Chapter 5

Data base summary: effective rates of protection

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5.1 Introduction and motivation

The effective rate of protection (ERP) is a measure of how tariff structure affects value added in an industry. The ERP is very important to producers because it indicates the degree of protection provided to domestic production of import-competing goods. The ERP measure has been widely used both by governments to determine the level of protection to provide to domestic industries and by international organizations such as the World Bank, the OECD, and the World Trade Organization in trade policy negotiations.

Traditionally, ERP was measured under partial equilibrium (PE) assumptions that include pure competition, constant returns to scale, infinite elasticities of export demand and import supply, unchanged factor prices, no transportation costs, and zero substitution elasticity between intermediate inputs and primary factors. Critics have questioned the validity of these assumptions and have pointed out that actual resource pull and push, which ERP is supposed to capture, depend on other factors such as supply elasticities and production functions that are not accounted for by partial equilibrium ERP calculations.[1]

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[1]For an expanded review of the theory of ERP see Jennifer Stevens “Evaluating the Impact of Korean Trade Policy: The Role of Intermediate Inputs” M.S. Thesis, unpublished. December 1995.

An alternative approach is to compute ERP measures based on input-output (I/O) tables (Melzer (1980); Devaranjan, and Sussangkarn (forthcoming); and Stevens (1995)). The advantage of the I/O data structure is in its completeness and consistency. Unlike the more open data structure (e.g., manufacturing census data), I/O tables cover all inputs and outputs not just some. They also fully account for all usage of tradeables. The more open-ended structures may fail to observe the sectoral balance condition. A disadvantage of the I/O data structure, however, is in its inability to utilize information at a more detailed industry classification, to separate out different types of commodities. For example, in dealing with commodity classifications such as "import-competing", "exportable", or "non-tradeable", the existing I/O framework which we use (to incorporate into the] data base) cannot distinguish between the different types of commodities very well, as compared, for example, with studies which use manufacturing census data. This is because in the context of the I/O data sets, most goods lie somewhere on the continuum, between perfectly tradeable and completely non-tradeable. In addition, most commodities are aggregates of both exportable and import-competing goods. To resolve this issue, this chapter reports on an attempt to compute the sectoral ERP for the Global Trade Analysis Project (GTAP) version 4 sectors by firstly separating out each "aggregate" into three "varieties": exportable, import-competing, and non-tradeable, and then computing the ERP for exportable and importable varieties.

5.2 Defining ERP

In the context of the I/O framework, an ERP can be written as the ratio of the difference between the assisted (AVA) and unassisted value added (UVA) over the unassisted value added:

$$ERP = (AVA - UVA)/UVA, \qquad (1)$$

$$AVA = AVOUT - AVINP \qquad (2)$$

Where *AVOUT* and *AVINP* are the assisted value of output, and the assisted value of inputs, respectively. The assisted value of output can be expanded as follow:

$$AVOUT = (1 + NRP) * UVOUT \qquad (3)$$

where *NRP* and *UVOUT* are the nominal rate of protection and the unassisted value of output, respectively.

Assuming no protection on inputs, i.e. AVINP = UVINP, the latter is the unassisted value of inputs, the assisted value added can then be written out as:

$$AVA = (1 + NRP) * UVOUT - UVINP = NRP * UVOUT + UVA \quad (4)$$

Rewriting equation (1) gives:

$$ERP = NRP * UVOUT/UVA = NRP / (UVA/UVOUT) \quad (5)$$

In other words, ERP is equal to the ratio of the nominal rate of protection over the unassisted value added share. This shows one of the insights that the ERP concept was designed to convey: that even a low nominal rate of protection may provide a strong incentive to reallocate resources into the protected industry, if the industry's value-added share is low.

Now consider the case where the nominal rate of protection on inputs, *NRPI*, is non-zero. We simplify here by assuming just one input (to be precise, just one non-factor input). We have:

$$\begin{aligned} AVA &= AVOUT - AVINP \\ &= (1 + NRP) * UVOUT - (1 + NRPI) * UVINP \\ &= NRP * UVOUT - NRPI * UVINP \end{aligned}$$

and from (1):

$$ERP = NRP * (UVOUT / UVA) - NRPI * (UVINP / UVA)$$

This shows another of the key insights of the ERP concept: that protection to input-producing industries can offset protection to input-using industries. For example, protection to the textiles industry has a negative impact on incentives to produce garments. Depending on the magnitudes involved, even though the nominal rate of protection to the garments industry is positive, the effective rate may be positive, zero, or negative.

To derive the sectoral ERP measures using the GTAP I/O data base, the following steps were followed:

Step 1: A rule was devised to disaggregate the GTAP Version 4 sectors into three "varieties": exportable, importable, and non-tradeable. The three-way disaggregation rule has the following properties:

- All exports are counted as exportables.
- Exportables include both exports and exportable but domestically absorbed domestic products.
- All imports are counted as importables.
- Importables include both imports and import-competing domestic products.

- Domestically absorbed domestic product is divided into (non-exported) exportables, import-competing, and non-traded varieties.
- The higher the import penetration, the higher the share of import-competing products.
- The higher the export share, the higher the share of (non-exported) exportables.

Next we calculate the "price elasticities" for the three varieties using a homogenous partial equilibrium model of demand and supply (see section 5.3 below). Note that this approach matters only for the input side of the ERP calculation. This is because, to the extent that the NRPs vary across varieties, the value of input assistance generally depends on the variety shares.

Step 2: Taking the derived elasticities as shares, these were then used to compute the value flows for the three varieties of all 50 GTAP sectors.

Step 3: Since GTAP data base contain value flows that reflect current protection policies, an additional step consisted of generating a protection-free data set is required. This involves eliminating the world versus domestic price wedges in a simulation using an I/O model.

Step 4: Computing the ERP as given in equation (1).

5.3 Model for generating "variety" shares

A partial equilibrium model of demand and supply was formulated for the purpose of apportioning domestically absorbed domestic products into exportable, import-competing, and non-tradeable "varieties". The objective was to derive a reduced form expression for the price of domestically absorbed domestic output (p_D) as a function of the price of exports(p_X), of imports (p_M) and of inputs (p_N):

$$p_D = A\ p_X + B\ p_M + C\ p_N$$

With the heuristic equation above, the derived coefficients A, B, and C are functions of export share of output, import share of domestic absorption, and domestically absorbed share of output. Since this partial equilibrium model is price-homogenous, the coefficients A, B, and C sum to one. These coefficients are also a function of the elasticity of substitution (Armington elasticity, normally provided in the GTAP data base), the transformation elasticity between exports and domestically absorbed goods, and the supply elasticity. The transformation elasticity is not provided in the GTAP data base and was set equal to twice the supply elasticity. The supply elasticity for commodity *i* is derived from a partial equilibrium calculation and is given as follow (we abstract from regional indices):

$$\sigma_s^i = (1 - KSH_{VA}^i) * \sigma^i / KSH_{TC}^i$$

where KSH_{VA}^i and KSH_{TC}^i are the share of capital in value added in commodity i, and the share of capital in total costs in commodity i, respectively. σ^i is the elasticity of substitution between primary factors. The supply elasticity given above was derived under the assumption that capital, natural resources, and agricultural land are fixed inputs. Note that we treat only capital as a fixed factor, although it would be natural to treat agricultural land and natural resources as fixed also.

Given the price homogeneity of the partial equilibrium model, the coefficients A, B, and C can be taken as shares in disaggregating the GTAP sectors into the three varieties.

5.4 Computing effective rate of protection

Given the computed shares, the value added flows for each of the 50 sectors of the GTAP data base were separated into 3 separate varieties: exportable, importable, and non-tradeable. From this "disaggregated" data base, a simulation of the I/O model was carried out to eliminate the wedge between the world and domestic prices. The resulting new data set value flows are free of protection policies. The ERP measures from equation (1) were then computed for exportable and importable, taking assisted values from the pre-simulation data base, and unassisted values from the post-simulation.

5.5 Results

Tables 5.1 and 5.2 report on the computed ERP measures for exportable and importable variants for each of the 50 GTAP sectors. A negative value reflects a taxed industry, a zero reflects no protection while a positive value reflects a protected sector. The ERP values are reported as fractions of the unassisted value added. For example, in the case of Australia, the computed ERP for motor vehicles and parts is 0.86. That is, the value of assistance to this sector is equivalent to 86% of the unassisted value added. A (··) symbol indicates that the computed unassisted value added is negative, and therefore, these cases are excluded from the discussion of the results below.

On the importable side, import-competing agricultural products are generally protected, as expected by developed countries such as the US, the countries of the European Union, and Australia. Japan protects against the imports of plant-based fibers. Korea on the other hand, protects against cereal grains imports. For the regions of the Middle East and North Africa, a net importer of food products, importable agricultural products are protected with the exception of rice. For South Africa, the Rest of Southern Africa, and the Rest of Sub-Saharan Africa, domestic production of importable cereal grains other than wheat are taxed while domestic production of other agricultural products are protected. For Eastern Europe and the rest of the developing countries, policies towards agricultural imports are a mixture of protection and taxation depending on the product and the country.

