

Agricultural Trade and the Doha Round. Lessons from Commodity StudiesJohn C. Beghin and Ataman Aksoy¹

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Correspondence: John Beghin UMR Economie Publique INRA-INA Paris-Grignon
16, Rue Claude Bernard 75231 Paris Cedex 05 France
Phone : 33-1-4408-1738. E-mail: beghin@iastate.edu

Abstract: While global analytical approaches to agricultural trade liberalization yield large gains for most economies, there are substantial variations in the policy regimes across commodities. To clarify the multiplicity of distortions and impacts, the World Bank's Trade department undertook a series of commodity studies. The studies highlight the important challenges faced by negotiating countries in the Doha round of the WTO trade negotiations. The studies provide a sharper look at the North-South dimensions of the agricultural trade debate with the North's trade barriers, domestic support, and tariff escalation. They also underline the South-South challenge on border protection, and reduced rural income opportunities for the lowest-income countries due to policies in higher-income countries depressing world prices. Agricultural trade liberalization would induce significant prices increases for most commodities. The studies identify the detrimental effects of multilateral trade liberalization for some countries via lost preferential trade agreements and higher prices on net consumers of commodities. Given the complexity of specific issues in agriculture, as well as the North-South and South-South dimensions of distortions, a global solution would be required to liberalize these markets. Rather than being self-contained, agricultural trade negotiations should involve concessions on other sectors and issues (services, IPRs) to identify overall reform packages palatable to all parties.

Keywords: Doha Round, trade negotiations, agricultural policy, commodities, protection, WTO.

¹ Affiliations are: John Beghin (Institut National de Recherche Agronomique, Paris-Grignon, and Iowa State University); Ataman Aksoy (The World Bank). The view presented should not be attributed to the authors affiliated institutions. Thanks to J. Baffes, J-C. Bureau, U. Dadush, N. Diop, D. Mitchell, J. Nash, and D. van der Mensbrugge for comments on earlier drafts and discussions.

Introduction

While global analytical approaches to agricultural trade liberalization yield large gains for most economies, there are substantial variations in the policy regimes across commodities. To clarify the multiplicity of distortions and impacts, the World Bank's Trade department undertook commodity studies. The studies highlight the important challenges faced by negotiating countries in the Doha round of the WTO trade negotiations. We report findings based on completed studies covering cotton, dairy, groundnuts, rice, and sugar.²

These specific commodities have been chosen because they illustrate and highlight the important challenges faced by negotiating countries in the Doha round of the WTO trade negotiations. In particular, the commodities studies provide a sharper look at the North-South dimensions of the agricultural trade debate (North's trade barriers (e.g., sugar) and domestic support (e.g., cotton)), the South-South challenge on border protection (e.g., groundnuts), and on LDCs' reduced rural income opportunities because of other countries' policies (e.g., cotton, groundnuts in Africa). The studies also shed light on detrimental effects of multilateral trade liberalization for some countries via lost preferential trade agreements (e.g., sugar) and higher prices for net consumers of commodities (e.g., rice in LDCs).

These commodity studies complement and refine the earlier aggregate assessment of trade liberalization, carried out with global models by the World Bank and the research community. The latter models are essential to gauging aggregate welfare and trade effects of agricultural and trade policies being debated in multilateral trade negotiations, but are constrained by the lack of detailed, up-to-date, policy coverage and product disaggregation. By contrast, the commodity studies take into account the latest policy developments in these markets, such as the new U.S. Farm Bill, CAP reform, and the implementation of EBA, and NAFTA. The level of product disaggregation (single commodity versus aggregate crops) is also instrumental to clearly identify potential win-

² The Trade Department is also analyzing the fisheries-seafood, and wheat markets.

ners and losers in liberalized markets. The complexity of commodities, such as sugar, show that protection often leads to unexpected consequences such as the emergence of substitute products and the distortion of product-using markets such as confectionery. Further, these studies provide firmer grounds to derive practical policy recommendation within the context of global reform for the commodities considered, and better understanding of the policies shows when there are opportunities for change.

Finally, the studies are forward looking. They capture important emerging stylized facts and trends in these markets, which will reshape them and provide new opportunities or challenges to developing countries beyond the timeframe of the Doha round. We first present key emerging patterns and findings, which are recurrent across several commodities analyzed. Then, we highlight some commodity-specific findings pertinent to the Doha negotiations. Concluding comments focus on the policy challenges facing the trade negotiations. The individual commissioned papers are available upon request (Baffes, Cox, Diop et al., Mitchell, and Wailes).

