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WTO Disciplines on Agricultural Support

Experience to Date and Assessment of Doha Proposals

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When the World Trade Organization (WTO) was created in 1995, its members committed themselves to a set of disciplines for domestic support, market access, and export competition for agriculture. The Agreement on Agriculture laid the way for the pursuit of progressive reductions in world agricultural market distortions. Its supporters hoped the new rules and commitments would encourage countries to move domestic farm policies in a less trade-distorting direction.

This research brief examines the Agreement's domestic support disciplines and their potential strengthening under the asyet unfinished Doha Round negotiations. The brief provides a summary of the main conclusions from the March 2011 book WTO Disciplines on Agricultural Support: Seeking a Fair Basis for Trade.¹ The analysis focuses on four developed countries (the United States, the European Union [as a single "country"], Japan, and Norway) and four developing countries (Brazil, China, India, and the Philippines). We highlight the substantial differences among these countries in their notifications of policy measures and the support they provide. Where a complete set of notifications is not available for 1995–2008, estimates ("shadow" notifications) are constructed. Domestic support is also projected through the mid-2010s and compared to existing and potential WTO commitments.

While the Agreement on Agriculture's disciplines impose legal requirements on members, its fundamental purpose is to constrain policies that lead to economic distortions in agricultural production and trade. The differences between the legal requirements and their economic implications can be large. Consequently, it is necessary to examine the relationship between the ways that support is calculated and notified and the economic interpretation of that support in terms of producer incentives and policy assessments. In some cases, variations in notified support reflect real policy reforms, while in others they largely reflect how countries have chosen to categorize and report policy measures. The dichotomy has a substantial impact

on the efficacy of the WTO rules and commitments in achieving their underlying purpose.

The WTO Agricultural Support Disciplines

The Agreement divides domestic support measures into four distinct categories. These broadly reflect the support measures' potential to distort trade. Three categories of measures are exempt from expenditure commitments. First, some measures (known as the green box) are agreed to have "no, or at most minimal, trade-distorting effects or effects on production." By leaving levels of support in the green box unconstrained, the Agreement encourages the adoption of less-trade-distorting policy measures.

A second category of policy measures with no expenditure limit (the blue box) comprises payments made in conjunction with production-limiting programs, as it can be argued that constraining supply dampens their trade-distorting effect. A third exemption applies to developing countries only. It includes general investment support for agriculture and input subsidies to low-income and resource-poor farmers. The development program exemption provides a form of special and differential treatment for developing countries—an accepted principle in the WTO framework.

The remaining domestic support measures compose a less precisely defined residual category (often called the amber box) of interventions and subsidies that are the target of the disciplines. Support under these measures is calculated through an Aggregate Measurement of Support (AMS) for each product (product-specific AMS) and a separate total for support to agricultural producers in general (non-product-specific AMS). Product-specific support includes production-related payments to producers, certain other product-specific support and levies, and a measurement of market price support (MPS). MPS is calculated "using the gap between a fixed external reference price and the applied administered price multiplied by the quantity of

production eligible to receive the applied administered price."³ The WTO measurement of MPS differs from an economic measurement that uses contemporaneous domestic and world market prices and the total quantity of production to evaluate the extent to which policy measures are affecting current production incentives and incomes. In the Uruguay Round negotiation of the Agreement some countries were unwilling to bind themselves to a support measurement dependent on prevailing market prices and quantities. Consequently, countries agreed to the described measurement using the ambiguous definition of the eligible quantity and the gap between administered prices, over which they had control, and fixed reference prices, which would not change with world market conditions or exchange rates.⁴

