Forging Financials From Beskar: Protecting Our Breweries From Financial Distress

Audra Gaiziunas
Brewed For Her Ledger LLC
Vermont Craft Brewers Conference 2023

Agenda

- Our current industry environment
- Ratios to be tracking using your financial statements
- Cost components per product
- Overhead
- Approaching new products – do or do not?
- Four costs every brewery encounters
- Breakeven
- Cost structure calculation exercise
- Other key performance indicators to consider
- Open book management

2020-2023 What Happened Operationally, Financially? Why Are We Not Feeling One With The Force?

- Funding crutches
- Operating in 2021 and 2022 without a budget
  - EIDL spent on capital projects without calculations of ROI expectations nor goals tied to expansions
  - PPP funds spent on payroll without projections as to how much sales we will need in order to support this payroll once PPP funds run out
- Raw materials costs increased twice in 2022
- Packaging costs have increased in 2023
  - Case carton cost quoted at 98 cents in January; by May it was $2.27
- On average taproom sales down 15% with my brewery partners
- Consumers are seeking out to low sesh and imperials; our portfolio is no longer aligning with consumer tastes and trends
- Brewery in Ohio with $1.3M loss, brewery in Michigan never profitable, recognizing 2023 is go time

Liquidity and Efficiency: This is the Way

Current Ratio:

Current Assets/Current Liabilities

*1.0 minimum or higher

Working Capital:

Current assets – current liabilities

*The higher the better

Days Working Capital:

(Working Capital * 365) / Total Revenue

*The lower the better

Days Sales in Inventory:

Average Inventory/Cost of Goods Sold *365

*Most cases 60-90 favorable target

Inventory Turnover:

Cost of Goods Sold/Average Inventory

*Higher is better

The Debt Service Coverage Ratio

Calculated as:

EBITDA / Debt Service

(principal and interest for 12 months)

EBITDA: net operating income

Target is 1.2 or higher for banks and investors to view you as financially healthy

Create a debt schedule for 12 months from each loan sitting on your balance sheet

Sum the total of 12 months of all your debt service payments and multiply that annualized sum by 1.2 for your target EBITDA for the upcoming year when creating projections

Cost Components Per Product

- Direct Materials
- Direct Labor
- Overhead
  - Overhead is an accounting term that refers to all ongoing brewery expenses not including, or related to, direct labor, direct materials or third-party pass-through expenses (such as sales tax collected from customers and submitted directly to the state).
  - A brewery must pay overhead on an ongoing basis, regardless of whether it is conducting a high or low volume of business. It is important not just for budgeting purposes but for determining how much a brewery must charge for its products or services to make a profit.
  - **Understand your fixed overhead:** if you produced 0 BBLs for the month, which expenses will you still have to pay?
  - Breweries tend to ignore this piece when making pricing decisions and building their bill of materials

A Closer Look at Overhead

- Overhead expenses can be fixed or variable.
- Fixed overhead expenses are the same from month to month. Ex. rent
- Variable overhead expenses increase or decrease depending on the business's activity level. Ex.: shipping and mailing
- Overhead expenses can also be semi-variable.
- With semi-variable overhead expenses, the company incurs some portion of the expense no matter what, and some portion depends on the level of business activity. Ex.: Many utility costs are actually semi-variable with a component existing as a base charge and the remainder of the charges being based on usage.

A Closer Look at Overhead

Overhead can be general.

General overhead is also referred to as brewery overhead. This overhead applies to the brewery's operations as a whole.

A brewery can allocate overhead to a specific project or department as well. Ex: production, sales, admin

Overhead expenses may apply to a variety of operational categories.

