Rich Country Tariffs and Subsidies: Let's Do the Numbers

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CGD Notes

The Doha Round seems destined to fail unless rich countries cut the trade barriers that hurt developing countries most: those in agriculture.

The modern system of international trade rules was built up through a series of eight grand negotiating rounds over more than fifty years. The club of nations involved has steadily grown from a small core of rich countries, such as the United States and France, to nearly all nations on earth. The ninth negotiating round, named the "Doha" Round for the city in Qatar where it was launched, has proven to be unique because many developing countries are flexing their political muscle as never before.

As a result, the Doha Round seems destined to fail unless rich countries cut the trade barriers that hurt developing countries most: those in agriculture. Rich countries subsidize their own farmers and impose high tariffs (taxes) on imports from other countries. Curtailing those policies would expand economic opportunities for rising agricultural powerhouses such as Brazil. And it could lift incomes for the poorest of the poor in developing countries, 70 percent of whom live in the countryside.

Tariffs and subsidies are complex and hard even for experts to measure. This note brings specificity to the discussion by distilling bottom-line results from the method used in the Center for Global Development's Commitment to Development Index to grade rich countries' barriers against developing country exports.

Tariffs

Customs authorities levy duties on thousands of distinct products and vary the levies depending on what country the goods are coming from. Subsidy programs are also intricate. A big challenge in averaging together all these duties and payments is deciding which are most important and deserve the most weight. The CDI weights tariffs based on exporter's production.[1] So Vietnam's ability to export rice to Japan—and its loss from not being able to do so—is estimated based on the value of its actual rice production, whether for consumption at home or for export. Agricultural subsidies are also factored in, by estimating, for example, what additional tariff the United States would have to impose on wheat from developing countries in order to do the same harm as its current payments to American wheat farmers.

Table 1 shows overall *tariff* levels in individual rich countries with respect to the developing world. The data are for 2001, the most recent available, but they are still meaningful because tariffs change slowly. These numbers answer the question: if a country imposed a single, across-the-board duty on all imports from developing countries, how high would it have to be to do the same harm to developing countries as the actual, complex set of tariffs in place?

Table 1. Rich Country Protection, 2001

Country	Tariffs	Tariffs + just-abolished textile & apparel quotas
Australia	4.4%	4.4%
Canada	3.9%	4.8%
EU-15	7.4%	9.1%
Japan	26.9%	26.9%
New Zealand	2.6%	2.6%
Norway	16.8%	16.8%
Switzerland	11.0%	11.0%
United States	2.8%	4.1%

Average tariff, ad valorem *% (like sales tax or VAT)*

* This Note is based on CGD Working Paper 66, "Production-weighted Estimates of Aggregate Protection in Rich Countries Toward Developing Countries." (Washington: Center for Global Development, 2005), which is the basis for the trade component of the Commitment to Development Index (www.cgdev.org/cdi).

The figure that rich countries spend $300 billion/year subsidizing agriculture is widely cited and widely misunderstood. Most of the $300 billion, what the OECD calls its Total Support Estimate, is not government payouts, but money farmers make thanks to *tariffs*, which stifle foreign competition and let farmers at home charge more.

Table 2. Tariff Barriers Highest against Poorest Countries

Country	Low income	Lower middle income	Middle income	Upper middle income	Upper income
Australia	4.0%	4.2%	4.4%	5.1%	3.8%
Canada	3.1%	3.9%	4.2%	3.9%	3.4%
EU-15	6.5%	7.8%	6.0%	7.1%	3.9%
Japan	40.1%	25.0%	13.9%	25.5%	14.8%
New Zealand	5.0%	2.5%	2.2%	2.9%	1.9%
Norway	18.8%	16.4%	18.8%	5.6%	8.6%
Switzerland	11.9%	9.9%	13.7%	6.4%	9.4%
United States	2.3%	3.1%	2.1%	2.8%	1.9%

Average tariff, ad valorem *% (like sales tax or VAT)*

For New Zealand, the answer is a mere 2.6%: its trade duties are like a 2.6% sales tax or VAT on developing country exports. The United States is just slightly higher, while Norway, Switzerland, and Japan are at the high end. These figures exclude subsidies. The 15 western European members of the European Union are treated as a group (leaving out the 10 eastern nations that recently joined) because they have a common trade policy. "Developing countries" means all countries other than the rich ones rated here.

The second column of Table 1 shows what the numbers would have been in 2004, before Canada, the EU, and the United States abolished quantitative caps on fabric and clothing imports, pursuant to the last WTO round.