Emerging common findings

Exacerbated shallowness of markets and price signals

Most of the analyzed commodity markets are artificially thin, i.e., they are characterized by small trade volume, small number of agents in the market leading to high variability of price and trade flows. Beyond natural causes (weather shocks, pest), there are two causes relevant to policy. First and foremost, large trade distortions impede trade flows, depress world prices, and discourage market entry. Border barriers are high in most of the markets studied, except cotton, with well-known culprits (QUAD countries, India) and new ones in the South (many middle-income countries) leading to widespread protection. For example, the global trade-weighted average tariff for all types of rice is 43 percent, and reaches 217 percent for Japonica rice!³

³ Not all commodity markets are that thin and price sensitive, especially markets that are less distorted, such as wheat. Estimates of price effects of liberalization are between 5 to 10 percent (FAPRI).

Protectionist policy interventions beyond a critical level of market distortion induce further interventions by otherwise competitive suppliers. To illustrate with the extreme case of sugar, world market price signals are so distorted that virtually no country can supply on world market without some form of subsidy (e.g., Thailand and Brazil are the among the most competitive sugar producers but provide some form of subsidies to their sugar industry).

Exports subsidies (e.g., EU dairy subsidies) when present have had a similar qualitative effect resulting in depressed world prices and entry by inducing pro-cyclical surplus production by noncompetitive and often large producers. In practice, their effects have been relatively smaller than those of tariffs and TRQ schemes (e.g., in dairy and sugar).

Many domestic subsidies in OECD countries have a similar effect (e.g. U.S. cotton subsidies) because they are counter-cyclical in nature and so large. For example, the US provided \$3.7 billion of subsidies in 2001/02 to their cotton growers and the EU (Greece and Spain) provided \$0.7 billion to their growers. These large subsidies have to be compared to the value of the world's cotton production of \$20 billion in 2001.

A second source of exacerbation originates in some developing economies, which suffer from inconsistent quality and infrastructure problems (so-called “supply problem”). The latter preclude a systematic presence on world markets as exporters (e.g., West African suppliers in the groundnut market). They will require some additional adjustments and assistance to take full advantage of trade liberalization to generate rural income. It can be done as shown by the cotton industry in East Africa. Policy discipline would bring less uncertain price signals, which in turn would facilitate these adjustments.

Agricultural trade liberalization would induce significant price increases, from 10-20 percent in cotton market, nearly 20 percent in groundnut markets, 20-40 percent in sugar and dairy, and up to 90 percent in the medium/short grain rice market. The reactive protection of competitive suppliers induced by extreme distortions would become superfluous, as in the case of sugar (Thailand, Brazil) and rice (the US). The recourse to anti-cyclical policies would be less likely in the US

(e.g. most of the U.S. peanut policy would be redundant under prices prevailing under free-trade).

Mitigating these strong price tendencies is the presence of substitutes in most of these markets (synthetic fibers for cotton, other proteins sources for dairy, other oilseeds for groundnuts, inter-grain competition for grains and rice, and other sweeteners for sugar). The price of these substitutes has often been distorted by either ever-creeping protectionism as in the case of sugar and sweeteners, or because of policy goals common to substitutes (e.g., China's policy to protect domestic value-added creation in oilseed sectors). With multilateral trade liberalization involving all products, the relative world prices of substitutes may not change as dramatically as suggested by the stand-alone commodities studies.

Relative importance of trade and domestic distortions

The studies stress both domestic and trade distortions, however trade distortions seem more important and prominent in most markets with the notable exception of cotton. Trade distortions are the most important source of distortion for two reasons: First, they are more widespread and large in absolute terms, as well as relative to prevailing manufacturing tariffs. They directly block trade flows (e.g., dairy, rice, and sugar TRQs), distort markets with inefficient production and penalized consumers (e.g., dairy in Korea), and tend to induce larger price effects than domestic programs. For example, the removal of tariffs on groundnuts products accounts for virtually all the increase in their world prices (15-20 percent) and welfare gains (\$0.56 billion). By contrast, the U.S. peanut program, the major domestic distortion in groundnut markets, affects world prices and welfare by less than 1 percent.

The second reason trade distortions are more important is that they underpin many of the domestic policies (e.g., dairy in the QUAD, rice in high-income Asia, and sugar in the US and the EU). The latter would not be feasible or fiscally sustainable without trade barriers, even in industrialized economies with loose budget constraints. Trade opening acts as a discipline device for domestic distorting policies. The groundnut and sugar studies make this case vividly with recent positive policy developments under NAFTA and the EBA. High trade distortions in the US were

an essential pillar of the U.S. peanut program to generously subsidize growers. Border opening under NAFTA forced the US to reform its policy under the 2002 Farm Bill, which is now much less trade distorting and rendered trade barriers redundant. Similar developments are happening for sugar in the US under NAFTA and will happen soon in the EU under EBA.

