

## Agricultural Trade Liberalization

### Summary

Since the end of World War II, the United States and other countries have benefited from agreements reducing tariffs and subsidies that distort international trade in manufactured goods. Similar liberalization for agricultural products would provide additional benefits to U.S. consumers and producers and to taxpayers by reducing federal spending.

U.S. policies that distort agricultural trade are modest by international standards: tariffs and export subsidy rates are quite low on average, while rates of trade-distorting domestic subsidies are somewhat higher. Those facts suggest that U.S. agriculture has more to gain from liberalization in terms of increased exports than it has to lose in terms of increased imports.

According to studies surveyed by the Congressional Budget Office, the United States and, to a lesser extent, its agricultural sector would benefit economically from reductions in agricultural tariffs and subsidies worldwide. Many other countries, including all

major developed countries and most developing countries, would also see a net economic benefit.

If all policies worldwide that distort agricultural trade were phased out in this decade, the likely total annual economic benefit to the world by 2015 would be roughly \$50 billion to \$185 billion, which is about 3 percent to 13 percent of the value added by world agriculture. Those estimates account for only the efficiency gains and increased investment resulting from liberalization. In studies that also incorporate effects on productivity growth rates, the benefits are 50 percent to more than 100 percent larger.

Roughly 80 percent to 90 percent of the benefit from liberalization would come from eliminating tariffs and similar import restrictions. However, even relatively modest exceptions for selected tariffs could substantially reduce the benefits that would otherwise be realized.

Over the past 50 years, the United States and many other countries have concluded a series of multilateral trade agreements that have improved the economic well-being of their residents. For the most part, the agreements have reduced tariffs and other policies that distort trade in manufactured products. Although removing the remaining barriers to such trade has the potential to produce additional benefits, trade barriers in agricultural products are higher than those for manufactured goods and present a greater opportunity for future gains. That opportunity motivated member countries of the World Trade Organization (WTO) to initiate the Doha Round of multilateral trade negotiations, and although those talks have been suspended, liberalizing trade in agricultural products is likely to be a priority in the future.

The Congressional Budget Office (CBO) has published several papers assessing current policies that distort world agricultural trade and surveying studies that examine the effects of reducing or eliminating such policies.<sup>1</sup> This issue brief summarizes the conclusions of those papers.

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1. See Congressional Budget Office, *The Effects of Liberalizing World Agricultural Trade: A Review of Modeling Studies* (June 2006); *The Effects of Liberalizing World Agricultural Trade: A Survey* (December 2005); and *Policies That Distort World Agricultural Trade: Prevalence and Magnitude* (August 2005).

## Policies That Distort World Agricultural Trade

In the rubric of international trade negotiations and the talks concerning liberalization, policies that distort agricultural trade fall into three major categories: market access, which refers to policies such as tariffs and tariff-rate quotas that regulate the access of imports into a country's domestic market; domestic support, which refers to various forms of assistance to domestic producers, such as production subsidies and price supports that raise the price of agricultural products; and export subsidies (sometimes called export competition).

