

# Weak Prices Test U.S. Sugar Policy

xpanding domestic sugar production and prospects for higher ✓ imports are testing the government's ability to prevent sugar prices from dropping below support levels. In June, USDA entered the sugar market for the first time since 1986, purchasing 132,000 tons of refined sugar at a total cost of \$54 million. With this move, USDA projected savings of as much as \$6 million in administrative costs that the government might otherwise incur from expected loan forfeitures later in the fiscal year. The move is also intended to support sugar growers and to help boost prices for sugar.

The purchase announcement in May stated that at least 75 percent of an initial (150,000-ton) purchase would be refined sugar and could be followed by additional purchases, depending on price and market conditions. The purchase was authorized under the cost-reduction options of the Food Security Act (FSA) of 1985. Since June, USDA's Commodity Credit Corporation (CCC) has been storing the purchased sugar. On August 17, USDA announced a 2-week signup period for the Sugar Payment-In-Kind (PIK) Program, which offers sugar beet producers the option of diverting a portion of this year's

crop from production in exchange for government-held sugar.

### **Burgeoning Supplies**

U.S. sugar production for fiscal year 2000 (ending September 30) is estimated at a record 9.035 million short tons (raw value)—almost 700,000 tons larger than fiscal 1999 production. One reason for this increase is record area harvested for sugar beets and sugarcane, spurred by higher expected returns compared with crops that normally compete with sugar for land use, such as wheat, feed grains, hay, soybeans, and rice. Also, sugar yields in Louisiana, which now surpasses Florida in sugarcane acreage, have risen more than 34 percent since 1995 as more acreage has been planted to high-yielding varieties.

For beets, last year's generally favorable growing and harvesting conditions permitted a clean crop, with higher sugar content than the previous year. Beets entered storage in good condition and remained in good shape through the winter months as sugar was extracted from them, although winter weather conditions were less than ideal for storage.

In addition to domestic production, imports are augmenting U.S. sugar sup-

plies. U.S. imports are restricted by a tariff-rate quota (TRQ). Under the raw sugar TRQ, 40 quota-holding countries are each allocated a fixed amount which they may ship to the U.S. in a fiscal year (October-September) at a zero or low duty. Any raw sugar that enters the U.S. above the quota is subject to a duty of 15.36 cents per pound—high enough to be generally prohibitive.

As part of the Uruguay Round Agreement of the General Agreement on Tariffs and Trade (GATT), the U.S. had agreed to bind its minimum sugar TRQ imports at 1.256 million tons per fiscal year. When the World Trade Organization (WTO) replaced the GATT in 1995, the U.S. minimum access commitment became enforceable under its dispute settlement mechanisms.

USDA establishes the total TRQ (for raw and specialty/refined sugar) annually to control supply. If it is set too high, U.S. prices could decline below the price support level. If it is set too low, prices could rise to unacceptably high levels.

A year ago, USDA's fiscal 2000 projection put sugar production at record levels, and sugar imports in excess of the minimum bound level. In November 1999, the raw sugar TRQ was established at 1.501 million tons. At USDA's request, it was agreed that only the portion of the fiscal 2000 TRQ corresponding to the WTO minimum access level would be imported (allocated to quota-holding exporters), with the remainder constituting a reserve (unallocated) that could be imported if domestic supply failed to meet projected levels.

In addition to domestic production and sugar imports, supply is amplified with sugar extracted from imports of sugar syrups ("stuffed molasses") outside the TRQ. These imports have added an estimated 125,000 tons to the U.S. sugar supply in fiscal 2000.

