

INSIGHTS & ANALYSIS

Two Looks at Craft Prices and Elasticities



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One of the most common questions I've gotten in recent months relates to price elasticities. Beer is definitely price elastic and has cross price elasticities with other beverage alcohol segments. I won't go into that literature here, but if you're interested in learning more, [here's a meta study on elasticities](#), and [here's another one looking at segments within beer and how much they interact](#). Related to that second study, I've long assumed that [craft beer](#) has a lower elasticity than other, lower-priced categories of beer. Elasticity is a well studied area, so these articles are just the tip of the iceberg.

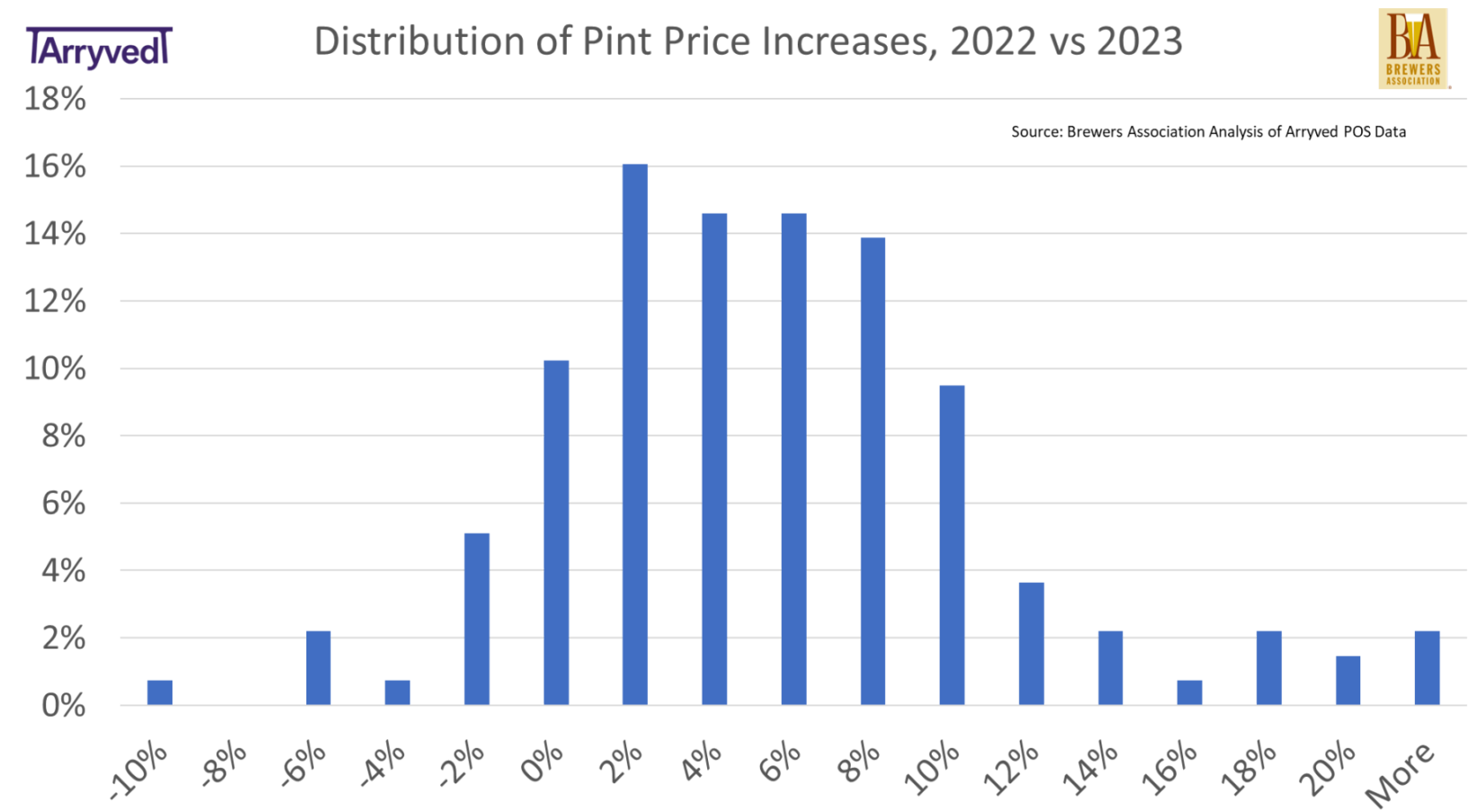
That said, given changes in U.S. inflation and craft category demand, I think it's worth discounting historical findings and digging into the current situation. Overall price inflation and the proliferation of choices within craft, coupled with lots of new competition in beverage alcohol, has clearly made some consumers think about price more in their purchasing decisions. The simple version of those changes is that craft's elasticity has likely gone up (i.e., price increases lead to bigger drops in demand than they did a few years ago). People seem to inherently know that, which is why craft pricing went up less than overall beer pricing in the past few years, and why beer pricing went up less than overall food and beverage pricing.

