An Analysis of the South Carolina Peanut Industry

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Introduction
2002: A significant change in Federal programs affecting U.S. peanut industry
Prior to 2002: Federal programs directly affected peanut supply and price
- Peanut production quotas and price supports
- Peanuts quota buyout program
- Peanut growers became eligible for a number of farm support programs
- Crop years 2014-2018 programs include
  - Marketing Assistance Loan
  - Price Loss Coverage
  - Agriculture Risk Coverage
  - Price Risk Management
  - Price Risk Management

Objective
- To evaluate the performance of peanut industry in South Carolina in the period following the industry deregulation
- To focus on changes in the level and volatility of key economic variables
- To provide preliminary estimates of peanut price flexibility

Data
USDA National Agricultural Statistics Service
- Area planted, production, yield, production value, price received by growers
- USDA Economic Research Service
- Peanut production costs
- All variables used in the analysis are on a yearly basis

Methodology
- Averages and coefficients of variation (CV) are calculated for key economic variables
- Two periods are used in the analysis
  - 1995-2001: a period prior to the industry deregulation
  - 2002-2015: a period following the industry deregulation


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<tbody>
<tr>
<td>Area planted</td>
<td>Average</td>
<td>CV</td>
</tr>
<tr>
<td>Production pounds</td>
<td>20,025,000</td>
<td>0.08</td>
</tr>
<tr>
<td>Yield</td>
<td>2,780</td>
<td>0.11</td>
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<tr>
<td>Production value</td>
<td>$7,977,246</td>
<td>0.10</td>
</tr>
<tr>
<td>Price received</td>
<td>$0.27</td>
<td>0.07</td>
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<tr>
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<tbody>
<tr>
<td>Average Variable Costs</td>
<td>$0.128</td>
<td>$0.09</td>
</tr>
<tr>
<td>Average Total Costs</td>
<td>$0.270</td>
<td>$0.09</td>
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<tr>
<td>Price received</td>
<td>$0.289</td>
<td>$0.09</td>
</tr>
<tr>
<td>ATC (based on AVC)</td>
<td>$0.142</td>
<td>$0.09</td>
</tr>
<tr>
<td>PCM (based on AVC)</td>
<td>52.62</td>
<td>0.05</td>
</tr>
<tr>
<td>PCM (based on ATC)</td>
<td>0.00</td>
<td>-56.03</td>
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- The average area planted increased almost 6 times
- The area volatility increased 12 times
- The average production measured in pounds increased 7 times
- The production volatility increased almost 7 times
- The average yield measured in pounds per acre increased by 18%
- The average production value measured in $ increased 6.5 times
- The production value volatility increased almost 7 times
- The average price received by growers decreased by 14%
- The price volatility increased almost 3 times

Table 3. Peanut Price Flexibility

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<tr>
<td>Q, million pounds</td>
<td>112.2, 168.0</td>
<td>273.0, 410.4</td>
</tr>
<tr>
<td>P, $ per pound</td>
<td>0.21, 0.19</td>
<td>0.26, 0.25</td>
</tr>
<tr>
<td>% change in Q</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>% change in P</td>
<td>-10</td>
<td>-7</td>
</tr>
<tr>
<td>Price Flexibility</td>
<td>-0.20</td>
<td>-0.14</td>
</tr>
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Conclusions
Changes in the South Carolina peanut industry performance
- Increase in peanut production and increase in production volatility
- Decrease in peanut price received by growers and increase in price volatility
- Price-cost margins exhibit a decreasing trend over time
- Increasing volatility of peanut production costs

Market environment after the industry deregulation
- A greater exposure of peanut growers to production, marketing and price risks
- Current farm support programs influence production and marketing decisions of peanut growers
- The use of marketing contracts increases
- Contract pricing structures are tied to marketing loan rates
- Price discovery issue: peanut industry has "thin" market characteristics

References