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
2002: Industry deregulation
• Peanut 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

Objectives

• 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

Chart 1. South Carolina Peanut Industry:
Area Planted and Production (1995-2015)

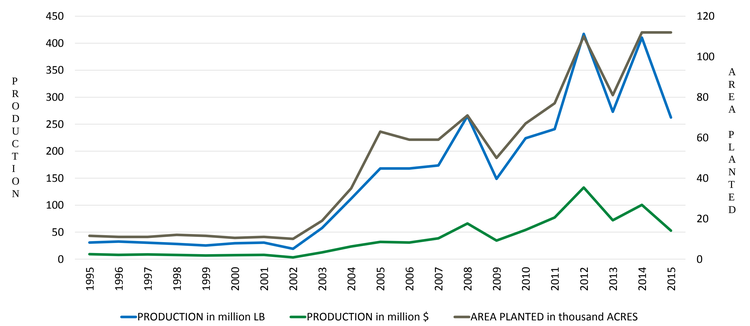

Table 1. South Carolina Peanut Industry: Peanut Production and Price (1995-2002).

		1995-2001		2002-2015	
		Average	CV	Average	CV
Area planted	acres	11,214	0.04	66,071	0.48
Production	pounds	29,625,000	0.08	210,052,857	0.55
Yield	pounds/acre	2,786	0.11	3,293	0.14
Production value	$	7,977,286	0.10	52,166,071	0.68
Price received	$/pound	0.27	0.07	0.23	0.20

Changes in the Industry Performance Following the Deregulation (2002-2015)

• 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

Chart 2. South Carolina Peanut Industry:
Peanut Price and Production Costs (1995-2015)

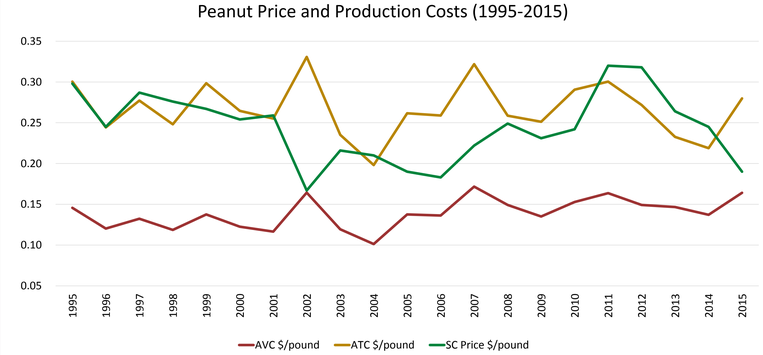

Table 2. South Carolina Peanut Industry: Peanut Price and Production Costs (1995-2002).

		1995-2001		2002-2015	
		Average	CV	Average	CV
Average Variable Costs	$/pound	0.128	0.09	0.145	0.13
Average Total Costs	$/pound	0.270	0.09	0.265	0.14
Price received	$/pound	0.269	0.07	0.232	0.20
PCM (based on AVC)	$/pound	0.142	0.09	0.087	0.54
PCM (based on AVC)	% of price	52.62	0.05	35.47	0.43
PCM (based on ATC)	$/pound	0.00	-56.03	-0.03	-1.83
PCM (based on ATC)	% of price	-0.21	-31.74	-18.73	-1.70

Changes in the Industry Performance Following the Deregulation (2002-2015)

• The average *price* received by growers decreased by 14%
• The average *variable costs* increased by almost 13%
  • The average *price-cost margin* (calculated using AVC) decreased by more than 30%
• The average total production costs remained at approximately the same level
  • The average *price-cost margin* (calculated using ATC) became negative

Table 3. Peanut Price Flexibility

	2004-2005	2013-2014
Q, million pounds	112.2; 168.0	273.0; 410.4
P, $ per pound	0.21; 0.19	0.26; 0.25
% change in Q	50	50
% change in P	-10	-7
Price Flexibility	**-0.20**	**-0.14**

Based on 2013-2014 production (pounds) and price ($ per pound) data
Peanut price flexibility is -0.14
• An increase in peanut production by 1% results in a decrease in peanut price by 0.14%
• A decrease in peanut production by 1% results in an increase in peanut price by 0.14%
  • Should be used with caution in the decision-making process
  • A high level of supply volatility

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

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