California Agriculture: Trends, Issues and Outlook

Executive seminar on Agricultural Issues
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Some Aggregate Economic Data for California Agriculture

- Diversity of agriculture in California
- Aggregate price and revenue trends
- Input costs
- Asset values
Cash Receipts by Commodity Group, California 2000

- Fruits/nuts: 28%
- Vegetables: 26%
- Field Crops: 15%
- Dairy: 15%
- Greenhouse/nursery: 11%
- Others: 8%
- Beef Cattle: 5%
Index of California Agricultural Commodity Prices, 1960-2000
1965-1967 = 100
Gross Cash Income, California Agriculture
Constant 1996 Dollars
Net Farm Income, California Agriculture
Constant 1996 Dollars

In Millions

<table>
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<td>5900</td>
<td>6100</td>
<td>5300</td>
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US Producer Price Index

(Jan. '91 - Oct. '01)

## California Farm Land Prices

<table>
<thead>
<tr>
<th>Year</th>
<th>All</th>
<th>Pasture</th>
<th>Cropland</th>
<th>Irrigated Cropland</th>
<th>Non-irrigated Cropland</th>
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<tr>
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<td>$</td>
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<td>Change</td>
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<td>Change</td>
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<tr>
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<td>2500</td>
<td>1100</td>
<td>5080</td>
<td>5400</td>
<td>1830</td>
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<td>2610</td>
<td>1050</td>
<td>5260</td>
<td>5600</td>
<td>1700</td>
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<td></td>
<td>4%</td>
<td>-5%</td>
<td>4%</td>
<td>4%</td>
<td>-7%</td>
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<tr>
<td>1999</td>
<td>2770</td>
<td>1050</td>
<td>5700</td>
<td>6100</td>
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<tr>
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<td>6%</td>
<td>0%</td>
<td>8%</td>
<td>9%</td>
<td>-7%</td>
</tr>
<tr>
<td>2000</td>
<td>2850</td>
<td>1000</td>
<td>5960</td>
<td>6400</td>
<td>1400</td>
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<td>-5%</td>
<td>5%</td>
<td>5%</td>
<td>-11%</td>
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<tr>
<td>2001</td>
<td>2910</td>
<td>1040</td>
<td>5870</td>
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<td>4%</td>
<td>-2%</td>
<td>-2%</td>
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Commodity Prices

- Supply/demand fundamentals differ by commodity and are driven by climate and demand shocks and related variables
- Current-season summary data is not yet available
- Ten-year and forty-year price indexes provide some context
(1965-67=100)

- Carrots, All
- Lettuce, Head
- Broccoli, All
Price Indices for California
Almonds, Walnuts, Avocados

1990 = 100


- 50 100 150 200 250

Almonds
Walnuts, English
Avocados, All
Price Indices for Wine Grapes and Raisins

- Raisins
- Wine grapes
Price Indices for California Citrus

- Lemons
- Oranges
Price Indices for California Fresh Grapes and Strawberries

Table Grapes
Strawberries
Price Indices for California Cattle, Broilers and Milk

- Cows
- Steers and Heifers
- Broilers
- Milk, All
More on the California Dairy Situation

- Dairy is the top revenue commodity in California Agriculture
- The dairy situation has been extremely variable over the last few years
- Recent production and prices show this is continuing
California Average Dairy Price, Overbase
(by Month, nominal \$/Cwt.)

Source: CDFA
More on the Winegrape Situation

• Grapes are the number one crop in California by revenue

• Winegrape expansion has been remarkable

• But, prices have now responded to rapid supply growth
California Bearing Area of Wine-variety Grapes, 1990 - 2000
(Thousand hectares)

Source: (California Department of Food and Agriculture/CASS, Grape Acreage Reports)
Volume Shares:
High Priced Varieties and Coastal Region

Four High-priced Varieties (Cabernet Sauvignon, Chardonnay, Merlot, Pinot Noir)

Coastal region
Regional Distribution of Grape Crush within California in 2000

San Joaquin Valley 61%
North Coast 11%
Central Coast 9%
Northern Central Valley 19%
Others 0%

Source: CDFA/CASS, Grape Crush Report data
Average Price of Crushed Grapes in California by Region, 1998-2000 ($ per Ton)

Source: CDFA/CASS, Grape Crush Report data.
### Ratio of Non-Bearing Area to Bearing Area
for grape crush in CA 1997 and 2000