In the rest of this article I'm going to dig deeper into this topic using point-of-sale data from [Arryved](#) on pint prices and Circana scan data on IPA brands by IPA sub-style. These analyses will hopefully help you zero in on what elasticity looks like these days, but more importantly add context for how you should think about pricing. There isn't one elasticity for craft. There are multiple by brand, style, location, and more, and so the more you're really zeroing in on pricing decisions for particular beers and locations, the more you'll be able to make the best decisions for your business.

Arrayed Pint Data

The first data we’ll be looking at comes from Arrayed, who provided access to their data set with locations anonymized. I recently presented this data on an Arrayed webinar that also covers some state data trends, so feel free to [watch that recording](#) which also gets into the details of the data set, locations covered, etc.

Starting at a high level, using a comparable location set, pint pricing was up 4.6% in 2023. Breaking that down across locations, here’s a histogram of how individual locations raised or lowered pint prices.



This shows that that 4.6% number hides a lot of variation. Most locations fell in the 2%–8% range, but approximately 40% of locations had average pint price changes that were either decreases or above 10% (note: we are looking at the location level, so we can’t look at pricing by brand, so this might include some shift in brand mix). I thought it would be interesting to dig in deeper into what drives that variation. In addition to state (California has much higher pricing than North Carolina or Ohio, for example; you can see that data in the webinar), one thought was urban versus rural, which I looked at based on zip codes. Here’s that data.

What else drives variation?

	2022	2023	Change	Average Zip income	
Urban	\$7.15	\$7.32	2.36%	Urban	\$87,187
Suburban	\$7.25	\$7.55	4.21%	Suburban	\$85,174
Rural	\$7.34	\$7.76	5.68%	Rural	\$74,470

This analysis created a surprise, at least to me. Not only was rural pint pricing higher in 2023 than urban or suburban, it also grew faster as well. This can’t be explained by income levels, since for the zip codes covered, urban areas had higher income. So, what if we interact those two variables? The graphic below shows the interaction of zip code location—separated into urban, suburban, rural—and wealth. “High” income is defined as within the 75th percentile and up, “Low” is the 25th percentile and below, and “Middle” is anything between the 25th to 75th percentiles.

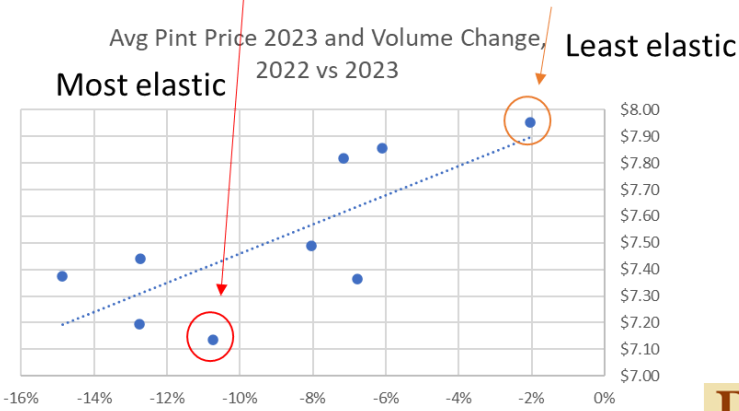
Digging Deeper...

