



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

**China's Price Support for Wheat, Rice and Corn under Dispute at the WTO:  
Compliance and Economic Issues**

David Orden and Lars Brink  
May 21, 2018

David Orden (presenting author)  
Professor, Institute for Society, Culture and Environment (ISCE)  
Virginia Tech Research Center - Arlington  
900 N. Glebe Road  
Arlington, VA 22203  
[orden@vt.edu](mailto:orden@vt.edu)

Lars Brink  
Independent Advisor  
Ottawa, Canada  
[lars.brink@hotmail.com](mailto:lars.brink@hotmail.com)

*Selected Paper prepared for presentation at the 2018 Agricultural & Applied Economics  
Association Annual Meeting, Washington, D.C., August 5-7, 2018*

Copyright 2018 by David Orden and Lars Brink. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

# **The WTO Dispute on China's Price Support for Wheat, Rice and Corn: Compliance and Economic Issues**

David Orden and Lars Brink  
May 21, 2018

## **Abstract**

In 2016 the United States launched a WTO dispute claiming China's market price support for wheat, rice and corn in 2012-15 exceeded its Agreement on Agriculture (AA) limits. A WTO Panel is grappling with critical issues of interpretation of the AA, with a ruling expected in 2018. This paper provides an interim assessment of this dispute based on materials available in public as of May 15, 2018. The Panel ruling may clarify the extent to which the legally-effective stipulations of the AA also limit economic price support for producers, with important implications for agricultural policy decisions not only in China but also in many other countries. China argues that its support has been within its limits, drawing on its accession constituent data and methodology. The United States argues that larger quantities of production should count as eligible for price support, and that the calculations should use the 1986-88 base years stipulated in the AA, not 1996-98 from China's accession calculations. Using the larger production quantities along with the 1996-98 base years would have allowed China to meet its WTO limits during 2012-15 while maintaining administered prices high enough to provide some economic price support, but not as much as the OECD calculates was provided. Using the larger quantities and the 1986-88 base years would make economic price support impossible without exceeding China's WTO limits. One interpretation of the AA would make some economic price support feasible if tight caps on the production eligible for support procurement were pre-announced. These different interpretations of the AA thus affect the scope China would have for price support policies. Further analysis will be undertaken once the Panel releases its report on the dispute.

Domestic agricultural policy can affect trade and motivate trade disputes. The Agreement on Agriculture (AA) of the World Trade Organization (WTO) imposes limits on the amounts of support a member can provide to its producers through certain domestic support policies and lays down rules for measuring the support that counts towards the limit. In September 2016 the United States launched a WTO dispute claiming that China's yearly government support to producers of wheat, rice and corn in 2012-15 exceeded China's WTO commitments (WTO, 2016b). A news release pegged the excess in 2015 at nearly US\$100 billion above the summed limits for these grains (USDA, 2016b).

The WTO established a Panel for this dispute, *China – Domestic Support for Agricultural Producers* (DS511), on January 25, 2017 and the Panel was composed on June 24, 2017 (WTO, 2018a). Twenty-seven other members reserved their third-party rights to participate in the Panel’s proceedings, reflecting the broad stakes at issue.<sup>1</sup> The United States and China made their first written submissions to the Panel in September-October 2017, followed by third-party submissions. The United States and China made submissions and statements to substantive meetings of the Panel during January 22-24 and April 24-25, 2018 and the Panel has posed questions to the parties subsequent to these meeting and received their answers. A Panel report is anticipated later in the year, in which the Panel will explain its findings and recommendations and may summarize the arguments made by the parties in the dispute.

The outcome of this dispute will clarify how key provisions of the AA are interpreted and may have significant implications for China’s grain support policies, as well as for support policies of many other members, especially low-income and middle-income countries. Distinct from most members’ practice, the United States makes public some of its input to Panels; in this dispute, so far, its first (but not second) written submission (USTR, 2017), its opening and closing statements at the two substantive Panel meetings (USTR, 2018a, 2018b, 2018c, 2018d), and its responses to questions from the Panel following the two substantive meetings.<sup>2</sup> This is a laudable contribution to public discussion and transparency – beyond the U.S. interpretations, the essence of other parties’ arguments is usually not known until a Panel makes its report public.

---

<sup>1</sup> The third-parties are: Australia, Brazil, Canada, Colombia, Ecuador, Egypt, El Salvador, European Union, Guatemala, India, Indonesia, Israel, Japan, Kazakhstan, Korea, Norway, Pakistan, Paraguay, Philippines, Russian Federation, Saudi Arabia, Singapore, Chinese Taipei, Thailand, Turkey, Ukraine and Viet Nam.

<sup>2</sup> The latter were posted subsequent to our preparation of this paper for the March 23, 2018 submission deadline. These responses generally reinforce and further elaborate the arguments made by the United States in its first written submission and opening and closing statements at the panel meetings. The responses to questions are available at: <https://ustr.gov/issue-areas/enforcement/dispute-settlement-proceedings/wto-dispute-settlement/pending-wto-disput29>.

This paper sheds light on the key issues in the dispute *China – Domestic Support* (for short) drawing on the U.S. public input to the Panel, analysis of the AA text, the findings in previous related disputes (including as cited in the written submissions of the United States), China’s accession documents, its notifications of domestic support to the WTO, and economic analysis of China’s support levels. The outcome will be crucial in clarifying the extent to which the legally-effective stipulations of the AA also limit economic price support for producers. One outcome could create pressure on some members to limit certain economic support currently provided or at least employ different policy instruments to deliver support. Other outcomes could leave the WTO rules ineffective in limiting economic price support. Whatever the outcome, this case may strengthen many members’ motivation to engage – offensively or defensively – in further WTO negotiations on new rules for domestic support that distorts trade, and on the rules for acquisition of public stocks of food grains by developing countries. These issues have been debated within the WTO over recent years but remain unresolved.

To be more specific, the *China – Domestic Support* dispute concerns market price support (MPS), based on a price gap calculation under the rules of the AA, which has been a key component of China’s support to agricultural producers. The MPS measured under the AA differs from the economic MPS measured by, for example, the Organization for Economic Cooperation and Development (OECD, 2017). The measurement of WTO MPS hinges on several technical terms of the AA, and the Panel faces related arguments in determining how to measure China’s support.