- Manufacturing overhead includes costs related to production. Ex. QA/QC/lab, CIP, keg cleaning
- Administrative overhead most traditionally includes costs related to basic administration and general business operation. Ex. the need for accountants, attorneys, IT support
- Selling overhead relates to activities involved in sales and/or marketing. Ex. printed materials, social media campaigns, salaries of sales staff and their corresponding administrative-support professionals

Calculating Overhead and How it Slots in with the Bill of Materials

*Minimum: once/year
*Recommended: quarterly

Gallons Produced:	46,500	In BBLs:	1,500
Manufacturing Overhead:			
Rent	$ 18,160.00		
CAM, Tax, Insurance	$ 1,400.00		
Liability Insurance	$ 12,000.00		
Utilities	$ 7,820.00		
Repairs	$ 11,105.29		
Supplies	$ 4,200.00		
Payroll Indirect (Inventory Analyst)	$ 42,000.00		
Depreciation	$ 11,586.00		
	$ 108,271.29		
Overhead/gallon	$ 2.33		

IPA							batch	#
		Actual	Variance	Cost/lb(oz)	Total Cost	Fav/(unfav) variance		
	Canada Malting Superior Pilsner		-	$ 0.57	$ -	$ -		
300	Canada Malting 2-Row	300	-	$ 0.54	$ 160.50	$ -		
50	Simpsons Golden Promise	50	-	$ 0.82	$ 40.75	$ -		
100	Best Malz Light Munich	100	-	$ 0.64	$ 63.50	$ -		
250	Canada Malting Wheat Malt	250	-	$ 0.54	$ 133.75	$ -		
	Simpsons Caramalt 30-37L	0	-	$ 0.84	$ -	$ -		
	Canada Malting Rye Malt		-	$ 0.56	$ -	$ -		
	OIO Brewer's Grains Flaked Rye		-	$ 0.68	$ -	$ -		
	Weyermann CaraMunich II		-	$ 0.81	$ -	$ -		
	Weyermann Carafa III Special		-	$ 0.87	$ -	$ -		
	Hallertauer		-	$ 10.40	$ -	$ -		
	Nugget		-	$ 7.85	$ -	$ -		
	Crystal		-	$ 8.65	$ -	$ -		
	Styrian Golding		-	$ 9.83	$ -	$ -		
	Chinook		-	$ 8.65	$ -	$ -		
5	Warrior	5	-	$ 8.00	$ 40.00	$ -		
20	Citra	20	-	$ 10.65	$ 213.00	$ -		
10	Centennial	10	-	$ 12.00	$ 120.00	$ -		
5	Galaxy	5	-	$ 13.95	$ 69.75	$ -		
	Saaz		-	$ 9.91	$ -	$ -		
	Matueka		-	$ 14.56	$ -	$ -		
	Breakbright		-	$ 18.90	$ -	$ -		
	Magnesium Sulfate		-	$ 1.14	$ -	$ -		
	Calcium Carbonate		-	$ 1.18	$ -	$ -		
	Calcium Chloride		-	$ 1.86	$ -	$ -		
					$ 841.25	$ -		
Brew labor Andrew (hours)		6		$ 31.25	$ 187.50			
Brew labor 2 (hours)				$ 31.25	$ -			
Brew labor 3 (hours)				$ 14.42				
Brew labor 4 (hours)					$ -			
Overhead				$ 506.24	$ 506.24			
Cans				$ 0.11				
Can Lids				$ 0.03				
Nylon hop bag				$ 7.51	$ -			
Bottle Labels				$ 0.04				
Can Carriers				$ 0.10				
Carton				$ 0.53				
Keg Cap				$ 0.08				
5g keg rental				$ 2.69				
15.5g keg rental				$ 3.11				
Keg Collars				$ 0.08				
Filter sheet				$ 1.75	$ -			
Whirlfloc					$ -	$ -		
PKG/CELL Roy (hours)		7		$ 20.19	$ 141.35			
PKG/CELL Tony (hours)		2		$ 31.25	$ 62.50			
PKG/CELL 3 (hours)				$ 14.42	$ -			
PKG/CELL 4 (hours)				$ 21.63	$ -			
					$ 1,738.84	$ -		

	Per BBL:
Direct materials/gallon produced:	
$ 3.88	$ 120.18
Direct labor/gallon produced:	
$ 1.80	$ 55.91
Overhead/gallon produced:	
$ 2.33	$ 72.32