Importable processed food are typically taxed. China taxes its domestic production of importable meat products while it protects its vegetable oil and fats against imports. For Sub-Saharan Africa, all importable processed food, except processed rice, are protected, particularly livestock and meat products. For textile and clothing products, most countries protect these products against imports. The same applies to the rest of the manufacturing.

On the export side, there is a pattern of taxation of exports of agricultural and food products in developing countries. In the case of the South East Asian countries, exports of these products are taxed except for rice, which is taxed only by some countries (Singapore, Vietnam, and China) while protected by others (Indonesia, Malaysia, Korea, Philippines, and Thailand). For countries of South Asia (India, Sri Lanka, and the Rest of South Asia) exports of all agricultural products are taxed, except rice. For countries in Central and Latin America, most ERP values of exportable agriculture products are negative, but they are of small magnitudes, except for Brazil. For developed countries like the USA, Australia, and the European Community, most exportable agricultural goods are protected. In the US, some commodities are taxed, for example, vegetables and fruits, plant-based fibers, and crops n.e.c. In Canada, only vegetables, fruits, and nuts exportables are taxed, while in the European Community, all exportable of agricultural products are protected, except for plant-based fibers.

For energy products (coal, oil, and gas), all exportables are taxed in all regions. Exportable textiles and wearing apparel are also taxed in all countries except Uruguay, Rest of South America, and Rest of Middle East. Hong Kong is an exception as compared to all the other regions as it maintains a protection free regime for all GTAP commodities, except for textile and clothing exports, which are taxed.

For the remainder of the manufacturing sectors, the ERP measures for exports are generally negative (taxation) with the exception of China, which protects a variety of exportable commodities, particularly chemicals, minerals, and metal products. In addition, China also protects heavy manufacturing goods. A similar pattern was observed for the Rest of the Southern Africa region.

5.6 Caveats

The method reported here for calculating the ERP measures represents an improvement over previous attempts as it directly addressed the thorny question of tradeable vs non-tradeable within the aggregate commodity definition of a general equilibrium framework. However, for some special sectors, the reported values must be read with caution due to the problems of intersectoral links. For example, the GTAP data base version 4 distinguishes between raw milk and dairy products as two separate sectors. However, a weakness of our calculation, shared with most other studies, is that the ERP for the primary industry (e.g., raw milk) comes from the NRP for the secondary industry (e.g., dairy products) rather than from the NRP on the (barely traded) raw product. It would be preferable to use the latter but we have not done so. Another potential improvement to our calculations would be to treat agricultural land and natural resources as fixed inputs, in calculating variety shares. Also, the readers are notified that some ERPs in the tables apply to very small values in the data base, and perhaps zero in reality (e.g., rice production in Finland). Overall, the users are encouraged to compare and contrast the calculations presented in this chapter with other estimates.

References

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Melzer, Brian D. (1980). "A Comparison of Some Effective Rates of Protection With the Results of a General Equilibrium Model." Impact Project Research Paper No. G-26, Melbourne, Australia, May.

Stevens, Jennifer. "Evaluating the Impact if Korean Trade Policy: The Role of Intermediate Inputs" M.S. Thesis, unpublished. December 1995.

Table 5.1 Effective rate of protection for import-competing products, by commodity and region (fraction of unassisted value added)

	AUS	NZL	JPN	KOR	IDN	MYS
Paddy rice	0.13	-0.85	••	0.30	0.05	-0.01
Wheat	0.17	0.04	••	••	-0.98	••
Cereal grains n.e.c.	0.12	0.04	••	24.52	0.04	••
Vegetables, fruit, nuts	0.02	-0.02	0.04	0.47	0.16	0.16
Oil seeds	0.09	-0.06	0.84	0.02	0.14	0.01
Sugar cane, sugar beet	0.12	-0.85	12.77	••	0.06	0.90
Plant-based fibers	0.04	0.02	1.52	-0.20	0.04	-0.01
Crops n.e.c.	0.10	-0.06	-0.02	0.05	0.11	0.03
Bovine cattle, sheep, etc.	0.13	0.10	••	0.13	0.04	-0.12
Animal prods n.e.c.	0.12	0.04	-0.09	-0.15	0.06	0.08
Raw milk	-0.00	0.03	0.47	-0.23	-0.00	-0.05
Wool, silk-worm cocoons	0.13	0.06	-0.77	0.22	-0.98	-0.88
Forestry	-0.01	-0.00	-0.01	0.01	-0.01	0.34
Fishing	-0.05	0.03	0.06	0.22	0.15	0.00
Coal	-0.01	-0.01	-0.01	0.00	0.04	0.27
Oil	-0.00	-0.00	-0.00	-0.66	0.03	0.07
Gas	0.06	-0.00	-0.01	-0.88	0.06	0.21
Minerals n.e.c.	-0.00	0.00	-0.01	0.01	0.04	0.02
Cattle, sheep, etc. meat prods	0.15	-0.00	••	••	0.15	••
Meat prods n.e.c.	0.10	••	••	••	0.15	••
Vegetable oils & fats	0.07	-0.04	-0.15	-0.72	0.04	-0.23
Dairy prods	0.85	0.01	••	••	0.62	••
Processed rice	0.04	-0.04	••	••	-0.03	••
Sugar	0.14	-0.04	••	-0.68	0.02	-0.97
Food prods n.e.c.	0.13	0.07	-0.09	-0.23	0.20	0.34
Beverages, tobacco prods	0.14	0.17	-0.74	-0.73	1.07	6.86
Textiles	1.43	0.24	0.08	0.26	0.36	1.32
Wearing apparel	0.06	0.68	0.23	0.34	1.53	1.17
Leather prods	0.85	0.24	0.12	-0.05	0.00	1.01
Wood prods	0.19	0.16	0.01	0.24	0.39	3.62
Paper prods, publishing	0.14	0.13	0.00	0.09	0.10	0.14
Petroleum, coal prods	-0.03	0.03	0.07	-0.01	0.15	0.54
Chemical, rubber, plastic prods	0.21	0.03	0.05	0.20	0.13	0.12
Mineral prods n.e.c.	0.29	0.12	0.03	0.20	0.08	0.53
Ferrous metals	0.23	0.01	0.03	0.24	0.12	0.31
Metals n.e.c.	0.16	0.04	-0.00	0.13	0.05	0.51
Metal prods	0.41	0.14	0.02	0.22	0.35	0.30
Motor vehicles, parts	0.86	0.30	0.04	0.39	0.67	1.80
Transport equipment n.e.c.	0.04	-0.08	0.04	0.02	0.40	0.06
Machinery, equipment n.e.c.	0.22	0.12	-0.00	0.20	0.03	0.12
Manufactures n.e.c.	0.48	0.16	0.02	0.22	0.17	0.52
Electronic equipment	0.08	0.06	0.01	0.22	0.06	0.29

•• indicates negative unassisted value added.

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Table 5.1 Effective rate of protection for import-competing products, by commodity and region (fraction of unassisted value added) (continued)

	PHL	SGP	THA	VNM	CHN	HKG
Electricity	-0.00	-0.00	-0.00	-0.01	-0.02	0.01
Paddy rice	0.27	••	0.32	-0.02	-0.49	0.00
Wheat	0.94	••	1.85	0.01	-0.24	0.00
Cereal grains n.e.c.	4.00	••	28.27	0.12	0.02	0.00
Vegetables, fruit, nuts	0.29	0.47	0.33	0.48	0.50	0.00
Oil seeds	-0.10	0.52	0.29	0.11	-0.02	0.00
Sugar cane, sugar beet	-0.06	0.79	0.56	0.09	-0.07	0.00
Plant-based fibers	-0.09	0.71	0.17	0.00	0.14	0.00
Crops n.e.c.	0.15	0.33	0.52	0.06	0.29	0.00
Bovine cattle, sheep, etc.	-0.10	0.70	-0.03	-0.04	0.01	0.00
Animal prods n.e.c.	0.48	0.70	-0.15	0.01	0.58	0.00
Raw milk	-0.16	-0.22	-0.02	-0.03	-0.08	0.00
Wool, silk-worm cocoons	-0.07	••	0.45	0.06	0.26	0.01
Forestry	-0.02	-0.77	0.01	-0.03	0.02	0.00
Fishing	0.20	0.01	0.92	0.04	0.42	0.00
Coal	-0.26	-0.77	0.01	-0.15	0.24	0.00
Oil	-0.14	-0.77	-0.01	-0.19	-0.03	0.00
Gas	-0.04	-0.77	-0.01	-0.07	0.18	0.00
Minerals n.e.c.	-0.01	-0.01	0.01	-0.13	-0.04	0.00
Cattle, sheep, etc. meat prods	••	0.08	••	0.27	-0.60	0.00
Meat prods n.e.c.	••	0.07	••	0.30	-0.86	0.00
Vegetable oils & fats	0.54	7.01	0.34	2.07	4.64	0.00
Dairy prods	7.75	4.06	4.04	0.70	••	0.00
Processed rice	••	••	••	••	-0.75	0.00
Sugar	-0.40	0.12	3.89	••	••	0.00
Food prods n.e.c.	0.51	1.39	0.68	0.97	11.89	0.00
Beverages, tobacco prods	0.08	1.38	-0.39	••	••	0.00
Textiles	0.60	-0.02	0.58	2.02	••	0.00
Wearing apparel	0.83	0.34	2.89	6.04	••	0.00
Leather prods	0.26	0.01	0.24	0.19	••	0.00
Wood prods	2.24	0.02	0.12	0.15	1.85	0.00
Paper prods, publishing	0.37	-0.01	0.16	0.69	1.11	0.00
Petroleum, coal prods	••	0.30	0.15	••	0.84	0.00
Chemical, rubber, plastic prods	0.84	0.02	0.22	0.00	1.10	0.00
Mineral prods n.e.c.	0.85	-0.02	0.28	1.01	4.02	0.00
Ferrous metals	0.34	-0.04	0.10	-0.02	0.37	0.00
Metals n.e.c.	0.94	-0.02	0.11	-0.13	0.95	0.00
Metal prods	2.36	-0.02	0.42	0.35	••	0.00
Motor vehicles, parts	0.27	0.18	1.12	7.48	••	0.00
Transport equipment n.e.c.	0.34	0.05	0.07	0.43	0.34	0.00
Electronic equipment	0.02	-0.01	0.08	0.09	1.17	0.00
Machinery, equipment n.e.c.	0.72	-0.01	0.11	-0.03	1.03	0.00
Manufactures n.e.c.	0.72	-0.01	0.51	0.44	••	0.00
Electricity	-0.08	-0.33	-0.02	-0.10	-0.05	0.00