One major point of contention is the quantity of each grain to be counted as eligible for price support. A second major point of contention is whether the fixed external reference price in the price gap calculation is properly based on prices in 1986 to 1988 or in 1996 to 1998. Using

China's total national production of each grain along with price parameters determined under WTO rules generate support above China's WTO limits during 2012-2015 in either case, as shown below. MPS measured by the OECD, using total national production, is also relatively high during these years. This was thus a situation where complying with WTO limits, interpreted in certain particular ways, might have constrained the use of certain support instruments and associated economic support levels. Using reference prices from 1986 to 1988 makes the measured support much larger than if using a price from 1996 to 1998, which increases the likelihood of China having surpassed its limits or increases the amount of excess support.

### **Technical Terms and Issues**

When China acceded to the WTO in 2001, some of its domestic support for agricultural producers became subject to limits that apply to support measured through AMSs (Aggregate Measurements of Support) for individual products. China's commitments set the annual upper limit on each product's AMS at 8.5% of its value of production (the non-product-specific AMS is similarly limited). A product's AMS consists of MPS and certain payments.<sup>3</sup>

The U.S. complaint concerns WTO MPS for wheat, rice and corn (Brink and Orden, 2017a, b; Orden, Brink and Hejazi, 2017; USTR, 2017; WTO, 2018a). WTO MPS is measured by multiplying the gap between the current year's "applied administered price" (AAP) and a "fixed external reference price" (FERP) by the "quantity of production eligible to receive the applied administered price" (Annex 3 of the AA; WTO, 1999).

China's WTO accession documents calculate MPS for 1996-98 based on two support programs and state that "Eligible Production for State Procurement Price refers to the amount

---

<sup>3</sup> See, *inter alia*, Brink (2011), Díaz-Bonilla (2017), Matthews (2015) and Orden et al. (2011) for details on the WTO rules and their application in various policy and country settings.

purchased by state-owned enterprises from farmers at state procurement price for the food security purpose,” while its Protective Price System was set up to “safeguard farmers’ income” (WTO, 2001a). The quantity of wheat, rice and corn procured annually at procurement (administered) prices since China’s accession has been only a portion of total production and these procured quantities have been the eligible production China has utilized in its annual notifications of domestic support. China may argue that procurement takes place only in designated regions and only for part of the year, and that significant grain production is consumed on-farm and not marketed. Each of these practices reduces the quantity potentially procured at the support price. Overall, China holds that it is in compliance with its obligations.

The United States partially concurs that eligible production under the AA is less than total national production. In particular, the United States argues in its first written submission that the price support programs for wheat, rice and corn provided a minimum price for all production in the major producing provinces and autonomous regions where the programs were in operation—for wheat and rice this covered nearly 80% of national production and for corn about 45% during 2012-15 (USTR, 2017).<sup>4</sup> In this view, the announced support prices are the AAPs that apply to these levels of production in the MPS calculation, not to lesser procured quantities.

Of considerable consequence as well, the United States calculates China’s 2012-15 MPSs for wheat, rice and corn using FERPs based on 1986 to 1988 prices, as specified in Annex 3 of the AA, rather than the 1996 to 1998 prices China used in its WTO accession process. The basic argument of the United States, citing international rules for legal interpretation and several precedents in WTO dispute settlement, is that while the 1996-98 base period calculations

---

<sup>4</sup> The United States refers to provinces and autonomous regions (USTR, 2017). For brevity this paper’s references to provinces include autonomous regions.

provided an assessment of China's support for a recent period, upon accession China, similar to the original WTO members, became subject to the stipulation in the AA Annex 3 that annual AMSs be calculated using FERPs from the 1986-88 period (USTR 2017, 2018a, 2018c, 2018d).<sup>5</sup> At a very technical level the United States notes China's use of 1996 reference prices for its 1996 MPS (and similarly for 1997 and 1998) instead of using for each year the average of the reference prices for each grain of 1996, 1997 and 1998. The United States claims that China therefore did not use average 1996-98 reference prices in its base period MPS calculations and, in addition to the argument above, is therefore not entitled to using 1996-98 FERPs for its 2012-15 measurements. On these criteria, the United States argues that China must use FERPs based on the years 1986 to 1988, as stipulated in Annex 3 of the AA. The average 1986-88 FERPs are lower than the average 1996-98 FERPs, which increases the extent to which China would be out of compliance under the U.S. argument.

### **The Panel's Evaluation Task**

Several questions arise in the Panel's adjudication of the case. Article 1(a)(ii) of the AA requires an AMS to be calculated "in accordance with the provisions of Annex 3" and "taking into account the constituent data and methodology" (WTO, 1999). China's constituent data and methodology, as referenced in China's WTO schedule, were prepared in its accession process (WTO, 2001a). China reportedly asserts that its 2012-15 support should be calculated in accordance with its constituent data and methodology, including that the eligible production in these calculations are the quantities purchased by state-owned enterprises at the applied administered price and the FERPs are from 1996 to 1998 (USTR, 2018a, 2018c). The United

---

<sup>5</sup> More specifically, the United States draws on the *Vienna Convention on the Law of Treaties* and precedent from *EC – Export Subsidies on Sugar*, an earlier GATT panel in *US – Sugar*, and *EC – Bananas III* to argue that "A member cannot use its schedule to *derogate* from obligations in the WTO Agreements" (USTR, 2018a).

States, using a dictionary definition of eligible as “fit or entitled” to receive the AAP, interprets the AA to say that China should count a larger quantity of production as eligible production during 2012-15 because it placed no caps on the level of output that might be procured in the provinces in which the price support programs were in operation. The United States also argues that the Annex 3 stipulation that the FERP be based on the years 1986 to 1988 overrides use of the constituent data and methodology from the base period. The United States thus effectively dismisses the key elements of China’s assertions.<sup>6</sup> The United States supports its view with the argument that, while China’s constituent data and methodology for 1996-98 may have helped to identify China’s WTO commitment level, this part of the accession documentation is not part of China’s legal commitments. As evidence of this, the United States points out that China’s *de minimis* percentage of 8.5% instead of the 5% or 10% in the AA is one exception from the text of the AA that is part of China’s legal commitments because it is mentioned in the report of the working party on China’s accession (WTO, 2001b), while no such exception is made for the base years of 1986 to 1988 for the FERP (USTR, 2018c, 2018d).

