Issue 3 | Volume 9 | April 2010

Potential impacts of alternative policy reform scenarios on the world cotton market

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The WTO Doha Round could have a significant positive impact on world cotton prices and contribute to the expansion of cotton production and exports in developing countries. However, the likelihood of such an outcome is highly dependent on the depth of the subsidy reductions adopted by WTO members. The poor record of internal policy reforms in key subsidizing countries and the failure of the US to comply with recommendations from the WTO Dispute Settlement Body (DSB) highlight the importance of multilateral trade negotiations in addressing the profound distortions that characterize the world cotton market.

Cotton has proved to be one of the most politically sensitive issues in the Doha Round. Substantial subsidies provided by developed countries have continued to depress world prices and undermine the viability of otherwise competitive producers in the developing world. Cotton-exporting West African countries in particular have championed reform of the existing system. Collectively known as the Cotton Four (C-4), Benin, Burkina Faso, Chad and Mali have denounced the deleterious effects of cotton subsidies on poverty and food security and called for the establishment of a mechanism to phase out support for cotton. Nevertheless, due to little concrete engagement by subsidizing countries, the issue has languished.

In parallel to the efforts to address cotton subsidies through the Doha negotiations, countries have also sought to reduce trade distortions through the WTO's Dispute Settlement Body (DSU). The *US Upland Cotton*[1] dispute initiated by Brazil has led to significant developments in WTO jurisprudence on subsidies in general, as well as specific findings about the illegality of various US cotton subsidies under existing WTO rules. Meanwhile, unilateral domestic policy reforms in the EU and US have had limited if any impact on world cotton markets. The 2003-04 reform of the EU Common Agricultural Policy (CAP) changed the guaranteed minimum price for cotton to a mix of coupled and allegedly decoupled payments.[2] In the US, the 2008 Farm Bill kept cotton subsidies largely unchanged, indicating an unwillingness to comply with the DSB panel rulings or the mandates from the Hong Kong Ministerial Declaration.[3]

Recent research commissioned by the International Centre for Trade and Sustainable Development (ICTSD), the co-publishers of *TNI*, assesses the likely implications for exporting and importing countries from a trade deal in cotton. The study estimates the price, production and trade effects of reforming cotton subsidies and tariffs under alternative scenarios, with a primary focus on the WTO Doha Round. For each scenario, the model simulates the prices and quantities that would have obtained in a base year had the policy reforms implied by the given scenario been retroactively applied to that year. Simulations cover ten base years (1998-2007) that not only provide a wide variance in prices and subsidy levels but also reflect recent trends in supply and demand.

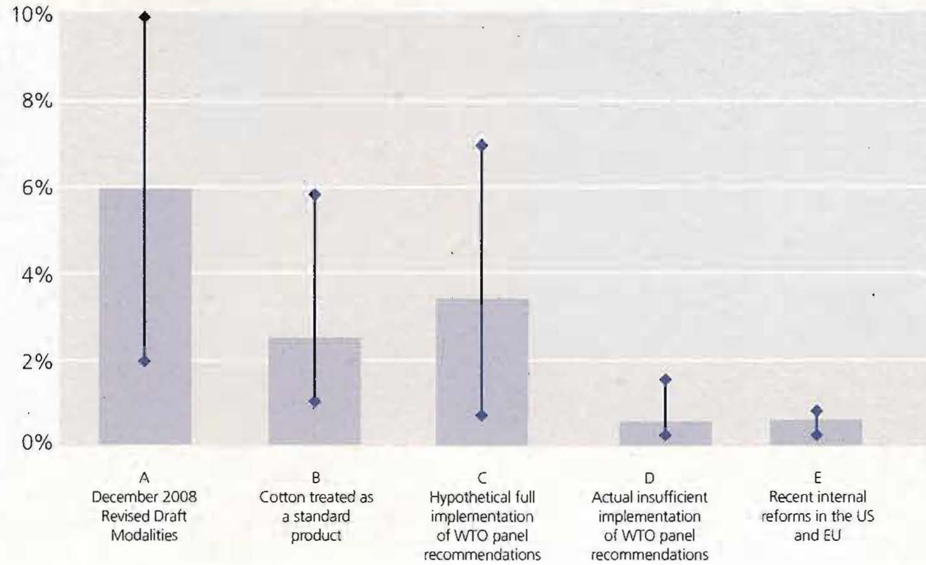
Scenarios

Five policy reform scenarios are simulated: the first two are alternative reform packages in the context of the Doha Round; the following three are benchmarks to which the potential outcomes of Doha can be contrasted.

Scenario A models the December 2008 Revised Draft Modalities.[4] It contains a number of special provisions applicable exclusively to the cotton sector. Most prominent among them are the more rigorous caps on cotton product-specific AMS and blue box support and the extension of duty- and quota-free access for cotton exports from least-developed countries (LDCs).

