A Timeline and Strategies for Investment in a Winery

By
Jerry White
Department of Applied Economics and Management
Cornell University
Leading Question:

• Do you want to make wine?

OR

• Do you want to make money?
Top 5 Reasons for Starting a Winery

1. It should be cheaper to make this stuff than to buy it!
2. To make a SMALL fortune.
3. You have just won the state lottery, and want to invest the proceeds!
4. To attract members of the opposite sex!
5. To offset taxable income from another business or profession.
Sequencing the operation: vineyard first, winery later? (I will first assume that you are determined to grow grapes!)

• Depends upon ATM!
• A=Aspirations. What are your goals?
• T=Time. How much time do you have?
• M=Money How much capital do you have?
• ATM has a double meaning: It means that you need a ready source of cash for the first few years you are operating!
How much time do you have? (Best case scenario!)

- Planning, ordering vines, vineyard establishment and development until mature yields are obtained—at least 5 years!
- At least another year is required to produce the first vintage, and perhaps 2 to 3 years to get the marketing plan into full swing.
- You are likely to have at least 4 years of negative net income for the winery.
- So if you start with a vineyard, it takes a minimum of 11 to 13 years to get into a positive net income position if you are marketing only the wine that you produce from your own grapes.
How much money do you have?
Ex: 10,000 case small premium winery

- $13,550 per acre to establish and get the vineyard into full production. (excluding land cost).
- Machinery investment might require $150,000, so total investment could be as much as about $557,500 for the vineyard and machinery.
- Requires $1,600,000 to build a 10,000 case winery and cover the negative cash flow for the first 5 years
- Total capital required for first 9 years: approximately $2.0 Million for this scenario (excluding land costs)
How much money do you have?

• For Finger Lakes vinifera (preliminary data, 2010), it requires $18,750 for first 3 years to establish the vineyard. Total investment for 50 acre vineyard: $937,500

• A 50 acre vineyard on average will supply enough grapes for a 10,000 case winery

• Machinery investment for a 50 acre vineyard: $150,000.

• Total investment for the vineyard and winery: $2.7 M (without land cost).
CONCLUSION

• It depends upon your goals and your location (can you buy in grapes?), but starting the winery sooner, rather than later, is often the best alternative

• Especially true when limited capital is a consideration!

• Cash flow is the driver!
Year 0 Capital Investment

- Receiving Equip. $86,950
- Refrigeration $8,600
- Cellar Equip. $11,575
- Winery Buildings and Grds. $562,800
- Truck $15,000

Total Year 0 $684,925
## Year 1 Capital Investment

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fermentation &amp; storage</td>
<td>$93,140</td>
</tr>
<tr>
<td>Lab equip.</td>
<td>$4,557</td>
</tr>
<tr>
<td>Refrigeration</td>
<td>$7,020</td>
</tr>
<tr>
<td>Cooperage</td>
<td>$3,158</td>
</tr>
<tr>
<td>Bottling line</td>
<td>$19,730</td>
</tr>
<tr>
<td>Office</td>
<td>$10,800</td>
</tr>
<tr>
<td>Tasting room</td>
<td>$511,800</td>
</tr>
<tr>
<td><strong>Total Yr. 1</strong></td>
<td><strong>$650,205</strong></td>
</tr>
</tbody>
</table>
SUMMARY OF CAPITAL INVESTMENT:
(For buildings and equipment)

- Year 0: $684,925
- Year 1: $650,205
- Year 2: $29,138
- Year 3: $17,113
- Year 4: $168,570

Total for years 0-4: $1,549,951
### Growth Assumptions

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Production Volume (Cases)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>2,484</td>
</tr>
<tr>
<td>Year 2</td>
<td>3,478</td>
</tr>
<tr>
<td>Year 3</td>
<td>4,521</td>
</tr>
<tr>
<td>Year 4</td>
<td>5,878</td>
</tr>
<tr>
<td>Year 5</td>
<td>7,641</td>
</tr>
<tr>
<td>Year 6</td>
<td>9,169</td>
</tr>
<tr>
<td>Years 7+</td>
<td>10,086</td>
</tr>
</tbody>
</table>
## PROMOTION
Percentage of Wine not sold for Promotional Purposes