On the issue of quantity of eligible production, the Panel may consider a precedent from *Korea – Various Measures on Beef*, concluded in 2000. In that earlier dispute, the WTO Appellate Body (AB), which hears appeals of Panel findings on legal grounds, held that “in accordance with” reflects a more rigorous standard than “taking into account” (WTO, 2000b). The AB provided precedent for eligible production being the quantity of output fit or entitled “to be chosen.” The AB then reasoned that the quantity Korea had declared it would procure constituted eligible production for the MPS calculation, even though Korea actually procured less. This precedent might suggest that if China had declared the maximum procurement quantity

---

<sup>6</sup> An exceptions is a mention in its first written submission of the 1996-98 FERPs and a supplemental exhibit (not public) providing U.S. calculations of China’s MPS using these FERPs (USTR, 2017).

in advance, this would be the quantity of eligible production for the MPS calculation, a point the United States concedes (USTR 2018a), even if less was actually procured. It does not, however, clarify a situation where the maximum quantity to be procured has not been declared.

There is an additional technical issue for rice. China's annual domestic support notifications (submitted only for 1999-2010, as of April 2018; e.g., WTO, 2015) calculate the price gap using an administered price of unmilled rice (an unprocessed product) but a FERP of milled rice (a higher-priced processed product). In calculating China's MPS, the United States expresses both the AAP and FERP for rice on an unmilled basis (USTR, 2017). This makes the price gap much larger, since converting the FERP to its unmilled-rice equivalent lowers the FERP considerably. The U.S. rice calculation does not follow China's constituent data and methodology, but if a milled price was used by China for both AAPs and FERPs for 1996-98, it is equivalent (abstracting from processing costs and margins, see Brink and Orden (2017a)) to similarly taking the same processing level (and corresponding quantity, unmilled or milled) into account for rice in 2012-15.<sup>7</sup> The United States argues its calculations are in accordance with the Annex 3 provision for AMSs to be calculated "as close as practicable to the point of first sale of the basic agricultural product" (i.e., for unmilled rice). The Annex 3 provision for adjusting the FERP "for quality differences as necessary" might also be brought to bear when the price observations relate to different qualities, such as milled and unmilled rice. In *Korea – Various Measures on Beef* the Panel (WTO, 2000a) made a strong argument that closely-matched

---

<sup>7</sup> China's 1996-98 constituent data and methodology are not explicit on the prices used but seem to have used milled administered and reference prices. China's announced domestic support prices during 1997-98 were only around 70% of the administered prices used for MPS in its accession documents, which is a percentage close to the conversion coefficient between milled and unmilled rice. The administered prices used for rice MPS dropped sharply in China's notification for 1999 when unmilled prices clearly began to be used.

qualities of beef must be used for AAPs and FERPs, which supports the U.S. argument for using equivalent rice prices.

A fourth issue concerns the Panel's consideration of China's market price support for corn in 2012-15. Input by the United States to the Panel reveals that China argues that a new policy of making payments to corn producers had been introduced in March 2016 and the price support program had thus expired before a Panel was requested. Therefore, in the view attributed to China, support for corn was not within the Panel's terms of reference under the Dispute Settlement Understanding; thus there was no basis for the Panel even to consider whether any market price support for corn in 2012-15 exceeded the WTO limits (USTR, 2018a, 2018c, 2018d). The United States holds that assessing the support for corn during 2012-15 is within the Panel's terms of reference. It links this argument to one of the peculiarities of the WTO domestic support provisions: the amount of applied support is calculated with data that becomes available only some time, possibly years, after the year in which the support was provided. An alleged excess above the applicable WTO limit on AMS support can therefore be challenged no earlier than at the point in time when the relevant data is made available. In addition, the United States argues that support prices for corn applied not only in 2012-15 but possibly also in 2016, thus, again considers it necessary to establish whether price support for corn exceeded the limit (USTR, 2018d).

Decisions the WTO has taken since 2013 concerning certain food stock acquisition in developing countries are not playing a role in the assessment of the *China – Domestic Support* dispute. Under the heading “public stockholding for food security purposes”, a series of WTO decisions have designed an interim mechanism that essentially allows developing countries with existing support programs to provide unlimited MPS for traditional staple food crops without

fear of legal challenge (WTO, 2013, 2014). The mechanism remains in place until a permanent solution is agreed and adopted. Conditions regarding notification, transparency, anti-circumvention and safeguards apply when using the mechanism. The U.S. challenge of China's support includes years following these decisions but seems to be launched independently of their contents and any arguments China might make under those decisions. China has not made the notifications to the Committee on Agriculture that would be needed for a defense under these decisions.

### **China's WTO Market Price Support**

This section illustrates the extent to which, if at all, China's MPS amounts for wheat, rice and corn under the WTO formula (labeled WTO MPS) may have exceeded their annual limits of 8.5% of the crop's value of production in 2012-15. The WTO MPSs are calculated using two different eligible production quantities (national production and production in major provinces) and base years for FERP (1996-98 and 1986-88). The use of only the procured quantities as eligible production is not displayed in the tables because the procurement levels have not been made public. Use of the procured quantities is assumed to be in line with China's calculations and thus not to generate MPSs in excess of the limits (at least with 1996-98 FERPs). We calculate and discuss in the text the maximum levels of eligible production at which the limits would not be exceeded for 1996-98 and 1986-88 FERPs. The analysis does not include any product-specific budgetary AMS components since they have not been raised as an issue in the dispute. MPSs and AMSs are thus seen as interchangeable in this analysis. The MPSs are given as percentages of values of national production, which makes it easier to see when and relatively by how much the MPSs exceed their nominal limits, which vary from year to year as the value of production changes.

Alternative 1 in Table 1 (all tables are at end of the paper) provides an initial point of reference. Alternative 1 shows the MPSs for each year 2012-15 for China's wheat, rice and corn calculated under an assumption that the total national production of each grain constitutes eligible production, rather than any smaller or nil quantities. It is assumed that China's administered prices are "applied administered prices" in the WTO sense for this total production. The calculations use FERPs from 1996-98. Under these assumptions, China's WTO MPSs exceed the limits of 8.5% of value of production each year in 2012-15. For wheat they are larger than 16% of value of production in all years and for corn they are larger than 40%. An additional critical factor for rice is the adjustment of the FERP to an unmilled basis. The WTO MPSs for rice exceed 35% of the values of production in 2012-15 when the administered prices and FERP are both on an unmilled basis but are less than the limit of 8.5% using a milled rice FERP.

An example of the calculations of nominal values of WTO MPSs is shown for 2015 in Table 2, again using total national production and 1996-98 FERPs. The WTO MPS amounts in 2015 sum to US\$85.3 billion, with each crop's limit being exceeded. The limits (not shown) sum to US\$19.0 billion, resulting in MPSs in excess of the limits of US\$66.3 billion.

