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Alternative Policies to Agricultural Export Taxes That Are Less Market Distorting

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What Is the Issue?

During the surge in world agricultural and food prices of 2006-08, as well as the more recent price jumps during 2010-12, many countries restricted agricultural exports by implementing shortrun taxes, quotas, and complete export bans. For the past few decades, another commonly used class of export controls has been longstanding export taxes, levied on both agricultural and nonagricultural products. The World Trade Organization has reviewed the trade policies of 121 countries and trading blocs from 1995 to 2014 and found that 74 of those countries/blocs applied export taxes for such products as agricultural goods, fishery and forestry products, minerals, metals, and precious stones.

Export restrictions affect prices, production, consumption, trade, and producer and consumer welfare. Domestic consumers of the affected products benefit from prices lower than would exist without the export restrictions, while domestic producers are hurt by the lower prices. If a country exports enough of a good to affect its world price, then the reduced supply to the global market from the export restriction also raises the world price. The effects abroad are in the opposite direction of the domestic effects: foreign consumers are hurt by the higher world price while foreign producers benefit from it.

The study has two main objectives:

- To examine the market effects of a conventional export tax and
- To identify alternative policies to a longstanding conventional export tax that increase exports and make the tax less market distorting and less welfare diminishing.

What Did the Study Find?

The researchers examined three welfare-enhancing policy alternatives to a conventional export tax: (1) a consumption subsidy, (2) a production tax, and (3) a modification of a conventional export tax that allows additional exports after producers meet a domestic sales requirement. In the domestic economy, the net economic welfare is higher with each of the three policy alternatives than with the conventional export tax, and each alternative results in more of the affected good being exported than does the unmodified tax. Increased exports benefit foreign consumers, especially for goods from countries exporting large volumes of that good. The

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additional exports lower the good's world price, further reducing the loss in global economic welfare from the initial tax.

A consumption subsidy can benefit domestic consumers as much as an export tax would, and it can benefit producers more than the export tax would because producers receive the same price and produce as much as they would without the tax. A production tax has the benefit that it can increase government revenue by more than the export tax would because all output is taxed, not just the amount exported.

However, the consumption subsidy and production tax have drawbacks. Two major government objectives in imposing export taxes are (1) benefiting consumers by lowering the price they pay for the exported good and thereby increasing their volume of consumption, and (2) gaining revenue from the tax. With the consumption subsidy, the government not only loses the revenue from the export tax but also must pay for the subsidy to consumers. With the production tax, consumers pay a higher price and purchase less of the good than they would with the conventional export tax.

The third alternative policy, a modification of a conventional export tax, addresses these disadvantages. The key feature of this alternative is that domestic producers of the exported good must collectively sell a minimum total volume through either domestic sales or exports under a conventional export tax before being allowed additional exports at the world market price. The advantage of this policy over the other two is that domestic consumers pay the same price and purchase as much of the good as they would with the conventional tax, and the government can earn exactly the same tax revenue as with the conventional export tax. In this way, the additional export policy would not compromise any of the major objectives of export taxes—or put another way, domestic producers would gain, but no other domestic group would lose.

Although the welfare of both the domestic economy and the rest of the world is higher with all three alternative policies than with the conventional export tax, the alternative policies are less welfare enhancing in the aggregate for both the domestic and world economy than abolishing the export tax altogether to allow entirely free export. Thus, given the assumptions in this model, the alternative policies are "second best" policy options, with the first best policy being free trade.

How Was the Study Conducted?

The study uses market supply, demand, and trade analysis to examine the effects of an export tax and alternative policies to the conventional tax that are less market distorting. Key to the investigation is welfare analysis that includes measures of economic benefits to consumers and producers (consumer surplus and producer surplus) in different policy situations.