



# IPC Policy Focus

Farm Bill Series  
No. 5

June 2007

## U.S. Farm Policy and the White Commodities: Cotton, Rice, Sugar and Milk

by Daniel A. Sumner, Director at the University of California Agricultural Issues Center and the Frank H. Buck, Jr. Professor at the Department of Agricultural and Resource Economics, University of California, Davis.

Cotton, rice, sugar and dairy are important commodities to the developing world, and US agricultural policy plays a role in shaping the world market for these goods. While the debate over the 2007 Farm Bill is underway, the US has faced global pressure to remove trade distorting aspects of its farm programs for white commodities. This IPC Policy Focus outlines the unique nature of these support programs, and shows how they are emblematic of the distorting nature of US agriculture policy.

The white commodities, as cotton, rice, sugar, and milk are sometimes called, share a propensity for high rates of government support in the United States and in many countries, including the European Union. The Organization for Economic Cooperation and Development (OECD) calculations show that rice, sugar, and dairy products are among the most heavily supported commodities in agriculture across all the OECD members (Alston, 2007).<sup>1</sup> The OECD has not calculated support for cotton, but similar calculations show that in the United States and the European Union, support is at least as high as that for rice in recent years.

Although they share high levels of government support in the United States and elsewhere, the government programs underlying that support, the markets and the pattern of production differ widely across these four white commodities.

### Cotton

Cotton production in the United States is spread across the South and Far West. Texas produces about 28 percent of the crop, with significant production in the South Atlantic states, the Mid South states, and California and Arizona. The U.S. textile processing industry, which had been concentrated in the South Atlantic region, has declined such that the great majority of cotton is exported for milling and further

processing, especially in China, but in many other countries as well.

Support for cotton in the United States is primarily through government payments to eligible producers, with significant benefits also from subsidized crop insurance. Cotton receives a disproportionate share of government farm payments in the United States. During the period 2002 through 2005, cotton accounted for 2 percent of the value of agricultural production in the United States and 22 percent of the government payments for agriculture (See Figure 1).

From 2002 through 2005, cotton accounted for 2 percent of the value of agricultural production in the United States and 22 percent of the government payments for agriculture.

Cotton program payments come in three forms: direct payments, counter cyclical payments, and marketing loan benefits. Since the 2002 Farm Bill, the United States has provided about \$5.1 billion per year in direct payments tied to the historical yield of an acreage base of program commodities. Cotton payments account for about \$611 million, or 12 percent of the total. Although these payments are distributed to producers who have a history of growing cotton, the payments continue even if the land has been shifted to other crops,

used for livestock grazing, or left idle.<sup>2</sup> The predecessor to the direct payment program, the Flexibility Contract Payment program, was reported as a “not more than minimally trade distorting” green box program in the U.S. WTO notifications. However, the rulings in the WTO dispute over U.S. upland

**After several years of low prices, rice prices are now projected to be high enough that marketing loan benefits and counter-cyclical payments are likely to be zero for the life of the 2007 Farm Bill. Because of its small market share, U.S. rice subsidies have little effect on world markets for rice.**

cotton policy (see below) has raised questions about that classification because of the restrictions on what crops that can be planted on the base land.

Similar to the direct payment program, the counter-cyclical payment program, which was created with the 2002 Farm Bill, also provides payments to owners of program base. Unlike the direct payment program, however, the counter-cyclical payments for cotton vary inversely with the U.S. national average market price of cotton and thus rise and fall from year to year. The payments averaged \$1.1 billion per year from 2002 through 2005 (USDA).

The third major program for cotton, the marketing loan program, provides benefits in the form of payments that vary inversely with the international market price. The payment can be collected at harvest or the producer can hold the crop, receive a government loan to ease cash flow, and repay the loan when he sells the cotton, with the loan repayment rate determined by the international price at that time. The marketing loan benefits for cotton averaged \$1.0 billion per year from 2002 through 2005 (USDA). Crop insurance benefits, which include the difference between payments and farmer paid premiums, added another \$160 million per year from 2002 through 2005. Total of these cotton subsidies was \$2.9 billion

per year from 2002 through 2005.<sup>3</sup> Cotton subsidies are projected to continue, given persistent low global prices for cotton (compared, in particular, to other commodities which have witnessed significant price increases recently) unless U.S. support is reduced or eliminated in the 2007 Farm Bill.