•• indicates negative unassisted value added.

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Table 5.1 Effective rate of protection for import-competing products, by commodity and region (fraction of unassisted value added) (continued)

	TWN	IND	LKA	RAS	CAN	USA
Paddy rice	1.28	0.09	0.16	0.17	-0.35	5.76
Wheat	3.54	-0.19	-0.19	-0.25	0.51	0.94
Cereal grains n.e.c.	••	-0.02	-0.03	-0.07	0.24	0.22
Vegetables, fruit, nuts	0.67	0.39	0.39	2.12	-0.14	0.02
Oil seeds	-0.01	1.16	0.46	1.01	0.30	0.18
Sugar cane, sugar beet	-0.04	1.02	0.01	-0.05	0.51	1.56
Plant-based fibers	0.05	0.70	0.20	1.02	••	0.01
Crops n.e.c.	0.13	0.96	0.49	1.51	-0.14	0.05
Bovine cattle, sheep, etc.	-0.40	2.54	0.01	1.56	0.57	1.94
Animal prods n.e.c.	-0.08	0.18	0.28	2.73	0.74	0.24
Raw milk	-0.50	-0.02	0.01	-0.11	0.52	0.86
Wool, silk-worm cocoons	-0.01	0.47	0.41	0.46	-0.35	••
Forestry	-0.00	0.11	0.10	1.15	-0.00	0.00
Fishing	0.28	0.65	0.19	0.63	-0.00	0.00
Coal	-0.01	0.13	0.10	1.28	-0.00	0.00
Oil	0.12	-0.01	0.42	0.73	0.18	0.00
Gas	0.10	0.79	0.11	0.73	-0.00	0.00
Minerals n.e.c.	-0.00	0.04	0.10	0.62	-0.00	0.00
Cattle, sheep, etc. meat prods	-0.33	••	0.25	-0.18	0.30	0.83
Meat prods n.e.c.	0.09	5.91	0.48	-0.02	1.08	0.30
Vegetable oils & fats	-0.65	••	6.05	••	0.09	0.23
Dairy prods	••	0.57	0.09	••	••	••
Processed rice	••	-0.42	-0.25	-0.59	-0.34	0.45
Sugar	0.84	••	••	••	0.11	••
Food prods n.e.c.	0.84	••	0.31	••	0.10	0.06
Beverages, tobacco prods	-0.44	••	••	••	0.13	0.56
Textiles	0.30	••	0.62	••	0.14	0.25
Wearing apparel	0.48	••	0.64	••	0.51	0.29
Leather prods	0.13	••	0.46	••	0.30	0.21
Wood prods	0.06	••	0.24	••	0.02	0.02
Paper prods, publishing	0.11	20.13	0.28	••	0.00	0.01
Petroleum, coal prods	0.16	••	-0.92	••	-0.28	0.73
Chemical, rubber, plastic prods	0.14	••	0.18	••	0.03	0.07
Mineral prods n.e.c.	0.22	••	0.23	6.31	0.03	0.11
Ferrous metals	0.25	••	0.31	••	0.06	0.08
Metals n.e.c.	0.09	••	0.36	••	0.01	0.02
Metal prods	0.32	3.04	0.52	7.32	0.04	0.06
Motor vehicles, parts	2.76	••	3.66	••	0.02	0.05
Transport equipment n.e.c.	0.09	1.23	0.23	0.91	0.01	0.03
Electronic equipment	0.07	1.83	0.28	1.90	0.00	0.02
Machinery, equipment n.e.c.	0.19	2.15	0.26	3.51	0.02	0.04
Manufactures n.e.c.	0.21	3.71	1.34	16.02	0.02	0.05
Electricity	-0.01	-0.08	-0.01	-0.30	-0.00	0.00

•• indicates negative unassisted value added.

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Table 5.1 Effective rate of protection for import-competing products, by commodity and region (fraction of unassisted value added) (continued)

	MEX	CAM	VEN	COL	RAP	ARG
Paddy rice	0.29	0.11	0.28	0.22	0.26	0.08
Wheat	-0.07	-0.45	-0.34	-0.29	-0.31	-0.30
Cereal grains n.e.c.	0.47	-0.04	-0.03	-0.02	-0.04	-0.01
Vegetables, fruit, nuts	0.14	0.25	0.14	0.11	0.17	0.12
Oil seeds	0.27	0.14	0.27	0.01	0.12	0.02
Sugar cane, sugar beet	-0.14	0.13	0.13	-0.01	0.08	0.22
Plant-based fibers	0.11	0.06	0.18	0.11	0.13	0.07
Crops n.e.c.	0.04	0.13	0.12	0.06	0.08	0.05
Bovine cattle, sheep, etc.	-0.25	0.09	0.09	0.06	0.03	0.03
Animal prods n.e.c.	0.23	0.15	0.26	0.07	0.09	0.03
Raw milk	0.16	-0.08	-0.02	-0.01	-0.04	-0.00
Wool, silk-worm cocoons	0.00	-0.44	0.11	0.12	0.12	0.23
Forestry	0.01	0.15	0.05	0.05	0.17	0.02
Fishing	0.21	0.20	0.11	0.04	0.10	0.12
Coal	0.02	0.11	0.05	0.06	0.00	0.19
Oil	-0.00	0.04	••	0.13	0.51	0.43
Gas	0.00	0.09	-1.75	0.06	0.01	••
Minerals n.e.c.	0.05	0.10	0.06	0.06	0.08	0.04
Cattle, sheep, etc. meat prods	-0.52	0.13	0.22	0.17	0.08	0.26
Meat prods n.e.c.	-0.39	0.10	0.11	0.17	0.08	0.25
Vegetable oils & fats	0.25	0.17	••	0.62	0.42	0.40
Dairy prods	0.25	-0.07	-8.74	0.40	0.32	0.53
Processed rice	0.04	-0.62	-0.33	-0.37	-0.54	-0.31
Sugar	-0.34	0.83	0.97	0.04	0.42	0.76
Food prods n.e.c.	0.82	1.17	1.24	0.46	0.45	0.39
Beverages, tobacco prods	-0.19	0.56	0.36	0.06	-0.04	0.44
Textiles	0.07	0.60	0.59	0.26	0.26	0.47
Wearing apparel	0.05	1.86	2.32	0.43	0.29	0.76
Leather prods	0.17	33.15	3.12	0.22	0.23	0.76
Wood prods	0.03	0.55	0.89	0.23	0.23	0.31
Paper prods, publishing	0.01	0.08	0.20	0.15	0.12	0.20
Petroleum, coal prods	0.07	••	••	0.09	0.00	-0.08
Chemical, rubber, plastic prods	0.07	0.11	0.47	0.12	0.14	0.19
Mineral prods n.e.c.	0.08	0.36	0.50	0.18	0.20	0.26
Ferrous metals	0.10	0.13	0.25	0.23	0.14	0.21
Metals n.e.c.	0.02	0.08	0.19	0.06	0.17	0.17
Metal prods	0.04	0.22	0.49	0.20	0.34	0.40
Motor vehicles, parts	0.09	0.65	0.81	0.28	0.22	0.83
Transport equipment n.e.c.	0.09	0.10	0.22	0.08	0.15	0.31
Electronic equipment	0.09	0.03	0.21	0.09	0.14	0.09
Machinery, equipment n.e.c.	0.05	0.00	0.50	0.16	0.12	0.15
Manufactures n.e.c.	0.17	0.19	0.42	0.20	0.25	0.40
Electricity	-0.00	-0.03	-0.00	-0.00	-0.03	-0.00

•• indicates negative unassisted value added.