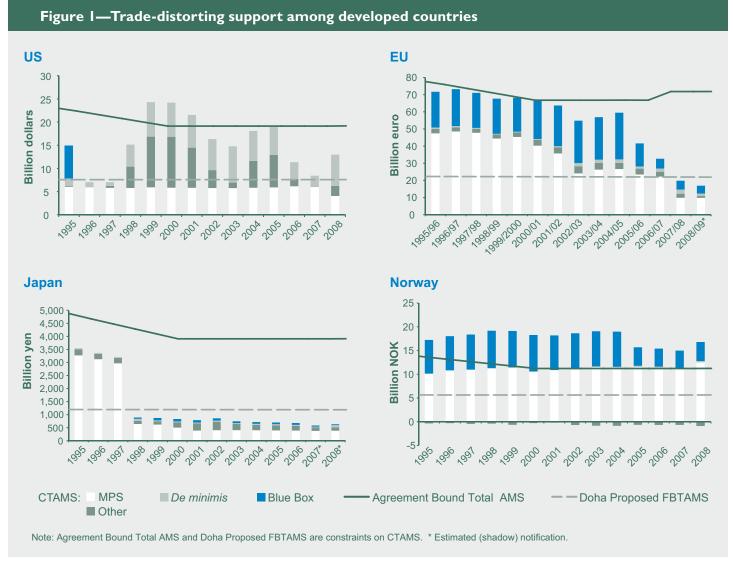
The annual sum of AMS support is called the Current Total Aggregate Measurement of Support (CTAMS). However, the Agreement provides for *de minimis* exclusions from the CTAMS of product-specific and non-product-specific AMS support that is below threshold values (generally 5 percent of the relevant value of production for developed countries and 10 percent for developing countries). The CTAMS is subject to a ceiling commitment, denoted as the Final Bound Total AMS (FBTAMS). A country's

FBTAMS is derived from the level of support provided during 1986–88, with a few exceptions for countries that joined the WTO after 1995. Most developing countries do not have a ceiling commitment derived from the base period and are required to maintain AMS support below their *de minimis* thresholds.

Compliance with Commitments

Annual notifications of domestic support allow WTO members to monitor other members' compliance with commitments made under the Agreement. Notifications and implementation of commitments are reviewed in the WTO Committee on Agriculture. ⁵ Among the eight countries examined, AMS support exceeding a commitment has been reported in only one isolated case.

The United States has notified levels of CTAMS well below its limit in most years (Figure 1). However, the level of support in the United States, of which government payments are a major part, is tied to world prices. In several low-price years, CTAMS has exceeded 85 percent of the US ceiling commitment. The United States also stands out as having notified substantial non-product-specific AMS support as *de minimis*. This has allowed price-dependent US payments in years of relatively



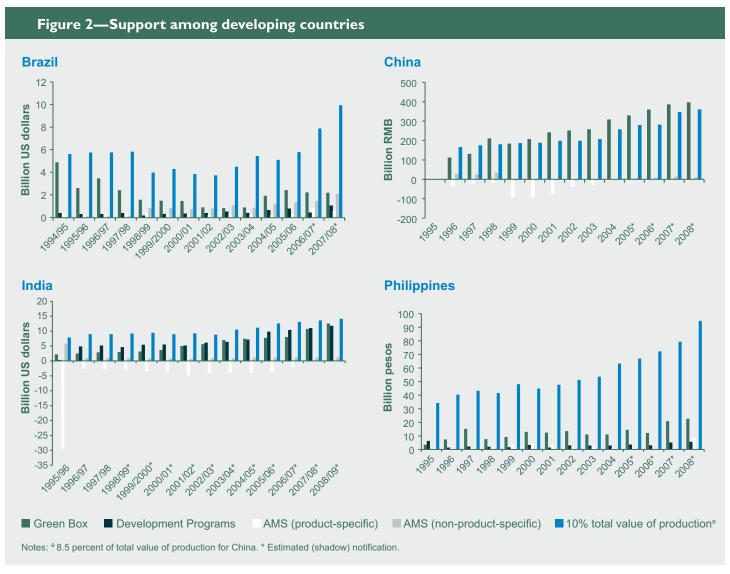
low world prices for important crops (primarily corn, soybeans, wheat, rice, and cotton) to be excluded from CTAMS. The US non-product-specific AMS reflects policy reform through a shift to payments less tied to specific products or supply controls than earlier blue-box payments. Yet, the classification of these price-linked payments has been controversial. If they were included in CTAMS, the United States would have exceeded its ceiling in three years. The United States has notified a relatively stable MPS, mainly for dairy and sugar, with a reduction of MPS in the notification for 2008 based on redefining the coverage of its dairy price support program.