Innovation Pricing and Target Costing

*text me your email to 919-538-4404 to get this workbook

[Input variables in blue font]			Beer Name
Target 4pk/16oz can price to consumer			$ 15.99
Equivalent case price of 6-4pk/16oz cans			95.94
Less normal retail margin	25.0%		(23.99)
Target wholesale price			71.96
Less normal wholesale margin	30.0%		(21.59)
Target laid-in cost for wholesaler (FOB+VT Excise+Freight)			50.37
Less VT excise per case ($0.27/gal)			(0.81)
Less Freight per case from A to B			(0.17)
Target FOB per case price to wholesaler			49.39
Less minimum brewery gross profit margin	35.0%		(17.49)
Target COGS per case (federal excise, ingredients, packaging, labor & overhead)			31.90
Less Federal excise per case ($3.50/bbl)			(0.34)
Less Labor & overhead per case costs			(12.39)
Less Packaging per case cost			(10.82)
Can, blank, 16oz (ea)	$ 0.139		(3.34)
Can, end (ea)	$ 0.036		(0.87)
Label (ea)	$ 0.230		(5.52)
PakTech (ea)	$ 0.140		(0.84)
Tray (ea)	$ 0.250		(0.25)
Target ingredient costs per case			8.35
Expected yield	85.0%		
Target ingredient costs per brewed barrel			$ 86.26

Four Types of Costs Breweries Encounter

- **Direct Costs**
  Can be directly traced to the product.
  Ex.: material, labor costs
- **Indirect Costs**
  Can't be directly traced to the product; costs are allocated, based on some level of activity. Ex.: overhead costs
- **Fixed Costs**
  Don't vary with the level of production.
  Ex.: a lease on a building, insurance, subscriptions
- **Variable Costs**
  Change with the level of production.
  Ex.: materials used in production, labor hours spent kegging or canning beer

NOTE: Every cost can be defined with two of these four costs.
Ex.: The cost to repair machinery is an indirect variable cost.
You decide if the cost is direct or indirect, *and* if the cost is fixed or variable.

Breakeven Point

- The breakeven point is the level of sales where your profit is zero.
- Breakeven point formula: Profit ($0) = sales – variable costs – fixed costs
  - To determine sales, multiply your sales per unit by units sold.
  - To determine variable costs, multiply the variable cost per unit by the same units sold.
  - The sales level that makes the formula equal to zero is the breakeven point
- Another way to write the formula: $S(x) - VC(x) - FC = 0$ where x is the number of units sold.

Breakeven Point Example

Scenario:

- Sales price per case = \$36.
- Rent = \$1000.
- Utilities = \$250.
- Barley, hops = \$3.
- Packaging = \$2.
- Excise tax = \$.50.
- Labor = \$2.

What is the breakeven point?

- S(x) – VC(x) – FC = 0
- \$36(x) - \$7.50(x) - \$1250 = 0
- \$28.50(x) = \$1250
- x = 43.86 or 44 cases

Determining Your Overhead Rate Given Your Financial Goals

- Go through your annualized income statement, line by line, labeling each cost as “fixed” or “variable” AND “direct” or “indirect”.
- Add up the totals of each of those four buckets: fixed, variable, direct, and indirect. Your check is that you should get a total that is exactly 2x your total expenses.
- Divide your indirect bucket by the number of BBLs you sold last year and/or the number of BBLs you project you will sell in the current year. That is your overhead rate per BBL. Use that rate for your analysis when creating pricing scenarios.

Tailoring the Breakeven Formula to Meet Your Goals

- Divide your variable bucket by the number of BBLs sold over the past year. That is your VC component for your breakeven formula.
- Keep your fixed bucket as a $ total. That is your FC component.
- Divide your total beer sales $ by the number of BBLs sold over the past year. That is the S component for your breakeven formula.
- Set your financial goal in $ for the year, then solve for x. In this case, x is expressed in BBLs
- S(x) - VC(x) – FC = your set financial goal
  - I use a debt service coverage ratio of 1.2 when I complete initial reviews

June 2023 for a Brewery That Sold 42 BBLs

1. Label each line item as F/V and D/I.
2. Sum up each F, V, D and I bucket.
3. Divide the I bucket by 42 BBLs.

That is your general overhead/BBL.