While the WTO MPSs in Tables 1 and 2 are based on total national production, the United States' calculations use as eligible production only the production in major provinces in which the support programs operated. The United States calculates 1986-88 FERPs for the three grains from China's trade data (USTR, 2017). For Alternative 2 in Table 3, eligible production is limited to production in the major provinces while retaining the FERPs from 1996-98. This reduces the MPSs from Alternative 1 in proportion to the yearly ratio of production in the major provinces to total national production. The main effect is on the MPSs for corn, where the major provinces are responsible for less than half of national production. Alternative 3 in Table 3 also

uses production in the major provinces as eligible production but shifts to the FERPs from 1986-88. This corresponds to the calculations presented in the U.S. first written submission (USTR, 2017). As shown in Table 3, this shift to the earlier years' FERPs has a large effect on the extent to which the calculated MPSs for all three crops exceed the AMS limits of 8.5% of the values of national production.

### **Comparing China's WTO MPS and Economic MPS**

While the determination of whether China's AMSs have exceeded their limits will be made on the legal grounds of the AA, an underlying objective of the WTO provisions is to provide for reductions in agricultural support, with the result of correcting and preventing distortions in world agricultural markets. One measurement of distorting support that arises through policies that affect domestic prices is the economic MPS calculated by the OECD (2017). Economic MPS utilizes the difference between annual observed domestic market prices and contemporaneous border (international) prices at the same stage in the value chain. This observed difference results from myriad underlying policies—not only domestic policy instruments but also border instruments such as tariffs, including high over-quota tariffs, and non-tariff measures. The difference, whatever its causes, applies to total national production. The economic MPS, which measures the policy-related incentives for producers compared to international prices, contrasts with the WTO MPS, which uses the AAP, FERP, and eligible production.

The economic MPSs for China for wheat, rice and corn from OECD are reported in Table 4 (OECD, 2017). While specific annual values differ, an alignment occurs during 2012-15: both the WTO MPSs (except rice with milled FERPs) calculated using total national production and 1996-98 FERPs and the economic MPSs calculated by OECD for wheat, rice and corn exceed

the level corresponding to 8.5% of value of production. Economic MPS is not subject to WTO limits, but exceeding the limit can be considered an indicator of whether economic MPS is relatively high or low. The economic MPSs in Table 4 are larger than the WTO MPSs shown in Table 1 for wheat, while for rice and corn the economic MPS is smaller than the WTO MPS. If 1986-88 FERPs are used, even with only production in the major provinces as eligible production (Alternative 3 in Table 3), the WTO MPSs greatly exceeds the economic MPSs.

The instance of the WTO MPSs with 1996-98 FERPs and economic MPSs both exceeding 8.5% of value of production in 2012-15 and being of similar ranges of values is a time-period specific occurrence. In the four preceding years 2008-11 (not shown in the tables, see Brink and Orden (2017a) or Orden, Brink and Hejazi, (2017)), wheat support in economic terms is at similar levels to 2012-15, but the WTO MPS when using the 1996-98 FERPs only exceeds its limit in 2011. Thus with the 1996-98 FERPs, if the U.S. interpretation of eligible production under the WTO rules were to prevail, these rules could still not have served in 2008-10 to constrain the economic support for wheat. For rice, the WTO MPS calculated with 1996-98 FERPs also exceeds its limit only in 2011 (with unmilled AAPs and FERPs). But, opposite of wheat, rice is a situation where a WTO challenge would not have been motivated on economic grounds in 2008-11, since the economic MPSs indicates that rice was disprotected. Corn is an intermediate case in which WTO MPS exceeded its limit each year during 2008-11, with corn economically disprotected in 2008 but protected in 2009-11. Using the lower 1986-88 FERPs, the calculated WTO MPSs exceed the limits for wheat, rice and corn in all years 2008-11. This demonstrates again the important implications that will arise from the Panel ruling on the issue of base years for FERPs.

## Policy Reform to Achieve Compliance

As the United States was making the determination to initiate the dispute at the WTO about China's MPS, China was undertaking reforms to address what has become known as the "three highs" – high production, high government-held stocks and high imports – that resulted from its rising price support levels during 2012-15. In particular, China asserts that it modified its price support program for corn in March 2016 and shifted to providing payments to corn producers, partially coupled to production area. While the United States questions whether the corn price support program has been terminated, China's domestic corn prices, which had followed its rising support prices upward during 2009-15, fell sharply in 2016 to levels similar to world prices, as shown in Figure 1.

For wheat and rice, China has retained its administered prices above world market levels. Hence, the questions can be asked: to what extent would China have had to lower its AAPs in order to keep its MPSs in compliance with its WTO limits during 2012-15, or might China need to do so in the future to bring its support into compliance with those limits? Likewise, do the WTO limits allow some economic support above world price levels or precluded such support?

Tables 5 and 6 provide some evidence in this regard for the years 2012-15 covered by the *China – Domestic Support* dispute. The analysis focuses on wheat and rice and on MPS as calculated in Alternatives 2 and 3 in Table 3.

Table 5 shows the percentage reductions that would have been required from the AAPs for 2012-15 in order to bring China's MPSs for those years down to the limit of 8.5% of the crop's value of production. The denominator of the calculation of MPS in percentage terms is the value of total national production, which is affected by the level of domestic prices. The price movements during 2012-15 indicate domestic prices of wheat, rice and corn have moved closely,

but not perfectly, with administered prices, as shown for corn in Figure 1. Thus, in Alternative 2 (1996-98 FERPs and eligible production in major provinces) the two rows illustrate the needed reductions of AAPs, assuming that China's total value of production either stays constant when the AAP is reduced or declines in proportion to the reduction in AAP as the domestic price of the crop is assumed to fall. This difference in the denominators makes only a relatively small difference in the reduction of the AAPs required to comply with the WTO limits. For wheat, reductions of the AAPs of 5% to 17% (with value of production assumed to stay constant) or 6% to 19% (with value of production falling due to lower domestic prices) would have brought the MPSs into compliance. For rice, larger reductions in the range of 26% to 38% would have been required.

In Alternative 3 (1986-88 FERPs and eligible production in major provinces) much larger reductions in AAPs would, not surprisingly, have been required: on the order of 67% to 71%. In this case, border prices would provide a floor for domestic prices, which thus would not fall in proportion to the full decline of the AAPs. Table 5 therefore presents only the calculations assuming domestic values of production remain constant.

