the Framework, namely a Current Overall Trade-Distorting Support (Current OTDS). It would include Current Total AMS, applied blue box payments, and all AMSs excluded from Current Total AMS on grounds of being *de minimis*. Article 6.2 support, in spite of being trade-distorting, would seem to be excluded although the argument for excluding it hinges only on it not being mentioned in the Framework's listing of the elements of the overall base. The use of Current OTDS parallels the use of Current Total AMS: it will demonstrate that certain applied support does not exceed the new commitment on OTDS.

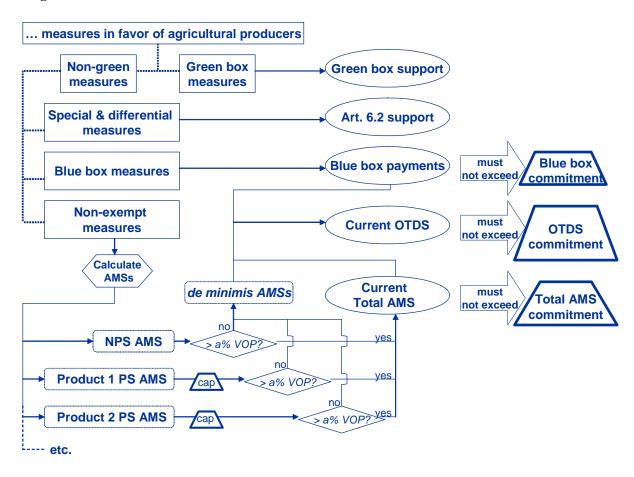


Figure 2. Classification and measurement under the 2004 Framework

Challenges in Analysis of Domestic Support

Nature of domestic support provisions. Analysis of domestic support provisions differs significantly in nature from analysis of market access provisions. The 2004 Framework does not introduce new kinds of market access commitments other than the existing ones of tariffs and tariff rate quotas, which are concepts that are routinely represented in economic analysis. Many concepts in domestic support, on the other hand, find their counterparts in economics-based analysis only with difficulty, if at all. A country can decide to apply a lower tariff than the bound tariff or apply a tariff rate

quota larger than the bound quota. Such a decision can be confined to some specific products and it can be reversed. In domestic support a country's policy decisions tend to generate more complicated and interdependent changes in several measurements of applied support at the same time, often extending to several product sectors. The sequence of reforms of the European Union's farm policy and the sequence of U.S. farm acts illustrate the multitude of changes in policy settings to be accounted for in measurements of applied domestic support in a given year. A complete reversal of such policy changes would be unlikely in practice, given the number of policy settings to be reversed. Even if a complete reversal was practically possible in a given later year, the measurements of applied support would still be different because they depend to some extent on quantities and values observed in the given later year.

When looking at applied support it is necessary to distinguish between *de minimis* AMSs and the corresponding *de minimis* allowances. This is often a surprisingly difficult distinction to make. The shorthand expression of just "*de minimis*" when speaking of either the AMS or the allowance may be at the root of the difficulty. This shorthand is common, especially in popular media coverage.

Time specificity of measured support: past, current, future. Analysis of the domestic support area of the negotiations tends to focus on two issues: contrasting Current Total AMS in past years against a new, smaller Total AMS commitment than the existing Final Bound Total AMS commitment, and contrasting certain applied support in past years against several of the new constraints. The applied support measurements are often those of the recent past or even going back to the 1995 beginning of the AA. This is perhaps of some interest, but it would seem more relevant to look ahead and evaluate the new commitments and rules in the context of the present policy set and policy settings or a range of potential future sets and settings.²²

Whatever the time frame, the terminology of the AA and the texts emanating from the negotiations seems to lay a trap for the casual analyst. This has to do with a term such as Current Total AMS and by extension also Current OTDS. The AA defines Current Total AMS as "the level of support actually provided during any year of the implementation period and thereafter" (Article 1(h)). "Current" thus means the year in which support is provided. Letting "Current" retain this meaning of support in a given year, other time-defining terms need to be used to indicate what that year is, such as past, 2000, 2006, 2014, or future. This explains the need for the somewhat awkward-sounding expression future Current Total AMS, as distinguished from the Current Total AMS of the present year or the recent past.