Total U.S. sugar supply (including beginning stocks) for fiscal 2000 is currently estimated at 12.3 million tons. Total use (domestic deliveries plus exports) is estimated at about 10.4 million tons, leaving ending stocks at 1.91 million tons. The

Raw cane sugar	FL	LA	TX	HI	Р	uerto Rico	U.S. average*
	Cents per lb.						
_oan rate	17.85	18.35	18.04	17.64		18.27	18.08
Minus forfeiture penalty	1.00	1.00	1.00	1.00		1.00	1.00
Equals net proceeds from forfeiture	16.85	17.35	17.04	16.64		17.27	17.08
Plus cost of loan redemption and marketing							
Interest expense	0.90	0.93	0.91	0.89		0.92	0.91
Transportation costs	1.95	1.21	1.07	2.00	0.52		1.41
Location discounts	0.00	0.40	0.20	1.25	0.00		0.20
Equals minimum price	19.70	19.89	19.22	20.78		18.71	19.60
			CO,	W. ND			
	MI	MN &	NE, &	MT, &	OR		
Refined beet sugar	& OH	E. ND	E. WY	W. WY	& ID	CA	U.S. average
	Cents per lb.						
oan rate	23.77	22.78	23.45	22.31	22.20	23.85	23.06
Minus forfeiture penalty	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Equals net proceeds from forfeiture	22.70	21.71	22.38	21.24	21.13	22.78	21.99
Plus cost of loan redemption and marketing							
Processor's interest expense	2.57	1.15	3.12	2.97	1.12	3.18	2.35
Cash discount (2%)	0.52	0.47	0.52	0.49	0.45	0.53	0.50
Equals minimum price	25.79	23.33	26.02	24.70	22.70	26.49	24.84

Fiscal year beginning October 1999.

\*Excludes Hawaii and Puerto Rico. No Hawaiian sugar is put under loan due to contractual obligations to ship Hawaiian product to the C&H refinery in California. The Puerto Rico crop is very small.

Economic Research Service, USDA

resulting stocks-to-use ratio is 18.4 percent, the highest level since fiscal 1986.

The abundant sugar supply relative to demand has caused U.S. sugar prices to decrease to levels not seen in 20 years. The widely quoted No.14 New York nearby futures price for U.S. raw sugar declined from a monthly average of 22.61 cents per pound in July 1999 to 17.24 cents in February 2000—a 24-percent decrease. Prices rebounded to the mid-19-cent range in mid-June, but plunged to 17-18 cents by mid-July, despite the USDA sugar purchase.

Refined beet-sugar prices have decreased as well. Prices for spot-refined beet sugar as quoted in the *Milling and Baking News* averaged only 19 cents per pound in June and July, down more than 7 cents from a year earlier.

### Government Response Through The U.S. Sugar Program

The level of price support to the sugar industry is based on loan rates legislated in the 1996 Farm Act. Sugar processors (not farmers, whose crop can't be stored) can take out loans from the government with sugar as collateral. The loan rate that borrowers receive for raw cane sugar is 18 cents per pound, and for refined beet sugar the rate is 22.9 cents per pound.

Processors take sugar program loans for a maximum term of 9 months and repay them along with interest charges (or forfeit the collateral) before September 30. If the TRQ is less than 1.5 million tons, sugar loans are recourse, which like ordinary loans are repayable in cash only. Such loans have no price-supporting effect and only serve as a mechanism for short-term financing, with no risk of Treasury expense.

When the TRO is higher than 1.5 million tons, loans are nonrecourse—i.e., the processor may forfeit the collateral in lieu of repaying the loan, and the government has no recourse but to accept the sugar as full payment. To the extent that processors put their sugar under loan, their return on that sugar (minus forfeiture penalty) is protected when market prices drop below the loan rate. Nonrecourse loans can, in theory at least, help support the sugar price, since forfeited sugar is effectively taken off the market in the near term. This price protection, however, incurs risk of government Treasury expense. With the TRQ set above the trigger in fiscal 2000, loans are nonrecourse.

Loans outstanding to the CCC as of mid-July are sizable, totaling \$447 million and 1.1 million tons. Raw sugar loans made to sugarcane processors total \$183 million, with 511,164 tons under loan, or about 12.4 percent of estimated production. Beet sugar loans total \$264 million, with

620,618 tons under loan, or about 12.5 percent of estimated production. The maximum government budget exposure if all loans are forfeited is \$425 million (taking into account offsetting revenue of \$22 million from forfeiture penalties).