Table 6 addresses the question of whether reducing the AAPs to meet China's WTO limits would have allowed some economic support above world price levels or precluded any such support when eligible production is the production in the major provinces. As shown, in Alternative 2 with 1996-98 FERPs, China would have been able to provide some support above OECD contemporaneous border prices while meeting its WTO obligations, but at lower levels than the economic support reported by the OECD during these years. Conversely, in Alternative 3 with 1986-88 FERPs, the AAPs would have had to be reduced far below the OECD border prices for WTO MPS to comply with the limits. Again, this demonstrates the important

implications of a Panel ruling on the FERP determination for China's scope, or lack thereof, to set administered prices such that some economic protection is provided by its price support programs for wheat and rice.

A final calculation is to assess the maximum level of production that, when counted as eligible production, holds MPSs to the limits when calculated with China's actual 2012-2015 AAPs. When MPS is calculated using 1996-98 FERPs, this level of production ranges from 71% of wheat production in the major provinces in 2012 (calculated as the 8.5% limit divided by 12% MPS using production in these provinces in Alternative 2, Table 3) to 39% in 2014 and 2015. The maximum eligible production levels for rice are lower, ranging from 31% in 2012 to 24% in 2015. The maximum levels of production that could be counted as eligible production while not exceeding the limits are lower for wheat and rice when 1986-88 FERPs are used in the calculations (Alternative 3, Table 3). For wheat, the range is from 15% of production in the major provinces in 2012 to 13% in 2015; for rice from 14% in 2012 to 12% in 2015. While consistent series of the levels of procurements are not yet available in public, USDA (2016) indicates that Sinograin reportedly purchased 20.8 million metric tonnes of the 2015 wheat crop and 32 million metric tonnes of rice. This corresponds to 16% of the wheat production in the major provinces and 19% of rice, levels below the maximums at which the MPSs do not exceed the limits when calculated using 1996-98 FERPs, but above these levels using 1986-88 FERPs.

### ***Context of China – Domestic Support***

The United States initiated the WTO dispute on domestic support following several years of heightened concerns about market distortions from China's agricultural policies, even as China has become the top destination for U.S. agricultural exports (e.g., DTB, 2014). Of 22 dispute cases the United States has initiated against China since its accession to the WTO in

2001, only the domestic support case and two others, *China – Broiler Products* and *China – Tariff Rate Quotas for Certain Agricultural Products*, exclusively concern agriculture. More recently, contestation over China’s trade and intellectual property policies has been elevated to a very high political level. This will heighten scrutiny of the Panel findings and recommendations in the *China – Domestic Support* dispute.

In terms of the agriculture-specific dispute cases, the United States requested the establishment of a compliance panel in its case against China’s anti-dumping and countervailing duties on U.S. broiler products on May 27, 2016 (WTO, 2016a). The Panel circulated its report on January 18, 2018 (WTO, 2018b). It resulted in findings that China had not complied with earlier rulings. This dispute traces back to China’s imposition of high duties in 2010 and is one of several issues between the United States and China over such measures, including the imposition in 2016 by China of duties on certain feed imports (particularly distillers dried grains and solubles, DDGS) from the United States, which so far has not escalated into a WTO dispute.

The WTO dispute on tariff-rate quotas (TRQs) is closely related to the domestic support case. The United States requested consultations with China on its administration of TRQs for wheat, rice and corn on December 15, 2016 (WTO, 2016c). The Panel was composed in February 2018 and the United States has made public its first submission to the panel (USTR, 2018e). The United States alleges, *inter alia*, that China does not administer its TRQs for these grains on a transparent, predictable, and fair basis and alleges deficiencies in China’s administrative procedures and requirements (Gale, 2017a; USTR, 2018e). In particular, the United States asserts that the TRQs have been under-filled even in the years 2012-15, when there was a strong economic incentive to use them fully as domestic prices in China were above world levels, along with industry requests for opportunities to do so. Higher TRQ fill rates would

directly increase China's grain imports up to the small portion of consumption that the TRQs represent. A ruling in U.S. favor in the domestic support dispute would have a less direct effect but a potentially as large as or larger impact, depending on the extent to which lower administered prices and hence lower domestic market prices might affect China's total production and consumption, with related effects on world markets. In this context, it bears emphasizing that *China – Domestic Support* is a complaint about compliance with the AA, not about adverse effects under the WTO Agreement on Subsidies and Countervailing Duties, as was the case in the well-known *United States – Upland Cotton* dispute brought by Brazil (WTO, 2009). A domestic support complaint under the AA requires the complainant to demonstrate that the respondent has exceeded a limit on certain domestic support but does not require demonstrating adverse effects.

### **Implications of *China – Domestic Support***

A ruling along lines of the U.S. argument that the eligible production that receives support is all production in the major provinces where the price support programs operate would raise China's WTO MPSs considerably above China's presumed measurements using smaller quantities as eligible production. Requiring China to use FERPs based on 1986 to 1988 would similarly raise its WTO MPSs compared to use of FERPs based on 1996 to 1998. Either outcome, or the two together, would have implications for many other members that operate certain types of price support programs, in particular countries with *de minimis* AMS limits, i.e., mostly low-income and middle-income countries. While their nominal limits increase as values of production increase, the measured support will in some situations increase by more than the increase in nominal limits. This occurs even if the values of production and the nominal support prices rise at the same rate, since the rise in the nominal limit is only a given percentage, such as

5%, 8.5% or 10%, of the rise in the value of production (Matthews, 2015). It would thus eventually be impossible to operate price support programs with administered prices. A Panel outcome validating China's use of only certain small quantities for eligible production and/or its use of 1996-98 FERPs would increase its scope, and by implication the scope of some other members, to continue providing market price support to producers.

The Panel outcome on the base years for FERPs would have particular relevance for the 36 members, including China, that have acceded to the WTO since 1995. These members (except Bulgaria in 1996, now a member of the EU) used data for later years than 1986 to 1988 in their accession processes. While many of them did not report market price support in their base years, the ones that did thus deviated from the AA stipulation of basing FERPs on the years 1986 to 1988 that the United States insists applies to China. An outcome validating the U.S. view could mean that the calculation of current MPS by any of the 36 members having acceded since 1995 would need to use FERPs based on the years 1986 to 1988. Their current use of FERPs based on later years might thus be open to challenge. In addition to China, the accession members that use FERPs from later years include, for example, Chinese Taipei, Viet Nam, Ukraine, the Russian Federation, and Kazakhstan. It is not obvious how some of them might identify the proper trade data for the years 1986 to 1988 to generate the corresponding FERPs. A separate consideration with regard to FERPs is that if the Panel outcome were to legitimize China's and, by implication, other accession members' use of FERPs from later years than 1986 to 1988, these members would continue to enjoy their negotiated larger scope for MPS support than original WTO members, who are required to use their 1986-88 FERPs. For example, India and China, both populous nations and major agricultural producers, would face quite different constraints on their MPS policies. The United States highlights this implication in terms of

fairness considerations in its closing statement to the second substantive meeting of the Panel (USTR, 2018d).