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Table 5.1 Effective rate of protection for import-competing products, by commodity and region (fraction of unassisted value added) (continued)

	BRA	CHL	URY	RSM	GBR	DEU
Paddy rice	-0.41	0.09	0.31	0.50	5.47	1.46
Wheat	0.24	-0.40	-0.36	-0.40	6.06	2.41
Cereal grains n.e.c.	-0.22	-0.10	-0.04	-0.08	5.12	3.57
Vegetables, fruit, nuts	0.15	-0.03	0.23	0.08	0.06	0.10
Oil seeds	0.15	0.10	-0.03	0.04	••	3.68
Sugar cane, sugar beet	-0.23	-0.06	-0.05	-0.04	9.26	1.04
Plant-based fibers	0.15	0.10	-0.01	0.08	0.73	0.98
Crops n.e.c.	0.18	0.09	0.04	-0.01	0.03	0.10
Bovine cattle, sheep, etc.	0.24	0.17	-0.04	-0.06	••	••
Animal prods n.e.c.	0.06	0.18	0.05	0.11	1.17	0.33
Raw milk	0.01	-0.04	-0.04	-0.08	0.26	0.23
Wool, silk-worm cocoons	••	0.50	0.11	0.10	••	0.10
Forestry	0.27	0.13	-0.02	0.00	-0.00	0.00
Fishing	0.18	0.16	-0.03	-0.04	0.06	0.03
Coal	-0.02	0.24	-0.01	0.07	0.00	0.00
Oil	0.38	0.12	-0.01	0.05	-0.00	-0.00
Gas	0.20	0.06	-0.00	-0.11	-0.00	-0.00
Minerals n.e.c.	-0.01	0.14	-0.01	0.04	-0.00	-0.01
Cattle, sheep, etc. meat prods	••	0.40	0.14	0.10	••	179.17
Meat prods n.e.c.	7.55	0.44	0.15	0.06	0.69	0.24
Vegetable oils & fats	0.52	0.33	0.77	-0.24	1.58	0.10
Dairy prods	-0.59	1.18	3.14	4.88	28.72	1.48
Processed rice	-0.60	-0.57	-0.54	-0.78	-0.60	15.44
Sugar	0.63	1.59	0.46	0.04	••	2.66
Food prods n.e.c.	0.63	0.44	0.64	2.30	0.12	0.17
Beverages, tobacco prods	0.93	0.40	0.03	0.54	-0.02	-0.57
Textiles	0.50	0.18	0.60	0.52	0.04	0.04
Wearing apparel	0.57	0.44	0.99	0.43	0.14	0.23
Leather prods	0.44	0.41	-0.05	••	0.07	0.06
Wood prods	0.19	0.24	0.50	0.78	0.02	0.02
Paper prods, publishing	0.06	0.21	0.47	0.08	0.01	0.01
Petroleum, coal prods	0.57	0.23	-0.01	-0.12	0.02	0.01
Chemical, rubber, plastic prods	0.26	0.19	0.11	0.22	0.02	0.02
Mineral prods n.e.c.	0.36	0.17	0.36	0.43	0.03	0.03
Ferrous metals	2.17	0.21	0.17	0.37	0.02	0.03
Metals n.e.c.	0.32	0.20	0.14	0.03	0.02	0.02
Metal prods	0.62	0.27	0.21	0.40	0.04	0.03
Motor vehicles, parts	••	0.25	0.11	2.11	0.03	0.04
Transport equipment n.e.c.	0.61	0.14	0.03	-0.09	0.01	0.01
Electronic equipment	0.83	0.27	-0.02	0.11	0.05	0.06
Machinery, equipment n.e.c.	0.60	0.26	0.01	0.84	0.03	0.02
Manufactures n.e.c.	0.57	0.21	0.01	0.30	0.07	0.06
Electricity	-0.03	-0.01	-0.00	-0.05	-0.00	-0.00

•• indicates negative unassisted value added.

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Table 5.1 Effective rate of protection for import-competing products, by commodity and region (fraction of unassisted value added) (continued)

	DNK	SWE	FIN	REU	EFT	CEA
Paddy rice	1.07	2.81	••	••	0.09	-0.01
Wheat	2.21	2.63	1.72	1.36	••	-0.25
Cereal grains n.e.c.	••	5.77	56.69	1.93	••	-0.20
Vegetables, fruit, nuts	0.06	0.02	1.13	0.03	2.32	0.21
Oil seeds	••	7.62	4.33	57.92	••	0.19
Sugar cane, sugar beet	0.54	1.90	2.23	1.72	••	0.80
Plant-based fibers	1.60	0.60	••	0.73	2.00	0.19
Crops n.e.c.	0.13	0.01	0.58	0.04	1.34	0.13
Bovine cattle, sheep, etc.	4.17	••	23.06	3.10	••	0.20
Animal prods n.e.c.	0.45	0.26	0.23	1.25	1.90	0.39
Raw milk	0.37	0.19	0.18	0.26	2.93	0.22
Wool, silk-worm cocoons	0.07	-0.01	0.81	1.16	4.12	-0.00
Forestry	0.00	-0.00	0.00	-0.00	-0.02	0.05
Fishing	0.03	0.02	0.03	0.05	-0.02	0.12
Coal	0.01	-0.21	-0.74	0.01	0.00	0.02
Oil	-0.00	-0.26	-0.79	-0.00	0.01	0.01
Gas	0.00	-0.25	-0.79	0.00	0.00	0.01
Minerals n.e.c.	-0.00	-0.00	-0.00	-0.00	-0.00	0.00
Cattle, sheep, etc. meat prods	••	••	••	••	••	2.80
Meat prods n.e.c.	0.29	1.21	1.31	1.29	••	••
Vegetable oils & fats	0.51	0.09	0.22	0.78	••	0.42
Dairy prods	3.36	0.53	9.24	0.61	••	3.65
Processed rice	-0.26	••	••	••	-0.15	-0.01
Sugar	1.65	1.02	••	0.50	••	••
Food prods n.e.c.	0.17	0.09	0.31	0.12	-0.07	1.01
Beverages, tobacco prods	0.06	0.04	0.18	-0.43	-0.50	1.69
Textiles	0.02	0.02	0.02	0.01	0.00	0.23
Wearing apparel	0.16	0.07	0.10	0.13	0.13	0.25
Leather prods	0.06	0.03	0.04	0.05	0.07	0.24
Wood prods	0.01	0.01	0.02	0.01	0.00	0.16
Paper prods, publishing	0.00	0.01	0.01	0.01	-0.00	0.13
Petroleum, coal prods	0.01	0.00	0.02	0.02	-0.01	0.24
Chemical, rubber, plastic prods	0.01	0.01	0.02	0.02	-0.01	0.24
Mineral prods n.e.c.	0.01	0.01	0.02	0.02	0.01	0.24
Ferrous metals	0.02	0.00	0.02	0.02	0.01	0.11
Metals n.e.c.	0.05	0.02	0.03	0.02	0.02	0.13
Metal prods	0.01	0.01	0.03	0.01	0.01	0.22
Motor vehicles, parts	0.03	0.02	0.04	0.02	0.01	0.75
Transport equipment n.e.c.	0.01	0.01	0.01	0.02	0.01	0.24
Electronic equipment	0.02	0.02	0.04	0.05	0.02	0.18
Machinery, equipment n.e.c.	0.01	0.01	0.02	0.02	0.00	0.12
Manufactures n.e.c.	0.03	0.02	0.03	0.05	0.01	0.28
Electricity	-0.00	-0.00	0.00	-0.00	-0.00	-0.01

•• indicates negative unassisted value added.

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Table 5.1 Effective rate of protection for import-competing products, by commodity and region (fraction of unassisted value added) (continued)

