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## Surveying the Costs of Protection: A Partial Equilibrium Approach

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Much the rage these days in circles interested in the World Trade Organization (WTO) are “new issues”: environment, labor, and corruption. By contrast, this chapter reports on studies completed or under way dealing with a very old issue: namely, the costs imposed on societies by their own protective barriers. The Institute initiated its “cost of protection” studies with an examination of the United States. Subsequently, studies were commissioned for other countries, in cooperation with institutes and scholars in those nations (for a summary of results, see table 1).

The Institute’s studies use a computable partial equilibrium (CPE) model. The focus is on high-profile instances of protection—in other words, relatively large industries with relatively high protection. Another way of examining the toll of protection is to use a computable general equilibrium (CGE) model. CGE models encompass all sectors of the economy and simultaneously calculate the trade and welfare benefits of reducing barriers on a regional or global basis. CGE models come in different flavors—ranging from “plain vanilla” versions, which just calculate the comparative static effects of liberalization, to “super sundae” versions, which incorporate induced investment and endogenous growth equations. A later section in this chapter reports on a survey of CGE models by Francois, McDonald, and Nordström.

Still another approach to the protection question has been pioneered by the WTO (formerly the General Agreement on Tariffs and Trade) in its Trade Policy Review Mechanism (TPRM). These reviews are mixed

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**Table 1 Comparison of aggregate costs of protection**

	US	Japan	Korea	EU
Year	1994	1989	1990	1990
Number of industries surveyed	21	47	49	20
Consumer cost				
billions of dollars	70	75-110	12-13	67-100
share of GDP	1.2	2.6-3.8	3.8-4.3	1.1-1.6
Average tariff equivalent (percent)	35	180	170	40
Jobs "saved"	190,000	180,000	174,000-405,000	1,500,000
Cost per job saved (dollars)	170,000	600,000	33,000-67,000	70,000

Sources: Hufbauer and Elliott 1994 (US); Sazanami, Urata, and Kawai 1995 (Japan); Kim 1996 (Korea); and Messerlin and Owen 1996 (EU).

qualitative-quantitative assessments of national trade policies, carried out by the WTO Secretariat on two- to four-year intervals (more frequent for the bigger WTO members). At the end of the chapter, suggestions are offered for improving the TPRM process.

Neither the quantitative CPE and CGE models nor the more qualitative TPRM reports do a very good job of evaluating barriers to services trade. The reason is that data on the tariff-equivalent magnitude of such barriers are just now being collected. One of the more interesting of these studies is by Hoekman (1995), who, in a rough-and-ready way, sizes up the tariff-equivalent magnitude of nontariff barriers in the services sectors.

## United States

The Institute's cost of protection series was launched with the publication of *Trade Protection in the United States: 31 Case Studies* (Hufbauer, Berliner, and Elliott 1986), which surveyed the instances of high-profile protection in the United States as of 1984-85. In the context of the Uruguay Round and the contemporary debates over steel, autos, textiles and apparel, sugar, and other products, the estimates in this volume were widely cited by the press.

The methodology was refined and the case studies were updated in *Measuring the Costs of Protection in the United States* (Hufbauer and Elliott 1994). Briefly, the methodology devised for that volume uses a partial CPE model, which assumes imperfect substitution between domestic and foreign goods, perfect competition in the domestic market, and perfectly elastic foreign supply (the small-country assumption). Protection is modeled either as a quantitative restriction on imports or as a tariff-equivalent barrier. The other Institute country studies (described later) employ essentially the same methodology.

Hufbauer and Elliott (1994) surveyed the high-profile cases as of 1990, but their data pretty much described the status of US protection still in place on the eve of the Uruguay Round agreement. Broadly speaking, the authors found that total US protection cost US consumers (intermediate industries as well as households) about \$70 billion in 1990, or about 1.2 percent of GDP. The 21 highly protected industries surveyed accounted for a little less than half the total cost, and within this category, textiles and apparel were the outstanding claimants (\$24 billion out of \$32 billion). The average tariff-equivalent barrier on the 21 industries was estimated at 35 percent. The authors estimated that 190,000 blue-collar jobs would be eliminated if the highly protected industries were subject to free trade (less than 0.2 percent of total US employment) and that the average consumer cost per job “saved” in these industries was \$170,000—obviously much higher than the average wage (Hufbauer and Elliott 1994, tables 1.2 and 1.3).