The fact that the negotiations on the domestic support commitments in agriculture for almost all the accession members since 1995 used data for later years than 1986 to 1988 to establish commitment levels could indicate the existence of a common practice in this respect. International trade law allows for agreed “subsequent practice” to be taken into account in interpreting legal text. The United States acknowledges that China has invoked a consistent practice in countries’ accession negotiations of using base periods of the three years preceding the accession, i.e., not the years 1986 to 1988 (USTR, 2018a). However, the United States dismisses this line of thought as not applying to the Annex 3 rules for calculating current support once the country is a member. Those calculations would therefore need to use FERPs based on the years 1986 to 1988. The United States implies that China argues the opposite – that calculation of its MPS must be based on the constituent data and methodology of its accession base period calculations (USTR, 2018c).

The U.S. input to the Panel discusses a timing issue with regard to calculating support levels and launching a legal challenge of them (USTR, 2018a, 2018c, 2018d) . Since the data needed to calculate support levels is only available with some delay, possibly years, after the year when support was provided, a legal challenge can be launched only later. The completion of any dispute proceedings adds more time. The U.S. input does not address, however, the question of how relevant a finding of non-compliance would be when it is finally reached several years after the provision of the excessive support. A Panel finding of non-compliance in the years concerned would usually result in a recommendation that the challenged party be requested to bring its measures into conformity with its commitments, which in compliance proceedings

could concern the design and parameters of its support policies in later years. Otherwise, it is not obvious what would be the value to the complaining party of such a WTO request since it is not possible to reduce the historical support provided. This conundrum seems to have the potential to weaken the effectiveness of the AA rules in curbing excessive support. Depending on the findings and recommendations of the Panel for *China – Domestic Support* and how they are formulated, some clarity may or may not be gained on this question.

The relatively high levels of China's economic MPS during 2012-15 coincide with the possibility that China's WTO MPSs exceeded their limits. This raises the prospect that the WTO rules on domestic support may effectively limit certain economic support. To meet its WTO commitments a member would in these circumstances need to limit the amount of economic support, or at least resort to different policy instruments than applied administered prices. China asserts it modified its price support program for corn in 2016, with the result that the WTO domestic support dispute may not have a bearing on China's future policy for corn. Lowering or eliminating China's administered prices also for wheat or rice could be a policy response to reduce future vulnerability to legal challenges, and China has begun to lower its wheat and rice support prices since 2017. In short, China may itself see merit in an alternative policy direction that relies less on administered prices and MPS even for these two staple food grains. As shown, the dispute Panel ruling may also affect China's scope to provide economic MPS while remaining in compliance with its WTO limit.

It has to be kept in mind that reducing the amount of MPS as measured under WTO rules does not automatically reduce economic support. Another possible implication is therefore that the outcome of *China – Domestic Support*, along with the earlier ruling in the *Korea – Various Measures on Beef*, could legitimize a policy landscape in which WTO members design price

support policies specifically to measure only modest support for pre-announced procurement quantities under the rules of the AA, without this limitation on the announced quantity having much effect on the economic MPS provided. This could occur, for example, if China or other members announced caps on annual procurements that limited eligible production under the WTO rules while leaving room for substantial economic MPS to be provided by these levels of procurement. The scope of implications from this dispute will also depend on the WTO decisions taken since 2013 regarding excessive AMSs generated in the acquisition of foodstuffs for public stockholding in developing countries and any decisions on rules for AMSs and measurement of support in that context that may eventually be given permanent legal effect.

In short, the stakes in the WTO dispute *China – Domestic Support for Agricultural Producers* are substantial. The large number of third parties in the dispute highlights the breadth of the compliance implications that the resolution of this dispute will have. The present interim elaboration on the issues and their implications draws on the public input to the Panel by the United States, analysis of the AA text, the findings in previous related disputes, China's accession documents and notifications of domestic support to the WTO, and economic analysis of China's support levels. Further developments in this case are expected before the end of 2018. Continued public discussion of the issues arising in the case will be needed, due to its broad implications for the interpretation of the MPS provisions of the AA and for countries' choice of policies while meeting their WTO commitments.

## References

- Brink, L. 2011. The WTO disciplines on domestic support. In *WTO Disciplines on Agricultural Support: Seeking a Fair Basis for Trade*, ed. D. Orden, D. Blandford and T. Josling. Cambridge: Cambridge University Press.
- Brink, L. and D. Orden. 2017a. “The United States WTO Complaint on China’s Agricultural Domestic Support: Preliminary Observations.” Paper presented at the International Agricultural Trade Research Consortium (IATRC), Scottsdale, Arizona, December 12, 2016, updated January 26, 2017. Available online: <http://ageconsearch.umn.edu/bitstream/253002/2/Session%20%20-%20Brink%20and%20Orden%20Paper.pdf>
- Brink, L. and D. Orden. 2017b. “China – Domestic Support for Agricultural Producers (DS511).” Presented at the annual meeting of the International Agricultural Trade Research Consortium (IATRC), Washington D.C., December 5.
- Díaz-Bonilla, E. 2017. Food Security Stocks: Economic and Operational Issues. In *Agriculture, Development, and the Global Trading System: 2000 – 2015*, ed. A. Bouët and D. Laborde Debucquet. Washington, D.C.: International Food Policy Research Institute (IFPRI). Available online: <http://www.ifpri.org/publication/agriculture-development-and-global-trading-system-2000%E2%80%932015>
- DTB Associates LLP. 2014. Agricultural subsidies in key developing countries: November 2014 update. Available online: [http://www.uswheat.org/studiesAnalysis/doc/0FFFC46C31AA7FED852580140060275D/\\$File/Dev%20Co%20Subs%20Update%20FINAL%201-28.docx.pdf?OpenElement](http://www.uswheat.org/studiesAnalysis/doc/0FFFC46C31AA7FED852580140060275D/$File/Dev%20Co%20Subs%20Update%20FINAL%201-28.docx.pdf?OpenElement)
- Gale, F. 2017a. “U.S. Challenge of China’s Tariff-rate Quota (TRQ) Administration for Grains.” Presented at the International Agricultural Trade Research Consortium (IATRC), Washington D.C., December 5, 2017. Available on request.
- Gale, F. 2017b. Price Comparison Database Maintained for Economic Research Service, USDA.
- Matthews, A. 2015. Food Security, Developing Countries and Multilateral Trade Rules. Background paper prepared for *The State of Agricultural Commodity Markets 2015–16*. Rome: FAO. Available online: <http://www.fao.org/3/a-i5133e.pdf>
- Orden, D., D. Blandford and T. Josling (eds.). 2011. *WTO Disciplines on Agricultural Support – Seeking a Fair Basis for Trade*. Cambridge, UK: Cambridge University Press.
- Orden, D., L. Brink and M. Hejazi. 2017. The WTO Dispute on China’s Agricultural Support. *Choices*, 2<sup>nd</sup> Quarter. Available online: [http://www.choicesmagazine.org/UserFiles/file/cmsarticle\\_583.pdf](http://www.choicesmagazine.org/UserFiles/file/cmsarticle_583.pdf)
- OECD (Organisation for Economic Co-Operation and Development). 2017. Producer and Consumer Support Estimates Database. Country files: China P.R. Available online: <https://www.oecd.org/tad/agricultural-policies/producerandconsumerssupportestimatesdatabase.htm>