Brazil brought a case against the US cotton program in 2002. This case highlighted the impact of U.S. cotton subsidies on U.S. production and on prices and production in other countries, especially developing countries. The WTO found that the magnitude of U.S. subsidies and the importance of the United States in the global market (20 percent of world production and 40 percent of world exports) meant that U.S. cotton subsidies suppressed the world price of cotton. Estimates of the magnitude of the impact vary, but the WTO panel and Appellate Body determined that the magnitude was sufficient to cause serious prejudice to the interests of Brazil (Sumner, 2007). In 2005, the WTO instructed the United States to modify its cotton programs. Brazil subsequently claimed that the United States failed to fully implement the needed policy changes. A WTO panel is expected to report on this “compliance” issue in June 2007.

## Rice

U.S. rice programs are quite similar to those for cotton, except that rice is a much smaller part of U.S. agriculture, and U.S. rice is a much smaller part of the world market than is cotton. Rice receives payments from the same three programs that apply to cotton, but crop insurance is less important for rice. Furthermore, unlike for cotton, after several years of low prices and high subsidies, rice prices are now projected to be high enough that marketing loan benefits and counter-cyclical payments are likely to be zero for the life of the 2007 Farm Bill (FAPRI, 2007 baseline projections). This result means that, if prices follow the projections, the subsidy programs look to be relatively unimportant for rice produc-

tion in the 2007 Farm Bill. Furthermore, because of its small global market share, U.S. rice subsidies have relatively little effect on world markets for rice. The OECD calculated the U.S. Producer Support Estimate for rice of about 20 percent in 2004, far lower than the 40 percent to 50 percent estimate that held in earlier years when global rice market prices were lower.

Supporters of the rice program advocate its continuance because, while they accept that prices are likely to remain high over the next few years, they note that projections are often wrong. They argue that the counter-cyclical payment program and the marketing loan program provide a “safety net” for producers in case prices decline below current projections. They also point out that since price-contingent payments are currently projected to be zero, eliminating these programs would not generate budget savings that could be spent on conservation, nutrition, R&D, or other agricultural policies favored by other interests. The main argument for using this period of high prices to remove the rice programs (as well as those for wheat, feed grains, and oilseeds) is that doing so would not cause significant financial stress to the industry and that the programs no longer serve the public interest.

## Sugar

The main “Farm Bill” sugar policy in the United States is a price support program that is mostly inoperative because import barriers keep the U.S. price of

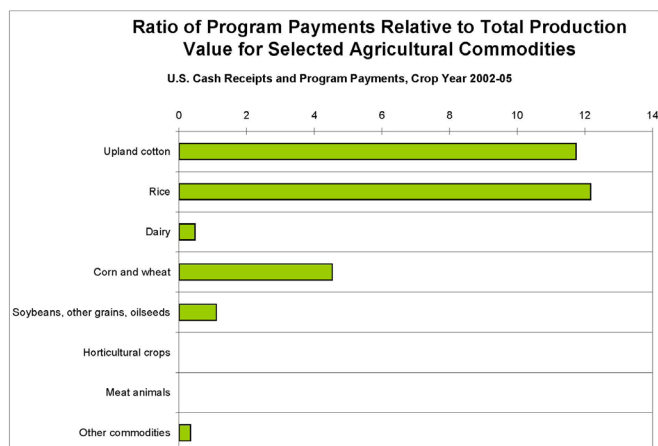
sugar above the government set price support. The OECD calculated a sugar Producer Support Estimate of about 55 percent in 2004. The current over-quota tariff of about 16 cents per pound (slightly higher for refined sugar and slightly lower for raw cane sugar) is enough to keep out imports above the amount allowed under a zero tariff quota that is allocated to traditional sources of U.S. imports. Under the Uruguay Round WTO agreement, the United States was required to maintain its previous import access quantity of 1.6 million tons, which is allocated to about 40 individual countries (Beghin).

Since the U.S. market price is typically in the range of 22 cents per pound (with the price support a bit below that amount), the tariff is high enough to keep additional sugar out of the U.S. market unless the world price plus transport costs were to fall below 6 cents per pound. The current domestic price of sugar (NYBOT #14) for July delivery on the New York Futures market is about 21.5 cents per pound, while the international price of sugar (NYBOT #11) is about 9 cents per pound. Thus the tariff protection is prohibitive even if the world price were to fall by 50 percent from its current relatively low level.