In order to discourage forfeiture, market prices must be high enough to cover the interest expenses, transportation costs (for cane), and market discounts (for beet sugar). Cane processors incur transportation and distribution costs in moving sugar to the refiner, in contrast with beet sugar which is already in refined form and requires no further processing. Cane processors also face location discounts required by some refiners. Sugar beet processors must recover the entire interest expense of loan repayment in their share of the sugar's selling price (unlike cane processors who share interest expenses with growers) as well as a 2-percent cash discount (beet sugar is normally sold at discount to cane).

In addition, processors must consider forfeiture penalties when deciding whether to forfeit sugar to the CCC. The 1996 Farm Act requires that processors who forfeit sugar pledged as collateral for a nonrecourse loan pay a penalty of 1 cent per pound for raw cane sugar and 1.072 cents per pound for refined beet sugar.

Accounting for these factors, the average minimum price necessary to discourage forfeiture in fiscal 2000 is about 19.6 cents per pound (mainland states) for raw sugar (cane) and about 24.84 cents per pound for beet sugar. With the mid-July New York nearby futures price between 17 and 18 cents per pound and the refined Midwest beet sugar spot price at 19 cents per pound in mid-July, forfeitures for both types of sugar seemed likely. Most beet sugar customers had already contracted for their sugar needs through the rest of the year by mid-July, and there was little likelihood that spot prices would recover sufficiently to exceed the minimum price for forfeiture. In fact, beet processors had already forfeited 42,000 tons as of August 1.

#### Dealing with Surplus Sugar

Results from the June 2000 USDA sugar purchase are unclear. On the positive side, the purchase seems to have reduced the costs USDA would have incurred through defaults on nonrecourse loans. Purchase prices averaged 20.5 cents, which is less than the sum of the loan rate (22.9 cents per pound) and accumulated interest (about 1.16 cents per pound) minus the forfeiture penalty (1.072 cents per pound).

However, the purchase does not seem to have had any noticeable effect on sugar prices. Industry observers, including independent analysts, have suggested that USDA should have offered to purchase much more sugar in order to affect the market price. Some sugar processors and growers had initially suggested a larger purchase, in the neighborhood of 250,000 to 370,000 tons. They now argue that USDA should consider a second purchase offer, acting quickly to restore market confidence.

As of August 1, CCC is holding an inventory of 174,000 tons of refined sugar, an amount equivalent to 2 percent of the total sugar production forecast for 2000. The inventory includes sugar that was recently forfeited, as well as the sugar purchased in June. Additional sugar forfeitures, which can take place on September 1 and on October 1, will likely boost government-owned stocks further. Processors intending to forfeit are required to file a 30-day notice with the CCC, but they are not bound to forfeit once they have filed notice.

What will USDA do with the sugar that is forfeited, in addition to the sugar purchased in June? On August 1, USDA announced a Payment-In-Kind (PIK) program, offering sugar beet farmers the option of foregoing harvest in exchange for sugar held by the CCC. On August 17, USDA announced a 2-week signup period beginning August 21 for the PIK Program. Farmers are limited to \$20,000 in PIK payments. By reducing this year's harvest, the PIK program will help alleviate sugar overproduction, reduce federal expenditures by reducing probable crop loan forfeitures in fiscal 2001, and reduce government storage expenditures. The amount of sugar available for the

PIK program is likely to increase in the coming months as sugar pledged as collateral for CCC loans is forfeited.

Another potential policy option was selling sugar for the manufacture of ethanol, but the corn industry indicated strong opposition because of adverse impacts on the corn market. And disposal in the international market (at a loss, which would violate World Trade Organization export subsidy commitments) or as emergency food aid was not widely viewed as an appropriate option.

#### Low Price Outlook For Fiscal 2001

The market situation may not improve in the coming year. Large predicted sugar supplies with only modest demand growth indicate continued economic distress for the industry.

On the supply side, USDA is projecting fiscal 2001 cane and beet sugar production at 8.973 million tons, slightly below the current year's estimated record level. Cane sugar production is expected to be higher in 2001 because of an expected record year in Louisiana as well as more production in Florida and Texas compared with fiscal 2000. In contrast, beet sugar production is expected to be down, with a return to more normal crop yield patterns and the possible closing of two processing plants in California.