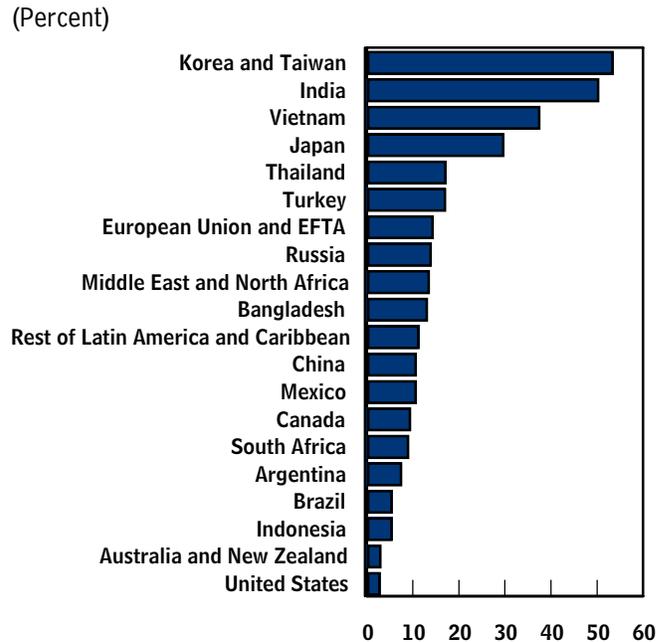
### Market Access

Tariffs on agricultural goods remain substantially higher than those on manufactured goods almost everywhere around the world. According to a 2006 World Bank study, the average agricultural tariff for the world as a whole in 2001 was more than three times the average for all merchandise trade (16.7 percent versus 5.2 percent).<sup>2</sup> For high-income countries, the ratio was even greater at 5.5 (16 percent versus 2.9 percent). Middle- and low-income countries had lower ratios at 1.9 and 1.4 (16.5 percent versus 8.9 percent, and 22.2 percent versus 15.9 percent), respectively. Only a few countries, most of them major agricultural exporters, had agricultural tariffs as low as their average tariffs for all merchandise trade. For the United States, tariffs protecting agriculture were, on average, 1.3 times those for all merchandise.

U.S. agricultural tariffs—along with those of Australia and New Zealand—are generally low in comparison with those of other countries (see Figure 1). According to that same World Bank study, the United States' average rate for agriculture and processed foods in 2005 was 2.4 percent. Mexico's and Canada's averages were 10.3 percent and 9.0 percent, respectively. By comparison, the average for the 25 member countries of the European Union (EU) coupled with the four member countries of the European Free Trade Association (EFTA) was 13.9 percent.<sup>3</sup> Most developing countries had averages that were higher still.

2. Kym Anderson, Will Martin, and Dominique van der Mensbrugghe, "Market and Welfare Implications of Doha Reform Scenarios," in Kym Anderson and Will Martin, eds., *Agricultural Trade Reform and the Doha Development Agenda* (New York: Palgrave Macmillan and the World Bank, 2006).

**Figure 1.**  
**Average Tariff Rates for Agriculture and Processed Foods, 2005**



Source: Kym Anderson, Will Martin, and Dominique van der Mensbrugghe, "Market and Welfare Implications of Doha Reform Scenarios," in Kym Anderson and Will Martin, eds., *Agricultural Trade Reform and the Doha Development Agenda* (New York: Palgrave Macmillan and the World Bank, 2006), Table 12.3, p. 345.

Notes: Tariff-rate averages are weighted by imports.  
EFTA = European Free Trade Association.

In many countries, very high tariffs—much higher than the average for all agricultural products—and tariff-rate quotas (which generally have substantial tariffs for imports that exceed the quota) on a few selected products are a significant feature of agricultural protection. For example, according to another World Bank study, the

3. The European Union is effectively one country for purposes of international trade. There is free trade among its members, its members have a common trade policy toward the rest of the world, and the union itself (rather than its individual member countries) is a member of the World Trade Organization.

The European Free Trade Association consists of Iceland, Norway, Switzerland, and Liechtenstein.

highest agricultural tariff for the EU is 506 percent.<sup>4</sup> For the United States, the comparable number is 350 percent; and for Korea, 917 percent. Less extreme but still significant are the figures for Japan and Brazil, which are 50 percent and 55 percent, respectively. Although relatively few in number, very high tariffs and tariff-rate quotas insulate a substantial portion of agricultural production from international competition. Fifty percent of Eastern European production is protected by tariff-rate quotas, as is 39 percent of EU production and 26 percent of U.S. production. On average, 28 percent of agricultural production in the major industrialized countries of the world is protected in that way.<sup>5</sup>

### Domestic Support

Domestic farm subsidies are pervasive around the world. Of the 80 countries reporting on their policies to the World Trade Organization, 68 indicated that they granted subsidies of some kind in at least one of the years from 1998 through 2005. Subsidies of all kinds reported to the WTO total more than \$200 billion per year, or roughly one-sixth of the \$1.2 trillion total value added in the agricultural sector worldwide.

A few countries dominate the total dollar value of subsidies granted. The EU and the United States grant about one-third of the world total each—the EU somewhat more than the United States because its agricultural sector is slightly larger—and Japan grants almost 12 percent. In contrast, Australia, a major agricultural producer, accounts for less than one-half of 1 percent of the world total.