- USDA (United States Department of Agriculture). 2016a. China Grain and Feed Annual – 2016. GAIN Report Number CH16027. Foreign Agricultural Service. 8 April.
- USDA. 2016b. United States Challenges Excessive Chinese Support for Rice, Wheat and Corn. News Releases, Release No. 0195.16, Foreign Agricultural Service, September 13, 2016. Available online: <https://www.fas.usda.gov/newsroom/united-states-challenges-excessive-chinese-support-rice-wheat-and-corn>
- USTR (United States Trade Representative). 2017. *China – Domestic Support for Agricultural Producers (DS511)*, First Written Submission of the United States of America, September 19. Available online: <https://ustr.gov/issue-areas/enforcement/dispute-settlement-proceedings/wto-dispute-settlement/pending-wto-disput29>
- USTR. 2018a. *China – Domestic Support for Agricultural Producers (DS511)*, “Opening Statement of the United States of America at the First Substantive Meeting of the Panel,” January 22. Available online: <https://ustr.gov/sites/default/files/enforcement/DS/US.Pnl.Mtg1.Open.Stmt.%28as.del%29.fin.%28public%29.pdf>
- USTR. 2018b. *China – Domestic Support for Agricultural Producers (DS511)*, “Closing Statement of the United States of America at the First Substantive Meeting of the Panel,” January 24. Available online: <https://ustr.gov/sites/default/files/enforcement/DS/US.Pnl.Mtg1.Close.Stmt.%28as.del%29.fin.%28public%29.pdf>
- USTR. 2018c. *China – Domestic Support for Agricultural Producers (DS511)*, “Opening Statement of the United States of America at the Second Substantive meeting of the Panel,” April 24. Available online: <https://ustr.gov/sites/default/files/enforcement/DS/US.Open.Stmt.Pnl.Mtg2.pdf>
- USTR. 2018d. *China – Domestic Support for Agricultural Producers (DS511)*, “Closing Statement of the United States of America at the Second Substantive meeting of the Panel,” April 25. Available online: <https://ustr.gov/sites/default/files/enforcement/DS/US.Clos.Stmt.Pnl.Mtg2.pdf>
- USTR. 2018e. *China – Tariff Rate Quotas for Certain Agricultural Products (DS517)*, First Written Submission of the United States of America, April 3, 2018. Available online: <https://ustr.gov/issue-areas/enforcement/dispute-settlement-proceedings/wto-dispute-settlement/pending-wto-dispute-36>
- WTO (World Trade Organization). 1999. Agreement on Agriculture. In *The Results of the Uruguay Round of Multilateral Trade Negotiations – the Legal Texts*. World Trade Organization and Cambridge University Press.
- WTO. 2000a. *Korea – Measures affecting imports of fresh, chilled and frozen beef*. Report of the Panel. WT/DS161/R and WT/DS169/R. 31 July.
- WTO. 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/AB/R. 11 December.

- WTO. 2001a. Communication from China. Working Party on the Accession of China, WT/ACC/CHN/38/Rev.3. 19 July. Available online: [https://docs.wto.org/dol2fe/Pages/FE\\_Search/FE\\_S\\_S005.aspx](https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S005.aspx)
- WTO. 2001b. Report of the Working Party on the Accession of China. WT/ACC/CHN/49. 1 October.
- WTO. 2009. *United States – Subsidies on Upland Cotton*. DS267, Dispute settlement website. Available online: [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds267\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds267_e.htm)
- WTO. 2013. Public stockholding for food security purposes. WT/MIN(13)/38; WT/L/913. Ninth Session, Ministerial Conference, Bali, 3-6 December. Available online: [https://www.wto.org/english/thewto\\_e/minist\\_e/mc9\\_e/desci38\\_e.htm](https://www.wto.org/english/thewto_e/minist_e/mc9_e/desci38_e.htm)
- WTO. 2014. Public stockholding for food security purposes. WT/L/939. General Council, 28 November. Available online: [https://www.wto.org/english/thewto\\_e/minist\\_e/mc9\\_e/nov14stockholding\\_e.htm](https://www.wto.org/english/thewto_e/minist_e/mc9_e/nov14stockholding_e.htm)
- WTO. 2015. Notification. China. Committee on Agriculture, G/AG/N/CHN/28. 6 May. Available online: [https://docs.wto.org/dol2fe/Pages/FE\\_Search/FE\\_S\\_S005.aspx](https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S005.aspx)
- WTO. 2016a. *China – Anti-dumping and countervailing duty measures on broiler products from the United States*. Recourse to Article 21.5 of the DSU by the United States. Request for the establishment of a Panel. WT/DS427/11. 2 June. Available online: [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds427\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds427_e.htm)
- WTO. 2016b. *China – Domestic Support for Agricultural Producers*. Request for Consultations by the United States. WT/DS511/1; G/AG/GEN/135; G/L/1150. 20 September. Available online: [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds511\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds511_e.htm)
- WTO. 2016c. *China – Tariff rate quotas for certain agricultural products*. Request for consultations by the United States. WT/DS517/1; G/L/1171. 21 December.
- WTO. 2018a. *China – Domestic Support for Agricultural Producers*. DS511, Dispute settlement website. Available online: [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds511\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds511_e.htm)
- WTO. 2018b. *China – Anti-dumping and countervailing duty measures on broiler products from the United States*. Recourse to Article 21.5 of the DSU by the United States. Report of the Panel. WT/DS427/RW. 18 January. Available online: [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds427\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds427_e.htm)