The highly charged public debate over the North American Free Trade Agreement (NAFTA), both before its ratification in October 1993 and in the aftermath of the Mexican peso crisis in December 1994, demonstrated America’s supersensitivity to job losses associated with trade liberalization. Claims of “millions” of jobs fleeing the United States for the lower wage environs of Mexico were widely touted, and every plant relocated to Mexico was spotlighted by the press. Far less notice was paid to the job-creating effects of inward foreign investment or larger US exports. In the hubbub, widespread confusion was evident between trade balance effects and trade composition effects. From the NAFTA debate, I draw several conclusions:

- Honest public discourse requires an analysis of sectors that might be adversely affected by trade liberalization, accompanied by calculations of likely job losses.
- Similar estimates should be made of sectors that will be favorably affected, with calculations of likely job gains.
- The point that trade liberalization does not on balance create or destroy jobs must be made again and again.
- It should be emphasized that trade liberalization generally (but not always) shifts employment from lower paid to higher paid jobs.
- The point should also be made that freer trade invariably means lower cost and greater variety of goods and services for consumers.

In short, the media circus surrounding NAFTA demonstrated a continuing need for sober analysis of both the costs of protection and the consequences of liberalization. This need is not confined to the United States. Other countries, to a greater or lesser degree, fluctuating over time, also suffer anxiety bouts over the prospect of freer trade and investment.

## Japan

One country that has historically displayed remarkable tolerance for high consumer costs imposed by public quotas and private nontariff barriers is Japan. In 1994, the Institute published *Measuring the Costs of Protection in Japan* (Sazanami, Urata, and Kawai 1994), with findings for 1989 on Japanese barriers. The Japanese authors estimated that public and private trade barriers, for just the 47 high-profile industries examined, cost Japanese consumers between \$75 billion and \$110 billion, or 2.6 to 3.8 percent of GNP. While the authors made no estimate for the costs of all Japanese trade protection, it is fair to speculate that the figure might have reached 4 to 5 percent of GNP in 1989.

For the 47 highly protected industries, Yoko Sazanami and her colleagues calculated that Japanese trade barriers averaged about 180 percent in tariff-equivalent terms (Sazanami, Urata, and Kawai 1994, table 1.1). The authors calculated that 180,000 jobs (about 0.3 percent of total Japanese employment) were “saved,” and the consumer cost per job saved exceeded \$600,000—a figure far in excess of the average Japanese wage (Sazanami, Urata, and Kawai 1994, table 3.4).

The study was controversial. When it was launched, Japanese dogma insisted that the nation’s trade barriers were essentially zero—after all, Japanese tariffs were among the world’s lowest. Because this dogma was so pervasive within Japan, it was difficult for the Institute to find competent Japanese scholars who would undertake the study. Moreover, the study was virtually ignored by the Japanese press, and for some time no publishing firm would bring out a Japanese language edition.

The study was controversial for a second reason. Since a principal purpose was to assess private nontariff barriers, the authors could not simply size up the tariff equivalent of quotas and tariffs. Instead, they relied on unit-value comparisons to measure the gap between c.i.f. import prices and ex-factory domestic prices. Unit-value comparisons are fraught with difficulty because of qualitative differences between imported and domestic products, and this difficulty could not be entirely overcome, even with fine-grained Japanese statistics.

Since 1994, influential Japanese institutions have come to acknowledge the pervasive and costly nature of nontariff barriers. In part, acknowledgment was forced by the tariffication of agricultural quotas, mandated by the Uruguay Round agreement. For rice and other products, the Japanese government established tariffs at 300 percent and higher—after decades of asserting that Japanese quotas had less severe price effects.

Meanwhile, the Keidanren recognized that widespread regulation and cartelization, including private limitations on imported goods and services, were strangling the Japanese economy, causing five years of very low growth. Moreover, new additions to the 47 industries examined by Sazanami and her colleagues have since popped out of US-Japan trade

and investment disputes: auto parts, photographic film, pension fund management, civil aviation, and telecommunications.

In retrospect, it seems possible that the Japanese team may have understated the extent and cost of Japanese trade barriers. We can only hope that the authors will undertake a second edition in the next few years.

## **Korea**

As part of a wider cooperative program between the Korea Institute for International Economic Policy (KIEP) and the Institute for International Economics, Namdoo Kim (1996) has nearly finished a study titled *Measuring the Costs of Visible Protection in Korea*.