Table 2 asks which developing countries face the highest trade barriers. Despite the "preferences" that rich countries grant the poorest ones (e.g., low tariffs under the U.S. Africa Growth and Opportunity Act or the EU Everything But Arms initiative), the poorest countries actually face the *highest* barriers. Why? They depend the most on agriculture.

Subsidies

The figure that rich countries spend $300 billion a year subsidizing agriculture is widely cited and widely misunderstood. Most of the $300 billion, what the OECD calls its Total Support Estimate (TSE), is not government payouts, but money farmers make thanks to *tariffs*, which stifle foreign competition and let farmers at home charge more. The Commitment to Development Index defines subsidies in a way more in tune with most people's intuition, as government payments that stimulate production.

Table 3 shows that the TSE averaged $282.9 billion a year in 2001–03, but total trade-distorting payments were only $77.5 billion a year. Export

Table 3. The Amount Spent on Rich-Country Subsidies is Widely Misunderstood (2001–03 averages, billions $)

	Australia	Canada	EU-15	Japan	N. Zealand	Norway	Switzerland	United States	Total
OECD Total Support Estimate	1.3	6.3	114.7	56.9	0.2	2.9	5.5	95.1	282.9
Export subsidies	0	0	2.7	0	0	–0.1	0	0	2.7
Other trade-distorting government payments	0.7	1.4	43.7	4.4	0	1.3	1.6	21.8	74.9
Total trade-distorting government payments	0.7	1.4	46.4	4.4	0	1.2	1.5	21.8	77.5

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All rich countries spend more on their own cows, per head, than on aid per poor person.

Table 4. More Spent on Sheep and Cows Than on Aid

Country	Subsidies per Cow	Chicken	Pig	Sheep	Aid per person
EU 15	$200	$0.36	$11	$35	$11.03
Australia	$18	$0.41	$7	$1	$0.44
Canada	$92	$0.46	$17	$0	$0.71
Japan	$161	$0.23	$5	$0	$2.20
New Zealand	$3	$0.47	$0	$0	$0.06
Norway	$965	$0.85	$52	$91	$0.75
Switzerland	$986	$2.63	$140	$16	$0.46
United States	$41	$0.43	$6	$2	$5.26
Average	$107	$0.40	$10	$16	$14.50

subsidies account for just $2.7 billion of this sum, which suggests they have received attention out of proportion to their importance.

But $77.5 billion is still not small change. Table 4 shows that all rich countries spend more on their own cows, per head, than on aid per poor person (defined as one of the estimated 2.7 billion people living on $2/day or less). Switzerland even spends more on its chickens. Most spend more on their sheep.

Tariffs and subsidies combined

Table 5 reports estimates of the "tariff equivalents" of agricultural subsidies—hypothetical tariffs that would affect developing countries as much as actual subsidies.[2] Having expressed actual tariffs and subsidies in the same terms (as ad valorem equivalents), it combines them to show which rich countries impose the lowest or highest agricultural barriers. It then does the same for all goods; the latter numbers are lower because barriers in most other industries are lower than they are in agriculture.

The table shows that except in New Zealand, United States and Australia, agricultural tariffs

Table 5. Agicultural Tariffs Dominate Subsidies as Barriers to Trade

Country	Tariffs, 2001	Subsidies, 2001–03	Tariffs and subsidies combined
Agriculture			
Australia	0.8%	6.4%	7.3%
Canada	10.8%	2.8%	14.0%
EU-15	34.4%	7.7%	45.7%
Japan	158.1%	3.9%	179.1%
New Zealand	0.4%	1.1%	1.5%
Norway	89.4%	3.9%	99.8%
Switzerland	50.9%	4.5%	60.1%
United States	5.0%	10.7%	16.4%
All goods			
Australia	4.4%	1.1%	5.4%
Canada	3.9%	0.7%	4.7%
EU-15	7.5%	1.4%	9.4%
Japan	26.9%	2.5%	32.6%
New Zealand	2.6%	0.2%	2.7%
Norway	16.8%	0.6%	18.3%
Switzerland	11.0%	0.5%	12.1%
United States	2.8%	1.4%	4.3%

Average tariff equivalent, ad valorem *% (like sales tax or VAT)*

dominate subsidies as barriers. It also demonstrates that agriculture drives the overall results. Japan, Norway, and Switzerland have the highest agricultural barriers and this shows up in their high overall results.

Table 6 details agriculture barriers against developing countries, showing tariffs, subsidies, and both together, by crop. By far the highest barriers are Japan's on rice, equivalent to a sales tax or VAT of more than 1,000%—enough to raise the price of rice by a factor of 11 there!

