

16.E

Agricultural Export Subsidies

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16.E.1 Source of Export Subsidies Data

The treatment of agricultural export subsidies in the GTAP 6 Data Base is the same as in the GTAP 5 Data Base. Export taxes/subsidies for agricultural commodities are based on country submissions to the WTO of export subsidy expenditures. Under the Uruguay Round Agreement on Agriculture, twenty-five members of the WTO committed to reduce their export subsidies. Each year, starting in 1995, WTO members are required to notify the WTO Secretariat about the volume of and expenditures on export subsidies, by commodity, as specified in their country schedules.

At the time that the export subsidies for GTAP 6 were calculated, 2000/2001 was the latest year with notification data available for all subsidizing countries. Country notifications to the WTO Secretariat continue to be the best and most comprehensive data source for agricultural export subsidies. In a few cases where country submission do not square exactly with actual subsidy offerings (such as EU sugar subsidies), we supplemented WTO notifications with additional data sources (see below).

Table 16.E.1 shows the value of country export subsidies as notified by WTO member countries by commodity from 1998 (data used in GTAP 5) to 2001 (data used in GTAP 6). The table lists Eastern European countries separately from the EU15 even though they have since joined the EU. For some commodities such as wheat, rice, grains, fruits and vegetables, and sugar, export subsidies continue to be offered solely by the EU15 and some new members (Poland, Hungary, Slovakia). Dairy is heavily subsidized by the EU, Switzerland and Norway and to a smaller extent by the Czech Republic, the United States, Slovakia, and Poland. It is hard to tell whether export subsidies have significantly dropped from 2000 to 2001 or if this is just a reporting issue. In calculating export subsidies we took available notification for either 2001 and, if not available, we considered the previous reporting year(2000). This was the case for Switzerland, Czech Republic, Korea and Turkey.

16.E.2 Export Subsidy Calculations

In the GTAP 6 Data Base, agricultural export subsidies are reported as effective export subsidy rates using the 2000/2001 value of export subsidy expenditures, as reported to the WTO, and the *f.o.b.* value of exports for 2000/2001 using UNCTAD trade data. For each of the reporting countries, export subsidy expenditures were converted to a common currency, the US dollar, and were aggregated up to the GTAP commodity classification.

In the context of multilateral reforms, treating the subsidy reductions in terms of reductions in export subsidy rates could be used as an approximation of the effects of the WTO commitments. This is because reductions in export subsidies are expected to raise world prices, offsetting the reduction in export volume implied by the reduction in export subsidies. The per-unit export subsidy rate for sector i is calculated as follows:

$$S_i = XR_i / (XT_i * T_i)$$

where S is the subsidy rate, XR is value of export refund in 2000/2001 \$US millions, XT is the total value of exports (excluding intra-EU trade in the case of the European Union), and T is the share of exports that is subsidized. In order to be consistent across commodities and regions, a simplifying assumption of setting $T = 1$ for all commodities and regions in the model was employed. The export subsidy rates for 2001 are reported in table 16.E.2.

As stated above, WTO notifications may not be inclusive of all export subsidies. A country's notifications reflect its delegation's understanding of its government policies at the time. The WTO has identified some omissions. In one case, the WTO identified that the European Union under-report export subsidies for sugar. The EU's WTO notifications do not include additional export subsidies on imported preferential sugar from ACP countries and India which are re-exported by the EU. To remedy this particular discrepancy, instead of WTO notifications, FEOGA payments data for EU sugar export subsidies was used (data was supplied by Hans G. Jensen from the Food and Resource Economics Institute, (FOI), Denmark).

16.E.3 Concluding Remarks

The treatment of agricultural export subsidies in GTAP 6 is derived from WTO notifications which represent the best available and comprehensive source of export subsidies data particularly for agricultural and food products. Nevertheless, there may be cases where the analyst should take into account other export subsidies/taxes not covered by the data before embarking on trade policy analysis.

