Reducing Distortions in International Commodity Markets

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World commodity markets—and particularly the markets for agricultural commodities—remain highly distorted despite the wave of liberalization that has swept world trade since the 1980s. Commodity markets are distorted on both the export and the import sides, with serious implications for world prices and their volatility. Very few of the price distortions found in commodity markets can be justified on the grounds of dealing with market failures. Rather, most policies that affect commodity prices are designed to transfer resources to favored groups by raising or lowering prices. Policies may target the level and/or the volatility of prices, and the pursuit of one type of policy objective may have unintended consequences in generating further distortions. Moreover, some commodity markets are characterized by imperfect competition. Where monopolies or oligopolies in trade arise, either because of government regulation or through other barriers to entry, distortions may arise that call for application of antitrust laws and other forms of pro-competitive policy action.

The negative spillovers for other countries that are generated by national policies or the exercise of market power imply there is significant potential to realize global welfare gains through international cooperation and negotiation of disciplines on the use of specific policies. The main multilateral institution that offers a framework for countries to pursue such cooperation is the World Trade Organization (WTO). The WTO embodies a set of rules that apply to the agricultural trade policies of member states, but these address only a subset of the relevant policies. Compared to the historical focus of the membership on negotiating agreements to improve access to markets for exporters, rules applying to import policies are more extensive and better developed than rules pertaining to export policies. In principle, the WTO’s framework of rules and disciplines can be applied to both types of policies—what is needed is for members to be willing to do so.

Rising real incomes, the emergence of a multipolar world economy resulting from the sustained economic growth in many developing countries over the last two decades, and increasing competition (demand) for natural resources have changed the political economy landscape. The recent upsurge in the use of export barriers suggests that the general mercantilist reluctance to restrict trade cannot be taken for granted when world food prices rise, or when there is a significant increase in global demand for scarce natural resources (Frankel 2010). In this situation, many governments may place a higher weight on the welfare of consumers and downstream industries than on the welfare of upstream producers (farmers, miners, and so forth) when deciding on whether and how to use trade policies. The use of export restrictions may increase as emerging markets continue to experience high rates of economic growth, which generates greater demand for food products and raw materials. These recent developments suggest that a more comprehensive approach to negotiating rules of the game for policies affecting commodity markets could potentially benefit a much wider set of stakeholders than those that have so far driven
WTO negotiations. However, implementing a broader approach would require going beyond traditional trade policies to encompass policies that affect investment in natural resource production/extraction and market competition.

**Agricultural and Commodity Market Distortions**

Many agricultural commodities tend to be heavily protected in industrial countries for reasons such as: (i) food is typically a small share of consumers’ expenditures in these countries; (ii) the number of farmers tends to be small, making it relatively easy for them to coordinate to apply political pressure; and (iii) farmers sell virtually all of their output and use substantial amounts of purchased inputs—increasing the leverage of output prices on their net returns. Conversely, historically, agricultural products in developing countries have tended to be taxed because: (i) food expenditures are frequently a large share of the income of most people; (ii) the number of farmers is large, making it hard for them to organize; (iii) urban consumers are a relatively small group, able to organize against rising food prices; and (iv) farmers are mainly subsistence oriented—selling only part of their output and using few intermediate inputs so that there is little leverage between food prices and their net returns.

A recent comprehensive multicountry study shows that agricultural distortions in industrial countries remain large, but have declined from the high levels in the mid-1980s (Anderson 2009). In developing countries, the average rate of taxation on agriculture declined sharply, as shown in figure 1, and has switched to positive assistance on average. The changes in these rates of assistance reflect a sea-change in the pattern of agricultural distortions in developing countries, perhaps related to the high rates of economic growth in developing countries in the latter period of the sample, and the sharp shift away from dependence on exports of commodities toward greater reliance on exports of manufactures. In developing countries’ agricultural sectors, there is a sharp difference between the rates of protection provided to import-competing agriculture and those provided to export-oriented agriculture (figure 2). The almost complete elimination of taxation on agriculture has sharply reduced the cost of distortions on export-oriented agriculture in developing countries. The rise in protection to import-competing agriculture is likely to be particularly costly to the poor, who spend a large share of their income on food.