COGS - Taproom Beer Ingredients	1,272.05
Contracted Production Labor	5,000.00
Equipment Lease	224.70
Production Supplies	2,217.51
Advertising and Promotion	1,168.00
Automobile Expense	32.08
Bar Supplies	1,694.88
Music	2,075.00
Credit Card Fees	1,458.58
Dues and Subscriptions	197.79
Insurance Expense	1,082.35

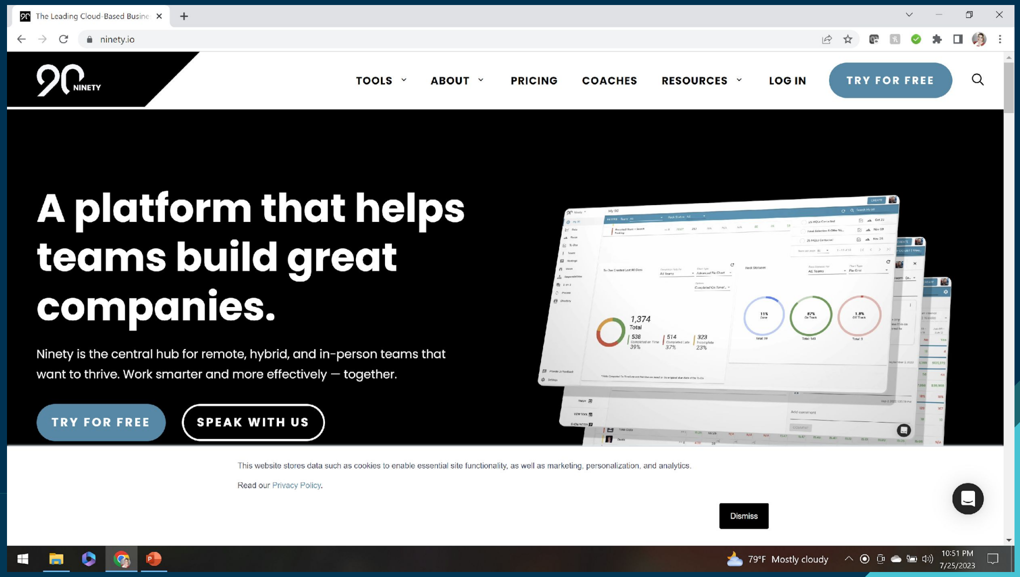
Interest Expense	210.01
Keg Lease	342.80
Meals and Entertainment	17.34
Office Supplies	25.20
Management Wages	7,338.00
Professional Fees	137.50
Rent Expense	3,500.00
Repairs and Maintenance	1,518.26
Excise Tax	348.00
Telephone Expense	54.82
Utilities	1,457.76

Other Key Performance Indicators to Track

- Production Labor $ Per BBL sold (including payroll taxes/bennies)
- Total Labor $ Per BBL sold (including payroll taxes/bennies)
- Trailing 12-Month Net Income/(Loss)
- Incremental Weekly Sales Needed to Break Even or Reach a Goal Net Operating Income
  - Can break apart taproom sales from wholesale sales
  - Use gross margin for each division of business (example: 52% wholesale; 71% taproom)

Open Book Management in Practice

- Meet weekly to review all KPIs and issues for accountability
- Project 12 months of income statement and cash flow quarterly
- Resources
  - The Great Game of Business by Jack Stack
  - Traction by Geno Wickman
    - Entrepreneurial Operating System (Ninety.io)



“In a Dark Place We Find Ourselves, and a Little More Knowledge Lights Our Way.”

Audra Gaiziunas
brewedforherledger.com
919-538-4404
audra.gaiziunas@gmail.com