2022	Income		
	Low	Middle	High
Urban	\$7.07	\$7.22	\$7.15
Suburban	\$7.00	\$7.19	\$7.46
Rural	\$6.96	\$7.43	\$7.61

Pricing Change	Low	Middle	High
Urban	0.9%	3.1%	3.1%
Suburban	2.7%	4.2%	4.8%
Rural	5.8%	5.7%	4.5%

2023	Income		
	Low	Middle	High
Urban	\$7.14	\$7.44	\$7.37
Suburban	\$7.19	\$7.49	\$7.82
Rural	\$7.36	\$7.86	\$7.95

Smaller gap

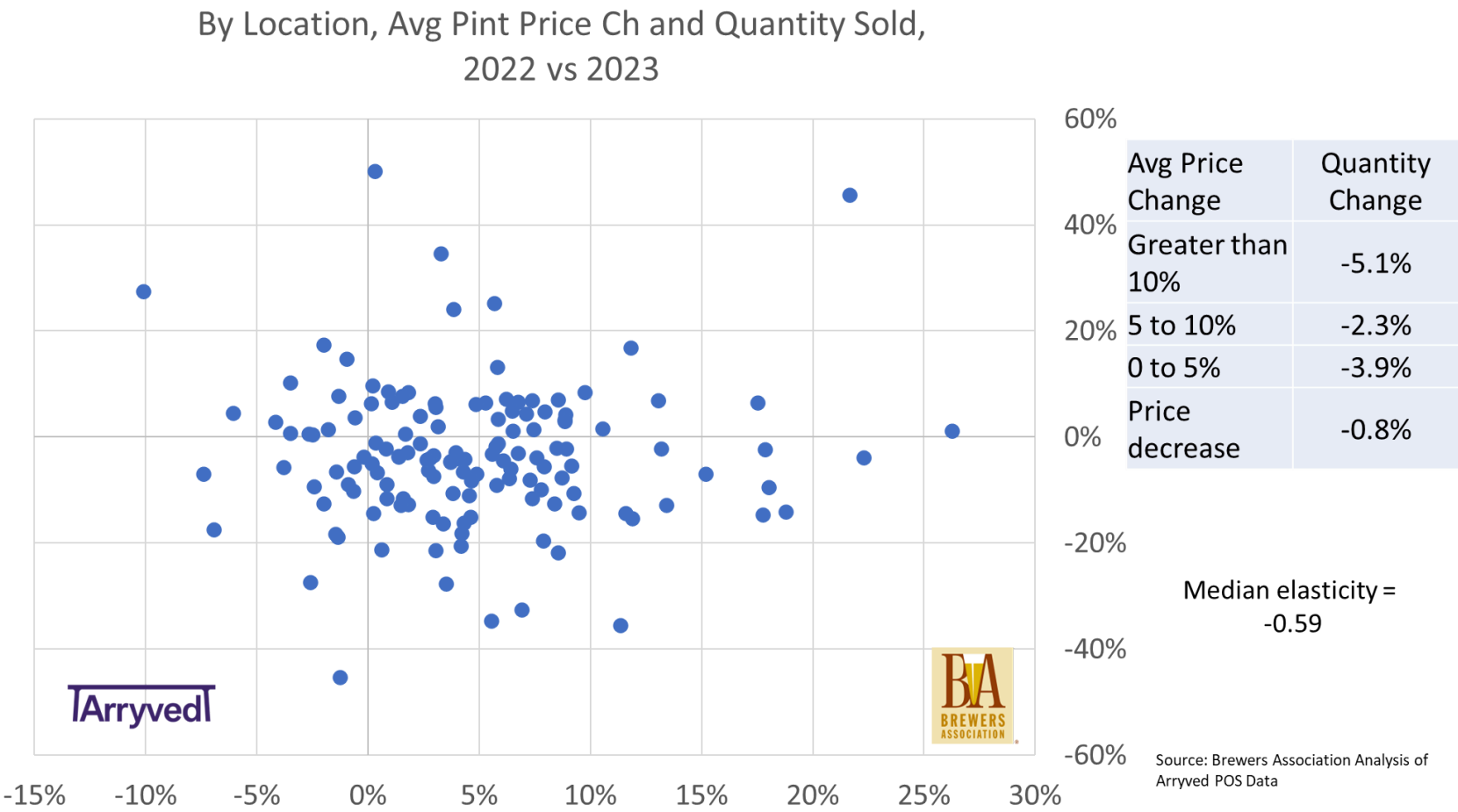


Source: Brewers Association Analysis of Arryved POS Data
Zip classification from Jed Kolko, Trulia
Zip income from US Census Bureau