	FSU	TUR	RME	MAR	RNF	SAF
Paddy rice	-0.03	0.01	-0.37	-0.57	-0.42	0.63
Wheat	-0.15	-0.03	0.06	0.05	0.05	0.54
Cereal grains n.e.c.	0.00	0.10	0.14	0.13	0.13	-0.15
Vegetables, fruit, nuts	0.12	0.24	0.16	0.26	0.23	0.16
Oil seeds	0.07	0.68	0.18	0.06	0.07	0.07
Sugar cane, sugar beet	-0.01	0.49	0.16	-0.02	0.41	0.37
Plant-based fibers	0.22	0.03	0.17	0.02	0.18	0.00
Crops n.e.c.	0.00	0.11	0.16	0.30	0.42	0.02
Bovine cattle, sheep, etc.	-0.01	••	0.17	0.04	0.08	-0.00
Animal prods n.e.c.	0.18	••	0.18	0.08	0.23	0.00
Raw milk	-0.05	0.54	-0.06	-0.01	-0.01	0.00
Wool, silk-worm cocoons	-0.02	0.02	0.30	0.41	0.44	-0.00
Forestry	0.40	0.02	0.20	0.16	0.12	-0.59
Fishing	0.19	0.11	0.30	0.31	0.15	••
Coal	0.09	0.03	0.19	0.02	0.03	-0.02
Oil	0.07	0.12	0.08	0.01	-0.07	-0.02
Gas	0.07	-0.00	0.22	0.74	-0.08	0.10
Minerals n.e.c.	1.13	0.03	0.21	0.03	0.23	-0.00
Cattle, sheep, etc. meat prods	1.48	••	0.35	••	14.03	••
Meat prods n.e.c.	1.66	••	0.62	••	1.56	••
Vegetable oils & fats	0.50	4.38	0.44	••	1.35	0.09
Dairy prods	0.45	1.72	4.50	19.98	15.47	0.33
Processed rice	-0.40	0.09	••	••	••	-0.22
Sugar	0.55	1.83	0.48	0.96	1.73	-0.01
Food prods n.e.c.	0.48	0.55	0.46	••	7.40	0.34
Beverages, tobacco prods	-0.11	0.84	0.46	0.92	••	1.13
Textiles	0.52	0.22	0.33	3.05	0.66	0.36
Wearing apparel	0.61	0.30	0.25	1.75	4.41	0.60
Leather prods	0.61	0.14	0.29	0.62	1.15	1.02
Wood prods	0.59	0.28	0.30	0.29	0.65	0.25
Paper prods, publishing	0.14	0.11	0.31	2.77	1.71	0.12
Petroleum, coal prods	0.20	0.45	1.34	0.37	0.52	0.10
Chemical, rubber, plastic prods	0.76	0.11	0.20	1.92	0.90	0.09
Mineral prods n.e.c.	0.58	0.09	0.28	3.68	4.24	0.23
Ferrous metals	0.48	0.09	0.31	0.14	1.33	0.14
Metals n.e.c.	0.39	0.09	0.34	2.04	••	0.04
Metal prods	0.45	0.37	0.26	3.34	5.58	0.28
Motor vehicles, parts	0.66	0.22	0.34	2.05	8.93	0.36
Transport equipment n.e.c.	0.32	0.12	0.24	0.58	0.31	0.05
Electronic equipment	0.30	0.11	0.25	0.95	0.91	0.03
Machinery, equipment n.e.c.	0.17	0.08	0.27	2.08	0.92	0.09
Manufactures n.e.c.	0.55	0.34	0.27	••	2.10	0.12
Electricity	0.08	-0.01	-0.01	-0.00	-0.00	-0.01

•• indicates negative unassisted value added.

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Table 5.1 Effective rate of protection for import-competing products, by commodity and region (fraction of unassisted value added) (continued)

	RSA	RSS	ROW
Paddy rice	0.79	0.66	0.32
Wheat	0.48	0.53	0.03
Cereal grains n.e.c.	-0.13	-0.10	0.09
Vegetables, fruit, nuts	0.12	0.31	0.30
Oil seeds	0.23	0.22	0.34
Sugar cane, sugar beet	0.21	0.22	0.45
Plant-based fibers	0.17	0.19	0.29
Crops n.e.c.	0.17	0.34	0.36
Bovine cattle, sheep, etc.	0.05	0.27	0.49
Animal prods n.e.c.	0.11	0.25	0.52
Raw milk	-0.02	-0.01	-0.02
Wool, silk-worm cocoons	-0.08	-0.03	0.06
Forestry	0.16	0.19	0.19
Fishing	0.13	0.18	0.28
Coal	-0.03	0.13	0.92
Oil	0.33	0.20	0.24
Gas	0.07	1.61	0.18
Minerals n.e.c.	0.08	0.65	0.22
Cattle, sheep, etc. meat prods	1.30	3.26	1.26
Meat prods n.e.c.	••	5.55	1.42
Vegetable oils & fats	0.99	1.75	12.78
Dairy prods	0.09	0.15	1.63
Processed rice	-0.32	-0.15	••
Sugar	0.83	0.80	2.21
Food prods n.e.c.	0.76	0.99	3.54
Beverages, tobacco prods	-0.69	0.31	••
Textiles	1.55	6.10	8.47
Wearing apparel	1.37	3.88	1.98
Leather prods	0.63	1.62	2154.00*
Wood prods	0.59	2.20	1.73
Paper prods, publishing	0.38	0.90	1.18
Petroleum, coal prods	••	••	0.94
Chemical, rubber, plastic prods	0.46	1.35	0.70
Mineral prods n.e.c.	0.48	1.27	1.05
Ferrous metals	0.37	0.92	0.51
Metals n.e.c.	2.18	••	0.38
Metal prods	0.62	1.45	1.94
Motor vehicles, parts	0.37	1.04	0.87
Transport equipment n.e.c.	0.16	0.32	0.73
Electronic equipment	0.10	0.66	0.57
Machinery, equipment n.e.c.	0.07	0.51	0.64
Manufactures n.e.c.	0.72	1.17	1.36
Electricity	0.15	0.00	-0.02

•• indicates negative unassisted value added.

* the unasssisted value added for ROW is very small.

Table 5.2 Effective rate of protection for exportable products, by commodity and region (fraction of unassisted value added)

	AUS	NZL	JPN	KOR	IDN	MYS
Paddy rice	0.13	-0.85		1.04	0.16	1.32
Wheat	0.17	0.04	••	••	-0.98	••
Cereal grains n.e.c.	0.12	0.04	••	24.54	0.04	••
Vegetables, fruit, nuts	-0.02	-0.03	-0.04	-0.01	-0.00	-0.17
Oil seeds	0.09	-0.06	0.84	-0.08	-0.00	-0.17
Sugar cane, sugar beet	0.16	-0.85	12.77	-0.99	-0.01	-0.19
Plant-based fibers	-0.01	-0.06	-0.09	-0.22	-0.01	-0.17
Crops n.e.c.	-0.03	-0.06	-0.04	-0.02	-0.00	-0.17
Bovine cattle, sheep, etc.	0.13	0.10	••	-0.05	-0.00	-0.35
Animal prods n.e.c.	0.13	26.32	••	-0.28	-0.02	-0.32
Raw milk	-0.00	0.03	0.47	-0.23	-0.00	-0.05
Wool, silk-worm cocoons	0.13	0.06	-0.77	-0.15	-1.00	-0.94
Forestry	-0.01	-0.00	-0.01	-0.00	-0.01	-0.16
Fishing	-0.06	-0.01	-0.01	-0.02	-0.00	-0.14
Coal	-0.02	-0.01	-0.01	-0.02	-0.00	-0.53
Oil	-0.01	-0.00	-0.02	-0.94	-0.00	-0.17
Gas	-0.01	-0.00	-0.01	-0.94	-0.00	-0.18
Minerals n.e.c.	-0.02	-0.01	-0.01	-0.01	-0.01	-0.17
Cattle, sheep, etc. meat prods	0.15	-0.00	••	••	-0.03	••
Meat prods n.e.c.	0.10	••	••	••	-0.03	••
Vegetable oils & fats	0.07	-0.04	-0.15	-0.79	-0.00	-0.68
Dairy prods	15.50	0.01	••	••	-0.03	••
Processed rice	0.04	-0.04	••	••	-0.03	••
Sugar	0.19	-0.04	••	-0.75	-0.01	-0.98
Food prods n.e.c.	-0.02	-0.04	-0.25	-0.56	-0.01	-0.64
Beverages, tobacco prods	-0.11	-0.44	-0.76	-0.83	-0.02	-0.38
Textiles	-0.06	0.05	-0.03	-0.12	-0.13	-0.54
Wearing apparel	-0.12	-0.04	-0.03	-0.17	-0.14	-0.38
Leather prods	-0.09	-0.04	-0.13	-0.22	-0.10	-0.83
Wood prods	-0.04	-0.01	-0.01	-0.09	-0.02	-0.38
Paper prods, publishing	-0.08	-0.02	-0.01	-0.06	-0.04	-0.27
Petroleum, coal prods	-0.80	-0.01	-0.02	-0.36	-0.04	-0.71
Chemical, rubber, plastic prods	-0.06	-0.01	-0.02	-0.10	-0.04	-0.47
Mineral prods n.e.c.	-0.03	-0.01	-0.01	-0.03	-0.02	-0.34
Ferrous metals	-0.03	-0.01	-0.01	-0.12	-0.05	-0.42
Metals n.e.c.	-0.02	-0.01	-0.02	-0.10	-0.04	-0.48
Metal prods	-0.04	-0.01	-0.01	-0.07	-0.05	-0.29
Motor vehicles, parts	-0.14	-0.11	-0.02	-0.17	-0.07	-0.52
Transport equipment n.e.c.	-0.04	-0.11	-0.00	-0.05	-0.15	-0.30
Electronic equipment	-0.12	-0.01	-0.02	-0.08	-0.07	-0.39
Machinery, equipment n.e.c.	-0.07	-0.02	-0.00	-0.09	-0.15	-0.45
Manufactures n.e.c.	-0.18	-0.02	-0.02	-0.07	-0.01	-0.48
Electricity	-0.00	-0.00	0.02	-0.01	-0.02	0.01

•• indicates negative unassisted value added.