The EU and the United States have such large subsidies in part because they and their agricultural sectors are large. Even a small subsidy rate can result in a large total subsidy when it is applied to a large output. Ranking countries by subsidy rates paints a somewhat different picture (see Figure 2). The EU, Japan, and the United States have had subsidies averaging 37 percent of their

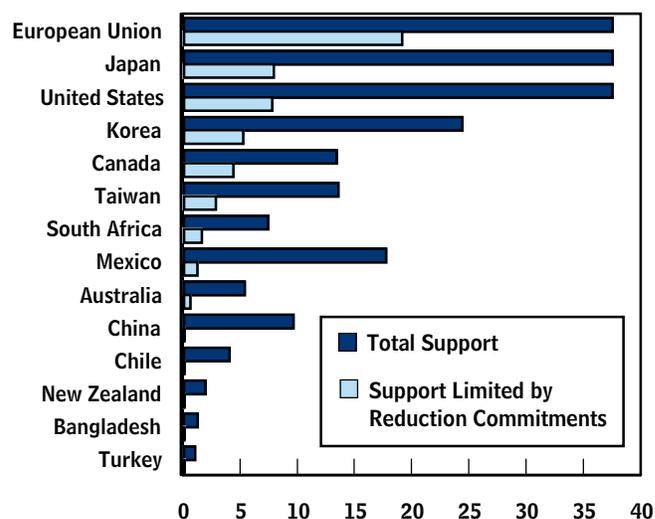
4. World Bank, *Global Economic Prospects: Realizing the Development Promise of the Doha Agenda, 2004* (Washington, D.C.: World Bank, 2003).

5. World Bank, *Global Economic Prospects*. The figure for the major industrialized countries is for the members of the Organisation for Economic Co-operation and Development (OECD), which consists primarily (although not exclusively) of the major industrialized countries of the world.

**Figure 2.**

### Average Annual Rates of Reported Domestic Support, 1998 to 2005

(Percentage of the value of agricultural output)



Source: Congressional Budget Office based on subsidy data reported to the World Trade Organization (WTO) by the countries in question as of July 31, 2006, and dollar-denominated value-of-production data from *Producer and Consumer Support Estimates*, OECD Database 1986-2003, on the Web site of the Organisation for Economic Co-operation and Development, and exchange-rate data from International Monetary Fund, *International Financial Statistics*.

Notes: "Support limited by reduction commitments" refers to the category of trade-distorting support that was limited and that countries made commitments to reduce in the Uruguay Round Agreement on Agriculture. It is often referred to as amber-box support.

Some countries' most recent reports of their subsidies are for some year earlier than 2005. Of particular interest, the most recent reports by the European Union and the United States are for 2001. That year is before the European Union expanded from 15 member countries to 25.

Some small developed countries have substantially higher rates of domestic support for their agricultural sectors than any of the countries shown in the figure.

respective agricultural outputs since 1998. The rates for Mexico and Canada are 18 percent and 13 percent, respectively. Australia and New Zealand have averaged 5 percent and 2 percent, respectively.

The Uruguay Round Agreement, which preceded the current Doha Round and created the WTO in 1995,

contained the first significant liberalization of agricultural trade. That agreement divided domestic agricultural subsidies into two broad categories depending on whether they were deemed by the negotiators to significantly distort trade. The subsidies deemed not to distort trade were exempted from controls under the agreement. In addition, certain of the trade-distorting subsidies—roughly one-third of them by dollar value worldwide—were exempted as well for various reasons. The rest of the trade-distorting subsidies had limits imposed, and countries made specific commitments to reduce them.<sup>6</sup> Worldwide, about one-third of agricultural subsidies fall into that last category. Although the United States and the EU provide comparable amounts of subsidies in total, the United States provides only about one-third as much support in the trade-distorting category limited by reduction commitments. The EU provides well over half of the world total of such subsidies, the United States about one-fifth, Japan between 8 percent and 9 percent, and every other country substantially less.

As a percentage of agricultural output, U.S. subsidies in the category are high enough to significantly distort production and trade but much lower than those of some other countries, most notably the EU. The EU's subsidies in the category have averaged 19 percent of the value of agricultural output since 1998 (but were a little lower, at 15.9 percent, in 2001, the most recent year for which the EU has reported). The United States' subsidy rate, at 7.7 percent, has been less than half of the EU's. Mexico has averaged just over 1 percent and Australia only 0.5 percent.

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6. The net result of the provisions was five categories, or "boxes." The *green box* is for subsidies that were deemed by the negotiators to have little or no distorting effect on trade. The *blue box* is for certain direct payments under production-limiting programs. Tying subsidies to requirements that recipients limit production is a means some countries use to reduce the distorting effect of their income-support programs. The *special and differential box* is for certain development subsidies granted by some developing countries. *De minimis support* consists of subsidies that are below specified percentages of the value of production that the negotiators deemed low enough so as not to be a cause for concern. Finally, the *amber box* is for all support not falling into any of the other four boxes. Such support, often called *nonexempt trade-distorting support*, was limited, and countries made commitments to reduce it.

