The Economic Outlook for California Pistachios

by

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The industry in California has a record of steady expansion

Pistachio market is unlike other nut crops in some ways:

• The domestic and global markets for pistachios are not yet as stable as almond and walnut markets
• So there are many opportunities for dynamic changes
A key factor … 

• Pistachio growers in California produce about 98% of the total crop in the United States, thus, they are “the market” in this country

• This creates unique economic challenges and opportunities
Recent Trends

• The scale of the industry in California has increased dramatically from 1,700 bearing acres in 1977 to 114,000 in 2007
• Yield per acre is trending up
• Therefore, total production has soared, despite alternate-bearing
Table 1. California Pistachio Production and Market Data, 2005-2007

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<th>2006</th>
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<td>Bearing acreage</td>
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<td>Yield (t/ac)</td>
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<td>Utilized production (1,000 t)</td>
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Global Production has followed California

- World production of pistachios has about tripled over the last 20 years
- Iran produces about half of total
- U.S. is second with about 20%
- China (5-10%) is expanding its output and will keep doing so
Demand for Pistachios

• Domestic per capita consumption is growing, partly from health benefits of nuts, partly from lower prices recently

• Consumption as “impulse snack” has limited growth potential

• Consumption growth potential is greatest from processed ingredient market, which is small currently
Surplus Output is Exported

- About 40% of California crop is exported
- That share will increase if production continues to expand at current rate
- Export sales are less profitable than domestic sales, on average
Export Prices are Competitive

• Iran sells lower quality pistachios, yet they hold about half of export markets

• U.S. lost much of the Hong Kong market to lower priced Iranian nuts

• U.S. exports will increase with expanded output, but prices will be lower
Price/Quantity Relationship

• In recent years, prices have fallen faster than production has increased (Table 1)

• This creates financial risk to growers

• Weak U.S. dollar has helped export sales recently (Table 2)
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Table 2. U.S. Exports of Selected Tree Nut Products

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<tr>
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<th>Season to 2007 (Million pounds)</th>
<th>date (May) 2008</th>
<th>Year to date (% change)</th>
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<tr>
<td>Pistachios</td>
<td>47.8</td>
<td>75.1</td>
<td>57.3</td>
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<tr>
<td>Almonds</td>
<td>718.8</td>
<td>835.9</td>
<td>16.3</td>
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<tr>
<td>Walnuts</td>
<td>140.3</td>
<td>196.6</td>
<td>40.1</td>
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<td>Pecans</td>
<td>25.3</td>
<td>42.7</td>
<td>69.0</td>
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Market Choices

• Choosing which commodity markets to invest in should be based on profit and risk factors

• UC cost study data can help in this decision analysis
Pistachio profits change quickly

• In 2004, pistachios were not profitable in California, on average: -$558/ac

• In 2008 analysis using a new cost study, results were:
  2005 = $1,280/ac
  2006 = -$25/ac
  2007 = $690/ac
Risk factors

• U.S. production is concentrated in San Joaquin Valley: same weather to all growers adds to industry yield swings, adding to price swings

• Domestic production can “over-shoot” quantity demanded, thus depressing prices and incomes (see 2007 vs 2005)
Opportunities and Strategies

Individual farmers must decide
• Whether to grow pistachios, acreage as part of diversified crop portfolio, whether to brand, or whether to rely on the industry for marketing

CA industry must decide whether to
• Organize
• Compete with other nuts
• Undertake “demand-enhancing activities”
• Consider “supply control”
Summary

• The pistachio industry in California is relatively young and not yet fully developed
• Balancing industry growth and farmers’ profitability is key
• Manage growers’ household income risk using diversification
• Industry needs to enhance demand beyond snack market