Under NAFTA, import barriers on sugar imports from Mexico are scheduled to be removed in 2008. Mexico is not among the lowest cost sugar producers in the world, but is likely to increase shipments to the United States when the trade barriers are removed. Increased exports to the United States are likely especially if the Mexican soft drink industry shifts from sugar to high fructose corn syrup, which would be produced from U.S. corn and would thereby increase the amount of Mexican sugar available for export. The United States also recently negotiated a free trade agreement with Australia, which is a significant low cost producer of sugar. However, no increase in Australian market access was included in that agreement.

The trade policies that constitute the major feature of U.S. sugar policy are not included in the Farm Bill because tariffs are set under legislation that implement international trade agreements. However, the additional imports from Mexico expected in 2008

Figure 1



Source: USDA.

could begin to place pressures on the price support program. The current supported U.S. market price of about 21.5 cents per pound may prove unsustainable if substantial exports from Mexico enter the U.S. market. As a consequence, there is pressure to make changes in the price support program in the 2007 Farm Bill. The simplest change would be to eliminate the program and allow import protection to provide whatever support is possible under NAFTA and other trade agreements. An alternative is to institute restrictions on domestic production designed to keep U.S. prices high even in the face of growing imports.

## Dairy

U.S. dairy policy is inordinately complex, even compared to programs for other commodities. The policy includes payments to producers when prices fall below a trigger amount; a price support program implemented by government purchase of manufacture dairy products; a tariff rate quota that limits imports; a small export subsidy; and a system of geographically-based price discrimination and pooling schemes. The OECD calculated a U.S. Producer Support Estimate of about 40 percent for dairy, a relatively high figure compared to the recent past reflecting relatively low milk prices in 2004.

The payment rates under the Milk Income Loss Contract (MILC) program vary inversely with the monthly market price of milk. For each farm, the annual quantity of milk eligible for payment is limited to just above the production quantity from an average size farm in Eastern United States. Under this program, smaller farms have an incentive to produce more, which drives down the price of milk, while larger farms exceed the quantity eligible for maximum payment, so much of their milk production receives only the lower market price. Larger farms, which produce most of the milk in the United States, actually lose more from the lower market price than they gain from the MILC payments (Balagtas).

The price support program guarantees that the government will purchase butter, non-fat dry milk, or cheese whenever the prices of these commodities fall below the specified support prices. The result

is that the price of milk used to produce these products is kept above the minimum. The government purchase program causes the U.S. industry to concentrate on production on these standard products and produce less of more specialized products for which demand has grown in recent year.

Under current and projected market conditions neither the price support program nor the MILC program are expected to affect U.S. dairy markets significantly. Proposals to eliminate these programs point to the fact that they provide little benefit to the industry as a whole, but when they do have an impact, it is to distort where milk is produced and which products are produced in ways that make the U.S. dairy industry less competitive in global markets (Balagtas).

The import barriers for dairy have become less important over time as the world price of skim milk powder has risen relative to the price in the United States. The barriers do restrict imports of products, such as butter and some high milk fat cheeses. The United States has emerged as a competitive exporter of products with high non-fat content, and the export subsidy has become irrelevant. Most projections show that the United States could be a competitive exporter of dairy products overall if it removed those parts of dairy policy that make the industry less competitive and if dairy subsidies and import barriers were removed in other countries.

The regional milk marketing order system provides for localized high prices for milk used for drinking and other “soft” products, and thus diverts some milk to the national market for “hard” manufactured product markets. The idea is to increase producer revenue because the price increase in the market for drinking milk caused by the diversion in supply is larger than the price decline in the market for the

The current supported U.S. market price of about 21.5 cents per pound may prove unsustainable if substantial exports from Mexico enter the U.S. market. As a consequence, there is pressure to make changes in the price support program in the 2007 Farm Bill

**Proposals to eliminate dairy programs point to the fact that they provide little benefit to the industry as a whole, but when they do have an impact, it is to distort which products are produced in ways that make the U.S. dairy industry less competitive.**

low-cost regions. Under the milk marketing orders, consumers of drinking milk, such as school milk programs and families with children pay more, while consumers of processed dairy products pay less.