For a number of staple foods, governments intervene to reduce the volatility of domestic prices relative to world prices. Such measures have a long history and were also used in high-income countries to stabilize domestic prices prior to the Uruguay Round multilateral trade negotiations. Insulating policies are heavily used for key staples such as rice and wheat. While these measures may help individual countries reduce domestic price volatility, they result in a serious collective-action problem. As more countries stabilize their domestic prices, world prices become more volatile, and the policy is completely ineffective if all countries use it to the same degree. Martin and Anderson (2012) found that almost half of the increase in the world rice price in 2005–8 could be explained by countries’ attempts to insulate themselves from the primary shocks causing the world rice price rise. While some countries were relatively successful in insulating themselves against the increases in world prices, domestic prices in low-income countries in Africa rose almost as much as world prices did, suggesting that price volatility may have been greater as a result of the insulating policies than it would have been otherwise.

Governments also have a long history of intervening in markets for other natural resources, both renewable and nonrenewable. Imperfect competition, market power, and high levels of concentration characterize some commodities markets and may result in price distortions. Political uncertainty and risk that preclude efficient investment and generate inefficient forms of trade can also generate important costs (Collier and Venables 2010; WTO 2010). In the case of natural resources, producers have focused much more on export restrictions designed either to lower domestic prices or to raise export prices—including through the creation of producer cartels. Export re-

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**Figure 1. Average Nominal Rates of Assistance to Agriculture, 1955–2004**

![Graph showing average nominal rates of assistance to agriculture](image)

Note: ECA = Europe and Central Asia; HIC = high-income countries.*

**Figure 2. Nominal Rates of Assistance to Developing Countries’ Agriculture**

![Graph showing nominal rates of assistance to developing countries’ agriculture](image)

*Source: Five-year averages from Anderson (2009) and [www.worldbank.org/agdistortions](http://www.worldbank.org/agdistortions).*
restrictions are predominantly used by developing countries (WTO 2010). Export taxes on natural resources account for about one-third of all export taxes imposed—some 11 percent of world trade in natural resources is covered by such taxes, with timber, iron, copper, pearls, and gemstones among the most frequently affected. Countries may also use other instruments that have effects similar to those of export restrictions on international prices, such as efforts to agree on joint production limitations (quotas), as in the case of the Organization for Petroleum Exporting Countries (OPEC). In practice, most efforts by producers to form a commodity cartel and improve their terms of trade by restricting supply have not been successful (OPEC is an exception).

Finally, state ownership and control of entities that produce or trade natural resources may affect the operation of the markets concerned and distort international competition as a result of de facto subsidization—soft budget constraints, privileged access to credit, and so forth—or market power effects. State-owned enterprises (SOEs) are particularly prevalent in the energy and mining sectors—often ranking among the largest nonfinancial multinational enterprises.

Protection rates for imports of nonagricultural natural resources are generally low because of pressure from user industries. However, importing countries confronting exporters of resources with market power and thus the ability to affect world prices may seek to use import tariffs or, more frequently, nondiscriminatory excise taxes to lower demand and shift rents away from supplying nations. In addition, tariff escalation is often used to increase the effective rate of assistance to domestic processing industries.

Commodity value chains are often characterized by imperfect competitive market structures. Domestic processors, for example, may have a degree of market power, as may suppliers of inputs such as seeds, fertilizers, or chemicals. Economic effects similar to those that are generated by trade policies can arise from the (non)application of antitrust law. One example is an exemption under competition law for behavior by national firms on export markets—such as export cartels—that would otherwise be illegal, as long as the actions do not have negative effects on consumers in the home market. Another issue that is attracting more attention in policy circles is concentration (a dominant position) at specific segments of global value chains. The concern is that monopoly power of input providers and/or monopsony power on the part of buyers (large trading companies or retailers) may lower domestic farm gate prices and/or result in retail prices that are higher than they would be if the relevant markets were characterized by greater competition.

In sum, a wide mix of policy instruments may influence the level and volatility of domestic prices for commodities. National policies may affect international prices, either indirectly or directly, especially if the countries concerned are large suppliers or importers. The pursuit of such policies, even if welfare enhancing for the countries concerned, may lower welfare for the world as a whole by generating negative spillover effects for trading partners and inducing affected governments to implement measures in turn to offset such effects, in the process generating further distortions and inefficiencies.