For 1992, Kim calculates that tariff and quota protection for 49 high-profile industries cost Korean consumers between \$12 billion and \$13 billion, or about 3.8 to 4.3 percent of Korean GNP (Kim 1996, tables 3.2a and 3.3a). If lesser profile industries and nontariff barriers on manufactured products were added to this picture, the overall total for Korean protection could exceed 5 percent of GNP. For the highly protected sectors, Kim found that tariff and quota barriers average about 170 percent, a figure that does not include nontariff barriers on manufactured products. Free trade for these agricultural and industrial products might dislocate between 174,000 and 405,000 workers (0.9 to 2.0 percent of employment).

Korean protection is highly concentrated on labor-intensive agriculture and light industry, with the result that the percentage of the work force shielded by trade barriers is rather high compared with the figures for United States or Japan, and the consumer costs per job saved are relatively low—\$33,000 to \$67,000—again compared with figures for the United States (\$170,000) or Japan (\$600,000). However, even the “low” Korean cost figure is substantially greater than Korea’s average wage.

Kim’s study makes additional comparisons between the Korean experience and high-profile protection in the United States and Japan. Two major similarities characterize all three countries. First, nontariff protection dominated the protection picture in the early 1990s. Second, high protection is focused on agriculture, fishery, and textile and apparel products in all three countries.

These two similarities underscore the importance of future WTO efforts aimed at removing agricultural quotas (or their post-Uruguay Round, high tariff equivalents) and at gaining adherence to (or even acceleration of) the Uruguay Round commitment to the phase-out of textile and apparel quotas.

## **Indonesia**

The Indonesian study on costs of protection is being carried out in a cooperative project between the Centre for Strategic and International

Studies in Jakarta (CSIS) and the Institute for International Economics. The Indonesian team is working under the guidance of Mari Pangestu and Raymond Atje. While information is at hand to identify high barriers and to calculate the costs of protection and the consequences of liberalization, the arduous task of sifting the data, composing the spreadsheets, and describing Indonesia's protective apparatus remains to be done.

However, data assembled by Fane and Condon (1995) indicate that, as in Korea, Indonesian barriers are lower now than they were 10 years ago, but in selected agricultural and industrial sectors they are still high. For example, protection in the automotive sector exceeds 50 percent. Very likely, the costs of protection in Indonesia, measured in terms of higher prices inflicted on Indonesian consumers, are above 2 percent of GDP.

A novel feature of the Indonesian study will be calculations of the market-structure benefits of liberalization. Atje and Hufbauer (1996) have already worked out the underlying methodology. They examine the partial equilibrium benefits of liberalization in two stages. In stage one, imports are liberalized, but the domestic market structure remains the same (e.g., monopoly, four-firm monopolistic competition, eight-firm monopolistic competition, or perfect competition). In stage two, the initial market structure becomes more competitive: for example, four-firm monopolistic competition might become eight-firm monopolistic competition. A more competitive market structure could result from investment liberalization, allowing new foreign firms to enter the market, or it could be a direct consequence of trade liberalization alone, as closer foreign substitutes are allowed to penetrate the domestic market.

On the basis of numerical illustrations and using parameters drawn from US experience, Atje and Hufbauer have reached certain preliminary conclusions. A sample of the illustrative calculations appears in table 2. In most cases, trade liberalization without market-structure change yields consumer benefits that are very similar to those calculated in the standard perfect-competition case. The big exception occurs when quota protection is removed for a monopolized industry. The reason is that quota protection substantially reduces the elasticity of the domestic demand schedule—because consumers can no longer turn to imports when the monopoly (or cartel) raises the price of domestic goods. But once the quota is removed, consumers have alternative sources of supply, and this dramatically erodes the monopoly's power to charge outlandish prices. In this case, trade liberalization alone (without changing the monopoly market structure) yields huge consumer benefits.