Domestic policies are also substantial contributors to market distortions via price effects but foremost in terms of lost earning opportunities in developing countries, as it is blatantly the case with domestic cotton policies in the USA, and to a lesser extent in the EU. These policies have displaced competitive suppliers in Africa and have induced rural income loss bigger than the development assistance received by some of these countries. These findings from the commodity studies on the relative importance of trade and domestic distortions corroborate findings of Hoekman et al. using a different approach.

Tariff escalation is widespread in the analyzed markets. Value-added production in developing economies that could be competitive suppliers on world markets is discouraged by significant trade barriers both in the South and the North (e.g., groundnut oil imports in India and China, processed rice imports in the EU, processed dairy imports in many countries). This tariff escalation is present in many preferential trade agreements, which confine poor developing countries to commodity markets instead of promoting valued-added industries (e.g., The ACP preferential agreements discouraging food-processing).

Welfare effects with large transfers

Aggregate welfare effects of trade liberalization appear significant and confirm the analysis done with global models. To illustrate, moving to free trade in sugar markets would result in estimated welfare gains of \$4.7 billion, 38 percent higher world sugar prices, and increased sugar trade of about 20 percent.

Countrywide net welfare effects (consumers, producers, taxpayers) are significant in distorted countries, but small relative to the size of transfers from consumers/taxpayers to producers in protected markets. For example, in Japan following full trade liberalization, profits in dairy pro-

duction would decrease by 60 percent (or \$3.1 billions); consumers' welfare would increase by 18 percent (\$3.7 billions); and net welfare would increase by roughly 2 percent (\$0.5 billion).

The indirect welfare effects of protection on competitive exporting countries are significant, especially given the small size of many developing economies taxed by current policies in OECD and middle-income developing countries. For example, Groundnut producers in Senegal, Gambia, Nigeria, South Africa, and Malawi would gain about \$124 millions in producer profits, a significant impact for these small economies, if China and India liberalized their groundnut product markets. These welfare effects are larger than development assistance in several cases.

Losers and winners

Agricultural trade liberalization would have winners and losers, but would mostly reduce rural poverty in developing economies because the South in aggregate has a strong comparative advantage in agriculture. Agricultural trade liberalization would induce significant rural income generation among the least-developed countries (e.g., groundnuts in Africa, and cotton production in central Asia and Africa).

Resource reallocation within agriculture in India and China would be significant with losers and winners. For example, in China and India, production of groundnut products would likely contract, but rice production and exports would expand in China, and dairy production and exports would expand in India. The liberalization of value-added activities is crucial in terms of expanding employment and income opportunities beyond the farm gate.

Consumers in highly protected markets would vastly benefit from trade liberalization with lower prices and expanded product choice (e.g., Asian consumers of rice and dairy). With higher import unit cost, consumers in poor net-food importing countries would face higher prices if these markets were not protected prior to liberalization. In practice these concerns have been exaggerated. For example, dairy consumption in North Africa and Middle East would be little affected by trade liberalization because of prevailing trade barriers offsetting the depressed world prices.

Multilateral trade liberalization erodes benefits from preferential bilateral trade agreements

and casts low-cost producers (e.g. sugar producers in Brazil and Thailand) against less efficient producers from LDCs. How these reforms occur will have important consequences for developing countries—a South-South dimension. The best approach is coordinated global liberalization of policies, which provides the largest price increases to offset some of the lost rents, accompanied by further effective opening of value-added markets along with some targeted assistance to overcome the “supply problem.” For example, world sugar price increases alone would offset about half of the lost quota rents for countries that have preferential access—which are much less than is commonly expected—because many are high cost producers.

Specific findings from the commodity studies

Cotton

In the North-South context of the cotton case, the current prospects for cotton policy reforms are slim at best. The US introduced the *2002 Farm Bill*, which is in place for the next 6 years with considerable transfers planned to cotton producers—historically *Farm Bills* have given more than they promise, not less. The EU reformed its cotton policy in 1999, and its forthcoming expansion does not affect the cotton sector since none of the new entrants are cotton producer. There is no major direct trade impediment at the international level, except the Agreement on Textiles and Clothing (the Multifibre Arrangement’s successor), which implicitly taxes cotton products. The cotton market is relatively static because of the competition of synthetic fibers, although new technology in textile and apparel has revitalized cotton use in high-end markets.