<table>
<thead>
<tr>
<th>Promotional Use</th>
<th>% Withheld</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poured in tasting room</td>
<td>10%</td>
</tr>
</tbody>
</table>

(Cash receipts are reduced by another 10% in the form of case discounts.)
# FINANCIAL PLAN

<table>
<thead>
<tr>
<th>Year</th>
<th>Amt. of money needed*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 0</td>
<td>$748,545</td>
</tr>
<tr>
<td>Year 1</td>
<td>$781,625</td>
</tr>
<tr>
<td>Year 2</td>
<td>$104,505</td>
</tr>
<tr>
<td>Year 3</td>
<td>$35,186</td>
</tr>
<tr>
<td>Year 4</td>
<td>$5,160</td>
</tr>
<tr>
<td>Total over five years</td>
<td>$1,675,061</td>
</tr>
</tbody>
</table>

*Includes capital investment + operating (cash flow) losses. Breakeven year: Year 9 (or 10th year)
FINANCIAL PLAN

ASSUMPTIONS

• Tasting room sales in yr, 10 = $657 K
• Wholesale channel $459 K
• Wine related sales $197 K
• Total gross income $1,313 K
• Roughly 5,000 cases are sold in the tasting room, and 5,000 in wholesale
Financial Plan Characteristics

- All equity financing
- Average cost of capital = 7.0 %
- Projected inflation rate = 3.0 %
- Effective (real) cost of capital = 4.0 %
- Assumes buying in grapes
# SUMMARY OF FINANCIAL ANALYSIS

<table>
<thead>
<tr>
<th></th>
<th>10 yrs.</th>
<th>20 yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Present Value</td>
<td>$20,000</td>
<td>$2,419,350</td>
</tr>
<tr>
<td>Internal Rate of Return</td>
<td>4.0%</td>
<td>13.0%</td>
</tr>
</tbody>
</table>
Summary points from this analysis

• Starting a winery requires a huge outlay of capital upfront and in the first two years;
• Production is lower than capacity for several years as you develop your market—you cannot sell all the wine that the winery capacity could produce, if equipment were fully utilized, in the early years;
• Therefore, costs per unit are very high (for fixed costs) for perhaps the first five years until you reach the winery’s capacity—implying lower or negative profits. Is this a case for---

➢ OUTSOURCING?
Some Alternative Business Models

- Have an existing winery make the wine and bottle it under your own (exclusive) label. Has to say on the bottle, “bottled in (Town), NC”
- Should cost about half of the retail price per bottle
- If you supply the grapes, it will probably end up costing more! (Extra cost to the winery of running a small batch through the equipment)
Some Alternative Business Models

• Invest in a bottling line, buy bulk wine from other wineries

• Investment costs: Under $10,000 in a basic bottling line will let you bottle as much as 12,000 gal. per year. Caution: “it’s a pain in the __”, according to one winery consultant, to operate such a line, but it does let you indicate on the label that you bottled the wine at your farm. Next question: Do the customers care?
Some Alternative Business Models

- Make unique products other than wine from grapes**
- Total wineries in NC=100
- Wineries making fruit & berry wine=44
- Wineries making dessert wine=46
- Wineries making sparkling wine=10
- Wineries making mead=1
- Wineries making ONLY table wine=24

** Data from the 2011 Wines & Vines Directory
Some Alternative Business Models: An Example from the Finger Lakes

• Planted vineyards (’97). Started (by a graduate student) with a 10 ac. planting (they now have 40 acres)
• Built tasting room with a café that sold wine from other NY wineries (’98)
• Bought grapes from other growers, used custom processing and bottling for own label
• Constructed “bare-bones” winery in an old barn
• Complete new winery (’00), make own wine from own grapes
Distribution Strategy

- Total Wineries in NC=100 (from Wines and Vines 2011 Directory)
- Wineries with tasting rooms=80
- Wineries with wine clubs=36
- Wineries with 100 % of sales direct to the consumer=18
- (The NC W&G Wine Council indicates there are 114 winery permit holders, 106 which have tasting rooms)
Impact of Current Economy on Timelines and Strategy

