Overview of the California Winegrape Industry

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Topics to Cover

• Demand/Supply Trends
• Wine and Grape Cycles
• Regionality? Coastal vs. Valley
• Price Segments and Implications for Growers
• Profitability
The Reality

• If you are growing winegrapes, you are in the wine industry
• Wine is still a marginal beverage in the United States
• You must understand the wine market and your place in it to succeed
A Few Statistics

• Approximately 5000 grapegrowers statewide
• Wine is California’s #1 finished Ag product
  – Estimated $51.8 billion impact in California
• Roughly 520,000 acres of wine grapes
• But France, Italy, and Spain all have 4-5 times the acreage
• Bordeaux has 318,000 acres and is on appellation!
Taking the Long View

- Vineyards are long term investments
- Generally assume 25-30 years of useful life
- Capital investments range from $10,000 to $50,000 in preproduction expenses
- Land prices?

- So, what has the long term outlook been for wine?
US Wine Sales Have Increased Every Year Since 1993

Millions Cases of Table Wine
U.S. Adult Per Capita Table Wine Consumption v. Population Growth

**Adult Population**
- 1970: 134
- 1975: 147
- 1980: 154
- 1985: 164
- 1990: 173
- 1995: 184
- 2000: 194
- 2006: 212

**Liters per Adult**
- 1970: 3.9
- 1975: 6.7
- 1980: 9.7
- 1985: 8.6
- 1990: 7.4
- 1995: 8.05
- 2000: 9.3
- 2006: 10.8* (Estimated)

*Source: U.S. Census Bureau, Adams Beverage Group*
U.S. Wine Consumption Relative to Other Countries in 2005

- France 55.85 L/capita
- Italy 48.16
- Argentina 28.18
- Australia 18.96
- United States 8.69

These figures imply that there is lots of room for increased consumption in the U.S., but are somewhat misleading.
Percent Adults by Choice of Alcoholic Beverage in 2008

- Non Drinkers: 43%
- Core: 16%
- Marginal: 15%
- Beer/Spirits: 26%

“Core” consumers drink at least one glass of wine a week and are responsible for 91% of all wine consumed in the United States!

Source: Wine Market Council
U.S. Wine Consumption Relative to Other Countries in 2005

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Growth will come from creating more “Core” consumers—not from enticing Core consumers to drink more wine.
Younger consumers Are Driving Growth in 2009

Percent Increase in Wine Consumption

Source: Wine Market Council
Conclusions on Demand

• Consumption has increased, largely due to “Millennials” choosing wine at a higher rate than did “Boomers”
• Every year for the next 7-8 years, 4 million Millennials will come of legal drinking age
• Proliferation of grape-growing and winemaking in states outside of California will make wine less “foreign” to non-consumers
• What of Supply?
Wine Source by Generation

Source: Wine Market Council 2009 data
Imports fluctuate with currency exchange rates

Import percent of US Market in Volume

What will happen as the dollar devalues relative to other currencies?
California Exports Have Increased

Millions Gallons

- 2002
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
Conclusions Demand/SupplyAssuming

• Assuming that Millennials keep drinking wine, demand within the U.S. should increase
• A weak dollar should help exports
• Supply is global and price sensitive
  – Constellation, Gallo and other major companies all have strong imported brands and may choose to build those brands rather than use domestic production
### Cycles of Growth

<table>
<thead>
<tr>
<th>Period</th>
<th>Acres Increased</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920-1929</td>
<td>89,100</td>
<td>90</td>
</tr>
<tr>
<td>1972-1985</td>
<td>185,600</td>
<td>137</td>
</tr>
<tr>
<td>1990-2002</td>
<td>196,000</td>
<td>67</td>
</tr>
</tbody>
</table>

What happened? Why did this occur?
Dynamics of Planting Cycles

• Something increases demand
  – Prohibition, Baby Boomers, Health
• Prices go up for wine and grapes
• 3-4 year lag on increased supply
• Individuals make planting decisions
• Bearing acreage ultimately exceeds demand
• Acreage removed
  – 90,000 acres in 2003/2004
Percent non-bearing acreage

![Graph showing percent non-bearing acreage]
How do you escape the cycles?

• You don’t—few are completely insulated
• Be aware of industry trends
  – On average, 9-10% of acreage should be non-bearing in order to renew existing vineyards, assuming a 30 year life of a vineyard and a 3 year pre-productive period
• Differentiate your vineyard in some way
Regionality? 2009 Crush Percentages

Volume: Tons Crushed
- Valley: 78%
- Coast: 22%

Value: Percent Dollars
- Valley: 40%
- Coast: 60%
A Tale of Two Industries?