Scenario B is also based on the modalities draft, except that it ignores the special cotton provisions and instead subjects cotton to the general disciplines applicable to standard agricultural products. Given that the 2005 Hong Kong Ministerial Declaration established a mandate to reduce cotton subsidies "more ambitiously than under whatever general formula is agreed" for standard products, the outcome of the Doha Round must be more ambitious than Scenario B.

Figure 1: Estimated Impact of Alternative Scenarios on the Cotton World Price, 1998-2007
(bar indicates average; vertical line indicates range)



Scenario C models the hypothetical implementation by the US of the DSB recommendations in the *US Upland Cotton* dispute, namely: (i) the withdrawal of export credit guarantees and user marketing payments; and (ii) the removal of the adverse effects of marketing loan programme payments (MLP) and counter-cyclical payments (CCP).[5]

Scenario D models the insufficient measures actually taken by the US in response to the DSB recommendations. Although the US has withdrawn part of its prohibited subsidies,[6] it has done nothing to remove the adverse effects of MLP and CCP.

Scenario E abstracts from multilateral negotiations and litigations and focuses on internal reforms in the US and EU. It models policy changes introduced by both the 2008 US Farm Bill and the 2003-04 EU CAP reform.[7]

Impact on Prices

Figure 1 summarizes world price effects for each scenario. Bars indicate average impacts in 1998-2007 and arrows indicate the full range of results. Impacts are moderate to high in Scenario A, lower in Scenarios B and C, and negligible in Scenarios D and E. The substantial variance in results on a year-by-year basis is largely due to the counter-cyclical nature of a considerable share of notified cotton subsidies. Estimated price effects are highest in years with below average world prices and record high trade-distorting domestic support, such as 1999 and 2001.

Had cotton subsidies and tariffs been reduced in 1998-2007 as described in Scenario A, the world price of cotton would have increased by 6 percent on average, with a range between 2 percent and 10 percent. However, had cotton been treated as a standard product (Scenario B), the average world price increase would have been only 2.5 percent. This difference in results is mainly driven by the size of caps on US trade distorting domestic support for cotton in each scenario: US$510 million in Scenario A (US$143 in AMS and US$367 in the blue box) and US$2,240 million in Scenario B (US$1,140 million in AMS and US$1,100 million in the blue box). Since the average trade-distorting support provided to US cotton producers in 1998-2007 was US$2,248 million, it comes as no surprise that cuts in US subsidies are not very significant in Scenario B. Discarding the special cotton provisions from the modalities text would greatly reduce the potential of the Doha Round to deliver lower subsidy levels and higher world prices for cotton.

By comparison, the world price of cotton would have increased on average by 3.5 percent in 1998-2007 had the US fully implemented the DSB panel recommendations in the *US Upland Cotton* dispute (Scenario C). The limited actions actually taken by the US in response to the DSB panel recommendations (Scenario D) would have increased the world price on average by only 0.7 percent. Had recent unilateral domestic reforms in US and EU cotton subsidies applied over the entire 1998-2007 period (Scenario E), the world price would have increased by 0.7 percent on average. The EU CAP reform would have accounted for the entirety of this change. The US 2008 Farm Bill alone would have had no impact on the cotton world price.

Impact on Production

Production effects would have varied significantly across countries and scenarios. Output would have decreased in countries that undertake reductions in applied levels of subsidies and tariffs. Elsewhere, production would have increased.

In Scenario A, US and EU cotton production would have declined by 9 percent and 24 percent, respectively. In years with historically low world prices, the decline in US output would have been larger than average (15 percent). In 2001 alone, US production would have declined by 680 thousand metric tonnes, which was more than the combined production volume of the C-4 countries that year. The fall in US and EU production would have been almost fully compensated by output expansion elsewhere. On average, production would have been 2 percent higher in Australia, Brazil, the C-4 countries, Central Asia, Pakistan and Turkey, and 1 percent higher in China and India. More importantly, production value in these countries would have increased by 6-8 percent on average and 11-13 percent in years of peak subsidy levels.

The impact on production would have been significantly smaller in Scenario B. On average, production volumes would have declined by 4 percent in the US and remained unchanged in the EU. Average output expansion in the rest of the world would have been limited: 0.8 percent in Australia, Brazil, the C-4 countries, Central Asia, Pakistan and Turkey, and 0.3 percent in China and India. In Scenario C, US production would have fallen by 7 percent on average. In response, production would have increased by 1 percent in Australia, Brazil, the C-4 countries, Central Asia, EU, Pakistan and Turkey, and 0.5 percent in China and India. Scenarios D and E would have had negligible effects on production volumes across most countries. The only exception being the EU in Scenario E (output would have fallen on average by 20 percent).