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Table 5.2 Effective rate of protection for exportable products, by commodity and region (fraction of unassisted value added) (continued)

	PHL	SGP	THA	VNM	CHN	HKG
Paddy rice	1.21	-0.80	1.18	-0.22	-0.39	0.00
Wheat	-0.17	-0.80	1.85	-0.04	-0.24	0.00
Cereal grains n.e.c.	4.00	-0.80	29.42	-0.23	0.02	0.00
Vegetables, fruit, nuts	-0.05	-0.08	-0.02	-0.23	-0.19	0.00
Oil seeds	-0.10	-0.08	-0.02	-0.17	-0.46	0.00
Sugar cane, sugar beet	-0.06	-0.15	-0.02	-0.02	••	0.00
Plant-based fibers	-0.09	-0.19	-0.02	-0.15	-0.12	0.00
Crops n.e.c.	-0.05	-0.08	-0.02	-0.22	-0.17	0.00
Bovine cattle, sheep, etc.	-0.10	-0.18	-0.07	-0.05	-0.24	0.00
Animal prods n.e.c.	-0.14	-0.19	-0.22	-0.30	-0.24	0.00
Raw milk	-0.16	-0.22	-0.02	-0.03	-0.08	0.00
Wool, silk-worm cocoons	-0.38	-0.80	-0.02	-0.34	-0.08	0.01
Forestry	-0.02	-0.80	-0.00	-0.17	0.00	0.00
Fishing	-0.02	-0.02	-0.04	-0.20	-0.07	0.00
Coal	-0.27	-0.80	-0.01	-0.18	0.02	0.00
Oil	-0.14	-0.80	-0.01	-0.21	-0.49	0.00
Gas	-0.04	-0.80	-0.01	-0.11	-0.36	0.00
Minerals n.e.c.	-0.12	-0.01	-0.02	-0.32	-0.10	0.00
Cattle, sheep, etc. meat prods	••	-0.19	••	-0.27	-0.60	0.00
Meat prods n.e.c.	••	-0.18	17.56	-0.28	-0.86	0.00
Vegetable oils & fats	-0.19	-0.17	-0.07	-0.52	0.08	0.00
Dairy prods	7.76	-0.24	4.04	-0.27	-0.35	0.00
Processed rice	••	-0.81	••	••	-0.75	0.00
Sugar	-0.42	-0.48	-0.17	-0.22	-0.08	0.00
Food prods n.e.c.	-0.17	-0.30	-0.27	-0.28	-0.11	0.00
Beverages, tobacco prods	-0.47	-0.15	-0.69	-0.58	-0.73	0.00
Textiles	-0.39	-0.02	-0.13	-0.37	-0.23	-0.02
Wearing apparel	-0.60	-0.08	-0.21	-0.37	-0.44	-0.26
Leather prods	-0.18	-0.03	-0.08	-0.38	-0.01	0.00
Wood prods	-0.13	-0.03	-0.03	-0.20	0.02	0.00
Paper prods, publishing	-0.20	-0.01	-0.05	-0.35	-0.02	0.00
Petroleum, coal prods	-0.26	-0.03	-0.01	-0.98	-0.48	0.00
Chemical, rubber, plastic prods	-0.34	-0.03	-0.04	-0.29	0.40	0.00
Mineral prods n.e.c.	-0.14	-0.02	-0.05	-0.25	2.30	0.00
Ferrous metals	-0.45	-0.04	-0.04	-0.16	0.01	0.00
Metals n.e.c.	-0.13	-0.02	-0.01	-0.21	0.66	0.00
Metal prods	-0.49	-0.02	-0.07	-0.13	0.36	0.00
Motor vehicles, parts	-0.38	-0.10	-0.21	-0.24	-0.77	0.01
Transport equipment n.e.c.	-0.17	-0.04	-0.02	-0.18	0.03	-0.00
Electronic equipment	-0.47	-0.01	-0.03	-0.14	-0.23	-0.00
Machinery, equipment n.e.c.	-0.57	-0.01	-0.05	-0.20	0.11	0.00
Manufactures n.e.c.	-0.19	-0.02	-0.06	-0.25	-0.74	0.00
Electricity	-0.08	-0.30	-0.02	-0.10	0.28	0.01

•• indicates negative unassisted value added.

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Table 5.2 Effective rate of protection for exportable products, by commodity and region (fraction of unassisted value added) (continued)

	TWN	IND	LKA	RAS	CAN	USA
Paddy rice	••	0.18	0.10	0.10	-0.35	5.76
Wheat	3.54	-0.19	0.00	-0.01	0.51	0.94
Cereal grains n.e.c.	••	-0.02	-0.03	-0.07	0.24	0.22
Vegetables, fruit, nuts	-0.02	-0.01	-0.02	-0.08	-0.14	-0.03
Oil seeds	-0.02	0.00	0.00	-0.06	0.30	0.18
Sugar cane, sugar beet	-0.04	0.00	0.01	-0.06	0.51	1.56
Plant-based fibers	-0.02	0.00	-0.00	-0.06	••	-0.05
Crops n.e.c.	-0.02	0.00	0.01	-0.06	-0.14	-0.03
Bovine cattle, sheep, etc.	-0.47	-0.03	0.01	-0.12	0.57	1.94
Animal prods n.e.c.	-0.09	-0.03	0.04	-0.12	1.33	0.32
Raw milk	-0.50	-0.02	0.01	-0.11	0.52	0.86
Wool, silk-worm cocoons	-0.02	-0.02	0.01	-0.11	-0.35	••
Forestry	-0.00	-0.00	-0.04	-0.02	-0.01	-0.03
Fishing	-0.05	-0.01	-0.08	-0.02	-0.01	-0.01
Coal	-0.01	-0.10	-0.02	-0.28	-0.01	-0.12
Oil	-0.01	-0.01	-0.02	-0.06	-0.00	0.00
Gas	-0.01	-0.01	-0.00	-0.06	-0.00	-0.06
Minerals n.e.c.	-0.02	-0.03	0.02	-0.09	-0.01	-0.06
Cattle, sheep, etc. meat prods	-0.62	-0.41	-0.01	-0.55	0.30	0.83
Meat prods n.e.c.	-0.27	-0.60	-0.05	-0.69	1.08	0.30
Vegetable oils & fats	-0.71	-0.29	-0.40	-0.50	0.09	0.23
Dairy prods	••	-0.11	0.08	-0.41	••	••
Processed rice	••	-0.43	-0.25	-0.61	-0.34	0.45
Sugar	-0.07	-0.29	-0.48	-0.50	0.11	••
Food prods n.e.c.	-0.28	-0.29	-0.11	-0.50	-0.02	0.00
Beverages, tobacco prods	-0.75	-0.29	0.07	-0.50	-0.04	-0.27
Textiles	-0.06	-0.19	-0.14	-0.35	-0.03	-0.02
Wearing apparel	-0.10	-0.37	-0.30	-0.38	-0.04	-0.03
Leather prods	-0.08	-0.18	-0.23	-0.41	-0.05	-0.01
Wood prods	-0.03	-0.13	-0.02	-0.38	-0.01	-0.03
Paper prods, publishing	-0.04	-0.22	-0.28	-0.47	-0.01	-0.02
Petroleum, coal prods	-0.06	-0.58	-0.98	-0.98	-0.38	-0.40
Chemical, rubber, plastic prods	-0.07	-0.25	-0.36	-0.54	-0.01	-0.04
Mineral prods n.e.c.	-0.04	-0.10	-0.12	-0.29	-0.00	-0.02
Ferrous metals	-0.08	-0.21	-0.25	-0.48	-0.01	-0.03
Metals n.e.c.	-0.06	-0.35	-0.46	-0.59	-0.00	-0.03
Metal prods	-0.04	-0.15	-0.16	-0.38	-0.01	-0.02
Motor vehicles, parts	-0.23	-0.24	-0.30	-0.56	-0.03	-0.03
Transport equipment n.e.c.	-0.05	-0.12	-0.11	-0.30	-0.01	-0.01
Electronic equipment	-0.05	-0.21	-0.11	-0.45	-0.00	-0.02
Machinery, equipment n.e.c.	-0.08	-0.22	-0.11	-0.46	-0.01	-0.02
Manufactures n.e.c.	-0.05	-0.14	-0.21	-0.34	-0.03	-0.01
Electricity	-0.01	-0.10	-0.01	-0.30	-0.00	0.00

•• indicates negative unassisted value added.