• Definitely over simplistic
• The California wine industry is made up of segments and niches
• The marketing of differences may be as important as “objective quality” differences based upon grape growing environment.
2009 Crush by Region

- SJ Valley: 61%
- Delta: 17%
- N Coast: 10%
- Cent Coast: 9%
- Other: 3%

% Volume

- SJ Valley: 26%
- N Coast: 38%
- Cent Coast: 19%
- Delta: 14%
- Other: 3%
Average Cabernet Prices Per Ton
2008 Crush

Source 2008 CDFA Final Crush Report—Table 10
Why the Price Difference?

• Real quality differences based upon grape composition
• Limited acreage in cooler growing regions
• Appellation marketing (in some cases for decades) builds demand
• Image marketing based on scarcity and quality increase prices.
Regional Differences are Real

WARM REGIONS
• Earlier maturity
• Higher tonnage
• Less color
• Less acid
• Less varietal intensity
• Lower price

COOL REGIONS
• Later maturity
• Lower tonnage
• More color
• More acid
• More varietal intensity
• Higher price
How is Wine Quality Defined?

• Absence of spoilage
• Intensity (more is generally better)
• Complexity (multiple layers of flavor)
  – Can come from fruit or from winemaking
• Typicity—Is the wine typical of the variety or region?
• COOLER REGIONS PRODUCE GRAPES WITH INTENSITY AND COMPLEXITY
Pros and Cons of Cooler Regions

• PROS
  – High demand= high prices
  – More barriers to entry (land scarcity)
  – Potential to raise prices
  – More potential customers (wineries)

• CONS
  – Much higher land and farming costs
  – More farming uncertainty (weather)
Pros/Cons of Warmer Regions

• PROS
  – Larger scale = lower costs per acre
  – More stable weather = lower farming risk

• CONS
  – More available land = more potential competitors
  – Price ceilings for supermarket wines?
  – Fewer number of customers (wineries)
  – Global competition
  – Less stable demand???
Market Segments: Where do YOUR Grapes fit in?
An Old Rule of Thumb

• For every $100 per ton the retail price goes up $1 a bottle
• $500/to grapes go to $5/bottle wine
• With reduced margins, this “formula” doesn’t always hold true anymore—but it is not far off, either
• Average price per ton in 2008 was $544
• WHERE DO YOUR GRAPES FIT IN?
Three Broad Segments

- **Wines of Commodity**: Under $7, price sensitive and a declining market until the recession
- **Wines of Variety and Brand**: $8-14—mass distributed, premium placed on marketing and distribution, brand dominated
- **Wines of Place**: Over $15, 1000s of producers, appellation dominated
Price segments differ in performance

2008 sales of California wines by volume

Gomberg-Frederickson courtesy Jon Fredrickson
Price segments differ in performance

2008 sales of California wines by dollars

Gomberg-Frederickson courtesy Jon Fredrickson
2008 California Wine Sales

38% of volume makes 67% of sales

Gomberg-Frederickson  courtesy Jon Fredrickson
Segment Profit Factors

• **Low End**
  – Increasingly price competitive
  – Commodity driven
  – High volumes and efficiency

• **High End**
  – Increasingly image conscious
  – High marketing costs
  – Requires high margins to cover low volume and high production costs
Profitability?
One Case Study

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION
2008
SAMPLE COSTS TO
ESTABLISH A VINEYARD AND PRODUCE
WINE GRAPES
RED VARIETIES - CABERNET SAUVIGNON
NORTH COAST – Lake County

Glenn T. McGourty UC Cooperative Extension Farm Advisor, Lake and Mendocino Counties
Karen M. Klonsky UC Cooperative Extension Specialist, Department of Agricultural and Resource Economics, UC Davis
Richard L. De Moura Research Associate, Department of Agricultural and Resource Economics, UCDavis
Assumptions