In addition, imported sugar is expected to add substantially to U.S. sugar supplies in 2001. *Combined allocated portions of the TRQ* will likely be close to the minimum WTO access of 1.256 million tons, although the raw and refined sugar TRQ's for fiscal 2001 have not yet been announced.

Non-TRQ imports are projected at 448,000 tons. These include sugar for the Refined Sugar and Sugar-Containing Products Re-export Programs and the Polyhydric Alcohol Program (315,000 tons), high-tier tariff sugar (8,000 tons), and sugar extracted from sugar syrups entering outside the sugar TRQ (125,000 tons).

Imports from Mexico could be as high as 250,000 tons. According to the North American Free Trade Agreement (NAFTA) side-letter agreement, Mexico's duty-free access to the U.S. market will increase from 25,000 metric tons (raw value) to the smaller of 250,000 metric tons or Mexico's "net surplus production." (Net surplus production is the difference between Mexico's projected production in metric tons, raw value, less the sum of projected domestic consumption of sugar in metric tons, raw value, and high-fructose corn syrup in metric tons.)

Total U.S. sugar supply could reach 13 million tons, 4 percent over the estimated supply for fiscal 2000. As for sugar demand, use is forecast up only 1.3 percent to 10.56 million tons, including exports under the Refined Sugar Reexport Program (175,000 tons). Projected ending stocks for fiscal 2001 could therefore be as high as 2.44 million tons, implying an ending stocks-to-use ratio of over 23 percent.

An open question for the industry is whether the fiscal 2001 U.S. sugar loan program will again be set as nonrecourse. If the raw sugar tariff-rate quota is 1.5

million tons or below, the loan program will be recourse. USDA would lose its authority to purchase sugar under the cost reduction options of the 1985 Food Security Act, and the price-supporting feature of U.S. sugar policy (nonrecourse loans) would evaporate for the fiscal year.

When the sugar industry faced the recourse/nonrecourse issue in fiscal 2000, USDA established a raw sugar TRQ above the 1.5-million-ton trigger. Last year's announcement of the raw sugar TRQ was delayed 6 weeks while debate of the plan proceeded within the Administration. The "reserve" portion (249,000 tons) made available for allocation at the discretion of USDA remains untapped as the fiscal year draws to close.

The decision on the size of the fiscal 2001 raw sugar TRQ is normally announced before October 1. For fiscal 2001, the WTO minimum access for the U.S. sugar TRQ is 1.256 million tons. Assuming duty-free sugar imports from Mexico under the NAFTA side-letter are not counted as part of the WTO minimum access, Mexico's projected duty-free shipments will be added to the minimum access to determine the size of the TRQ.

If Mexico's net surplus production is at least 244,035 metric tons (269,000 short tons), the U.S. raw sugar TRQ will be above the 1.5-million-ton trigger, and loans for fiscal 2001 will be nonrecourse. On the other hand, if Mexico's net surplus production is lower than 244,035 metric tons, then USDA may choose to have a portion of the raw sugar TRQ remain unallocated as in fiscal 2000, so that loans remain nonrecourse and price support remains intact.

If loans are nonrecourse in fiscal 2001, possible U.S. government budget exposure from loan forfeitures is very likely to be much higher next year. With domestic sugar consumption failing to keep pace with growth in domestic production plus imports in the foreseeable future, the sugar market will remain under pressure, making it difficult to keep prices above support levels without continuing to reduce output through a PIK program or incurring large Treasury costs.

Stephen Haley (202) 694-5247 and Nydia Suarez (202) 694-5259 shaley@ers.usda.gov nrsuarez@ers.usda.gov



# Sugar and Sweetener Situation and Outlook Report

Examining world and U.S. production, consumption, supply, trade, and prices for beet and cane sugar and for high fructose corn syrup

Two outlook reports annually plus a yearbook

Available electronically at

http://usda.mannlib.cornell.edu/reports/erssor/specialty/sss-bb/

To order printed copies:

Call 800-999-6779 (Outside the U.S. call 703-605-6220) Stock # SUB-SSS-4033 A product of the Economic Research Service, USDA