Dairy

The world dairy sector exhibits the worst case of distortions examined, with an entangled system of domestic and trade barriers including surplus disposal, especially in the QUAD countries and Korea. The QUAD countries and Oceania dominate the export market. The latter is a competitive exporter with few distortions. Dairy interest groups in the QUAD are entrenched and prospects for policy reforms appear dim, especially in the EU and Japan. Developing economies also distort their dairy markets.

Despite these distortions, dairy is a dynamic market with much growth potential. Dairy consumption in Asia has been expanding dramatically with urbanization and westernization of diets. Dairy is also experiencing food-processing innovations with new value-added opportunities in dairy-based ingredients, such as dry whey and lactose, for which trade barriers are low. Similar innovations have expanded trade opportunities for traditional milk products such milk powder and butter-oil, which are transformed into final products after importation to circumvent protection on finished products. Concentration and vertical integration in industrialized countries are also important source of economies in procurement, processing and logistics and FDI.

Groundnuts

The groundnut market is divided into a market for edible groundnuts (confectionery, processed butter and paste, and ingredient in candy items), and crushed groundnuts yielding oil and cakes used in livestock feed. The policy dimension of international groundnut markets is essentially a South-South challenge involving India and China with their protected groundnut product markets, and low cost producers in Argentina and SSA as potential gainers. India's and China's policies have the largest distorting effects on world prices for groundnuts, groundnut oil and groundnut meal. Their competitiveness is artificial; free trade would make them net importers.

Trade negotiations in the groundnut product markets could succeed if entrenched protected interests in India and china can be overcome. China's long-standing policy to favor domestic value added creation (groundnut oil) might be an impediment.

Rice

The rice market is a mature market, with static demand in the North and demand in developing economies growing with demographics but little less from income growth. Prospects for growth rely on policy reforms, which would be welcome since rice is a very distorted market. Nevertheless, rice is the most important food grain in the world. Production and consumption are concentrated in Asia (China, India, and Indonesia). On average, consumers in Low-Income-Food-Deficit countries get 28 percent of their calorie intake from rice.

Following trade liberalization, they would be negatively affected by the resulting price increase whenever their consumption is subsidized by current distortion structure (their own trade barriers, and lower world prices). Among them, African countries, other than Nigeria, Côte d'Ivoire, and Senegal, have lower consumption of rice (7 percent of average calorie intake) and would be less affected by price increases.

Sugar

The sugar market has complex North-South and South-South aspects. Along with dairy and rice, sugar is one of the most policy-distorted commodities, and the EU, Japan, and the US are among the worst offenders. OECD support to sugar producers of \$6.4 billion about equals developing country exports. The EU and US will have to reform their sugar programs because of internal market changes and international commitments already made under EBA and NAFTA and their protectionism is unraveling –another case of border opening forcing domestic policy discipline. Needed reforms coincide with scheduled reviews of the CAP in 2006 and the expiring of the U.S. Farm Bill in 2007 and provide a target period to get reforms agreed and in place.

Challenges ahead in the Doha Round

Prospects for successful reforms vary across commodity markets considered in the case studies. These seemingly simple commodity markets exhibit a complex political economy, domestically first, then compounded in the international negotiations. All the markets being studied present heterogeneous and conflicting vested interests pitching producers and processors in the North against their counterparts in the South as well as within the North and the South (e.g., US, Australian, Brazilian, and Turkish sugar producers). Identifying clear trade-offs leading to trade concessions is difficult because governments pursue multiple goals (food self-sufficiency, income transfer, development of domestic value added). Little attention is paid to rural income generation led by comparative advantage.

The probability of self-contained, successful, agricultural trade negotiations appears remote. A narrow sectoral approach to negotiations in agriculture alone will not allow improvements

in market access to be the driver of the process. Countries will just refuse to open their borders in agriculture if they do not perceive potential gains in other areas covered by the negotiations. Incorporating agriculture with other items on the negotiations agenda (e.g., IPRs, services, health) could enhance the likelihood of identifying more palatable reform packages.

On a positive final note, one should remember that trade liberalization in manufacturing took a slow start before significant liberalization occurred. Although considered a modest achievement, the Uruguay Round Agreement on Agriculture, codifies acceptable agricultural policy behavior and mandates future policy discipline (Messerlin). One can view CAP reforms and its current midterm review as positive developments induced by the URAA. The political challenge is to push forward with these reforms and find the maximum pace acceptable to all negotiating parties.

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