**Rule-Making Implications and Priorities**

Many of the policies that affect commodity markets are subject to multilateral rules under the WTO. But a number of the major policy instruments that are used by governments are not subject to effective disciplines, either because countries have not been willing to make commitments—for example, limits on the level of export taxes—or because there are no agreed on rules. In practice, domestic policy measures may be used that have an equivalent effect to trade policies that are subject to disciplines—for example, nondiscriminatory excise taxes on a good for which there is little national production or output quotas by exporting countries. The multilateral trading system has focused primarily on lowering import barriers and making them less variable.

The policy and negotiating agenda on import protection is well understood and is already squarely on the table in the WTO. Making progress in further disciplining the scope to use import barriers is important—the estimated welfare gains from lowering applied levels of protection and bringing down tariff bindings are significant. But extending the effort to agree on disciplines on export restrictions is equally important, not least because the greater freedom of countries to use export restrictions is likely to have a direct bearing on the willingness of many importing countries to accept greater disciplines on their import policies.

WTO disciplines are much less comprehensive on export measures and policies that reduce output or restrict supply. Article XI of the General Agreement on Tariffs and Trade (GATT) prohibits the use of quantitative restrictions, whether on imports or on exports, but permits temporary quantitative trade restrictions to prevent critical shortages of food or other goods. It leaves open the possibility of a country imposing production quotas or using excise taxes that primarily affect imports. The use of export taxes is also unconstrained unless a country has made specific commitments in this regard—the counterpart of import tariff ceiling bindings—which most WTO members have not. Article XVII GATT requires state-trading enterprises to abide by the WTO’s nondiscrimination rules (national treatment and most favored nation), but does not impose other constraints on the behavior of SOEs (Hoekman and Kosticki 2009).

There has been a recent upsurge in the use of export barriers in response to rising world prices of food staples and strong demand for scarce natural resources (Datt, Hoekman, and Malouche 2011). Export barriers are often used for political economy reasons—as, for example, to drive down the price of a com-
modity used as an input by a more politically powerful “preferred” sector. If a country can affect its terms of trade, export restraints can make economic sense for that country. An important difference between political economy and terms-of-trade motivated trade interventions is that in the case of the former, the probability that intervention raises national welfare is lower. Whatever the motivation, the interventions are likely to generate negative spillovers for other countries, providing an incentive to cooperate and negotiate reciprocally binding disciplines on the use of specific policies.

Fears of inadequate access to supplies by resource-scarce countries and of inappropriate exploitation in resource-rich regions have significant potential to generate trade conflicts and create negative spillovers for the world as a whole (WTO 2010). Responses by importers to actions by exporters to restrict supply—whether the government does so directly through a tax or other type of policy, or allows firms based in its jurisdiction to exploit their market power in foreign markets (through an export cartel, for example)—may result in some of the rents being shifted from exporters to importers, but the net result for world welfare is negative.

Conceptually, the agenda for cooperation in this area is rather straightforward and revolves around agreeing on a ban on export quotas and on binding commitments on export taxes and equivalent disciplines for export cartels. Given that countries that have the ability to set prices have an incentive to do so, affected trading partners will have to be willing to engage in quid pro quo negotiations and offer concessions to the countries that currently benefit from being able to impose export restrictions. In principle, this is of course exactly what the WTO is set up to do. The challenge is to design a negotiating agenda out of which win-win deals can be constructed. Despite the difficulty in concluding the Doha Round negotiations—which in part is arguably a result of an agenda that does not offer enough in the way of potential win-win deals—the history of negotiations under the GATT indicates that this is a challenge that members should be able to meet.

As has been argued by Collier and Venables (2010), multilateral efforts to agree on policy disciplines that will reduce distortions of international commodity markets need to span not only export and import trade policy and domestic substitutes for trade policy instruments, but also policies that determine the extent to which the most efficient firms are permitted access to resources. Uncertainty regarding the conditions of competition for contracts and leases and the future operating and tax regime that will affect extraction activities and rates of return on investment generate distortions that may result in reductions in supply, excess costs and inefficiencies, and lower revenues for host governments. Rule-making efforts need to include issues that affect access to resources through foreign direct investment (FDI) and contracting transparency (government procurement).

