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**Measuring Price Support Under WTO Domestic Support Rules:
How Much Advantage from Being an Article XII Member?**

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Selected presentation for the International Agricultural Trade Research Consortium's (IATRC's) 2020 Annual Meeting: Economic Implications of COVID-19, December 14-15, 2020, Virtual platform.

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A gravel path winds through a lush green forest, leading towards a bright opening in the trees. The path is composed of light-colored gravel and is flanked by dense green foliage and trees. The background is a soft-focus view of a forest with sunlight filtering through the leaves.

Measuring price support under WTO domestic support rules: How much advantage from being an Article XII member?

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International Agricultural Trade Research Consortium (IATRC)
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Domestic support and the WTO Agreement on Agriculture (AoA)

- **MPS (market price support) is part of a product's AMS**

AMS: Aggregate Measurement of Support

 - AMS support is subject to a limit
 - Size of current MPS matters for WTO compliance
 - MPS calculated with AoA method differs from economic market price support
- **MPS = (price gap) x (quantity of eligible production)**
 - Price gap = current administered price – reference price
 - Current administered price here is member's latest administered price notified to the WTO
 - Price gap = “admin price” – “ref price”
- **Ref price is fixed from particular base years**
 - “Original members” from Uruguay Round
 - All use ref price from 1986-88 for any MPS
 - “Art. XII members” acceded to WTO after 1995 (e.g., China in 2001)
 - Article XII, *Accession*, Marrakesh Agreement Establishing the World Trade Organization
 - All except one use ref price from later years than 1986-88 for any MPS

Extra room for MPS for Art. XII members?

- **WTO dispute DS511: USA against China over 2012-15 MPS**
 - 1996-98 were base years in China's WTO accession documents, not 1986-88
 - USA observed: using 1996-98 understates current price gaps and MPS
 - Therefore easier to stay within limit, which gives China extra room for MPS
- **Panel said: use same ref price as in accession docs: 1996-98**
 - Otherwise measured support is lower because of change in method (ref price)
 - Not because of change in policy
 - Panel's reasoning
 - Relies on legal term "context"
 - Applies only to China dispute
- **If U.S. reasoning were extended to all Art. XII members**
 - For which members and products would MPS be understated? By how much?
 - How applicable to additional products among Art. XII members?

36 Art. XII members; only few are large agr traders

- **12 Art. XII members calculated MPS in their base years**
 - 64 MPSs for 31 products using different base years for ref price
 - Bulgaria and Lithuania are now in EU, therefore excluded from this analysis
- **Leaves 10 members with 41 MPS calculations in their base years**
 - Base years between 1990-92 and 2010-12
 - 23 different products; between 1 and 12 MPS products per member
 - All MPSs were for crops (except Kazakhstan: crops and 9 livestock products)
- **Latest annual notification: few Art. XII member report any MPS**
 - Kazakhstan has no annual notification yet
- **Leaves 9 Art. XII members with MPS in latest annual notification**
 - Latest notified year ranges from 2007 (!) to 2018
 - 7 out of 9 members reduced number of MPS products or eliminated MPS
 - Leaves 15 MPS calculations in latest annual notification

Table 1. MPS products (41) in base years of Art. XII members

Accession year	2000	2001	2002	2003	2005	2007	2008	2012	2012	2015
Art. XII member	Jordan	China	Chinese Taipei	North Macedonia	Saudi Arabia	Viet Nam	Ukraine	Lao	Russia	Kazakhstan
Base years	1994-96	1996-98	1990-92	1998-2000	2001-03	1999-2001	2004-06	2001-03	2006-08	2010-12
Latest notified year	2014	2016	2016	2007	2017	2013	2012	2016	2018	No annual notification
	Wheat	Wheat	Wheat	Wheat	Wheat				Wheat	Wheat
									Rye	
		Corn							Corn	
	Barley				Barley				Barley	Barley
		Japonica rice	Japonica rice							
		Indica rice	Rice: 3 kinds			Rice		Rice		
			Sugar				Sugar			
		Cotton				Cotton				Cotton
			Tobacco	Tobacco						
	Lentils									
	Chickpeas									
			Wine grapes							
										Bovine meat
										Pork
										Poultry
										Sheep and goats
										Horses
										Dry milk
										Fatless cheese
										Butter
										Sheep wool