Here we perhaps see a bit more of the expected pattern, with poorer rural areas starting with the lowest pricing in 2022, though that jumped in 2023, and in general higher income zip codes saw higher pricing across location types. A couple of findings that caught my eye were: A) the much smaller pricing gaps for urban areas by income levels, which makes sense as they are likely closer together; and B) stronger pricing changes for rural areas across most income levels. Looking at these boxes, wealthy rural areas had the least elasticity in 2023 and poorer urban areas had the highest. In general, this data starts to fill out the story of how craft pricing strategy can’t be fixed, but has to be viewed in context of things like location and customer base.

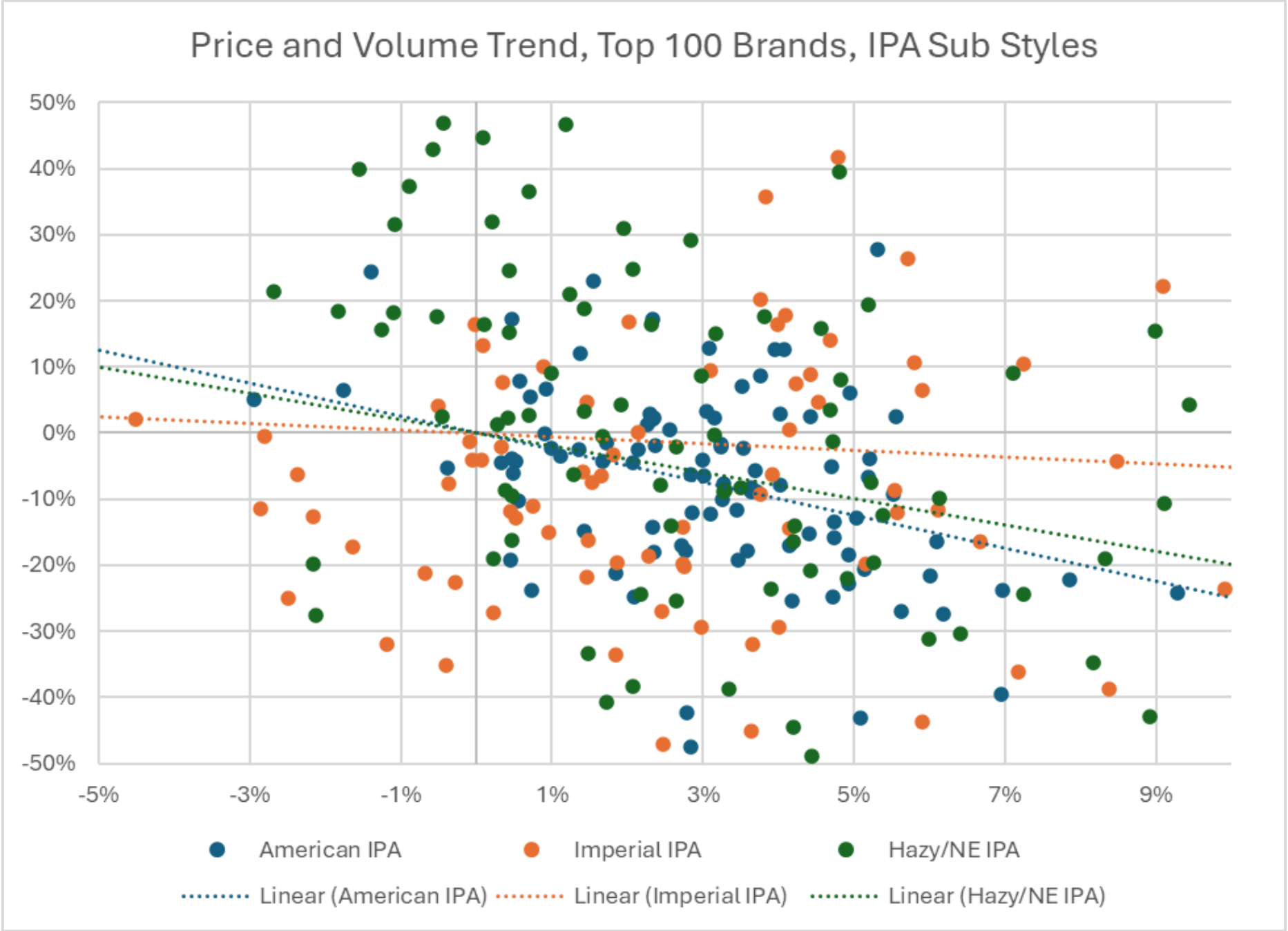
Finally, we can look at pricing change in 2023 (see the x-axis in the table below) versus quantity of pints sold (y-axis) at the location level. As you can see, this isn’t as strong a relationship as you might expect if you just took Econ 101, again suggesting that context, like brand strength and location, matter.