Impact on Trade

Among net exporters, export volumes would have retracted in the US and increased elsewhere (Australia, Brazil, C-4 countries, Central Asia and India). The simultaneous increase in export quantities and world prices would have led to an unambiguous rise in the value of exports for all net exporters except the US. The magnitude of changes in exports would have been largest in Scenario A, moderate in Scenarios B and C, and small or negligible in Scenarios D and E. Countries with large textiles manufacturing sectors (India and Brazil) would have experienced relatively greater expansion in cotton exports.

Among key net importers (Bangladesh, China, Indonesia, Pakistan and Turkey), import volumes would have decreased in every scenario analyzed due to the expansion of domestic output and the retraction of domestic demand. Since reductions in import quantities dominate world price increases, estimated import costs would also have fallen. The magnitude of changes in imports follows the same pattern observed above for exports. EU import quantities and costs would have increased substantially in the scenarios where European production falls (A and E) and remained mostly unchanged in the other scenarios (B, C and D).

Subsidies vs. Tariffs

Virtually all benefits for cotton in the Doha Round will accrue from the reduction of subsidies. There are two reasons why market access will play a marginal role at best. First, the cotton sector already enjoys exceptionally low levels of applied tariffs.[8] Second, only two WTO members (the US and Oman) will have to reduce current applied tariffs as a result of the negotiations. All other countries either: (i) already provide duty-free access, (ii) enjoy significant tariff overhang, or (iii) qualify for tariff-cut exemptions due to their status as LDCs, very recently-acceded members or small low-income recently-acceded members.

The extension by developed countries of duty-free access for cotton exports from LDCs will have little if any impact on market access opportunities for LDCs. First, all developed countries apart from the US already provide duty-free access to cotton imports at a most-favored nation (MFN) basis. Second, as US cotton consumption has plummeted in recent years, the country's share of world cotton imports has collapsed to only 0.05 percent. Moreover, US cotton quotas are consistently under-filled despite the low level of in-quota tariffs (between zero and 3 percent).

In contrast, developing countries account for nearly 95 percent of world cotton imports. Of the top fifteen developing country importers, all but China currently provide duty-free MFN access to cotton. The Doha Round will not significantly alter market access conditions in China since Beijing is likely to exempt cotton from tariff reduction and quota expansion by selecting it as a Special Product. Even if China were not to select cotton as a Special Product, the large tariff overhang would be enough to prevent any effective cut in the applied tariff.

When it comes to cotton, subsidies should be the heart and soul of the negotiations. There is an urgent need to rebalance existing trade rules that permit developed countries to highly subsidize domestic production, depress world prices, push farmers elsewhere out of production and impair prospects for economic advancement in the developing world. The adoption of ambitious domestic support reforms for cotton in the Doha Round would be a significant step towards the establishment of a fair and market-oriented trading system.

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Notes

1 Unites States Subsidies on Upland Cotton Dispute (DS267), reports available on: *http://www.wto.org/english/tratop_E/dispu_e/cases_e/ds267_e.htm*
2 Studies that are not specific to the cotton sector have suggested that EU farm operators, to a large extent, do not treat the new payments as fully decoupled (Hennessy and Thorne, 2005; Howley et al., 2009). As a result, these subsidies are believed to maintain a strong supply inducing effect on agricultural production.
3 *http://www.wto.org/english/thewto_e/minist_e/min05_e/final_text_e.pdf*
4 *http://www.wto.org/english/tratop_E/agric_e/agchairtxt_dec08_a_e.doc*
5 Since the DSB is silent regarding the exact steps that the US must take in order to remove the adverse effects of some of its subsidies, this requirement is implemented in Scenario C by limiting the combined value of MLP and CCP so that their negative impact on the world price is not greater than 2 percent.
6 This includes the elimination of user marketing payments (Step 2), the repeal of the Supplier Credit Guarantee Programme (SCGP), the termination of the Intermediate Export Credit Guarantee Programme (GSM 103) and the revision of the Export Credit Guarantee Programme (GSM 102).
7 Changes introduced by the 2008 US Farm Bill include the reduction in payment acres for direct payments, the drop in the target price for counter-cyclical payments, the decrease in storage payment rates and the introduction of a new subsidy to domestic users of cotton for all documented use of upland cotton regardless of its origin Although the farm bill officially discontinued Step 2 payments, SCGP and GSM 103 export, these policy changes are not included in Scenario E. Instead they are taken into account in Scenario D.
8 Of the 153 members of the WTO, 84 currently apply duty-free access to cotton imports, 62 apply tariffs between 0 and 10 percent, and only seven apply tariffs between 10 percent and 33 percent. Of the seven countries with tariffs above 10 percent, only Nigeria has a significantly large domestic market. The other countries are Djibouti, Gambia, Haiti, Maldives, Solomon Islands and Tonga.