2012 Craft Brewers Conference  
San Diego, California

Cost Analysis of Draught and Bottled Beer for a Small Brewery  
David Logsdon, Tom Moench, Van Havig  
Moderated by: Audra Marotta

Cost Analysis for a Small Brewery
• We are going to show and compare the cost of start up and operations of three different breweries, in different markets, with different products, packages, and price points.

Cost Analysis Overview
• Brewery Purchase Price
• Bottling Line Costs
• Contract bottling Kegging Equipment
• Keg Options; Purchasing, Leasing
• Cash Requirements
• Real Estate and Overhead
• Purchase, lease or monthly rents
• Insurance
• Utilities
• Licensing and related fees

Cost Analysis Overview
• What is your beer worth?
• What does it cost to produce?
• What is your break even point?
• How many kegs, or bottles to operate?
• How long to reach the break even point?

Cost Analysis Overview
• What price will your market bear?
• Price of beer to wholesaler
• Price of beer to retailer
• Suggested retail price to consumer
• On premise, off premise.

2012 Craft Brewers Conference
• David Logsdon, Logsdon Farmhouse Ales
• Tom Moench, Orange Blossom Pilsner
• Van Havig, Gigantic Brewing Company
• Audra...... Moderator
Logsdon Farmhouse Ales

- A farm brewery operating since February 2011. The brewery operates as a cooperative with 6 members.
- Organic Certified farmhouse style ales.
- Primary package: 750 ml bottle
- Draught: Small quantities of ½, ⅛ and 1/6 barrel kegs.

Logsdon Farmhouse Ales

- Start up Capital: (cash & in kind) $325,000
- Brewery Cost: (used 15 bbl) $75,000
- Bottling Line: (used 12 head filler, crowner, labeler, sparger) $40,000
- Start Up Expenses for retooling, small parts and repairs: $50,000
- Licensing and Legal Fees: $10,000
- Operating Cash: $150,000

Logsdon Farmhouse Ales

- Rent: $1000
- Utilities: 1000
- Insurance: 250
- Accounting & Legal 250
- Organic Certification 100
- Distributions: (labor) 11,000
- Monthly Overhead Expenses: $13,600
- Annual Fixed Expenses $163,200

Logsdon Farmhouse Ales

- Malt & Fermentables: $13,500
- Hops 1,600
- Bottles, Labels & Pkg. 21,000
- Repairs & Maintenance 13,000
- Advertising & Marketing 7,000
- 300 bbl Annual Variable Costs $56,100
- Monthly Variable Costs $4,675

Logsdon Farmhouse Ales

- 300 BBL Annual Production
- Fixed Costs $163,200
- Variable Costs $56,100
- Total Costs $219,300
- 100% Yield $219,300 / 300 bbl
- Total Cost per BBL = $731

Logsdon Farmhouse Ales

- Pricing Structure – 750 ml bottles
- Price to Wholesaler ($60/cs) $5 / bottle
- Price to Retailer ($84/cs) $7 / bottle
- Suggested retail price $10 / bottle
Logsdon Farmhouse Ales

Pricing Structure - Draught Beer

<table>
<thead>
<tr>
<th>Wholesale</th>
<th>Retailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ bbls</td>
<td>$245</td>
</tr>
<tr>
<td>¼ bbls</td>
<td>$130</td>
</tr>
<tr>
<td>1/6 bbls</td>
<td>$85</td>
</tr>
</tbody>
</table>

Logsdon Farmhouse Ales

$219,000 annual production costs
Realistic yield of 67% or 200 bbl
$219,000 / 200 = $1091 / bbl
Self distribution sale price of 12/750 ml bottles; price to retailer = $84.00
1 bbl = 13 cases @ $84.00 = $1092 / bbl

Logsdon Farmhouse Ales

1st year barrels production 300
Cost per barrel / bottles $1091
Selling price per barrel (bottles) $1092
Cost per barrel / draught $990
Selling price per barrel (draught) $660

Logsdon Farmhouse Ales

Projected cost per barrel of bottled beer based on annual production increases

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost / Barrel</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 bbl / year</td>
<td>$1091</td>
</tr>
<tr>
<td>1000 bbl / year</td>
<td>$270 - 320</td>
</tr>
<tr>
<td>2000 bbl / year</td>
<td>$185 - 235</td>
</tr>
<tr>
<td>3000 bbl / year</td>
<td>$160 - 210</td>
</tr>
</tbody>
</table>

Gigantic Brewing Company

Something really big is about to happen!

A small production facility in an industrial area with a 20 person tasting room.
Just started brewing in April.
One year round beer – IPA. Everything else is seasonal specialty.
Primary package 22 oz bottle – 75% of production
Draught primarily in 50 liter kegs
Gigantic Brewing Company

- Start up capital $630,000
- Brewery Cost (new 15 BBL brewery, etc.) $250,000
- Bottling line $0 = using a local mobile bottling firm
- Start up expenses – salaries and construction costs $215,000
- Licensing and Legal fees $30,000
- Operating cash $135,000

- Rent $2300
- Utilities $1350
- Insurance $435
- Vehicle $750
- Distributions (labor) $11000
- Monthly overhead expenses $15835
- Annual fixed costs $190,020

- 1000 BBLs per year annual production
- Raw materials $68600
- Bottling costs (inc. labels and bottling fees) $70,500
- Repairs and maintenance $6000
- Marketing $30,000
- Total annual variable costs $175100