**Table 1. Measurement of China's WTO MPS: An Initial Benchmark**

$\text{WTO MPS}_t = [\text{Applied Admin Price}_t - \text{FERP}_{\text{fixed years}}] \times [\text{Eligible Production}_t]$ (expressed as percent of China's total Value of Production of the crop)				
	Year			
	2012	2013	2014	2015
<b>Alternative 1: FERP: 1996-98; Eligible Production: China's total production</b>				
<b>Wheat</b>	<b>16</b>	<b>23</b>	<b>27</b>	<b>28</b>
<b>Rice</b>				
Unmilled AAPs and FERPs	35	43	45	46
Unmilled AAPs; milled FERPs	5	4	6	6
<b>Corn</b>	<b>41</b>	<b>48</b>	<b>47</b>	<b>42</b>

Source: Authors' calculations.

**Table 2. China's 2015 WTO MPS Estimated Under Initial Benchmark Assumptions**

Crop	Administered price	FERP 1996-98	Price gap	Production (national)	MPS	
	RMB/tonne			million tonnes	billion RMB	billion US dollars
Wheat	2,360	1,698	662	130.2	86.2	13.9
Corn	2,000	1,199	801	224.6	179.9	29.1
Rice (unmilled AAPs and FERPs)	2,853	1,595	1,258	208.1	261.8	42.3

Source: Authors' calculations.

**Table 3. Alternative Measurements of China's WTO MPS: Adjusting Eligible Production and FERP Base Period**

$\text{WTO MPS}_t = [\text{Applied Admin Price}_t - \text{FERP}_{\text{fixed years}}] \times [\text{Eligible Production}_t]$ (expressed as percent of China's total Value of Production of the crop)				
	Year			
	2012	2013	2014	2015
<b>Alternative 2: FERP: 1996-98; Eligible Production: Major provinces</b>				
Wheat	12	18	22	22
Rice	27	34	35	36
Corn	17	21	21	19
<b>Alternative 3: FERP: 1986-88; Eligible Production: Major provinces (matches U.S. First Submission)</b>				
Wheat	58	61	63	65
Rice				
Weighted Average	59	66	67	68
Indica	58	66	67	68
Japonica	61	67	67	69
Corn	33	38	37	39

Source: Authors' calculations and USTR 2017.

**Table 4. Measurement of China's Economic MPS**

$\text{Economic MPS}_t = [\text{Domestic Price}_t - \text{Border Price}_t] \times [\text{Total Production}_t]$ (expressed as percent of China's total Value of Production of the crop)				
	Year			
	2012	2013	2014	2015
Wheat	30	29	34	36
Rice	29	32	32	36
Corn	14	23	26	32

Source: OECD, 2017.

**Table 5. AAP Reductions Needed to Make WTO MPS = 8.5% of China's Total Value of Production of the crop**

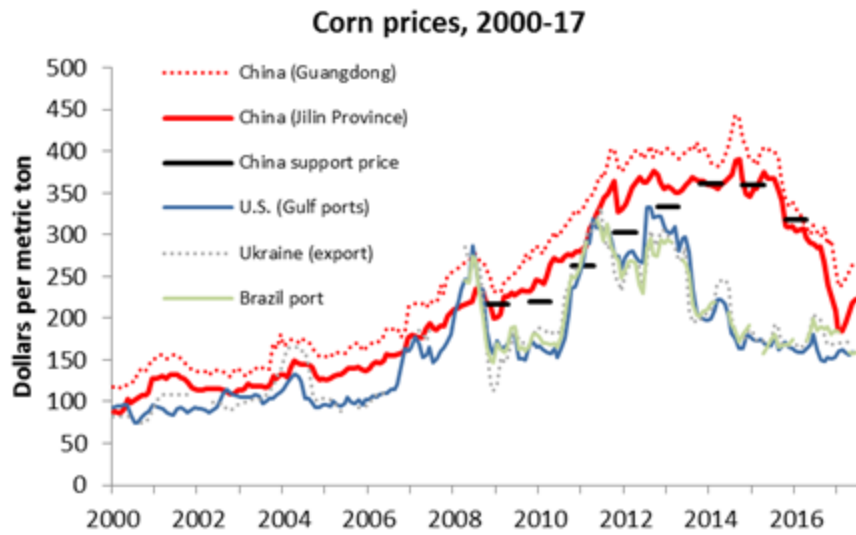
Percent reduction required				
	Year			
	2012	2013	2014	2015
<b>Alternative 2: FERP: 1996-98; Eligible Production: Major provinces</b>				
<b>Wheat</b>				
VoP constant	-5	-13	-17	-17
Proportionate VoP decline	-6	-15	-19	-19
<b>Rice</b>				
VoP constant	-26	-32	-33	-34
Proportionate VoP decline	-30	-36	-37	-38
<b>Alternative 3: FERP: 1986-88; Eligible Production: Major provinces (matches U.S. First Submission; calculated here only for holding VoP constant)</b>				
Wheat	-67	-69	-71	-71
Rice	-69	-72	-72	-72

Source: Authors' calculations.

**Table 6. Economic MPS when AAPs Are Reduced to Make WTO MPS = 8.5% of China's Total Value of Production of the crop**

Reduced AAP would be above (+) or below (-) the OECD contemporaneous Border Price by these percentages				
	Year			
	2012	2013	2014	2015
<b>Alternative 2: FERP: 1996-98; Eligible Production: Major provinces</b>				
<b>Wheat</b>				
VoP constant	24	13	19	27
Proportionate VoP decline	23	11	16	23
<b>Rice</b>				
VoP constant	9	15	12	21
Proportionate VoP decline	4	8	5	13
<b>Alternative 3: FERP: 1986-88; Eligible Production: Major provinces (matches U.S. First Submission; calculated here only for holding VoP constant)</b>				
Wheat	-57	-60	-58	-56
Rice	-54	-52	-53	-50

Source: Authors' calculations.



**Figure 1. Comparison of Corn Prices, China and International**

Source: Gale, 2017b.