Turning to stage two, the authors find intriguing results from their illustrative calculations. If trade and investment liberalization serves to create a more competitive domestic market, consumers derive additional benefits—as might be expected. In addition, however, domestic production often expands. This is because, with a more competitive market, the

**Table 2 Illustrative consequences of trade liberalization expressed as a function of market structure<sup>a</sup>**

Starting and ending market structure	Consumer surplus gain		Producer surplus gain or loss	Loss of tariff revenue (or quota rents)	Total efficiency gain	Decline in excess profits	Change in price (percent of base level)		Change in volume (percent of base level)	
	Domestic goods	Imported goods					Domestic goods	Imported goods	Domestic goods	Imported goods
Stage 1										
PC with to without tariff	1.83	10.24	-1.83	-9.91	0.33	0.00	-4.22	-9.91	-8.25	6.65
8-firm MC with to without tariff	1.83	10.24	-1.77	-9.91	0.40	-0.20	-4.22	-9.91	-8.25	6.65
4-firm MC with to without tariff	1.83	10.24	-1.70	-9.91	0.46	-0.39	-4.22	-9.91	-8.25	6.65
Monopoly with to without tariff	1.83	10.24	-1.31	-9.91	0.85	-1.57	-4.22	-9.91	-8.25	6.65
Monopoly with to without quota	40.87	8.45	24.88	-9.91	64.29	-2.89	-36.72	-9.91	291.43	-29.54
Stage 2										
From 8-firm MC to PC	0.54	0.00	0.92	0.00	0.03	-1.42	-1.31	0.00	4.74	-1.31
From 4-firm MC to 8-firm MC	0.56	0.00	0.92	0.00	0.10	-1.37	-1.36	0.00	4.92	-1.36
From 4-firm MC to PC	1.11	0.00	1.87	0.00	0.14	-2.84	-2.66	0.00	9.89	-2.66
From monopoly (formerly with tariff) to 4-firm MC	4.34	0.00	6.19	0.00	2.77	-7.76	-9.10	0.00	39.64	-9.10
From monopoly (formerly with tariff) to 8-firm MC	5.07	0.00	7.38	0.00	2.94	-9.51	-10.34	0.00	46.51	-10.34
From monopoly (formerly with tariff) to PC	5.81	0.00	8.60	0.00	3.04	-11.37	-11.52	0.00	53.46	-11.52
From monopoly (formerly with quota) to 4-firm MC	12.23	0.00	17.45	0.00	7.80	-21.89	-9.10	0.00	39.64	-9.10
From monopoly (formerly with quota) to 8-firm MC	14.30	0.00	20.79	0.00	8.29	-26.79	-10.34	0.00	46.51	-10.34
From monopoly (formerly with quota) to PC	16.38	0.00	24.25	0.00	8.57	-32.06	-11.52	0.00	53.46	-11.52

PC = perfect competition; MC = monopolistic competition.

a. Changes in consumer surplus, tariffs, quota rents, efficiency, and excess profits are all expressed as percentages of preliberalization import values. Changes in price and volume are reported as percentages of base levels. Employment is assumed to change by the same percentage as domestic production. Declines in excess profits are counted in computing efficiency gains in stage two, but not in stage one because of the loss of excess profit in stage one.

marginal-revenue schedule perceived by each firm gets closer to the market price, which in turn inspires firms to produce more goods and services.

This result has long been known in the theoretical literature. When the model is applied to actual Indonesian data, it will be interesting to discover whether there are many industries for which the production expansion consequences of more competitive market structures (stage two) significantly offset the production contraction consequences of trade liberalization (stage one).

## China

A study of Chinese trade barriers is under way by the Unirule Institute of Economics in Beijing, in cooperation with the Institute for International Economics. The principal Chinese authors are Zhang Shu-guang, Zhang Yan-sheng, and Wan Zhong-xin. Data on the Chinese economy are hard to gather, and published statistics are often unreliable. Moreover, the protective regime in Fujian Province may differ in practice from the protective regime in Guangdong Province. These realities make the study of Chinese protection an exceptional challenge.

The authors have identified several sectors subject to high tariff and nontariff barriers (table 3). In China, unlike the other countries studied, tariffs often exceed estimated nontariff barriers. Hence the revenue consequences of trade liberalization are likely to be greater for China.

Many of the highly protected industrial sectors in China are also monopolized. The same market-structure analysis pioneered for Indonesia will also be applied to China.

## European Union

Patrick Messerlin and Robert Owen are cooperating with the Institute for International Economics to assess protective barriers surrounding the European Union. Three familiar sectors are on the list: agriculture, textiles, and apparel. In addition, the European Union gives special protection to certain sectors that have relatively low barriers in the United States and Japan. Three important examples are autos, certain electronic products, and cinematic films (in the case of France). The tariff-equivalent rates of protection are similar to those found for the United States.