### Export Subsidies

Export subsidies are granted by substantially fewer countries than are domestic subsidies. Under current international trade rules, a WTO member country may provide such subsidies only if it has made a commitment to reduce them.<sup>7</sup> Twenty-five countries, accounting for over 40 percent of agricultural exports worldwide, have made such commitments. The EU makes the greatest use of such subsidies, providing 85 percent to 90 percent of the export subsidies reported by the 25 countries. The United States has accounted for between 1 percent and 2 percent. The EU's export subsidies have averaged 6.6 percent of the value of its exports; the United States', about 0.05 percent.

### The Effects of Liberalizing World Agricultural Trade

Countries typically adopt trade-distorting agricultural policies to benefit their domestic agricultural producers. In doing so, however, they generally impose costs on their consumers, who as a result must pay more for agricultural products protected by tariffs; on their taxpayers, who must pay for any subsidies; and on competing foreign producers, who lose sales. The costs to domestic consumers and taxpayers alone are usually greater in dollar terms than the benefits to domestic producers. Therefore, eliminating those policies generally yields a net economic benefit, although the agricultural sector may be harmed.

### The Effects of Full Liberalization

Almost all of the studies examined by CBO predict that the United States would gain from full liberalization of agriculture (that is, complete elimination of all tariffs and subsidies) by all countries. The one exception (which uses an alternative assumption about the workings of nonagricultural markets) nevertheless predicts that U.S. agriculture would benefit. Moreover, almost all of the studies predict that U.S. agriculture as a whole would benefit, although to a lesser extent than would the country as a whole. It is difficult to draw reliable conclusions from the studies' estimates of the effects of liberalization on producers of individual agricultural products, some of whom would lose subsidies or tariff protection.

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7. The Uruguay Round Agreement made a temporary exception for developing countries without reduction commitments to provide certain kinds of export subsidies during the initial nine-year implementation period of the agreement. However, that period is now over.

The studies generally also find that all developed countries would benefit from a liberalization agreement and that most developing countries—including China, India, and Brazil—would gain as well. Countries whose agricultural sectors would probably benefit the most include Australia, New Zealand, Canada, Brazil, and Argentina. Countries whose agricultural sectors would probably be harmed the most include members of the European Union and the European Free Trade Association and high-income Asian countries. The United States is someplace in the middle—as are China and India, whose agricultural sectors are predicted to be little affected.

For the world as a whole, one can conclude on the basis of the studies CBO examined that if all policies distorting agricultural trade were phased out by the end of this decade, the likely total annual economic benefit by the middle of the next decade from resulting efficiency gains and investment growth would be in the range of \$50 billion to \$185 billion, or 0.1 percent to 0.4 percent of the value of world output of all goods and services, or roughly 3 percent to 13 percent of the value added by world agriculture. In the studies that also include effects of liberalization on the rate of productivity growth, the benefits are 50 percent to more than 100 percent larger. If the other studies that CBO examined had also incorporated such effects and found them to be of similar magnitude, the range for the estimated total benefit from all three effects of liberalization—efficiency gains, investment growth, and productivity growth—would be roughly 0.2 percent to more than 0.8 percent of global output, or 7 percent to more than 25 percent of the value added by world agriculture.<sup>8</sup>

Agricultural trade liberalization would most likely increase the real wages of both skilled and unskilled workers and, to a slightly lesser extent, interest earnings and profits in almost all countries, with larger effects in percentage terms for less-developed countries. Whether the wages of unskilled workers increased by more than the wages of skilled workers or vice versa for a given country would most likely depend on whether the growth of the country's agricultural output increased or decreased as a result of liberalization—with increased growth of output resulting in greater relative growth of unskilled workers' wages.

Developing countries as a group would benefit more from the liberalization of their own policies, which directly affect both their exports and their imports, than they would benefit from the liberalization of developed countries' policies, which directly affect only the exports of developing countries. To the extent that developing countries are harmed by developed countries' policies that distort trade, the evidence suggests that the European Union and high-income Asian countries are much larger sources of harm than the United States.

### Considerations Concerning Partial Liberalization

A multilateral trade agreement might not eliminate all policies that distort agricultural trade. Instead, it might eliminate some such policies, reduce others, and leave still others in place. The studies that CBO surveyed support several observations about the effects of such partial liberalization.