The European Union has notified AMS support even more comfortably within its commitment. As the European Union has shifted notified support from MPS to direct payments, its CTAMS has fallen over time.⁶ The European Union initially notified its payments as exempt on blue-box grounds and subsequently almost entirely shifted them into the green box as exempt decoupled income support. Payments in this category (not shown in Figure 1) exceeded €31 billion in 2007/08. The change in the domestic support regime in the European Union has been associated with a decline in economic market price

support to farmers, but that decline has been smaller than the reduction in the notified MPS. The price support notified by the European Union for 2007/08 dropped, for example, when it reported that fresh fruits and vegetables no longer had administered prices, though there is little evidence of change in the effects of the EU's domestic and border policy measures on internal market prices for these products.

The situation in Japan is even more incongruent. Elimination of the administered price and MPS for rice in 1998 resulted in a reduction in the notified CTAMS from 70 percent of Japan's FBTAMS commitment to just 20 percent. Economic market price support for rice essentially remained the same that year and only modestly declined in subsequent years. Japan's nonexempt support payments have accounted for about one-third of its notified CTAMS since elimination of the rice MPS.

Norway stands out as having consistently notified an annual CTAMS close to its ceiling. There is a close relationship for Norway between administered and market prices and total production and the notified eligible quantities. Thus, the MPS notified by Norway, while remaining under government control, has more accurately reflected the economic protection provided



to farmers than the MPS in the other countries. Norway has changed the legal definition of its support prices for some products, without making significant changes to domestic support measures, so as to keep the MPS low enough to avoid violations of its WTO commitment.⁷

Brazil (see Figure 2) is the only one of the four developing countries that has a FBTAMS and also the only one that has regularly notified price-linked payments within the productspecific AMS. The AMS for one or more products (cotton or wheat) has exceeded the *de minimis* threshold in a few years, but product-specific AMS support is much lower than in the developed countries. Brazil's CTAMS has always been below its small FBTAMS (US\$0.9 billion, not shown in the figure). For the other developing countries, the notified product-specific AMS support has been composed almost entirely of MPS. A negative MPS was notified or estimated for China and India for several years because administered prices were below fixed external reference prices for key food staples (rice and wheat).8 This fails to accurately reflect economic market price support to rice or wheat farmers in China or India, which mostly has been positive. The notified MPS for China and India also fails to accurately reflect economic market price support because government grain procurements or other limited amounts are notified as eligible quantities rather than marketed or total production.

For the Philippines there is also a disconnect between the price support imputed in the notified MPS and economic market price support. Rice is protected by border measures and domestic prices have been as much as double the world price. The gap between administered prices and fixed reference prices has become even wider. Nevertheless, the Philippines notifies a rice MPS below the *de minimis* threshold because only small amounts procured by the government are reported as the eligible quantity of production.

The four developing countries also have notified various measures that provide non-product-specific AMS support below *de minimis* thresholds. Brazil, India, and the Philippines have notified similar or identical measures under the exemption for development programs (China is ineligible for this exemption under its WTO accession terms). The development program notifications by Brazil and India have included input subsidies that are key forms of support in these countries. For India, in contrast to the other countries, the inclusion of subsidies for electricity and irrigation in the notifications generates a higher level of non-product-specific support. The sum of India's non-product-specific AMS support and development program support approaches the *de minimis* threshold level for non-product-specific AMS. The WTO rules do not constrain this total.

Each of the eight countries has found room within the exemptions and *de minimis* exclusions provided by the Agreement to allocate domestic support among the defined categories in order to claim compliance with WTO rules and remain within the country's commitment. Substantial differences exist

in the approaches taken to classify measures and notify support levels. Challenges to notifications can be raised in bilateral discussions, through the WTO Committee on Agriculture, or through the WTO's formal dispute settlement process. However, the porous domestic support disciplines of the Agreement have provided limited scope to challenge compliance.

Policy Transparency and Reform

To contribute to the transparency of agricultural domestic support, the WTO notifications must be timely, and they must track changes in the policy measures and report accurate and meaningful values for the support provided. Some progress has been made, but more is possible in each of these areas.

Notifications even by the largest agricultural producing and trading countries have sometimes been delayed for many years. The timing and length of some delays appear to reflect strategic decisions, rather than lack of appropriate data. The resulting lags have made it difficult for the Committee on Agriculture to carry out its mandate to review the implementation of commitments. The lags also make it difficult to analyze the levels of support in relation to possible WTO dispute settlement cases or in the Doha negotiations. For example, as late as mid-2007, six years into the Doha Round, there had been no notifications relating to US farm-program legislation enacted in 2002, nor for the EU policy changes in 2003.

