Near Term Prospects for the U.S. Sugar Industry

Edward Evans, Sikavas Na Lampang and John VanSickle

International Agricultural Trade and Policy Center (IATPC)
University of Florida
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Outline

- Trends in U.S. sugar market
- Long & short-term issues
- Model
- Policy scenarios
- Results
- Conclusions
Trends in U.S. Sugar Consumption, Production, Imports and Stocks, FY 1991-2001

('000 metric tons)
Trends in U.S. and World Raw and Refined Sugar Prices, FY 1991-2001
(U.S. cents a pound)
Long-Term Issues

- New rounds of WTO negotiations on agriculture
  - Alliance for Sugar Trade Reform and Liberalization
- Proposed formation of FTAA in 2005
  - Brazil
- Single sugar market between U.S. and Mexico in 2008
Long-Term Issues

- Proposed formation of free trade area with APEC in 2010
  - Australia

- Impending trade with Cuba
  - Cuban Humanitarian Trade Act of 1999
  - Cuban Food and Medicine Security Act of 1999
  - U.S.-Cuba Trade Act of 2000
Near-Term Issues

- Farm Security & Rural Investment Act
- High-tier sugar imports from Mexico to the U.S.
- How the two sweetener trade disputes with Mexico are resolved.
  - Validity of the Side Letter Agreement
  - Access to the Mexican market for U.S. corn syrup (HFCS)
  - Recent Mexican proposal to tax soft drinks containing corn syrup but not sugar
1. Farm Security & Rural Investment Act:
   - Honors International Sugar Commitments
     • Effectively increases minimum TRQ from 1.13 to 1.38 million metric tons (MMT)
   - Reduces the Burden on Producers
     • Terminates marketing assessments
     • Eliminates the forfeiture penalty
     • Eliminates the 1-percentage point payment above the CCC’s cost of borrowing
   - Reestablishes No-Net-Cost Feature of Program
     • Reinstates marketing allotments for domestically grown sugar
     • Pre-Plant Payment-in-Kind Program
## Calculation of U.S. Average Effective Loan Rate and Target Price for Raw Sugar

<table>
<thead>
<tr>
<th>Raw Cane Sugar</th>
<th>Old Farm Bill (Cents/lb)</th>
<th>New Farm Bill (Cents/lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan rate</td>
<td>18.08</td>
<td>18.08</td>
</tr>
<tr>
<td>Less forfeiture penalty</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Effective loan rate</td>
<td>17.08</td>
<td>18.08</td>
</tr>
<tr>
<td>Plus Cost of Loan Redemption and Marketing</td>
<td>[\text{Cost items}]</td>
<td>[\text{Cost items}]</td>
</tr>
<tr>
<td>- Interest expense</td>
<td>0.91</td>
<td>0.90</td>
</tr>
<tr>
<td>- Transportation costs</td>
<td>1.41</td>
<td>1.41</td>
</tr>
<tr>
<td>- Location discounts</td>
<td>0.20</td>
<td>0.20</td>
</tr>
<tr>
<td>Effective (Target) Price</td>
<td>\textbf{19.60}</td>
<td>\textbf{20.59}</td>
</tr>
</tbody>
</table>
Near-Term Issues

2. High-tier sugar imports from Mexico to the U.S.
Selected Second-Tier of the U.S., 1995-2008

- Most Countries’ Raw Sugar
- Mexico’s Raw Sugar


US cents per pound: 0, 5, 10, 15, 20, 25
<table>
<thead>
<tr>
<th>Year</th>
<th>Target Price (1)</th>
<th>High Tariff (2)</th>
<th>Mkting Costs (3)</th>
<th>Implicit Barrier (4)</th>
<th>Incentive to Ship to US (1) - (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>21.00</td>
<td>10.58</td>
<td>1.00</td>
<td>11.58</td>
<td>9.42</td>
</tr>
<tr>
<td>2002</td>
<td>21.00</td>
<td>9.07</td>
<td>1.00</td>
<td>10.07</td>
<td>10.93</td>
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<tr>
<td>2003</td>
<td>21.00</td>
<td>7.56</td>
<td>1.00</td>
<td>8.56</td>
<td>12.44</td>
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<tr>
<td>2004</td>
<td>21.00</td>
<td>6.04</td>
<td>1.00</td>
<td>7.04</td>
<td>13.96</td>
</tr>
<tr>
<td>2005</td>
<td>21.00</td>
<td>4.53</td>
<td>1.00</td>
<td>5.53</td>
<td>15.47</td>
</tr>
<tr>
<td>2006</td>
<td>21.00</td>
<td>3.02</td>
<td>1.00</td>
<td>4.02</td>
<td>16.98</td>
</tr>
<tr>
<td>2007</td>
<td>21.00</td>
<td>1.51</td>
<td>1.00</td>
<td>2.51</td>
<td>18.49</td>
</tr>
</tbody>
</table>

*Assumption: Loan Rate of 18 cents a pound, for raw sugar*
Incentive for Mexico to Ship Over-the-Quota Sugar to the U.S. Market, 2001-07
(U.S. cents/lb)
Model

• Modified version of World Sugar Policy Simulation Model
  – Dr. Won Koo, North Dakota State University
  – Dynamic partial equilibrium net trade model
  – Comprises 18 sugar producing and consuming countries and regions
  – Makes specific assumptions about growth rate of various macroeconomic policy variables
### Scenarios

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td></td>
</tr>
<tr>
<td>S0</td>
<td>- Increased minimum TRQ from 1.13 to 1.38 MMT</td>
</tr>
<tr>
<td></td>
<td>- Mexico allowed to export all of sugar surplus to U.S. market beginning in FY 2002</td>
</tr>
<tr>
<td></td>
<td>- No PIK program or direct sugar purchases by government</td>
</tr>
<tr>
<td></td>
<td>- No restrictions on U.S. sugar production</td>
</tr>
<tr>
<td>S1</td>
<td>Same as in baseline (S0) except U.S. domestic sugar production restricted to 1999 level of 7.5 MMT</td>
</tr>
<tr>
<td>S2</td>
<td>Same as in baseline (S0) except U.S. domestic sugar price is maintained at 21 cents/lb for raw sugar (loan rate 18 cents/lb)</td>
</tr>
</tbody>
</table>
U.S. Raw Sugar Price Projections, 2002-06
(U.S. cents/lb)
U.S. Sugar Production Projections, 2001-06

(‘000 metric tons)
U.S. Sugar Beet Acres Harvested Projections, 2001-06
(‘000 acres)
U.S. Sugarcane Acres Harvested Projections, 2001-06
('000 acres)
Concluding Remarks

- The near term prospects and indeed the long term prospects for the U.S. sugar industry appear bleak
- It will be virtually impossible to operate the sugar program at no or minimum cost to the federal government