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Table 5.2 Effective rate of protection for exportable products, by commodity and region (fraction of unassisted value added) (continued)

	MEX	CAM	VEN	COL	RAP	ARG
Paddy rice	0.29	-0.01	1.06	0.74	1.11	-0.01
Wheat	-0.07	-0.45	-0.34	-0.01	-0.31	-0.30
Cereal grains n.e.c.	0.47	-0.04	-0.03	-0.02	-0.04	-0.01
Vegetables, fruit, nuts	0.00	-0.00	-0.00	-0.01	-0.02	-0.00
Oil seeds	0.27	-0.01	-0.01	-0.01	-0.02	-0.00
Sugar cane, sugar beet	-0.14	-0.01	-0.01	-0.01	-0.04	-0.00
Plant-based fibers	0.00	-0.01	-0.01	-0.01	-0.04	-0.00
Crops n.e.c.	0.00	-0.01	-0.00	-0.00	-0.02	-0.00
Bovine cattle, sheep, etc.	-0.25	-0.03	-0.01	-0.01	-0.02	0.00
Animal prods n.e.c.	-0.12	-0.14	-0.07	-0.01	-0.01	-0.00
Raw milk	0.16	-0.08	-0.02	-0.01	-0.04	-0.00
Wool, silk-worm cocoons	0.00	-0.76	0.00	-0.01	-0.04	-0.00
Forestry	-0.00	-0.01	-0.00	0.00	-0.02	-0.00
Fishing	0.00	-0.02	-0.00	0.00	-0.09	-0.00
Coal	-0.01	-0.01	-0.00	-0.01	-0.18	-0.01
Oil	-0.00	-0.05	-0.03	-0.01	-0.10	-0.00
Gas	-0.00	-0.01	-0.30	-0.00	-0.06	-0.84
Minerals n.e.c.	-0.01	-0.04	-0.02	-0.01	-0.14	-0.00
Cattle, sheep, etc. meat prods	-0.52	-0.09	-0.07	-0.02	-0.07	-0.00
Meat prods n.e.c.	-0.39	-0.07	-0.04	-0.02	-0.07	-0.01
Vegetable oils & fats	0.25	-0.29	-0.39	-0.02	-0.08	-0.00
Dairy prods	0.25	-0.42	-0.17	-0.01	-0.12	-0.01
Processed rice	0.04	-0.62	-0.33	-0.37	-0.54	-0.31
Sugar	-0.34	-0.04	-0.07	-0.01	-0.06	-0.03
Food prods n.e.c.	0.21	-0.30	-0.19	-0.20	-0.10	0.00
Beverages, tobacco prods	-0.38	-0.33	-0.41	-0.62	-0.35	-0.02
Textiles	-0.02	-0.20	-0.10	-0.01	-0.03	-0.02
Wearing apparel	-0.01	-0.28	-0.10	-0.02	-0.04	-0.03
Leather prods	0.01	-0.42	-0.20	-0.01	-0.10	-0.03
Wood prods	-0.01	-0.12	-0.08	-0.03	-0.04	-0.03
Paper prods, publishing	-0.01	-0.20	-0.11	-0.03	-0.06	-0.03
Petroleum, coal prods	-0.03	-0.10	-0.25	-0.45	-0.89	-0.16
Chemical, rubber, plastic prods	-0.02	-0.14	-0.09	-0.03	-0.00	-0.04
Mineral prods n.e.c.	-0.01	-0.09	-0.05	-0.04	-0.08	-0.02
Ferrous metals	-0.04	-0.11	-0.06	-0.06	-0.12	-0.02
Metals n.e.c.	-0.03	-0.17	-0.07	-0.05	-0.09	-0.04
Metal prods	-0.04	-0.13	-0.06	-0.03	-0.05	-0.02
Motor vehicles, parts	-0.07	-0.40	-0.20	-0.24	-0.13	-0.20
Transport equipment n.e.c.	-0.02	-0.21	-0.08	-0.21	-0.28	-0.05
Electronic equipment	-0.02	-0.15	-0.17	-0.04	-0.07	-0.05
Machinery, equipment n.e.c.	-0.03	-0.21	-0.11	-0.06	0.15	-0.04
Manufactures n.e.c.	-0.02	-0.03	-0.03	-0.05	-0.08	-0.03
Electricity	-0.00	-0.03	-0.00	-0.00	-0.03	0.01

•• indicates negative unassisted value added.

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Table 5.2 Effective rate of protection for exportable products, by commodity and region (fraction of unassisted value added) (continued)

	BRA	CHL	URY	RSM	GBR	DEU
Paddy rice	-0.31	-0.08	1.46	20.78	5.55	0.23
Wheat	0.24	-0.40	-0.36	-0.40	5.90	2.78
Cereal grains n.e.c.	-0.22	-0.10	-0.04	-0.08	11.12	16.37
Vegetables, fruit, nuts	-0.25	-0.07	0.09	0.07	0.01	0.08
Oil seeds	-0.24	-0.08	0.14	0.12	••	3.68
Sugar cane, sugar beet	-0.05	-0.12	-0.05	-0.13	7.72	1.25
Plant-based fibers	-0.27	-0.17	-0.01	-0.04	-0.17	0.07
Crops n.e.c.	-0.24	-0.08	-0.05	-0.11	0.00	0.07
Bovine cattle, sheep, etc.	-0.23	-0.02	-0.15	-0.20	••	••
Animal prods n.e.c.	-0.24	-0.03	-0.15	-0.20	3.48	0.57
Raw milk	0.01	-0.04	-0.04	-0.08	0.26	0.23
Wool, silk-worm cocoons	-0.67	-0.04	-0.04	-0.07	••	0.10
Forestry	-0.26	-0.00	-0.02	-0.10	-0.00	0.00
Fishing	-0.26	-0.02	-0.03	-0.13	-0.00	0.00
Coal	-0.11	-0.08	-0.01	-0.01	-0.00	-0.00
Oil	-0.07	-0.09	-0.01	-0.22	-0.00	-0.00
Gas	-0.07	-0.04	-0.00	-0.14	-0.00	-0.00
Minerals n.e.c.	-0.18	-0.03	-0.01	-0.06	-0.00	-0.02
Cattle, sheep, etc. meat prods	5.88	-0.07	-0.12	-0.19	1.93	2.17
Meat prods n.e.c.	2.13	-0.07	-0.07	-0.14	1.00	0.27
Vegetable oils & fats	-0.47	-0.28	0.16	-0.50	1.58	0.10
Dairy prods	-0.59	-0.06	-0.17	-0.34	••	••
Processed rice	-0.60	-0.57	-0.54	-0.78	••	94.87
Sugar	-0.48	-0.21	0.14	0.11	2.94	••
Food prods n.e.c.	-0.46	-0.05	0.14	0.03	0.02	0.07
Beverages, tobacco prods	-0.61	-0.08	-0.09	-0.38	-0.10	-0.58
Textiles	-0.12	-0.08	0.70	1.56	-0.01	-0.02
Wearing apparel	-0.05	-0.10	0.87	1.86	-0.01	-0.01
Leather prods	-0.14	-0.20	-0.09	-0.56	-0.01	-0.02
Wood prods	-0.03	-0.02	-0.12	-0.17	-0.01	-0.00
Paper prods, publishing	-0.04	-0.04	-0.14	-0.37	-0.00	-0.00
Petroleum, coal prods	-0.42	-0.37	-0.01	-0.12	-0.00	-0.01
Chemical, rubber, plastic prods	-0.26	-0.08	-0.01	-0.30	-0.01	-0.01
Mineral prods n.e.c.	-0.06	-0.03	-0.01	-0.13	-0.00	-0.00
Ferrous metals	-0.11	-0.08	-0.08	-0.30	-0.00	-0.01
Metals n.e.c.	-0.22	-0.06	-0.06	-0.41	-0.01	-0.01
Metal prods	-0.12	-0.08	-0.05	-0.24	-0.00	-0.00
Motor vehicles, parts	-0.12	-0.33	-0.14	-0.65	-0.02	-0.01
Transport equipment n.e.c.	-0.14	-0.03	-0.02	-0.37	-0.01	-0.00
Electronic equipment	-0.14	-0.06	-0.03	-0.31	-0.01	-0.01
Machinery, equipment n.e.c.	-0.16	-0.09	-0.03	-0.32	-0.01	-0.00
Manufactures n.e.c.	-0.14	-0.08	-0.03	-0.18	-0.01	-0.00
Electricity	-0.09	-0.01	-0.00	-0.05	-0.00	-0.00

•• indicates negative unassisted value added.

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Table 5.2 Effective rate of protection for exportable products, by commodity and region (fraction of unassisted value added) (continued)