For 1990, Messerlin and Owen estimate that overall consumer costs total about \$100 billion for highly protected sectors. An alternative set of calculations by the same authors, using the same elasticities applied in the US study, suggests European consumer costs of about \$67 billion. This figure is about 30 percent higher than the US consumer cost level.



**Table 3 Trade barriers in China, 1994**

<b>Commodity</b>	<b>Actual tariff rate (percent)</b>	<b>Nontariff barrier (percent)</b>	<b>Employment of workers (tens of thousands)</b>
Rapeseed oil	25	89	605.66
Sugar	30	111	46.02
Soft beverages	65	41	13.66
Plywood	20	26	12.49
Woolens	15	4	59.78
Color TVs	0	19	17.58
Video recorders	8	46	3.27
Motorcycles	120	15	14.41
Rolled steel products	15	24	66.66
Copper and copper products	10	7	16.17
Aluminum and aluminum products	18	9	20.17
Gasoline	9	26	26.55
Diesel oil	6	19	59.78
Ammonium phosphate	0	72	28.64
Synthetic fiber	15	7	19.56
Natural rubber	30	13	100.00
Synthetic rubber	30	13	14.12
Plastics	25	12	78.70
Sedans	110	24	10.94
Crude oil	1.5	17	97.90
Microcomputers	7	6	8.13
Color tubes	15	19	12.40
Wheat	0	72	2,800.00
Program-controlled switchboards	12	9	13.33

n.a. = not available.

Source: Zhang, Zhang, and Wan (1996).

European protection is heavily concentrated on agriculture. Since European agriculture is a labor-intensive activity, the adverse employment consequences of complete liberalization would be much greater for Europe than for the United States. High-profile protection preserves approximately 1.5 million EU jobs, but fewer than 0.2 million US jobs. In Europe, the consumer cost per job saved averaged about \$70,000 in 1990 (alternative estimates of consumer costs indicate that the figure could have been as low as \$50,000). These amounts contrast with \$170,000 for the United States. Job consequences go far to explaining the European Union's reluctance to tackle the remaining barriers to agricultural trade.

## Australia and Canada

In Canada, the Centre for Trade Policy and Law is the cooperating institution, and Sunder Magun is conducting the study. In Australia, the Australia-Japan Research Centre at the Australian National University is the

cooperating institution, and Ben Smith is carrying out the work. For both countries, high-quality statistics have already been gathered by public bodies (the Industry Commission in Australia and the former Economic Council of Canada). However, we are awaiting first drafts from both countries.

## **Barriers to Trade in Services**

Most of the Institute's cost of protection studies do not adequately cover barriers to services trade. These barriers were a major issue in the Uruguay Round, and at the end of the day a new General Agreement on Trade in Services (GATS) was created—a sister to the familiar GATT. Both agreements are housed under the new WTO.

At this stage, the GATS is basically a framework agreement, and national liberalization commitments remain to be negotiated. There is a clear historical parallel with the GATT in the 1950s. One major difference is that barriers to services trade are much less transparent than old-fashioned tariffs and quotas on goods. Correspondingly, it is difficult to assess their level, and much harder to discipline their use. In fact, three post-Uruguay Round sectoral negotiations—on financial services, maritime services, and basic telecommunications—have all failed. But some progress has been made in assessing the extent of barriers to services trade.

Hoekman (1995) has produced rough-and-ready estimates of services trade barriers. As with goods trade, certain service industries stand out for their high levels of protection: transport, communications, and financial services. Protective barriers of 50 percent and higher are estimated for many countries.

The Institute for International Economics has sponsored detailed studies of two service sectors: telecommunications and civil aviation. In these studies, an attempt was made to measure the consumer benefits of liberalization.<sup>1</sup> Over a 14-year period, the global consumer savings from complete liberalization could exceed \$1 trillion in telecommunications and \$150 billion in civil aviation. Evidently, the stakes in future negotiations are huge.

## **Computable General Equilibrium Models**

The CPE approach used in the Institute studies should be contrasted with two other methods widely used to assess the costs of protection and the benefits of liberalization.

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1. See my appendices in Petrazzini (1996, 73-76) and in Hufbauer and Findlay (1996, chapter 1).