Once submitted, the domestic support notifications reflect many of the significant changes in agricultural policies since the creation of the WTO in 1995. The support displayed in Figure 1 traces the EU's reductions of MPS, resulting from reforms in 1999 and 2003. When the United States eliminated its blue-box measures and introduced more decoupled payments in 1996, and when it introduced new price-linked assistance payments in 1998, subsequent notifications reflected these policy changes and the amounts of support provided. Likewise, the notifications shown in Figure 2 reflect Brazil's enactment of debt rescheduling in 1995 and 1999 and China's introduction of national payments to grain producers in 2004. In short, the requirement to list and categorize measures has led countries to notify new policies and levels of support.

However, the WTO notifications often fail to provide accurate and meaningful measurements of the economic support provided to producers. Countries have chosen to notify various policy measures in diverse ways—categories are not uniform and neither is the approach taken to calculate support levels. Most important, the method used to calculate MPS under the WTO rules hides rather than illuminates the underlying impact of policies on producer price incentives and incomes. It is thus difficult to establish a clear causal relationship between WTO disciplines on domestic support (and indeed the whole framework of disciplines on agricultural domestic and trade policies in the WTO) and the trends in national policies. The disciplines have offered

some incentives for traditional providers of high levels of domestic support to reduce those levels, but the picture is mixed. The discretion that countries have to adapt their notifications within existing disciplines without making substantive changes in policy is a systemic weakness of the Agreement. Yet, reviewing the policy dynamics within these eight countries makes apparent that consideration of WTO rules has entered increasingly into domestic debates on agricultural policies. The WTO regime is strong enough that countries have sought to avoid enacting legislation that would flagrantly violate their commitments. And the Doha Round, if and when concluded, would place more stringent limits on the allowed policy space, especially for developed countries.

The Doha Round Proposals

One goal of the Doha Round agricultural negotiations is to rewrite the rules and commitments for domestic support. A new framework was agreed upon in 2004, but subsequent negotiations have failed to achieve consensus on the details. The chairman of the Committee on Agriculture in Special Session (the forum for the agriculture negotiations) set out draft "modalities" in December 2008 to reflect progress to date and to serve as a blueprint for a future agreement.9

Under the Doha proposals, commitments on domestic support would be tightened and extended for certain countries. The proposals would sharply reduce the FBTAMS, lower the de minimis thresholds for a number of countries, and introduce a limit on the blue box. A ceiling would be placed on a new indicator of Overall Trade-Distorting Support (OTDS), which comprises the sum of the CTAMS, de minimis AMS support, and blue-box payments. The new OTDS limits are intended to avoid the problem of "box shifting" of support (other than to the green box or development programs) to meet commitments. In addition, the proposal would impose product-specific limits on AMS support and blue-box payments. These new rules and commitments go much further than the current Agreement in constraining support provided by some countries through measures that do not qualify for the green box or the development program exemptions. The Doha constraints, such as those on OTDS, the de minimis thresholds, and the product-specific caps, would be more lenient for developing countries than for developed countries. Thus, the Doha proposals would establish rules and support ceilings that are more comprehensive and tighter than those of the Agreement, but also more complex and heterogeneous across countries.

The Doha domestic support commitments would have a major impact on the levels allowed for developed countries (Table 1). The proposals encompass a harmonizing approach, in which those countries that provided the largest support in the past have to make the largest percentage cuts to their commitments. For most developed countries (and some developing countries) the OTDS limit would be reduced progressively from a base level to a Final Bound OTDS commitment.

The European Union has the largest reductions of allowed OTDS over a five-year phase-in period, followed by Japan, the United States, and Norway. The Final Bound OTDS would correspond to 7 percent of the base-period production value for the United States, 9 percent for the European Union, 14 percent for Japan, and 42 percent for Norway. The existing FBTAMS would be reduced significantly. Further constraint would come from new limits on exclusions from the CTAMS. The *de minimis* thresholds would be reduced for most developed countries from 5.0 percent to 2.5 percent. The total blue box would be limited to 2.5 percent of the 1995–2000 value of production.