By variety, by region, in percentage

<table>
<thead>
<tr>
<th>Region</th>
<th>Year</th>
<th>All Varieties</th>
<th>All Wine</th>
<th>White Wine</th>
<th>Chardonnay</th>
<th>Red Wine</th>
<th>Cabernet Sauvignon</th>
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<td>19.2</td>
<td>11.1</td>
<td>15.9</td>
<td>25.9</td>
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<td>23.8</td>
<td>17.4</td>
<td>36.1</td>
<td>30.1</td>
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<tr>
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<td>9.3</td>
<td>2.4</td>
<td>15.3</td>
<td>16.7</td>
<td>23.6</td>
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<td>5.7</td>
<td>14.9</td>
<td>8.2</td>
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<td>22.8</td>
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<td>17.6</td>
<td>18.4</td>
<td>14.0</td>
<td>12.6</td>
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<td>37.1</td>
<td>41.3</td>
<td>35.1</td>
<td>54.0</td>
<td>43.3</td>
<td>52.5</td>
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<td>Central Coast</td>
<td>2000</td>
<td>31.1</td>
<td>31.2</td>
<td>18.1</td>
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<td>48.3</td>
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<td>28.9</td>
<td>29.0</td>
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<td>17.7</td>
<td>16.6</td>
<td>27.8</td>
<td>21.5</td>
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California Agricultural Exports

- Exports have been steady after falling from the 1997 highs
- Exports by commodity and commodity group
- Exports by destination
- Exchange rates
California Agricultural Export Value by Commodity Group, 2000

- Fruits and wine: 31%
- Field Crops: 14%
- Tree-nuts: 14%
- Vegetables: 14%
- Animal Products: 8%
- Other: 19%
California Agricultural Export Value by Commodity Group, 2000

- Other products: 19%
- Grapes & Wine: 13%
- Almonds: 10%
- Oranges: 4%
- Other Fruits & Nuts: 17%
- Cotton: 9%
- Other Field Crops: 5%
- Milk & byprod: 5%
- Other Vegetables: 7%
- Tomatoes, Processed: 3%
- Other animal prod.: 3%
- Tomatoes, Fresh: 2%
- Lettuce: 2%
- Flowers & Nursery: 1%
- Other products: 19%
- Cotton: 9%
- Other Field Crops: 5%
- Milk & byprod: 5%
- Other Vegetables: 7%
- Tomatoes, Processed: 3%
- Other animal prod.: 3%
- Tomatoes, Fresh: 2%
- Lettuce: 2%
- Flowers & Nursery: 1%
- Other products: 19%
California Agricultural Exports: Top Ten Commodities, 1999-2000

- Almonds
- Cotton
- Wine
- Table Grapes
- Milk & byprod.
- Oranges
- Tomatoes, Proc.
- Rice
- Walnuts
- Beef

1999
2000
Ratio of Farm Quantity Exported to Produced

Grapes, All
Almonds
Cotton, Lint
Milk and Cream
Oranges
Tomatoes, Processed
Walnuts
Beef and Product
Rice
Lettuce
Prunes
Strawberries
Tomatoes, Fresh
Broccoli
Peaches/Nectarines
California Agricultural Exports, 2000: Field Crops

- Cotton: 65%
- Rice: 19%
- Hay: 10%
- Other: 6%
California Agricultural Exports, 2000: Tree Nuts and Fruits

- Almonds: 22%
- Table Grapes: 12%
- Wine: 17%
- Oranges: 10%
- Prunes: 5%
- Raisins: 5%
- Walnuts: 6%
- Other: 23%
California Agricultural Exports, 2000: Animal Products

- Dairy: 63%
- Beef and byproducts: 30%
- Other Animal Prod: 7%
California Agricultural Exports, 2000: Vegetables

- Tomatoes, Processed: 18%
- Tomatoes, Fresh: 10%
- Lettuce: 13%
- Broccoli: 10%
- Other vegetables: 49%
Agricultural Exports to the Top 10 Destinations by Value, 2000

- Canada: 22%
- Japan: 19%
- Mexico: 7%
- Other: 25%
- Spain: 2%
- Netherlands: 3%
- Germany: 4%
- Hong Kong: 4%
- Taiwan: 4%
- United Kingdom: 5%
- South Korea: 5%
### INDEXES OF REAL TRADE-WEIGHTED DOLLAR EXCHANGE RATE  All Agricultural Trade

<table>
<thead>
<tr>
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<td>125.2</td>
<td>126</td>
<td>125.3</td>
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Source: ERS/USDA  Base 1995 = 100
Final Impressions

• California agriculture is continuing to face serious economic challenges

• There is much variation by commodity, but most have been down recently and some are now facing price declines

• Fundamentals remain sound and export growth remains important for the long term