Note: Some product names are shown as less specific than in member's documentation. For Chinese Taipei, 3 kinds of rice comprise Indica rice, Indica rice (long) and Glutinous rice. Russia calculated MPS only for 2008, based on 2006-08 border prices.

Table 2. MPS products in base years of Art. XII members and eliminated (red) in latest annual notification

Accession year	2000	2001	2002	2003	2005	2007	2008	2012	2012	2015
Art. XII member	Jordan	China	Chinese Taipei	North Macedonia	Saudi Arabia	Viet Nam	Ukraine	Lao	Russia	Kazakhstan
Base years	1994-96	1996-98	1990-92	1998-2000	2001-03	1999-2001	2004-06	2001-03	2006-08	2010-12
Latest notified year	2014	2016	2016	2007	2017	2013	2012	2016	2018	No annual notification
	Wheat	Wheat	Wheat	Wheat	Wheat				Wheat	Wheat
									Rye	
		Corn							Corn	
	Barley				Barley				Barley	Barley
		Japonica rice	Japonica rice							
		Indica rice	Rice: 3 kinds			Rice		Rice		
			Sugar				Sugar			
		Cotton				Cotton				Cotton
			Tobacco	Tobacco						
	Lentils									
	Chickpeas									
			Wine grapes							
										Bovine meat
										Pork
										Poultry
										Sheep and goats
										Horses
										Dry milk
										Fatless cheese
										Butter
										Sheep wool

Note: Some product names are shown as less specific than in member's documentation. For Chinese Taipei, 3 kinds of rice comprise Indica rice, Indica rice (long) and Glutinous rice. Russia calculated MPS only for 2008, based on 2006-08 border prices. Products in red are those for which MPS is not reported in latest annual notification.

Interpret U.S. reasoning

- **Notified price gap understates “correct” price gap**
 - Understatement hides some MPS => administered price can be set higher
 - Size of understatement of MPS ~ difference in price gaps
 - For a given quantity
- **Member-specific prices and differences**
 - admin price = member’s latest notified administered price
 - E.g., in 2016
 - AGST ref price = member’s reference price in its base years in accession docs
 - E.g., in 2006-08
 - Members use border prices differently to determine reference prices: margins, qualities, etc.
 - **86-88 ref price: constructed by indexing backwards from AGST ref price**
 - Indicator price mainly from World Bank’s Pink Sheet
 - Assume indicator price and member’s reference price evolved in parallel from 1986-88
 - **Difference in price gap = Difference in ref prices =**
 - **= AGST ref price – 86-88 ref price**

Normalize expression of understatement of price gap

- Calculated differences in price gaps are member-specific
 - Various currencies
 - Various years
- Express understatement of price gap as % of two alternative price gaps
 - Price gap using 86-88 ref price (Table 3)
 - Price gap using AGST ref price (Table 4)

Table 3 (Difference in ref prices) / (admin price - 86-88 ref price)	Understatement of price gap under U.S. reasoning, expressed as % of the price gap that the member would have calculated under U.S. reasoning
Table 4 (Difference in ref prices) / (admin price - AGST ref price)	Understatement of price gap under U.S. reasoning, expressed as % of the price gap that the member calculated in its latest notification

86-88 ref price

Table 3. Understatement of price gap as % of price gap between latest notified admin price and 86-88 ref price