Conclusion

With respect to developing countries, New Zealand is least protective, followed by the United States, Canada, and Australia. EU barriers are about three times as high as those of the United States in agriculture, and twice as high overall. Norway and Switzerland use their freedom from EU constraints to erect even higher barriers, and Japan's well-known barriers against rice rank it as most protective. Overall, agricultural tariffs—not the subsidies so frequently cited in the media—are the largest barrier to exports from developing countries. They drive the results here and in the trade component of the Commitment to Development Index.

Footnotes

[1] David Roodman, "Production-weighted Estimates of Aggregate Protection in Rich Countries toward Developing Countries," Working Paper 66, Center for Global Development, August 2005; idem, "An Index of Donor Performance," Center for Global Development, Washington, DC: August 2005.

[2] William R. Cline developes the methodology for estimating tariff equivalents of subsidies in *Trade Policy and Global Poverty* (Washington, DC: Center for Global Development and Institute for International Economics, 2004), and refined in Roodman, "Production-weighted Estimates," op. cit.

Table 6. Agricultural Barriers against Developing Countries by Crop

Importer	Rice	Wheat	Corn & other grains	Sugar	Vegetables, fruit, nuts	Beef & sheep-meat	Pork, poultry, other meat	Dairy, eggs	Oil seeds	Wool
Tariffs, 2001										
Australia	0.0%	0.0%	0.0%	10.0%	0.8%	0.0%	0.7%	0.9%	0.8%	0.2%
Canada	0.0%	2.6%	0.3%	4.5%	1.8%	8.4%	39.5%	97.7%	0.0%	0.0%
EU-15	110.8%	0.7%	17.2%	90.4%	19.1%	75.8%	15.2%	38.0%	0.0%	0.0%
Japan	886.7%	214.4%	53.2%	227.0%	21.4%	38.2%	36.5%	82.4%	1.6%	1.2%
New Zealand	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	2.7%	1.3%	0.0%	0.0%
Norway	29.1%	208.4%	114.8%	56.6%	19.9%	222.7%	224.3%	134.0%	48.6%	0.0%
Switzerland	6.6%	131.6%	77.7%	100.9%	30.5%	168.2%	111.3%	106.8%	21.2%	0.0%
U.S.	5.2%	3.2%	0.9%	24.2%	5.0%	2.6%	3.3%	16.7%	8.7%	1.6%
Tariff equivalents of subsidies, 2001–03										
Australia	6.8%	16.1%	18.5%	19.5%	0.0%	20.8%	5.6%	17.4%	5.8%	20.1%
Canada	0.0%	19.1%	11.7%	0.0%	–1.3%	9.3%	4.8%	2.7%	13.2%	0.0%
EU-15	12.8%	20.4%	20.7%	4.6%	2.4%	18.7%	10.3%	13.7%	14.3%	0.0%
Japan	13.8%	4.1%	3.8%	2.4%	1.6%	3.5%	0.6%	6.9%	16.1%	0.0%
New Zealand	0.0%	0.0%	0.0%	0.0%	0.0%	5.8%	5.3%	5.7%	0.0%	0.0%
Norway	0.0%	9.5%	19.5%	0.0%	0.0%	19.3%	2.4%	20.7%	0.0%	21.5%
Switzerland	0.0%	11.3%	12.2%	6.3%	0.0%	13.7%	6.2%	20.3%	16.4%	0.0%
U.S.	20.5%	21.0%	20.1%	4.8%	13.0%	7.2%	9.0%	11.9%	20.5%	4.8%
Tariffs & subsidies combined										
Australia	6.8%	16.1%	18.5%	31.5%	0.8%	20.8%	6.4%	18.5%	6.6%	20.3%
Canada	0.0%	22.1%	12.0%	4.5%	0.5%	18.5%	46.1%	103.1%	13.2%	0.0%
EU-15	137.8%	21.2%	41.5%	99.2%	22.0%	108.6%	27.2%	57.0%	14.3%	0.0%
Japan	1023.1%	227.3%	58.9%	234.8%	23.4%	43.1%	37.3%	95.0%	18.0%	1.2%
New Zealand	0.0%	0.0%	0.0%	0.0%	0.1%	5.9%	8.2%	7.1%	0.0%	0.0%
Norway	29.1%	237.8%	156.7%	56.6%	19.9%	284.9%	232.2%	182.3%	48.6%	21.5%
Switzerland	6.6%	157.7%	99.5%	113.5%	30.5%	204.9%	124.4%	148.8%	41.0%	0.0%
U.S.	26.8%	24.9%	21.1%	30.2%	18.6%	10.0%	12.7%	30.6%	31.0%	6.5%

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