Title
Production Capacity, Mergers and Acquisitions, and the Changing Value of Craft Beer in the U.S.A.

I want to submit an abstract for:
Conference Presentation

Corresponding Author
Richard Volpe

E-Mail Corresponding Author
rvolpe@calpoly.edu

Affiliation
Cal Poly SLO

Co-Author/s
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael</td>
<td>McCullough</td>
</tr>
</tbody>
</table>

E-Mail/s Co-Author/s
E-Mail
mpmccull@calpoly.edu

Keywords
craft beer; craft brewing; mergers and acquisitions; production value

Research Question
How does the value per pint of craft beer change with the size of breweries, as measured by total production?

Methods
Nonlinear regression; kernel density estimation

Results
Craft beer value, plotted against production size, follows an inverted u-shaped curve. Value increases with size up to a point, then decreases for large corporate operations.

Abstract
As craft breweries have proliferated throughout the United States at a meteoric rate in recent decades, the structure of the craft beer industry has evolved. Much as consolidation has been the defining transformative process for the food supply chain since the 1980s, mergers and acquisitions have become commonplace among breweries. The extant literature on the value of craft beer and its relationship to price is thin. For example, Elzinga et al. (2015) provide a robust analysis of the determinants of brewery counts by state, but do not examine brewery size or production value, or pricing. We are interested in the relationship between brewery size, as measured by production capacity, and value. To measure value and identify this association, we study acquisitions over time.
We hypothesize that the value of craft beer, per can or per pint, is related to brewery size. The smallest craft breweries, also known as "nano" breweries, which produce less than 15,000 barrels per year, are missing attributes that contribute to notoriety and, in turn, value. These include marketing and social media (Foster et al., 2017), distribution (Pokrivčák et al., 2019), and technologically efficient production (Baiano, 2021). We therefore theorize that value per pint increases with size until breweries reach midsize, producing between 15,000 and 6,000,000 barrels per year. To be clear, we do not expect a discrete change in value at 15,000 barrels, but that estimated value should increase through some portion of this range.

As production size increases and distribution expands into assorted marketing channels, breweries increase their name recognition across wider geographic spaces. A wealth of research (Long et al., 2018; Koontz and Chapman, 2023; Debies-Carl, 2023) has established that craft beer drinkers value uniqueness and locality. We therefore anticipate that value per pint reaches a global maximum at a certain production level, beyond which point it decreases. While total revenues and profits may increase with expansion beyond that point, the value per pint of craft beer stagnates or even decreases, as these key attributes are lost. Moreover, the mass production of beer results in a homogeneous product, and craft beer drinkers who express preferences for local products often argue that variations in beer flavor are preferred.

We rely on information predominantly from the Brewers Association to compile a list of 132 acquisitions of craft breweries, dating back to 1988. We also draw on information from BrewBound.com and GlobalBeerTrekking.com to supplement the list of acquisitions and verify certain transactions. In many cases, additional news sources were required to augment the transaction information with production capacity, selling price, or both.

Preliminary plots of the data broadly support our hypotheses, in that the relationship between the value per pint of beer and brewery size is nonlinear. We find that value increases sharply with production size up to values between 100,000 and 150,000 barrels annually. While more work is needed to clean the data and estimate the kernel density of the distribution, beer value decreases slightly but significantly beyond this point, barring a selection of outliers that require further research. Work is underway to quantify the number of beers produced, average ABV, social media touchpoints, and other indicators to provide controls for our nonlinear estimation. We expect our results to have implications for craft brewers, for buyers considering the acquisition of craft breweries, and for regulations affecting beer and brewing.

Consent
✔️ I agree to the privacy policy.

You find the link to our privacy policy at the bottom of the page. In the privacy policy you find a link for exporting and/or erasing your personal data stored in our database.