The commitments for Brazil follow a pattern similar to those of the developed countries, but the reductions reflect the more lenient treatment for developing countries. No reductions are required from base OTDS or in the *de minimis* thresholds for China (negotiated as 8.5 percent at accession), India, and the Philippines. Total blue-box support would be capped at 5.0 percent of base-period production value for developing countries.

One consequence of the Doha proposals is that the Final Bound OTDS for China, India, and the Philippines (at 25 percent of base-period value of production) would be higher than that of the United States, the European Union, or Japan. On a dollar basis at 2009 exchange rates, the OTDS support that China and India could provide would be US\$86 billion and US\$26 billion, respectively. 10 The design of the Doha commitments thus shifts the balance between the developed and developing countries in terms of the scope for providing tradedistorting support for agriculture in the future compared to the historical pattern. China, India, and the Philippines face the constraint within this scope of maintaining a zero CTAMS. This requires that product-specific AMS support be kept below the de minimis thresholds, which allows less support relative to production value than some developed countries have provided in the past for certain products.

The stringency of the proposed Doha FBTAMS commitments relative to past notified CTAMS for the developed countries is illustrated in Figure 1. The stringency of the Doha proposals can be assessed further by projecting levels of support through the mid-2010s and comparing these levels to the proposed commitments. The extent to which a Doha agreement might constrain the future levels of domestic support in developed countries reflects the policy changes notified as already in place and, in the case of the United States, higher market prices since 2006. The level of domestic support in the United States is projected to be below the Doha Final Bound OTDS and FBTAMS commitments. However, even with the flexibility achieved by reducing its notified dairy MPS in 2008 (and steps that could further reduce notified MPS), if most US support remains linked to market prices, the Doha commitments could require some policy adjustments in periods when prices fall. Expansion of countercyclical support, such as that provided

US EU27 Japan Norway Brazil China India Philippines

US\$ NOK US\$ RMB US\$

Table I—Proposed Doha commitments and de minimis percentages

	US\$ billion	€ billion	¥ billion	NOK billion	US\$ billion	RMB billion	US\$ billion	PHP billion
Base OTDS	48.5	118.9	5,450.3	21.2	13.1	584.4	25.6	117.2
Full reduction percentage from Base OTDS (%)	70.0	80.0	75.0	55.0	37.0	_	_	_
Final Bound OTDS	14.5	23.8	1,362.6	9.5	8.3	584.4	25.6	117.2
Pre-Doha FBTAMS	19.1	72.2	3,972.9	11.4	0.9	_	_	_
Full reduction percentage from pre-Doha FBTAMS (%)	60.0	70.0	70.0	53.0	30.0			
FBTAMS after reduction	7.6	21.7	1,191.9	5.4	0.6	-	-	-
Blue-box limit ^a	4.9	6.5	246.2	3.6	2.4	116.9	5.1	23.4
De minimis percentage (%)	2.5	2.5	2.5	2.5	6.7	8.5	10.0	10.0
	Commitment as a share of base-period value of production (%) b							
Final Bound OTDS	7.4	9.2	13.8	42.1	17.0	25.0	25.0	25.0
FBTAMS	3.9	8.4	12.1	24.0	1.3	_	_	_
Blue-box limit	2.5	2.5	2.5	15.7	5.0	5.0	5.0	5.0
	Commitments in US\$ billion ^c							
Final Bound OTDS	14.5	33.1	14.6	1.5	8.3	85.5	25.6	2.5
FBTAMS	7.6	30.1	12.7	0.9	0.6	_	_	-
Blue-box limit	4.9	9.0	2.6	0.6	2.4	17.1	5.1	0.5

Source: D. Orden, D. Blandford, and T. Josling, ed., WTO Disciplines on Agricultural Support: Seeking a Fair Basis for Trade (Cambridge, UK: Cambridge University Press, 2011).

Note: – indicates zero. ^a Special rules apply to Norway. ^b Base period for OTDS is 1995–2000 for developed countries and 1995–2004 for developing countries. ^c Based on 2009 IMF average yearly exchange rates.

through the revenue-stabilizing Average Crop Revenue Election program enacted in 2008, could be constrained. For the United States, product-specific limits could prove more binding in some cases than the overall commitments.

For the European Union, as intervention in markets becomes less common, the reporting of administered prices and MPS will be phased out. Projected payments notified as decoupled income support will tend to increase accordingly, but these are not subject to WTO ceilings. The EU's OTDS and CTAMS in the mid-2010s are also projected, on the basis of recent notifications, to be below the proposed final Doha commitments. To a greater extent than under the Agreement, putting the Doha proposals in place would lock in past reforms.