The major international implications of dairy programs derive from the direct import trade barriers, which protect the U.S. industry from competition and tend to depress world market prices for dairy products, especially higher fat products. In addition, the price support program, the MILC payment program, and the price discrimination and pooling of the milk marketing orders all tend to stimulate production of milk that is used to produce export products, but these indirect impacts are small because the United States plays a small role in export markets.

## Concluding Remarks

Cotton, rice, sugar, and milk share high rates of government support, but the particular government policies, the U.S. market situation, and the position of the United States in the global market all differ substantially across the products. Cotton and rice are supported mainly by government payments, and the 2007 Farm Bill is a natural vehicle for removing or reducing the market distortions created by these programs. The sugar program is mainly supported by a high import tariff, and a tight tariff rate quota.

manufactured products. The revenue from the within-region product markets is pooled and producers in the same regional marketing order receive an average per unit revenue. The regional price discrimination and pooling arrangement restricts competition across regions and allows for the producer price of milk to be 40 percent higher in the Florida region than it is in the Upper Midwest or West. This means that more milk is produced in high-cost regions and less milk is produced in

These program features are not a part of the Farm Bill, but given the expiration of the NAFTA tariff with Mexico, sugar policy is also under pressure to change in 2007. Among the many dairy policy features, the price support and payment programs are included in the Farm Bill. These do little to aid the industry and have a number of negative impacts on dairy producers as well as consumers and taxpayers, but they are supported by politically potent producers in the Upper Midwest and Northeast. The milk marketing orders and the trade barriers are not a part of the Farm Bill. There is growing dissatisfaction with the differential effects of milk marketing across regions; these could be modified or removed in 2007 as a part of the Farm Bill. The dairy import barriers help keep the price of milk higher by limiting competition, especially for high fat products. These import tariffs are most likely to change in the context of multilateral trade negotiations.

While the support programs to these white commodities each have their unique elements, they are emblematic of the distorting nature of much of U.S. agricultural policy. Cotton, rice, and sugar are important commodities to the developing world, and as dairy consumption is increasing, the US can expect continued global pressure to remove the trade-distorting aspects of its farm programs in the 2007 Farm Bill.

## Endnotes

---

1 The OECD has discontinued its calculation of producer support by commodity. These data refer to the period through 2004 when such data were available.

2 Payment base land is restricted from nonagricultural uses and production of fruits, vegetables, melons, tree nuts, and wild rice.

3 Over this period the United States also provided more than \$400 million per year in cotton user subsidies, but this “Step-2” program ended in 2006 as a part of the U.S. response to the WTO upland cotton case brought against US programs by Brazil.

## References

---

Alston, Julian M. (2007) “Lessons from Agricultural Policy Reforms in Other Countries.” *The 2007 Farm Bill & Beyond: Working Papers* American Enterprise Institute. <http://www.aei.org/research/farbill/publications/pageID.1476,projectID.28/default.asp>

Balagtas, Joseph V. (2007) “U.S. Dairy Policy: Analysis and Options.” *The 2007 Farm Bill & Beyond: Working Papers* American Enterprise Institute. <http://www.aei.org/research/farbill/publications/pageID.1476,projectID.28/default.asp>

Beghin, John M. (2007) “U.S. Sugar Policy: Analysis and Options.” *The 2007 Farm Bill & Beyond: Working Papers* American Enterprise Institute. <http://www.aei.org/research/farbill/publications/pageID.1476,projectID.28/default.asp>

FAPRI (2007) *FAPRI Agricultural Outlook 2007*. <http://www.fapri.iastate.edu/Outlook2007/>

Sumner, Daniel A. (2007) “U.S. Farm Programs and African Cotton.” *International Food and Agricultural Trade Policy Council*. IPC Issues Brief 22, February 2007.

USDA Economic Research Service, *Farm Income Data*, accessible at: <http://www.ers.usda.gov/Data/FarmIncome/finfidmu.htm>.



---

## About IPC

The International Food & Agricultural Trade Policy Council (IPC) promotes a more open and equitable global food system by pursuing pragmatic trade and development policies in food and agriculture to meet the world's growing needs. IPC convenes influential policymakers, agribusiness executives, farm leaders, and academics from developed and developing countries to clarify complex issues, build consensus, and advocate policies to decision-makers.

---