• The economic growth in the US slowed down in the 1st Qtr. of 2011 according to the BEA, to 1.8 %...down from an increase of 3.1 % in the 4th Qtr. of 2010
• Wine consumption will continue to increase, but perhaps at a lower rate. (US wine consumption has increased about 3.5 % per year in the last 10 years)
• The impact on restaurants has been greater than the impact on retail outlets for wine (reductions by business on expense account spending)
Impact of Current Economy on Timelines and Strategy

• Price of gasoline and its impact on tourism
• High energy costs and their impact on production costs
• The last two of these (re: high energy costs) are long run concerns; the impact of slow economic growth is a current concern
• Gas prices at $4 again in some parts of the US will be a negative factor for wineries now starting up, due to the reliance of most wineries on sales at the tasting room. (Prices in NC: $3.80 - $3.90 per gal.)
Impact of Current Economy on Timelines and Strategy

• In the longer run, higher gasoline costs may impact traffic on the wine trails.
• Some wineries argued (during the recession) that they were making up much of the lost traffic from far away visitors in more traffic from nearby residents. People were not driving as far or as often on vacations/trips (Staycations!).
• An argument for placing even more emphasis on in-state or near-by metro areas in your promotion program?
Impact of Current Economy on Timelines and Strategy

• The indications from New York wineries are that traffic at tasting rooms was up slightly in 2010, after being down 5 to 10% for the past year.

• If you need to borrow money, interest rates are now favorable! (4.0 to 4.5% now for Farm Credit in NY for “good” customers)
Impact of Recession on Consumer-Survey of CA wineries by R. Smiley, UC Davis

- Consumers have traded down; sales (no. of bottles) of wine over $25 are now up, but many were heavily discounted
- Respondents thought that the economy had hit bottom
- The millennial generation (born between 1979 and 1994, now ages 17 to 32), who many analysts had expected to be key to the growth of wine consumption in the near future, may not help—many don’t have jobs, and have moved back with their parents! (But Boomers have started retiring, many without adequate pensions!)
Suggestions for grape growers who are considering a winery:

- Use “outsourcing” to get in the wine sales business

- Minimize investment in buildings and equipment. You might use custom pressing, have your own bottling line, or have some other winery make wine for your own label

- Round out your own product line by buying in grapes that you don’t currently grow. It is usually cheaper to buy grapes than to grow them!

- Emphasize processing unique products that build on the fruit crops you grow or buy in (i.e. apple, pear, berry wines), fruit brandy, mead)
Jerry’s rules for understanding and succeeding in the wine business

1) “Cash flow rules.”
2) It always takes longer to have a profitable year, and then to recover your investment, than you think it will.
3) You will end up investing more than you think you will (to make up the operating losses in the early years).
4) It’s better to think about who is your ideal customer (and hence, your target market) before decisions are made about Product, Price, Promotion, and Distribution strategies.
5) In a location with a mature industry, it is often cheaper to buy grapes (or juice) or fruit than to grow them.
Jerry’s rules (con’t)

6) It is usually better to sell wine (and invest in a tasting room and a winery) sooner, rather than later, if you can source grapes, juice, (or other fruit).

7) It is difficult for a small winery to succeed with distributors, even in-state.

8) It is costly to get into retail stores and restaurants, especially in an urban area.

9) Thus, most wineries need to start (and maybe remain) heavily reliant on direct sales at the tasting room.

10) Therefore, it is often better to choose a site based on its potential for direct sales and attracting your ideal customers, rather than selecting based on the site’s potential for growing grapes.
Acknowledgement

• Winery establishment data for the financial analysis was provided by:

• Dr. Tom Cottrell
  WineDocTM Winery Consulting
  www.winedoc.com
  859-533-8759
Contact information

• Prof. Gerald B. White
• Tel: 607-255-2299
• E-mail: gbw2@cornell.edu
• Web access of business planning bulletin:
  • http://www.aem.cornell.edu/outreach/materials.htm#2002 (Go to publications E. B. 2002-06 and E. B. 2002-07)