Accession year	2000	2001	2002	2003	2005	2007	2008	2012	2012	2015
Art. XII member	Jordan	China	Chinese Taipei	North Macedonia	Saudi Arabia	Viet Nam	Ukraine	Lao	Russia	Kazakhstan
Base years	1994-96	1996-98	1990-92	1998-2000	2001-03	1999-2001	2004-06	2001-03	2006-08	2010-12
Latest notified year	2014	2016	2016	2007	2017	2013	2012	2016	2018	No annual notification
Wheat	30%	61%			8%					84%
Corn		51%								
Barley	23%									159%
Japonica rice		66%	-1%					109%		
Indica rice		51%	0%							
Sugar			-12%				-2%			
Cotton										51%
Tobacco			3%							
Bovine meat										55%
Poultry										46%
Dry milk										71%

Table 3

- Negative percentages: Japonica rice and sugar (Chinese Taipei) and sugar (Ukraine). World prices for rice and sugar were lower in base years than in 1986-88. Using AGST ref price from base years instead of 86-88 ref price overstates rather than understates the price gap.
- Percentage larger than 100%: barley (Kazakhstan). The 2010-12 AGST ref price was more than three times higher than the very low 86-88 ref price. The 2012 admin price was set significantly below 2010-12 AGST ref price. The large difference in ref prices is divided by a relatively small difference between the 2012 admin price and the 86-88 ref price.
- Percentage larger than 100%: Japonica rice (Lao). The 2001-03 AGST ref price was significantly below the 86-88 ref price, yielding a negative difference in ref prices. The 2016 admin price was set only slightly higher than the 2001-03 AGST ref price. The significant negative difference in ref prices is divided by a relatively small negative difference between the 2016 admin price and the 86-88 ref price.

Note: Some product names are shown as less specific than in member’s documentation. For Kazakhstan: calculation uses admin price for 2012 from accession documentation; no calculations made for Pork, Sheep and goats, Horses, Fatless cheese, Butter and Sheep wool.

Table 4. Understatement of price gap as % of price gap between latest notified admin price and

Accession year	2000	2001	2002	2003	2005	2007	2008	2012	2012	2015
Art. XII member	Jordan	China	Chinese Taipei	North Macedonia	Saudi Arabia	Viet Nam	Ukraine	Lao	Russia	Kazakhstan
Base years	1994-96	1996-98	1990-92	1998-2000	2001-03	1999-2001	2004-06	2001-03	2006-08	2010-12
Latest notified year	2014	2016	2016	2007	2017	2013	2012	2016	2018	No annual notification
Wheat	43%	158%			9%					517%
Corn		104%								
Barley	30%									-268%
Japonica rice		198%	-1%					-1223%		
Indica rice		104%	0%							
Sugar			-11%				-2%			
Cotton										103%
Tobacco			3%							
Bovine meat										120%
Poultry										87%
Dry milk										251%

Table 4

- Negative percentages: Japonica rice and sugar (Chinese Taipei) and sugar (Ukraine). World prices for rice and sugar were lower in base years than in 1986-88. Using AGST ref price from base years instead of 86-88 ref price overstates rather than understates the price gap.
- Negative percentage above 1000%: Japonica rice (Lao). World price for rice was lower in base years than in 1986-88. Using AGST ref price instead of 86-88 ref price overstates rather than understates the price gap. The 2016 admin price was set only slightly above the AGST ref price. The significant negative difference in ref prices is divided by a very small positive gap between the 2016 admin price and the AGST ref price.
- Negative percentage: barley (Kazakhstan). The difference in ref prices was large: AGST ref price was 3.5 times the 86-88 ref price. The 2012 admin price was set below the AGST ref price, generating negative price gap. This combines to yield a large negative ratio.
- Percentage larger than 100%: wheat, corn, Japonica rice, Indica rice (China). AGST ref price was about three times the 86-88 ref price. The 2016 admin prices were set at roughly 1.5 times the 96-98 AGST ref prices. The large differences in ref prices are divided by relatively small gaps between the 2016 admin price and the 96-98 ref price. Similar explanation for several Kazakhstan products (2012 admin price).

