AMTA & Marketing Loan Program for U.S. Peanuts

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Subject: Replace the current quota support program for peanuts with a marketing loan program set at $450/ton. Examine the implications of an AMTA program similar to corresponding levels of payments for feed grains, wheat, cotton and rice.

Education Request:
- Southwestern Peanut Growers Association
- Texas Peanut Producers Board

Analytical Considerations – parameters to consider in making the transition.

Two levels of assessment are required before a complete statement can be made about the likely consequences of shifting from a quota protected program to a more flexible marketing loan set at $450/ton across the board. The first level is a simple comparison of protection implied by the FAIR Act for major commodities. Using this level as a reference point inferences can be made about a possible cross over program that offers peanut producers a similar level of protection.

This is usually done by comparing government support with the corresponding variable cost of production per acre. In general, this is accomplished at a national level. However regional comparisons will likely be necessary as a national based formula will likely trigger shifts in production patterns due to the regional nature of the current quota system.

But as an initial starting point national averages, will be used to develop a framework that demonstrates current levels of support or protection and corresponding implications for peanuts.

The second level of analysis necessary to finalize this assessment will not be attempted in this study. This level requires the use of analytical models that have the capability of estimating regional supply responses in conjunction with other regionally competitive crops. Also these models are designed to establish a demand system that interfaces both domestic and international markets. This latter component is essential in that a free market price will exist and must be projected in order to analyze the risk associated with the program in terms of producer and government cost.
If a marketing loan is the path taken by the peanut industry than it will be necessary to project the free market price. If the free market price floats below the marketing loan then LDP payments by the government are implied suggesting a level of treasury exposure. Ultimately, these estimates will be necessary before legislation can be decided.

**Stage one investigation – A comparison of implied government support under the current FAIR Act and corresponding implications for the peanut industry.**

Information in table 1 is designed to reflect relative government support levels for feed grains, wheat, soybeans, cotton and rice. In each case imputed trend yields and national variable cost of production are used as a reference point for estimating government protection under the marketing loan.

Trend yield for each commodity per acre multiplied times marketing loan represents a base levels of government supported revenue. The next step is to determine what percent of variable cost this covers. In this case government revenue is divided by variable cost and in general the ratio is expected to be greater than 1. The higher the ratio the higher is the implied level of government revenue support. Consider these variables measured at the national level in Table 1.
Table 1. Implied level of Government Revenue Support by Commodity. The ratio of government revenue support to variable cost per acre. (Based on national averages)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bu</td>
<td>98</td>
<td>99</td>
<td>98</td>
<td>99</td>
<td>98-99</td>
<td></td>
</tr>
<tr>
<td>Corn</td>
<td>129.6</td>
<td>131.5</td>
<td>1.89</td>
<td>1.89</td>
<td>245</td>
<td>249</td>
</tr>
<tr>
<td>Sorghum</td>
<td>66.7</td>
<td>67.0</td>
<td>1.74</td>
<td>1.74</td>
<td>116</td>
<td>117</td>
</tr>
<tr>
<td>Soybeans</td>
<td>38.5</td>
<td>39.0</td>
<td>5.26</td>
<td>5.26</td>
<td>202</td>
<td>205</td>
</tr>
<tr>
<td>Oats</td>
<td>59.5</td>
<td>60.2</td>
<td>1.11</td>
<td>1.13</td>
<td>66</td>
<td>68</td>
</tr>
<tr>
<td>Barley</td>
<td>60.6</td>
<td>61.5</td>
<td>1.56</td>
<td>1.59</td>
<td>94</td>
<td>98</td>
</tr>
<tr>
<td>Wheat</td>
<td>52.5</td>
<td>53.0</td>
<td>2.58</td>
<td>2.58</td>
<td>135</td>
<td>137</td>
</tr>
<tr>
<td>Upland Cotton</td>
<td>638.0</td>
<td>639.0</td>
<td>0.52</td>
<td>0.52</td>
<td>331</td>
<td>332</td>
</tr>
<tr>
<td>Rice</td>
<td>58.5 cwt</td>
<td>58.8 cwt</td>
<td>6.50 cwt</td>
<td>6.50 cwt</td>
<td>381</td>
<td>382</td>
</tr>
<tr>
<td>Peanuts</td>
<td>2564.6 lbs</td>
<td>2588.7 lbs</td>
<td></td>
<td></td>
<td>348</td>
<td>343</td>
</tr>
</tbody>
</table>

Table 1 is a reflection of implied government support for per acre at the national level through the use of a marketing loan. Consider corn as the example. The trend yield in 1998 is 129.6 bu per acre. The marketing loan is $1.89/bu implying a total revenue support of $245 per acre in 1998. The variable cost, which does include hired labor, is estimated at $158 per acre. This means that the government is supporting revenue of $245 per acre at a variable expense of $158 per acre giving a ratio of 1.56. In other words, if trend yields are achieved the marketing loan program for corn provides $1.56 for each dollar of variable cost.