**The Significance of Tariffs.** Tariffs and tariff-rate quotas are by far the most costly of the policies that distort world agricultural trade as they account for 80 percent to 90 percent of the total cost. Moreover, extremely high tariffs on a few selected products cause a disproportionately large percentage of the economic burden of agricultural tariffs. Correspondingly, an agreement that does not ensure that many of those high tariffs are significantly reduced is not likely to have much beneficial effect. The plan in the Doha Round negotiations was to allow each country to choose a few *sensitive products* and each developing country to choose a few additional *special products* whose protective tariffs would be cut less than others. The 2006 World Bank study modeled variations on a prototype scenario for agricultural liberalization in the general range of those under discussion in the Doha Round. That study found that allowing countries to designate as few as 2 percent of their tariff lines as protecting sensitive products and developing countries to designate an additional 2 percent as protecting special products could eliminate 80 percent of the economic gain that would otherwise result from the prototype liberalization scenario.

**The Effects of Subsidies.** Domestic subsidies are the second most costly of the policies distorting agricultural trade, followed by export subsidies. Unlike tariffs, which tend to harm all countries, subsidies tend to benefit the countries purchasing the subsidized products and to harm the countries granting the subsidies (although their agricultural sectors benefit) and the countries that are

8. The latter range of estimates assumes that agricultural value added maintains the 3.5 percent share of world output that it had in 2003—the most recent year of available data.

competing agricultural exporters. Because most subsidies are granted by developed countries, export subsidies tend to benefit developing countries and to harm developed countries; and, to a lesser extent, the same pattern is true for domestic subsidies.

**Actual Tariffs and Subsidies and Their Allowable Values Under Agreements.** Agreements to reduce tariffs will produce economic benefits only if they lower the tariffs actually in effect. Many agricultural tariffs currently in effect are substantially below their maximum allowable values that were agreed to in the Uruguay Round Agreement. For example, India's actual tariff on cattle is 39 percent even though its allowable tariff is 100 percent.<sup>9</sup> Therefore, an agreement to reduce its allowable tariff by 50 percent would have no effect. For the world as a whole, the average agricultural tariff rate is less than one-half of the average allowable rate. Further, for least-developed countries, the average tariff is more than 80 percent below the average allowable tariff. Multilateral trade agreements usually specify reductions in allowable tariffs, not actual tariffs. Because of the substantial differences between the two, reductions in the allowable tariffs must be quite large to effect a meaningful reduction in actual tariffs.

Similar differences between trade-distorting subsidies and their allowable amounts mean that reductions in those limits also must be substantial to have much effect. For example, the EU's most recently reported subsidies in that category were less than one-half of their allowable value, so a 50 percent reduction in the allowable value might have no effect. The United States' most recently re-

ported subsidies in the category were almost 25 percent below their allowable level, while Japan's were 84 percent below theirs.

**Special and Differential Treatment.** In international trade negotiations, developing countries are often given *special and differential treatment*, under which their required cuts in tariffs and subsidies are smaller than those for developed countries. An irony is that such concessions won by developing countries are more costly to them than they are to developed countries. In the 2006 World Bank study, eliminating special and differential treatment from its prototype scenario increased the estimated benefits to high-income countries by 21 percent, to middle-income countries by 37 percent, and to low-income countries by 64 percent.

#### **Liberalization Beyond the Agricultural Sector**

The effects of liberalization in the agricultural sector would be influenced by liberalization in other sectors such as manufacturing or services. Of particular interest, developing countries' exports of agricultural products to developed countries would increase more if developing countries reduced their own barriers to imports of manufactured goods. Similarly, developed countries' exports of manufactured goods to developing countries would increase if developed countries reduced their own agricultural tariffs and subsidies. The reason is that such liberalization would make it easier for countries with a comparative advantage in agriculture to export agricultural goods in exchange for imports of manufactured goods from countries with a comparative advantage in manufacturing. Moreover, the 2006 World Bank study found that adding liberalization of trade in manufactured goods to its prototype agricultural liberalization scenario increased the benefit for developing countries more in percentage terms than it did for developed countries.

9. Benjamin Buetre and others, "Agricultural Trade Liberalization: Effects on Developing Countries' Output, Incomes, and Trade," Australian Bureau of Agricultural and Resource Economics Project 110039 (paper presented to the Seventh Annual Conference on Global Economic Analysis, Trade, Poverty, and the Environment, Washington, D.C., June 17-19, 2004).

## Bibliography

Some of the studies of agricultural liberalization that CBO surveyed for the papers summarized in this issue brief are the following:

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This brief was prepared by Bruce Arnold. It and other CBO publications are available at the agency's Web site ([www.cbo.gov](http://www.cbo.gov)).



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