• 30 acre ranch, 25 acres of new vineyard to be planted to Cabernet Sauvignon
• Land valued at $20,000 an acre
• Planting density: 908 vines/acre
• Establishment: $14,966/acre ($372,900)
• Operating costs about $2,500 an acre
• Non Cash (depreciation and interest on land) about $4,000 an acre
## Non-Cash Operating Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost per farmed acre</th>
<th>Annual Cost/Acre</th>
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<tbody>
<tr>
<td>Vyrd. Establishment</td>
<td>$14,916</td>
<td>$1,266</td>
</tr>
<tr>
<td>Land (6.25%)</td>
<td>24,000</td>
<td>1,500</td>
</tr>
<tr>
<td>Buildings</td>
<td>2,400</td>
<td>214</td>
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<tr>
<td>Drip System</td>
<td>2,202</td>
<td>176</td>
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<tr>
<td>Fuel Tank</td>
<td>120</td>
<td>10</td>
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<tr>
<td>Reservoir</td>
<td>3,480</td>
<td>279</td>
</tr>
<tr>
<td>Shop/Vyrd Tools</td>
<td>80</td>
<td>10</td>
</tr>
<tr>
<td>Gondolas (30)</td>
<td>1,800</td>
<td>247</td>
</tr>
<tr>
<td>Equipment</td>
<td>2,429</td>
<td>273</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$3,975</strong></td>
</tr>
</tbody>
</table>
The Bottom Line

NET RETURNS PER ACRE ABOVE TOTAL COSTS

<table>
<thead>
<tr>
<th>PRICE</th>
<th>2.75</th>
<th>3.75</th>
<th>4.75</th>
<th>5.75</th>
<th>6.75</th>
<th>7.75</th>
<th>8.75</th>
</tr>
</thead>
<tbody>
<tr>
<td>$/ton</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,350</td>
<td>-3,892</td>
<td>-2,583</td>
<td>-1,274</td>
<td>36</td>
<td>1,343</td>
<td>2,653</td>
<td>3,962</td>
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<tr>
<td>1,450</td>
<td>-3,617</td>
<td><strong>-2,208</strong></td>
<td><strong>-799</strong></td>
<td>611</td>
<td>2,018</td>
<td>3,428</td>
<td>4,837</td>
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<tr>
<td>1,550</td>
<td>-3,342</td>
<td>-1,833</td>
<td>-324</td>
<td>1,186</td>
<td>2,693</td>
<td>4,203</td>
<td>5,712</td>
</tr>
<tr>
<td>1,650</td>
<td>-3,067</td>
<td>-1,458</td>
<td>151</td>
<td>1,761</td>
<td>3,368</td>
<td>4,978</td>
<td>6,587</td>
</tr>
<tr>
<td>1,750</td>
<td>-2,792</td>
<td>-1,083</td>
<td>626</td>
<td>2,336</td>
<td>4,043</td>
<td>5,753</td>
<td>7,462</td>
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<tr>
<td>1,850</td>
<td>-2,517</td>
<td>-708</td>
<td>1,101</td>
<td>2,911</td>
<td>4,718</td>
<td>6,528</td>
<td>8,337</td>
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<tr>
<td>1,950</td>
<td>-2,242</td>
<td>-333</td>
<td>1,576</td>
<td>3,486</td>
<td>5,393</td>
<td>7,303</td>
<td>9,212</td>
</tr>
</tbody>
</table>

2008 Lake county average Cabernet price was $1,435
Tonnage was 10392 tons/2499 bearing acres = 4.1 tons/acre
Some Take Home Messages

• You are in the wine business if you grow wine grapes—make an effort to understand it
• Know where your region and your grapes fit into price segments
• Recognize the difference between objective and subjective quality and the role that marketing plays in building image and price
• Increase quality and reduce costs: Experiment
More Take Home Messages

• Excel in all facets of your business: Determine your customers’ needs and sell service along with grapes
• Invest in regional promotion
  – Increased consumer interest = higher prices
• Differentiate your vineyard whenever possible
• Widen the use of wine in America—support the Wine Market Council
Increase in Wine Consumption
2003-2008

<table>
<thead>
<tr>
<th></th>
<th>% Adults</th>
<th>% Wine Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE</td>
<td>12.5</td>
<td>15.7</td>
</tr>
<tr>
<td>MARGINAL</td>
<td>13.9</td>
<td>15.2</td>
</tr>
<tr>
<td>BEER/SPRITS</td>
<td>30.6</td>
<td>25.6</td>
</tr>
<tr>
<td>NON DRINKERS</td>
<td>43.0</td>
<td>43.5</td>
</tr>
</tbody>
</table>

In 5 years, wine consumption has grown 17% and now 30.9% of adults drink wine. But “Core” consumers are responsible for 91% of the consumption!