Imperfect competition, market power, and high levels of concentration characterize some commodities markets and may result in price distortions. At the national level, competition policy and/or regulation is the appropriate instrument to address market behavior that may result in distorted pricing. From a global rule-making perspective, the question is what can international cooperation do to address the cross-border negative spillovers that are created by the behavior of firms located in a foreign country (or, in the case of multinationals, that are subject to multiple jurisdictions). “Competition issues” may arise in the operation of both food and nonfood commodity markets, but are more likely in the case of natural resources because production and/or exports of commodities concerned often involve a relatively small number of large firms (many of which may also have strong links to the state). Market power and oligopoly have a number of implications, including possible foreclosure of markets for more efficient foreign producers.

Competition policy was one of the three so-called Singapore issues suggested for negotiation at the 1996 WTO Ministerial Meeting that eventually were taken off the table at the 2003 Cancun ministerial. One reason was that the focus of discussions was not primarily on the negative spillovers associated with competition law enforcement (or nonenforcement). Instead, most of the deliberations revolved around the benefits of national competition policy per se—something that can and has been autonomously implemented by countries. Arguably, any effort to negotiate rules of a competition policy nature must address situations that involve private sector behavior that gives rise to cross-border negative externalities—antitrust exemptions for export cartels and international cartels being obvious examples. A number of major antitrust cases in recent years against global cartels connected with the food industry have illustrated the importance of active enforcement and international cooperation between competition authorities.

In many of the areas that can potentially give rise to competition concerns, there is significant uncertainty/ambiguity regarding whether a practice, level of market concentration, prevailing market structure, and so forth should be of concern, that is, whether they can affect price levels or generate excessive volatility. The same is true for the operation of SOEs. This suggests a first priority is to compile much better data and to undertake a concerted effort to identify negative cross-border spillovers and analyze whether these should be accepted (as in the case of cooperation between countries for nonrenewable natural resources such as oil). Thus, greater transparency and analysis should be part of any forward-looking work program on commodity markets and natural resources in the WTO.

Conclusion

Extending the multilateral trading regime to cover the main policy-induced distortions of global commodity markets is a complex endeavor. However, the case for a concerted focus on
the set of policies that distort agricultural and natural resource markets is strong. Distorted price levels and excess price volatility are detrimental to both producers and consumers. Agreement to discipline the use of policies that generate distortions would benefit all countries. To broker such an agreement, the focus must be comprehensive and address all of the major policy areas that affect the operation of international commodity markets, not just a subset.

There has been much analysis and discussion of why the Doha Round negotiations have proven so difficult to conclude successfully. One argument is that the negotiations (and thus prospective agreements) were not structured to make them relevant enough to international business and the concerns of citizens. In the case of commodities, the Doha negotiations have focused primarily on agricultural products and only a subset of the relevant policies—subsidies and import protection. This narrow focus significantly reduces the potential global welfare payoffs from any agreement and does not do enough to address the concerns of countries that rely heavily on imports of food and natural resources. Given the social importance of food prices and access to food and the impact of increasing demand and competition for other natural resources, renewable and nonrenewable, a concerted multilateral effort to agree to disciplines on the use of the major policies that distort global commodity markets should be a priority. The international community is now beginning to focus on the issues involved in addressing these challenges (G-20 2012), but rigorous effort and follow through will be needed to implement cooperative solutions for these problems.

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This note draws on Hoekman and Martin (2012).

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Notes

1. Export restrictions on natural resource products accounted for one-third of the 7,328 notified export restrictions in the time period covered by WTO (2010).
2. Forty-nine of the 200 largest nonfinancial multinationals are SOEs, defined as firms in which the government stake is at least 10 percent (Sauvant and Strauss 2012).
3. Although from a global point of view, improvements in the terms of trade are purely transfers, and removal of these barriers generally increases world income by reducing the efficiency costs of these distortions.
4. See the contributions in Evenett and Jenny (2012). Regarding export cartels, a distinction should be made between cartels that involve states and cartels of private firms. The former may be an efficient mechanism if the product concerned is a nonrenewable natural resource (Collier and Venables 2010). In any event, it is unlikely that any effort to declare such arrangements illegal will be successful because for many of the producing countries the natural resource represents a major source of national wealth.

References