	DNK	SWE	FIN	REU	EFT	CEA
Paddy rice	••	3.19	••	0.26	0.09	-0.01
Wheat	3.50	4.05	2.56	1.48	••	-0.25
Cereal grains n.e.c.	••	8.65	••	1.52	••	-0.20
Vegetables, fruit, nuts	0.04	0.05	1.02	-0.00	0.03	-0.01
Oil seeds	••	7.62	4.33	57.92	••	0.19
Sugar cane, sugar beet	1.18	1.89	2.24	1.17	••	0.80
Plant-based fibers	-0.16	-0.07	••	-0.19	0.06	-0.01
Crops n.e.c.	0.46	-0.00	0.53	0.01	1.28	-0.02
Bovine cattle, sheep, etc.	••	••	••	3.31	••	0.20
Animal prods n.e.c.	0.87	0.49	0.59	2.02	••	1.99
Raw milk	0.37	0.19	0.18	0.26	2.93	0.22
Wool, silk-worm cocoons	0.07	-0.01	0.81	1.16	4.12	-0.00
Forestry	0.00	-0.00	0.00	-0.00	-0.02	-0.02
Fishing	-0.00	0.00	0.00	-0.01	-0.02	-0.01
Coal	-0.00	-0.26	-0.77	-0.00	-0.00	-0.02
Oil	-0.00	-0.26	-0.79	-0.00	-0.00	-0.00
Gas	0.00	-0.42	-0.80	-0.00	-0.00	-0.02
Minerals n.e.c.	-0.00	0.00	-0.00	-0.02	-0.00	-0.03
Cattle, sheep, etc. meat prods	••	••	••	••	••	2.80
Meat prods n.e.c.	0.71	9.78	10.60	1.60	••	••
Vegetable oils & fats	0.51	0.09	0.22	0.78	••	0.42
Dairy prods	••	138.63	••	••	••	3.65
Processed rice	1.29	••	••	2.28	-0.15	-0.01
Sugar	••	49.18	••	1.51	••	••
Food prods n.e.c.	0.02	-0.01	0.22	0.03	-0.12	0.04
Beverages, tobacco prods	0.04	-0.23	0.02	-0.45	-0.52	-0.01
Textiles	-0.01	0.00	-0.00	-0.04	-0.04	-0.08
Wearing apparel	-0.00	-0.00	-0.00	-0.02	-0.02	-0.06
Leather prods	-0.03	-0.02	-0.02	-0.03	-0.03	-0.04
Wood prods	-0.00	0.00	-0.00	-0.01	-0.01	-0.03
Paper prods, publishing	-0.00	0.00	-0.00	-0.01	-0.00	-0.04
Petroleum, coal prods	-0.01	-0.01	-0.01	-0.02	-0.04	-0.04
Chemical, rubber, plastic prods	-0.00	0.00	-0.00	-0.02	-0.02	-0.06
Mineral prods n.e.c.	-0.00	0.01	-0.00	-0.01	-0.00	-0.03
Ferrous metals	-0.00	0.00	-0.00	-0.02	-0.01	-0.04
Metals n.e.c.	-0.00	0.01	-0.01	-0.02	-0.01	-0.05
Metal prods	-0.00	0.00	-0.00	-0.01	-0.00	-0.03
Motor vehicles, parts	-0.01	0.00	-0.01	-0.01	-0.01	-0.15
Transport equipment n.e.c.	-0.01	0.00	-0.01	-0.02	-0.01	-0.03
Electronic equipment	-0.01	0.01	-0.01	-0.01	-0.01	-0.04
Machinery, equipment n.e.c.	-0.00	0.01	-0.01	-0.02	-0.00	-0.04
Manufactures n.e.c.	-0.00	0.01	-0.00	-0.01	-0.00	-0.04
Electricity	-0.00	-0.00	-0.00	-0.00	-0.00	0.00

•• indicates negative unassisted value added.

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Table 5.2 Effective rate of protection for exportable products, by commodity and region (fraction of unassisted value added) (continued)

	FSU	TUR	RME	MAR	RNF	SAF
Paddy rice	-0.03	0.01	-0.29	-0.47	-0.34	3.74
Wheat	-0.15	-0.03	0.06	0.05	0.05	0.54
Cereal grains n.e.c.	0.00	0.10	0.13	0.12	0.12	-0.15
Vegetables, fruit, nuts	-0.04	0.01	-0.01	-0.04	-0.05	-0.02
Oil seeds	-0.04	0.68	0.06	-0.03	-0.03	0.00
Sugar cane, sugar beet	-0.03	0.49	-0.01	-0.07	-0.08	0.06
Plant-based fibers	-0.04	0.01	-0.04	-0.74	-0.75	0.02
Crops n.e.c.	-0.05	0.01	-0.04	-0.02	-0.03	0.00
Bovine cattle, sheep, etc.	-0.02	••	-0.16	-0.12	-0.13	0.13
Animal prods n.e.c.	-0.04	••	-0.08	-0.07	-0.08	0.12
Raw milk	-0.05	0.54	-0.06	-0.01	-0.01	0.00
Wool, silk-worm cocoons	-0.02	0.02	-0.08	-0.45	-0.41	-0.00
Forestry	-0.09	0.80	-0.02	-0.06	-0.06	-0.95
Fishing	-0.02	0.90	-0.06	-0.06	-0.06	-0.95
Coal	-0.03	0.62	-0.03	-0.05	-0.17	0.06
Oil	-0.04	0.87	-0.01	-0.04	-0.11	-0.04
Gas	-0.03	-0.00	-0.02	-0.05	-0.14	-0.02
Minerals n.e.c.	-0.05	0.29	-0.06	-0.08	-0.09	0.09
Cattle, sheep, etc. meat prods	0.77	-0.19	0.07	4.44	0.32	••
Meat prods n.e.c.	0.76	-0.19	0.20	1.72	0.08	••
Vegetable oils & fats	-0.15	-0.27	-0.13	-0.27	-0.32	0.02
Dairy prods	0.45	-0.00	4.20	15.87	12.74	-0.00
Processed rice	-0.40	0.10	-0.24	-0.40	-0.45	-0.22
Sugar	-0.28	0.08	-0.08	-0.28	-0.33	0.04
Food prods n.e.c.	-0.17	-0.04	-0.01	-0.36	-0.40	-0.04
Beverages, tobacco prods	-0.53	-0.25	-0.41	-0.52	-0.51	-0.02
Textiles	-0.06	-0.05	0.34	-0.49	-0.48	-0.06
Wearing apparel	-0.07	-0.10	0.20	-0.29	-0.26	-0.05
Leather prods	-0.15	-0.08	-0.16	-0.18	-0.20	-0.05
Wood prods	-0.06	-0.04	-0.08	-0.29	-0.31	-0.04
Paper prods, publishing	-0.03	-0.07	-0.07	-0.35	-0.36	-0.00
Petroleum, coal prods	-0.19	-0.13	-0.08	-0.05	-0.05	-0.57
Chemical, rubber, plastic prods	-0.07	-0.07	-0.09	-0.25	-0.28	-0.02
Mineral prods n.e.c.	-0.02	-0.02	-0.03	-0.26	-0.30	-0.02
Ferrous metals	-0.04	-0.11	-0.15	-0.29	-0.36	0.00
Metals n.e.c.	-0.04	-0.05	-0.14	-0.38	-0.48	-0.00
Metal prods	-0.03	-0.04	-0.09	-0.22	-0.28	-0.03
Motor vehicles, parts	-0.08	-0.07	-0.22	-0.41	-0.51	-0.06
Transport equipment n.e.c.	-0.04	-0.03	-0.12	-0.24	-0.34	-0.02
Electronic equipment	-0.03	-0.05	-0.08	-0.18	-0.22	-0.03
Machinery, equipment n.e.c.	-0.03	-0.04	-0.09	-0.25	-0.30	-0.04
Manufactures n.e.c.	-0.04	-0.06	-0.09	-0.22	-0.26	-0.03
Electricity	0.01	-0.01	-0.01	-0.00	-0.04	-0.01

•• indicates negative unassisted value added.

contd

Table 5.2 Effective rate of protection for exportable products, by commodity and region (fraction of unassisted value added) (continued)

	RSA	RSS	ROW
Paddy rice	8.00	3.73	-0.02
Wheat	0.48	0.53	-0.01
Cereal grains n.e.c.	-0.13	-0.10	-0.01
Vegetables, fruit, nuts	-0.26	-0.21	-0.01
Oil seeds	-0.07	-0.07	-0.01
Sugar cane, sugar beet	0.00	0.00	-0.01
Plant-based fibers	-0.04	-0.02	-0.01
Crops n.e.c.	-0.18	-0.17	-0.01
Bovine cattle, sheep, etc.	-0.34	-0.30	-0.02
Animal prods n.e.c.	-0.32	-0.29	-0.01
Raw milk	-0.02	-0.01	-0.02
Wool, silk-worm cocoons	-0.08	-0.03	-0.02
Forestry	0.00	-0.15	0.00
Fishing	-0.04	-0.03	-0.02
Coal	-0.02	-0.06	-0.02
Oil	-0.48	-0.16	-0.02
Gas	-0.03	-0.21	-0.01
Minerals n.e.c.	-0.05	-0.09	0.01
Cattle, sheep, etc. meat prods	0.74	1.47	-0.15
Meat prods n.e.c.	••	1.92	-0.16
Vegetable oils & fats	-0.31	-0.47	-0.10
Dairy prods	-0.29	-0.10	-0.08
Processed rice	-0.32	-0.15	-0.07
Sugar	-0.14	-0.16	-0.07
Food prods n.e.c.	-0.36	-0.24	-0.16
Beverages, tobacco prods	-0.66	-0.30	-0.16
Textiles	0.07	-0.02	-0.10
Wearing apparel	-0.22	-0.20	-0.16
Leather prods	-0.25	-0.20	-0.11
Wood prods	-0.13	-0.19	-0.06
Paper prods, publishing	0.14	0.08	-0.06
Petroleum, coal prods	••	-0.07	-0.35
Chemical, rubber, plastic prods	0.96	-0.19	-0.14
Mineral prods n.e.c.	0.28	-0.01	-0.06
Ferrous metals	0.03	-0.15	-0.08
Metals n.e.c.	0.79	-0.10	-0.07
Metal prods	0.48	-0.03	-0.06
Motor vehicles, parts	-0.56	-0.30	-0.14
Transport equipment n.e.c.	0.07	-0.08	-0.10
Electronic equipment	-0.10	-0.21	-0.06
Machinery, equipment n.e.c.	0.24	-0.09	-0.08
Manufactures n.e.c.	-0.20	-0.13	-0.09
Electricity	0.38	0.04	-0.02

•• indicates negative unassisted value added.