Similarly ratios can be computed for each of the supported commodity. This provides an interesting contrast. Soybeans reflect the highest ratio of revenue support at 2.56 and rice the lowest at 1.0.

The next step requires transferring these ratios back to the peanut industry. Suppose we compare or contrast what the implied marketing loan would be if similar revenue to cost ratios were used for peanuts. In the case of corn this becomes a simple formula. The question to be answered is what
peanut loan level can be derived from a similar revenue to cost ratio for corn. To answer this question one would use the following formula. Trend yield times peanut loan, divided by peanut variable cost of production equals the corn revenue to cost ratio.

\[ \frac{(2564 \text{ trend yield}) \times \text{peanut loan}}{(347.65 \text{ var cost})} = 1.57 \text{ Corn Ratio} \]

\[
\text{Peanut loan} = \frac{(1.57) \times (347.65)}{2564} \\
= \$0.21/\text{lb or } \$420/\text{ton}
\]

So if corn is used as a comparison the marketing loan would be $420 per ton for peanuts.

In a similar fashion a peanut loan rate can be computed relative to each supported crop. These figures are reflected in Table 2.

<table>
<thead>
<tr>
<th>Cents/lb</th>
<th>$/ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>21</td>
</tr>
<tr>
<td>Sorghum</td>
<td>20</td>
</tr>
<tr>
<td>Oats</td>
<td>17</td>
</tr>
<tr>
<td>Barley</td>
<td>15</td>
</tr>
<tr>
<td>Soybeans</td>
<td>35</td>
</tr>
<tr>
<td>Wheat</td>
<td>32</td>
</tr>
<tr>
<td>Upland cotton</td>
<td>17</td>
</tr>
<tr>
<td>Rice</td>
<td>14</td>
</tr>
</tbody>
</table>

Obviously a wide range exists between commodities. If peanuts were paid equivalent to rice the marketing loan implied would be $280/ton. On the other hand if wheat is chosen as a reference the implied marketing loan would be $640/ton.
These estimates reflect a starting point in any decision associated with moving the industry to a market oriented program with base government support across all planted acres under complete planting flexibility. Apparently the $450/ton selected as a starting point fits in this distribution. Is this a fair number? The answer depends on where/what region peanuts are grown with implied support across other commodities and corresponding payments that would be given up by quota holders.

**Quota Holders and Compensation**

The next stage focuses on quota holders and some implied compensation for the loss of their quota. Obviously regions that gain are areas that can now plant without restrictions, but this leaves the quota holder with a net loss. How to think about a fair compensation:

Consider the situation for the quota holder in 2000/2001:

- Quota tonnage is 1,280,000 tons
- Loan rate is .305/lb or $610/ton
- Loss of $160/ton on quota if move to $450 ton marketing loan
  - $160/ton * 1,280,000 tons = $204.8mil
  - Implies $0.08/lbs. loss for quota holders

If there is an AMTA type payment then an $0.08/lb payment for quota peanuts brings the quota holder back to $610/ton which is the original position before implementing the marketing loan of $450/ton.

**Conclusion**

This comparison is written as a starting point for the debate and lays out a frame-work that can be used to help justify the transition from the current quota based system to the one currently operating for wheat, feed grain, cotton, rice, and oilseed producers. Obviously some crops fair better than others on a bases where valuable cost per acre is a reference point. Many other factors could be influential.
Those include yield variability, production cost, and competitive return for other crops grown in the same region.

For any AMTA and marketing loan program there is an implied level of production for which the market will clear. This second stage will be necessary before this analysis is complete. However the debate is dependent on a starting point. This first stage of analysis suggests that comparisons can be made by region to examine a breakeven, relative to where and what quota holders can expect. Their supported returns via a marketing loan and AMTA can be derived. A completion of this information can lead to a bracketed set of support that can be further examined to determine an overall balance of supply and demand. This latter point will not be easily derived without analytical models that can accurately describe the overall U.S. supply, demand and corresponding prices. Supports set too low, will starve out peanut acreage-set too high, can have exactly the opposite effect.