Analysis may be based on a model and an associated data set that represent a particular past year, such as 2001. The analyst then introduces policy settings that represent the actual policy changes between 2001 and, say, 2006. The resulting measurements of applied support in 2006 are then contrasted against the constraints resulting from full implementation of the hypothesized commitments at the end of the implementation period. The challenges in presenting the results of this relatively complicated procedure are perhaps not fully appreciated. If, for example, the implementation or phase-in period is six years, starting in 2008, the findings of the analysis would need to be couched in language such as "Comparing the 2014 end point constraints to the measurements of applied support deriving from the 2006 policy measures, based on assumptions about 2014 classification of policy measures and methods for measuring support, shows that support in Country X would be constrained in the following ways....". Such a

²² One example of the complexities in comparing domestic support measurements arises in applying the *de minimis* rules. Although the new, smaller Total AMS commitment would in many cases be accompanied by a lower *de minimis* percentage, the Current Total AMS of past years was calculated with the larger AA *de minimis* percentage. If the Current Total AMS of past years is not recalculated with the lower *de minimis* percentage, comparing the past Current Total AMS with the new, smaller Total AMS commitment confounds the effects of reducing the Total AMS commitment and reducing the *de minimis* percentage.

qualified comparison would still seem to be more informative than comparing a 2014 end point to, say, notified support from the set of 2001 or 2003 policy measures.

Incorporating policy behaviour in the model requires assumptions about how the modelled country interprets the rules of the AA and the implications for its ability to comply with its future domestic support commitments. However, a standard model may not include the variables that matter in measuring domestic support for AMS purposes. For example, it may represent market price support by the gap between a border price and a domestic price (as in PSE measurement), not between the fixed external reference price and the applied administered price. Incorporating the applied administered price in the model could allow a simple calculation of future market price support for AMS purposes and also make it possible to account for any interactions between the applied administered price and other perhaps more economically important variables.

From Framework to analysis. The steps between written statements becoming available from the negotiations, such as written proposals, Chair's texts, Ministerial statements, and the 2004 Framework, on the one hand, and the incorporation of this information in quantitative analysis, on the other, are complicated. Model-based quantitative analysis relies on data sets and structures that make sense in terms of economics. What is available from negotiations is rarely presented in terms of economics (legal experts may say that it is rarely presented in terms of law either). The analyst must not only interpret what is actually being said in the documents at hand but must also convert that understanding into relationships that can be represented in the model. Not every element of the Framework needs to be modelled, of course, but having a good grasp of what is said and meant in such documents would seem to be crucial.

Examples of interpretations of the domestic support provisions of the Framework when preparing for quantitative analysis with the help of the GTAP model are given by, e.g., Jensen and Zobbe (2005), Kommerskollegium (2006), and Walsh (2005). There are mainly three steps.

- O Interpret the Framework and selected proposals in order to generate numerical estimates of the constraints and thresholds that would apply under each reduction scenario. This involves, e.g., making assumptions about (a) base periods for the base OTDS, the blue box payments, the values of production, and the caps on product-specific AMSs (and the method to establish these caps), (b) the size of reductions applying to base OTDS, Final Bound Total AMS commitment, and *de minimis* percentages, and (c) the rules for classifying support measures as green or blue.
- Starting from the classifications, measurements and data the country has used in its notifications to the Committee on Agriculture, (a) interpret the policy changes that have been decided since the last notification and (b) develop the data needed for a hypothetical notification for a more recent year or a future year in order to show compliance with the new constraints. This would involve, for example, estimating the effects of the 2005 EU sugar reform on future EU market price support, value of production, and amounts of payments in the AMS, blue and green categories, compared to what was shown in the latest (2003/04) notification.
- Identify situations where the hypothetically notified support would exceed a constraint. These situations would indicate either that the constraint is unrealistically tight under the assumed policy scenario and the country concerned would find it difficult to accept it as an outcome of the negotiations, or that the country concerned would need to change its policy measures to allow its classification of measures and measurement of support to demonstrate future conformity with all the commitments.

Projecting policy change and the corresponding classification and measurement. Since notifications are not available, it is not possible to observe how Member such as the EU and the USA classify new policy measures and measure support in 2006. The latest notifications (2003/04 for the EU and 2001 for the USA) are of only limited value since policy measures were introduced or changed in both the EU and the USA more recently. It is therefore necessary to make assumptions about the present or future classification of policy measures and measurement of support in terms of the AA and the Framework.²³

The EU farm policy reforms of 2003, 2004 and 2005 are quite specific about the support measures in place in 2006, and so is the U.S. farm act (Farm Bill) of 2002. It is also possible to speculate about the outcome of the EU reforms currently being discussed, which may include elimination or reduction of product-specific AMSs (and EMSs) for fruits and vegetables and wine, perhaps combined with increases in support provided through policy measures claimed as green or blue. This would reduce Current Total AMS by several billions of euros more than the reductions resulting from the policy decisions of 2003, 2004, and 2005. For the USA there is less fodder for speculation, and a continuation of the 2002 farm act is a common assumption. Many also see the abolition of the support price for milk as possible means to eliminate the measured market price support for milk for the USA. Such a future step, which would reduce the Current Total AMS by several billions of dollars, needs to be accounted for when assessing the effects of new constraints in domestic support.