Table 16.E.1 Summary Data on Export Notifications to the WTO for 1998-2001

Agricultural Commodity	Country	1998			1999			2000			2001		
		Notified Expenditures (\$US M)	Percent Permitted Expenditures	Notified Expenditures (\$US M)	Percent Permitted Expenditures	Notified Expenditures (\$US M)	Percent Permitted Expenditures	Notified Expenditures (\$US M)	Percent Permitted Expenditures	Notified Expenditures (\$US M)	Percent Permitted Expenditures		
Wheat													
	EU15	560.34	29.48	531.07	34.11								
	Hungary	0.03	0.13						96.52			8.40	
Rice													
	EU15			27.53	65.35				28.79			87.77	
Other grain													
	Czech Republic			1.15	76.92								
	EU15	855.79	60.15	761.42	63.02								
	Hungary	9.80	412.57	2.75	416.05				170.68			18.29	
	Romania			6.65									
	Poland								0.88			0.65	
Oilseed products													
	Turkey	1.00	--	1.02	49.54							--	
Fruits and Vegetables													
	Colombia	14.83	--										
	Switzerland	21.25	--										
	Chile			13.15	50.25				11.32			--	
	EU15	35.39	50.40	44.53	63.85				24.59			50.61	
	Hungary			1.27	116.04								
	Korea			12.00	100.00				16.11			--	
	Morocco			0.40	0.00				0.20			--	
	Pakistan			0.38	0.00							--	
	Poland											83.90	
	Slovakia			0.11	5.87				0.06			20.73	
	Tunisia			5.44	0.00				5.97			--	
	Turkey			7.49	84.10				20.21			--	
Sugar													
	Colombia	4.37	--										
	EU15	890.18	134.10	490.20	86.11				339.44			74.67	
	Poland	13.00	34.21	14.91	42.60				20.68			42.51	
	Slovakia	0.59	24.34										
	South Africa	7.87	--	4.85	48.24				3.04			--	
	Turkey	0.00	0.00										

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Table 16.E.1 Summary Data on Export Notifications to the WTO for 1998-2001 (Contd)

Agricultural Commodity	1998			1999			2000			2001		
	Notified Expenditures (\$US M)	Percent Permitted Expenditures	Percent Permitted Expenditures	Notified Expenditures (\$US M)	Percent Permitted Expenditures	Percent Permitted Expenditures	Notified Expenditures (\$US M)	Percent Permitted Expenditures	Percent Permitted Expenditures	Notified Expenditures (\$US M)	Percent Permitted Expenditures	Percent Permitted Expenditures
Daairy												
Australia			12.14	2.41								
Switzerland	275.59	78.78	85.76	171.70			108.79	64.96		--	--	--
Czech Republic	59.38	--	45.31	32.56			20.29	46.43		--	--	--
EU15	2271.70	--	93.87	1889.89			1020.49	48.09		902.14		52.34
Hungary			167.65	0.23								
Norway	79.97	--	126.13	57.42			32.35	96.69		23.75		76.96
Poland			245.66	14.99			3.82	68.30		--		--
Slovakia	11.70	--	57.74	7.65			7.50	67.52		4.26		61.04
USA	145.31	--	222.55	78.52			8.49	16.51		--		--
Bovine Livestock												
Hungary	0.00	0.00										
Switzerland	0.31	1.13	3.38	0.58			1.65	12.50		--		--
EU15												
Norway												
Slovakia												
Non-Bovine Livestock												
EU15	720.05	42.26										
Iceland	0.00	0.00										
Norway	14.19	--										
Korea			100.00	0.65			0.33			--		--
Beef Meats												
EU15			52.34	757.14			349.09	30.58		341.62		30.58
Norway			460.95	28.11			3.74	95.43		1.42		36.57
Poland			54.08	22.44								
Romania			862.61	0.27								
Slovakia										0.04		0.99
White Meats												
Czech Republic			102.60				0.09	4.60		--		--
EU15	3662.18	--	30.35	346.40			32.65	120.06		87.97		43.61
Hungary	18.03	--	261.76	8.44								
Norway				36.62			4.89	56.76		3.86		57.36
Israel							0.08	7.61		--		--

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Table 16.E.1 Summary Data on Export Notifications to the WTO for 1998-2001 (Contd)