For Japan, the Doha ceilings would preclude proposed increases in AMS and blue-box support the government announced in 2009. Those proposed levels of support, if they materialize, would not exceed Japan's existing FBTAMS but would violate Japan's potential Doha OTDS and total blue-box

commitments. For Norway, Doha commitments on domestic support would appear to require a reduction in the CTAMS and blue-box payments greater than the reduction implied by new commitments on market access and export competition. Domestic support measures could be introduced to maintain most of Norway's agricultural production under the Doha disciplines, but this would require a shift from MPS to direct payments funded by taxpayers.

Anticipated support in the mid-2010s for the developing countries remains well below the Doha constraints. China and India might experience some limits on MPS for staple crops if administered prices rise relative to fixed external reference prices. India will likely continue to exempt substantial support under development programs. Brazil and the Philippines remain far below allowed support in all dimensions. Thus, these four developing countries will have substantial flexibility with respect to provision of trade-distorting domestic support.

The results suggest that the proposed Doha disciplines would achieve some progress on the path toward the progressive

reduction of trade-distorting domestic support envisioned in the Agreement on Agriculture. A Doha agreement that tightened and extended commitments would not end such support, but would impose more stringent limits, especially for developed countries that have historically provided high levels of support to agriculture.

Strengthening the Disciplines beyond Doha

Reducing production and trade distortions created by national policies more fully than proposed in the Doha Round will require further policy reform consistent with open markets. This would include significant additional improvements in market access as well as limits on the use of explicit and implicit export restraints and taxes. There would need to be further reductions in the scope for providing trade-distorting domestic support, strengthened disciplines for green-box measures that allow unlimited support under well-defined criteria, and improved monitoring of international commitments. For domestic support, in particular, four steps could be taken to further improve the disciplines.

First, the role of the notifications as a device for monitoring policies and verifying compliance should be strengthened by reducing delays in WTO submissions. A Doha agreement would strengthen the notification requirements and subject the implementation of commitments to enhanced monitoring and review, but more can be done. Developed countries could add transparency by linking the preparation of WTO domestic support notifications to the annual review process for Organisation for Economic Co-operation and Development (OECD) Producer Support Estimates. A more dramatic step would be to make eligibility for various WTO exemptions contingent upon the timely submission of notifications.

Second, notifications of domestic support should not only serve a legal requirement but also meaningfully address the economic purpose that underlies the Agreement. A more coordinated approach to the preparation of notifications could reduce disparities. We have highlighted concerns about the definition and discretion afforded countries in notifying MPS, which precludes it from being an accurate and meaningful economic measurement of support. Some progress can be made by making clearer the rules for what constitutes an applied administered price and the eligible quantity of production. Ideally the domestic support disciplines should be applied to the economic measurement of market price support, but the structure of the Agreement on Agriculture and the Doha proposals, with separate pillars for domestic support, market access, and export competition, makes this difficult. At a minimum, further attempts might be made to scrutinize those occasions when a country notifies a sharp change in MPS in the absence of a change in the economic incentives provided by its policies.

Third, enhanced scrutiny of green-box measures is needed. In particular, direct payments to farmers have been notified as

decoupled income support by the United States, the European Union, and China. There are large differences in the levels of such payments. ¹¹ The extent to which decoupled income support affects production remains uncertain but may be consequential. Limits might therefore be envisioned for this type of support to achieve a balanced set of future commitments.

Finally, the WTO domestic support disciplines need to be adapted to the market and policy forces that will influence agriculture in the coming decades. The existing rules of the Agreement, and those being negotiated in the Doha Round, primarily target support that stimulates production and depresses world market prices. High agricultural prices since 2006 have not eliminated the need for traditional disciplines on price-depressing domestic support. But production-stimulating policies are not the only ones that create distortions in world markets. Measures that restrict supply (such as blue-box resource idling or green-box long-term acreage diversion under conservation measures) are also potentially production-and-trade distorting, as are measures that augment demand beyond market-driven levels (such as biofuels programs in the United States, the European Union, and Brazil). Demand-augmenting measures have become more prevalent, have contributed to relatively high agricultural prices, and could dominate future agricultural policies. WTO disciplines are needed in this context to ensure fairness in world markets for consumers, including those in low-income, net-food-importing countries.