It is unclear how the EU and the USA will report certain payments in light of the Panel on U.S. cotton having disqualified the U.S. Direct Payments program from being a green box measure. For the EU there is also uncertainty about the measurement of market price support in view of the abolition of intervention prices for some products. The EU intervention price is the "applied administered price" for AMS purposes for several products. New policy prices (basic price or reference price) have been introduced for some products in place of intervention prices. They can have different functions than the intervention prices, and it is not clear what role, if any, the EU would assign to them when measuring market price support.

Conclusions

There is much confusion about the domestic support concepts of the AA and in the Doha negotiations. Khor's (2006) diagnosis in the opening quote is correct. However, the root of the confusion is not to be found in the AA itself: the AA is very clear about the distinctions that need to be made. This concerns distinctions between such concepts as classification of policy measures and measurement of support, between subsidies and support, between commitment (or allowed amount) and applied (or actual) support provided, between measures subject to commitment and measures exempt from commitment (or boxes of different colour and other categories), between headings and criteria, between AMS and Total AMS, between de minimis AMSs and other AMSs, between the commitment under the AA and commitments introduced in the Doha negotiations, and between measures in place one year and measures in place in a later year.

Confusion may arise out of the efforts of analysts and commentators to interpret and simplify what the AA and negotiating proposals say. Some communications efforts may even inadvertently add to the confusion when they, instead of being based on the AA, further reinterpret and rephrase what other analysts and commentators have said. This confusing state of affairs can be aggravated when the provisions of the AA are evaluated in particular ways. For example, a commentator may contrast the

²³ Results of such efforts concerning the EU and/or the USA are reported by, e.g., Brink (2006), Buteault and Bureau (2006), Jensen and Zobbe (2005), Kutas (2006), Sumner (2005), and Walsh et al. (2005).

implications of the AA against the implications that the commentator wished would have resulted from the AA, or a commentator may contrast the reality of the AA against similar or corresponding concepts used in economic analysis.

Does this matter? It may not matter much for negotiators who tend to see through the imprecise or incorrect arguments they encounter. Nor may it matter much for those who argue that a certain ambiguity or lack of precision makes it easier to accommodate differences in view, in spite of the difficulties that will be faced in the future interpretation of such provisions. It may matter more for the shaping of the views of less well-informed interest groups, who in some cases seem to rely considerably on information propagated by observers with what appears to be somewhat shallow insights into the provisions of the AA. And it matters much for the economic analyst who, if relying overly on second hand or third hand renditions of the AA by well-intentioned but less than fully informed observers, may design a model or use data in ways that effectively limit the usefulness of the findings.

References

- Baffes, J. and H. de Gorter. 2005. *Disciplining Agricultural Support through Decoupling*. World Bank Policy Research Working Paper 3533, March. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=695382#PaperDownload
- Blandford, D. 2001. "Are Disciplines Required on Domestic Support?" *The Estey Centre Journal of International Law and Trade Policy* 2(1). http://www.esteycentre.ca/journal/archives.htm
- Brink, L. 2006. "WTO Constraints on U.S. and EU Domestic Support in Agriculture: The October 2005 Proposals". *The Estey Centre Journal of International Law and Trade Policy* 7(1). http://www.esteycentre.ca/journal/
- Deputy Assistant USTR. 2006. U.S. *Perspective on Ongoing Agricultural Negotiations*. Transcript, Press Briefing with Jason Hafemeister, June16.

 http://www.ustr.gov/assets/Document_Library/Transcripts/2006/June/asset_upload_file443_9569
 http://www.ustr.gov/assets/Document_Library/Transcripts/2006/June/asset_upload_file443_9569
 http://www.ustr.gov/assets/Document_Library/Transcripts/2006/June/asset_upload_file443_9569
 http://www.ustr.gov/assets/Document_Library/Transcripts/2006/June/asset_upload_file443_9569
 http://www.ustr.gov/assets/Document_Library/Transcripts/2006/June/asset_upload_file443_9569
 <a href="http://www.ustr.gov/assets/Document_Library/Transcripts/2006/June/asset_upload_file443_9569
 http://www.ustr.gov/asset_upload_file443_9569
 http://www.ustr.gov/asset_upload_file443_9569
 http://www.ustr.gov/asset_upload_file443_9569
 http://www.ustr.gov/asset_upload_file443_9569
 http://www.ustr.gov/asset_upload_file443_9569
 http://www.ustr.gov/asset_upload_file443_9569
 http://www.ustr.gov/asset_upload_file443_9569
 <a href="http://w
- EC. 2005. EU Agriculture and the WTO: Doha Development Agenda Hong Kong 2005 Info. European Commission, Directorate-General for Agriculture and Rural Development. October. http://ec.europa.eu/agriculture/external/wto/backgrou/infopack en.pdf
- G20. 2004. Statement by Ambassador Sun of China on behalf of G-20 in the Informal meeting of the Special Session of Committee on Agriculture held on October 6, 2004. http://www.wto-pakistan.org/statements/g20_coa.htm
- G33. 2005. *G-33 Statement De-minimis*. Reported in "G20 and G33 present papers on Blue Box and de minimis support at WTO agriculture negotiations". TWN Info Service on WTO and Trade Issues (Mar05/8), 22 March 2005. http://www.twnside.org.sg/title2/twninfo193.htm
- Goode, W. 1997. *Dictionary of Trade Policy Terms*. Centre for International Economic Studies. University of Adelaide.
- Jensen, H. G. and W. Yu. 2006. "Reforming Agricultural Domestic Support of the EU in the Doha Round: Measurement, Feasibility and Consequences". European Network of Agriculture and