Agricultural Commodity	1998			1999			2000			2001		
	Notified Expenditures (\$US M)	Percent Permitted Expenditures	Notified Expenditures (\$US M)	Notified Expenditures (\$US M)	Percent Permitted Expenditures	Notified Expenditures (\$US M)	Notified Expenditures (\$US M)	Percent Permitted Expenditures	Notified Expenditures (\$US M)	Notified Expenditures (\$US M)	Percent Permitted Expenditures	
White Meats (Contd)												
Poland			0.14	8.16	1077.90	21.53						
Romania			0.48		64.90	69.61						
Turkey			1.64	6.82	10.32	46.88						
USA	1.40	--										
Tobacco and Beverages												
EU15			255.27	108.65	192.28	91.73	106.33				91.73	
Hungary			0.06		2.39							
Czech Republic				2.99		21.51						
Other Food Products												
Colombia	0.92	--										
Switzerland	141.84	--	83.49	65.92	103.02	97.30	3.01				74.73	
EU15	815.81	--	750.26	380.60	151.35	99.27	368.98				99.76	
Hungary	1.11	12.85										
Norway	6.19	--	4.10	3.02	82.70	74.18	--				--	
Poland			3.19	2.87	41.95	41.56	3.20				46.37	
Slovakia			4.11	4.06	65.25	78.41	2.01				40.82	
Turkey			19.01	4.63	85.51	66.78	--				--	

Source: WTO Notifications; "--" Not notified

Table 16.E.2 Export Subsidy Rates: Ratio of Export Subsidy Outlays as Notified to WTO over FOB Value Exports

Country	Year	Wheat				Grains		Fruit & Vegetables		Oilseeds		Fiber		Other Crops		Cattle		Other Livestock	
		WHT	GRO	V F	OSD	PFB	OSD	V F	OSD	PFB	OSD	OCR	CTL	OAP					
European Union*	2001	8.63	33.39	2.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69					
Canada	2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Switzerland	2000	0.00	0.00	162.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.17	0.00	0.00					
Czech Republic	2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Hungary	2001	0.00	0.01	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Israel	2001	0.00	0.00	0.69	0.00	0.00	0.00	0.00	5.21	0.86	0.00	0.00	0.00	0.00					
Korea	2000	0.00	0.00	7.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Norway	2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Poland	2001	0.00	3.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Slovakia	2001	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Turkey	2000	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23						
United States	2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

NOTE: Country notifications are reported by the WTO Secretariat on the basis of GATT year.

*: for EU export subsidy rates, into-EU trade is excluded; for EU sugar, used FEOGA data not WTO notifications

Table 16.E.2 Export Subsidy Rates: Ratio of Export Subsidy Outlays as Notified to WTO over FOB Value Exports (Contd)

Country	Year	Bovine Meat		Non-Bovine Meat		Vegetable Oils		Dairy		Rice		Sugar		Other Food		Beverages & Tobacco	
		CMT	OMT	OMT	OMT	VOL	MIL	PCR	SGR	OFD	B T						
European Union*	2001	84.62	5.68	0.00	30.78	45.94	60.22	3.24	0.93								
Canada	2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
Switzerland	2000	0.00	0.00	0.00	30.19	0.00	0.00	5.55	0.00								
Czech Republic	2000	0.00	0.16	0.00	11.63	0.00	0.00	0.99	0.00								
Hungary	2001	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00								
Israel	2001	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00								
Korea	2000	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00								
Norway	2001	5.24	14.39	0.00	32.25	0.00	0.00	0.12	0.00								
Poland	2001	0.00	0.00	0.00	1.20	0.00	0.00	0.25	0.00								
Slovakia	2001	0.61	0.00	0.00	6.56	0.00	0.00	1.06	0.00								
Turkey	2000	0.00	0.93	2.12	0.00	0.00	1.44	1.96	0.00								
United States	2001	0.00	0.00	0.00	7.83	0.00	0.00	0.00	0.00								

NOTE: Country notifications are reported by the WTO Secretariat on the basis of GATT year.

*: for EU export subsidy rates, into-EU trade is excluded; for EU sugar, used FEOGA data not WTO notifications