- Fixed costs $190,020
- Variable costs $175,100
- Total costs $365,120
- Total cost per BBL at 1000 BBLs/yr $365.12

- Pricing structure for 22 oz bottles.
  - Two tiers of beer pricing
  - Price “a” to wholesaler ($30/case) = $2.5 / bottle
  - Price “a” to retailer ($39 / case) = $3.25 / bottle
  - Suggested retail price “a” = $5 / bottle
  - Price “b” to wholesaler ($48 / case) = $4 / bottle
  - Price “b” to retailer ($62 / case) = $5.17 / bottle
  - Suggested retail price “b” = $8 / bottle

- Pricing structure for draught beer
  - Two tiers of beer pricing, both sold in 50 liter kegs
  - Wholesale “a” = $97 Retailer “a” = $124
  - Wholesale “b” = $112 Retailer “b” = $143
Gigantic Brewing Company

• Total costs per BBL = $365.12 (at 1000 BBLs / yr)
• Revenue per BBL (1 BBL = 15 cases, or 2.35 50l kegs)
• Bottle price “a” = $450
• Bottle price “b” = $720
• Draught price “a” = $227.95
• Draught price “b” = $263.20
• Bottles generate profit, draught is an advertising expense.

Gigantic Brewing Company

• Projected cost per BBL as production increases.
  • 1000 BBLs / yr = $365.12
  • 2000 BBLs / yr = $287
  • 3000 BBLs / yr = $262
  • 4000 BBLs / yr = $249
  • 5000 BBLs / yr = $241

Orange Blossom Pilsner

• Contract brewed honey beer with wide appeal designed for the timid Florida palate.
• Plan was to establish brand, distributor network, fan base and sales record to justify a physical brewery.
• OBP is currently working on funding for Unique Brewing Company.

Unique Brewing Company

Start Up Capital: includes buildout, startup, operating expenses and lease down payment:
30bbl brewhouse with 5, 60 bbl unitanks (with space to expand to 30, 60bbl unitanks or 25k bbls +/- a year)
• $520,000
• $475,000 Lease
• $100,000 Lease
• Total Investment $1,095,000

Unique Brewing Company

Beer Cost Breakdown

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>Price</th>
<th>Unit</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cans</td>
<td>0.107</td>
<td>each</td>
<td>$ 2.57</td>
</tr>
<tr>
<td>Trays</td>
<td>0.0125</td>
<td>each</td>
<td>$ 0.30</td>
</tr>
<tr>
<td>rings perflipak (4500 per roll)</td>
<td>0.0096</td>
<td>Per Can</td>
<td>$ 0.23</td>
</tr>
<tr>
<td>Liquid Cost</td>
<td>1.35</td>
<td></td>
<td>$ 2.81</td>
</tr>
<tr>
<td>Indirect Cost</td>
<td></td>
<td></td>
<td>$ 5.62</td>
</tr>
</tbody>
</table>

| Total Cost | $11.53 |
| Price      | $19.50 |
| Gross Profit | $ 7.97 |
**Target: 5,400 bbls at end of Yr 1**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Avg Annual Gross Profit (per unit)</th>
<th>Units Sold (bbls)</th>
<th>Gross Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>$7.97</td>
<td>27,600 (2,003)</td>
<td>$220k</td>
</tr>
<tr>
<td>1/6 bbl</td>
<td>$15.12</td>
<td>5,680 (947)</td>
<td>$85.9k</td>
</tr>
<tr>
<td>½ bbl</td>
<td>$18.90</td>
<td>4,900 (2,450)</td>
<td>$93.6k</td>
</tr>
</tbody>
</table>

Total Gross Profit $398.5k
S&G expenses* $298.2k
YR 1 Operating Income $100.3k

*(sales & marketing, general overhead, etc)

**Target: 10,800 bbls at end of Yr 2**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Avg Annual Gross Profit (per unit)</th>
<th>Units Sold (bbls)</th>
<th>Gross Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>$9.56</td>
<td>59,520 (4,320)</td>
<td>$568.8k</td>
</tr>
<tr>
<td>1/6 bbl</td>
<td>$18.75</td>
<td>12,960 (2,160)</td>
<td>$243.1k</td>
</tr>
<tr>
<td>½ bbl</td>
<td>$29.81</td>
<td>8,640 (4,320)</td>
<td>$257.6k</td>
</tr>
</tbody>
</table>

Total Gross Profit $1,069k
S&G expenses* $408.2k
YR 2 Operating Income $661.2k

*(sales & marketing, general overhead, etc)

**Tasting Room**

<table>
<thead>
<tr>
<th></th>
<th>Pints (Per Day)</th>
<th>Growlers (Per Day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pints Sold (gal)</td>
<td>150 (18.75)</td>
<td>12</td>
</tr>
<tr>
<td>Cost</td>
<td>$23.43</td>
<td>$15</td>
</tr>
<tr>
<td>Revenue</td>
<td>$637.50</td>
<td>$225</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$614.07</td>
<td>$210</td>
</tr>
<tr>
<td>Daily Gross Profit</td>
<td></td>
<td>$824</td>
</tr>
<tr>
<td>Monthly Gross Profit</td>
<td></td>
<td>$21,426</td>
</tr>
<tr>
<td>Annual Gross Profit</td>
<td></td>
<td>$257,110*</td>
</tr>
</tbody>
</table>

*Does not include revenue on 6-packs, kegs, t-shirts, food, etc.