- Rural Policy Research Institutes Conference on *Trade Agreements and EU Agriculture*. Brussels, 8 June. http://www.enarpri.org/Publications/PPTNo11.ppt
- Josling, T. 2003. "Domestic Farm Policies and the WTO Negotiations on Domestic Support". Invited paper presented at the International Conference *Agricultural policy reform and the WTO: Where are we heading?*. Capri, Italy, 23-26 June. http://www.ecostat.unical.it/2003agtradeconf/
- --. 2006. The Impact of the WTO and Bilateral Trade Agreements on US Farm Policy. Personal communication, November.
- Khor, M. 2006. A Development Assessment of the Current WTO Negotiations. Third World Network, September.

 http://www.twnside.org.sg/title2/par/mk assessment of present Doha talks sept 06.doc
- Kommerskollegium (National Board of Trade). 2006. *Economic Implications of the Doha Round*. September, Stockholm.

 http://www.kommers.se/upload/Analysarkiv/Publikationer/Economic_implication_of_the_Doha_Round.pdf
- Kutas, G. 2006. EU Negotiating Room in Domestic Support after the 2003 CAP Reform and Enlargement. Working Paper, May 2006, Group d'Économie Mondiale, Fondation Nationale des Sciences Politiques, Paris. http://www.iconebrasil.org.br/english/conteudo.asp?idCategoria=14
- Merriam-Webster. 2006. Merriam-Webster Online Dictionary. http://www.m-w.com/dictionary/
- OECD. 2001. *Market Effects of Crop Support Measures*. Organization for Economic Cooperation and Development. Paris.
- --. 2005. Agricultural Policies in OECD Countries: Monitoring and Evaluation 2005. Organization for Economic Cooperation and Development. Paris.
- Panagariya, A. 2005. "Liberalizing Agriculture". WTO Special Edition, *Foreign Affairs*, December. http://www.foreignaffairs.org/20051201faessay84706/arvind-panagariya/liberalizing-agriculture.html
- South Centre. 2006. State of Play in Agriculture Negotiations: Country Groupings' Positions: Domestic Support Pillar. Analytical Note, SC/AN/TDP/AG/1-2. Geneva, November. http://www.southcentre.org/publications/AnalyticalNotes/Agriculture/Stateofplay_October2006_FINAL_DS.pdf
- Sumner, D. 2005. *Boxed In: Conflicts between U.S. Farm Policies and WTO Obligations*. Trade Policy Analysis No. 32, Cato Institute, Washington, D.C. http://www.freetrade.org/pubs/pas/tpa-032es.html
- Walsh, K., M. Brockmeier, and A. Matthews. 2005. *Implications of Domestic Support Disciplines for Further Agricultural Trade Liberalization*. The Institute for International Integration Studies, IIIS Discussion Paper No. 99, October. http://ideas.repec.org/p/iis/dispap/iiisdp99.html
- World Trade Organization (WTO). 1995a. *Notification Requirements and Formats*. G/AG/2, Committee on Agriculture, 30 June 1995. http://docsonline.wto.org/gen_search.asp?searchmode=simple

- --. 1995b. *The Results of the Uruguay Round of Multilateral Trade Negotiations The Legal Texts*. Reprinted in 1995 by the World Trade Organization. Geneva.
- --. 2000a. Agriculture. The WTO Agreements Series 3. Geneva.
- --. 2000b. *Korea Measures Affecting Imports of Fresh, Chilled and Frozen Beef.* Report of the Appellate Body, AB-2000-8, WT/DS161/AB/R and WT/DS169/R, December. http://www.wto.org/english/tratop_e/dispu_e/find_dispu_documents_e.htm
- --. 2004. Doha Work Programme Decision Adopted by the General Council on 1 August 2004. WT/L/579. http://www.wto.org/english/tratop_e/dda_e/draft_text_gc_dg_31july04_e.htm