The Difficult Task of Disciplining Domestic Support

Disciplines on domestic support are a key part of the Agreement on Agriculture and further disciplines will have to be part of any Doha Round agreement. While seeking to negotiate a strengthened multilateral agreement, countries continue to use many domestic support measures that have adverse international consequences. Notification of domestic support measures has been slow and inconsistent, which has devalued the process of reporting and the integrity of international disciplines, even if explicit violations have been rare. Should there be a Doha agreement, its credibility will hinge on more timely and consistent monitoring as more countries will find themselves closer to agreed support limits.

This review and the challenges identified indicate both the importance and the difficulty of disciplining agricultural domestic support. Any attempt to bring greater cohesion to the global regime of agricultural policies must address complex issues, including goals, rules, commitments, implementation, and monitoring. The experiences of countries under the Agreement on Agriculture illustrate potential pitfalls and offer lessons to guide international negotiations and future policy choices. Domestic support policies for agriculture must become more consistent and beneficial in a world economy in which the efficient functioning of agricultural markets and trade is needed for a sustainable global food system.

Notes

- 1. D. Orden, D. Blandford, and T. Josling, ed., *WTO Disciplines on Agricultural Support: Seeking a Fair Basis for Trade* (Cambridge, UK: Cambridge University Press, 2011). Authors of the country studies are T. Josling and A. Swinbank (EU); D. Blandford and D. Orden (US); Y. Godo and D. Takahashi (Japan); I. Gaasland, R. Garcia, and E. Vårdal (Norway); A. Nassar (Brazil); M. Gopinath (India); F. Cheng (China); and C. Cororaton (Philippines). L. Brink provides an overview chapter on the negotiation and rules of the Agreement on Agriculture and Doha proposals and disputes related to agricultural support.
- 2. See WTO, Results of the Uruguay Round of Multilateral Trade Negotiations—The Legal Texts (Geneva: WTO, 1995).
- 3. Ibid.
- 4. In contrast, the OECD uses an economic measurement through the Producer Support Estimates (PSE) prepared annually for its members and several emerging-market economies; see, for example, OECD, *Agricultural Policies in OECD Countries: Monitoring and Evaluation* (Paris: OECD, 2009). An economic approach was also used by the World Bank to assess levels and global trends in agricultural protection and support from the mid-1950s through 2006; see K. Anderson, ed., *Distortions to Agricultural Incentives: A Global Perspective 1955–2007* (London and Washington, DC: Palgrave Macmillan and World Bank, 2009).
- 5. Countries agreed on some of the notification procedures for identifying their policy measures, indicating how these were to be classified within the categories of the Agreement, and reporting the levels of MPS and budgetary expenditures or revenue forgone under the measures during initial meetings in 1995.

- 6. For the European Union, CTAMS has included price support and nonexempt payments provided under a related Equivalent Measurement of Support (EMS) used in place of AMS primarily for fruits and vegetables.
- 7. In its October 2010 notification for 2008, Norway acknowledged slightly exceeding its FBTAMS and indicated it would take action to ensure that this would not be repeated. Its notification for 2009, submitted simultaneously, showed support within the commitment level.
- 8. Because India had only provided notifications for three years (1995–98) through 2010, Gopinath undertook substantial shadow notification estimation.
- 9. See WTO, *Revised Draft Modalities for Agriculture*, TN/AG/W/4/Rev.4, December 6, 2008. In TN/AG/26, the chairman indicated that as of April 21, 2011, no further "discernable progress" had been made on the issues under negotiation that could be captured in a new modalities text.
- 10. In certain circumstances China's allowed trade-distorting support could even exceed its OTDS limit under proposals for recently acceded members.
- 11. Compared to the EU payments of €31.3 billion (about US\$44.0 billion), payments notified as decoupled income support were US\$5.8 billion in the United States in 2008 and an estimated RMB15.1 billion (about US\$2.2 billion) in China. See also R. Meléndez-Ortiz, C. Bellmann, and J. Hepburn, ed., *Agricultural Subsidies in the WTO Green Box: Ensuring Coherence with Sustainable Development Goals* (Cambridge, UK: Cambridge University Press, 2009).

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