Note: Some product names are shown as less specific than in member’s documentation. For Kazakhstan: calculation uses admin price for 2012 from accession documentation; no calculations made for Pork, Sheep and goats, Horses, Fatless cheese, Butter and Sheep wool.

Understatement of an MPS is not uniformly large

- **Few observations of recent MPS among few Art. XII members**
 - Only 15 MPS calculations by 6 members in latest annual notification
 - Plus 12 MPS calculations for 2010-12 in Kazakhstan accession documentation
- **Understatement under U.S. reasoning varies among members**
 - 9% (wheat; Saudi Arabia) and 30% and 43% (barley, wheat; Jordan) of latest notified price gaps
 - Slightly negative for rice and sugar (Chinese Taipei) and sugar (Ukraine)
 - International rice and sugar prices were lower in these respective base years than in 86-88
 - Between 104% and 198% of China's notified price gaps for wheat, rice, corn
 - If China's latest notified price gaps were calculated by using 86-88 ref prices instead of 96-98 ref prices, they would be 2-3 times the size of the latest notified price gaps
- **Calculations support U.S. reasoning on understatement w.r.t. China**
 - But less so with respect to other members
 - Evidence is getting still thinner as members report MPS for fewer products

Introduce admin price for a product that did not have AGST ref price in member's base years?

- **Panel's "context" hinges on AGST ref price shown in accession docs**
 - Consistency between current MPS and accession MPS requires same ref price
 - 41 MPS calculations by 10 members
- **No AGST ref price means methodological consistency is impossible**
 - Any additional products of 10 members + any products of 24 other members
- **What ref price to use for such products?**
 - Ref price from same base years as for domestic support other than MPS?
 - Stretches consistency idea; no AGST ref price exists; a substitute price is not necessarily valid
 - Ref price from 86-88 as stipulated in AoA?
 - Could work for most Art. XII members
 - But measurement issues for 8 former Soviet and 2 former Yugoslav republics
 - Border prices at which border? Currency conversion at which exchange rate?
- **No assurance of extra room by using ref price from later than 86-88**
 - Disincentive for Art. XII members to introduce admin price for more products

Summary and conclusions

- **Only 1/3 of Art. XII members calculated MPS in their WTO accession**
 - Most of these now report MPS for fewer products or no products
- **Understatement of current MPS and extra room for MPS?**
 - U.S. reasoning seems valid regarding China but less so for other members
 - In a few cases the understatement would be negative: border price declined
- **Consistency in measuring MPS was crucial in panel reasoning**
 - Measure current MPS by using same AGST ref price as in accession MPS
 - Deviating from 86-88 ref price hinges on “context” in interpreting AoA
 - Different context may imply 86-88 ref price ⇒ new MPS products less likely
- **Significance of any understatement declines over time**
 - Nominal admin prices tend to increase over time
 - Difference between the two ref prices is constant within increasing price gap
 - This constant difference is a shrinking share of price gap

Thank you!

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Selected references

- Ahn, D. and D. Orden. 2021 (forthcoming). China – Domestic support for agricultural producers: One policy, multiple parameters imply modest discipline. *World Trade Review*.
- Brink, L. and D. Orden. 2020. Taking stock and looking forward on domestic support under the WTO Agreement on Agriculture. Commissioned Paper 23, International Agricultural Trade Research Consortium (IATRC). April. <https://iatrc.umn.edu/taking-stock-and-looking-forward-on-domestic-support-under-the-wto-agreement-on-agriculture/>
- USTR (United States Trade Representative). 2018. Integrated executive summary of the United States of America. China – Domestic support for agricultural producers (DS511). 12 June. <https://ustr.gov/index.php/issue-areas/enforcement/dispute-settlement-proceedings/wto-dispute-settlement/pending-wto-disput29>
- WTO (World Trade Organization). 2019. China – Domestic support for agricultural producers. Report of the Panel. WT/DS511/R. 28 February.

Commodity price indices, 1986-88 = 100

Source: World Bank Pink Sheet