One method is the CGE approach, generally used in the context of a multicountry model. There are many skilled practitioners of the CGE technique. Some of the well-known institutions are the World Trade Organization Research Staff, Purdue University, the World Bank, the University of Michigan, the Australian Industry Commission, and the Brookings Institution. These models have the virtue of offering a comprehensive assessment of regional or global liberalization, taking into account cross-country and interindustry linkages. They have two main difficulties: the structural equations can be exceedingly complex and correspondingly hard for “outsiders” to understand, and the data requirements are huge, and thus the expenses of creating and maintaining the models are correspondingly high.

A very useful survey of CGE models was recently completed by Francois, McDonald, and Nordström (1995). Several differences should be noted between the CGE exercises and the Institute’s CPE results.

First, the Institute authors attempt to evaluate the consequences of full liberalization but concentrate their attention on a relatively few high-profile, high-protection sectors and look at only one country at a time. By contrast, the CGE model results reported by Francois, McDonald, and Nordström reflect the Uruguay Round results—far less than complete liberalization—but attempt to capture the total consequences of liberalization for the entire economy.

Second, the CGE models attempt to measure the interindustry and international effects of liberalization, a task well beyond the CPE models. The CPE models simply report a country-by-country snapshot of protection. Moreover, some of the CGE models incorporate induced investment and endogenous growth effects, aspects of trade liberalization that are not reflected in the Institute’s CPE models.

Third, the CGE models typically express the gains from liberalization in terms of percentage increments in GDP. Usually the gains are under 1.0 percent of baseline GDP. The comparable figures from CPE models are efficiency gains from liberalization. Efficiency gain figures, not reported in the preceding discussion but available in the basic studies, are also well under 1.0 percent of GDP. However, the CPE studies tend to focus on consumer costs and job effects.

Other differences between CPE and CGE analysis could be noted, but the recitation of these contrasts indicates that direct comparison between results is seldom feasible.

## **Trade Policy Review Mechanism Reports**

Another method of evaluating trade barriers is the descriptive approach used in the WTO’s Trade Policy Review Mechanism (TPRM) reports. These reports provide useful detail, they give national governments a

place to rationalize their trade policies, and they are published every two, four, or six years for each country (depending on its level of development).

But the TPRM reports lack cutting-edge criticism. An outside reader of the TPRM reports cannot use them to size up a country's barriers or to discover areas where governments might not be meeting their WTO obligations. These defects could be remedied. The TPRM staff should have more latitude to issue critical reports, to identify practices that may not conform to WTO standards, and to highlight national trade and investment practices that do conform but likely entail high protective costs.

If hard-hitting public reports along these lines are not acceptable to WTO members, then the organization should consider a confidential procedure, patterned after Article IV consultations held by the International Monetary Fund staff with member governments. In confidential consultations, blunt criticism would be delivered to national trade ministers by senior WTO officials.

The European Union regularly assesses the trade barriers of its members. Significant derogations from EU obligations are challenged in the European Court of Justice. Other regional organizations lack these mechanisms, mainly because their members do not want to cede sovereign powers to a central commission or a regional court. However, it should be possible to create surveillance bodies in some of the regional organizations: for example, NAFTA, Mercosur, the Association of Southeast Asian Nations, and the Asia Pacific Economic Cooperation forum. These bodies could issue periodic reports (perhaps jointly with the WTO) and conduct confidential consultations.

## Conclusions

The Institute's cost of protection studies suggest that old-fashioned trade barriers on agricultural and industrial goods still impose major costs, both in developed and developing countries. Rough estimates by Hoekman (1995) indicate that service barriers are also very high for selected activities.

High protection and large consumer costs are usually concentrated in a handful of industries in each country. Some sectors appear with regularity in the lists of highly protected activities. Agriculture, textiles, and apparel are on practically every country's list; automobiles and parts feature prominently on the protection schedules of developing countries. In the service sector, transport, communications, and finance are severely protected by many countries.

The employment consequences of liberalization are generally small, or at most modest, when scaled against the national work force, but jobs "lost" are typically concentrated in a few sensitive sectors. As a general rule, the job losses associated with trade liberalization and larger imports

are offset by job gains in the export sectors of the economy—generally better jobs at higher pay. Moreover, in some developing countries, when proper attention is paid to the market-structure benefits of liberalization, a significant number of jobs may be created in the very industries that are freed of tariff and quota barriers. Watchdog institutions should be encouraged in each country, independent of government, that can monitor trade and investment protection in all their guises and regularly report the costs and consequences. At an international level, the WTO and regional organizations such as NAFTA, Mercosur, ASEAN, and APEC should play a more vigorous surveillance role.

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