That said, we can bucket locations by price change and pull a median elasticity of -0.59 (meaning a 1% increase in price relates to a decrease in demand of -0.59%). This implies that there’s a general relationship with volume. Note that I say “relationship” as opposed to using causal language. One thing that’s really hard to know in these types of analyses is how much pricing affects trends versus how much trends affect pricing. A growing brand gains scale, which means you might want to lean in with more aggressive pricing. Maybe a location losing volume is increasing price to compensate. That said, using these price buckets we see that aggressive pricing held volume better than locations which sharply increased prices. Which is the better strategy would depend on individual factors.

Circana Scan Data

Since context matters, I thought it would be interesting to complement the pint analysis with some off-premise scan data. To narrow the focus here a bit, I looked at IPA sub styles. One of the challenges in estimating elasticities is that demand is changing for reasons totally unrelated to price and so controlling for style as a variable helps us create comparability on at least one dimension. I took the top 100 brands in three IPA sub-styles (American, Imperial, and Hazy/Juicy IPA) from 2022 and looked at their pricing and volume changes in 2023. Those brands are plotted below . Note that the graph is trimmed somewhat to exclude a few outliers. The x-axis is price (done by case equivalent price, so it doesn’t control for package types, counts, or channel mix changes) and the y-axis is volume.



A couple of things jump out at me here. The first is that, again, this relationship is pretty weak. So things like brand strength matter as much if not more than pricing. The second is that we immediately see differences in relationship by sub-style. Imperial IPA, which has seen more growth, has a weaker relationship than American and Hazy/Juicy (also known as New England or NE IPA), where the fitted line is more negative.

To build on this, I expanded the analysis to 200 brands, and then looked at the distribution of performance by pricing. I was able to condense that analysis into three buckets, which held fairly consistently across the three sub-styles—brands that cut price by 1% or more; brands that were between a 1% cut and 6% increase; and brands that increased by 6% or more.

American IPA

Price Change	Number of Brands	% that Grew in 2022
Greater than 1% cut	17	79.5%
1% cut to less than 6% increase	151	27.2%
6% or greater increase	32	9.4%

Hazy IPA

Price Change	Number of Brands	% that Grew in 2022
Greater than 1% cut	30	56.7%
1% cut to less than 6% increase	139	33.8%
6% or greater increase	31	16.1%

Imperial IPA

Price Change	Number of Brands	% that Grew in 2022
Greater than 1% cut	38	34.2%
1% cut to less than 6% increase	126	30.2%
6% or greater increase	36	11.1%

Total Across IPA Sub-Styles

Price Change	Number of Brands	% that Grew in 2022
Greater than 1% cut	85	50.6%
1% cut to less than 6% increase	416	30.3%
6% or greater increase	99	12.1%

Again, we don’t want to ascribe one-to-one causality here, since volume trends are going to affect pricing, but with that said, we see similar patterns emerging. 50% of brands that cut price by 1% or more were up in 2023. 30% of brands with slight cuts to 6% increases were up. And only 12% of brands with 6% or greater price increases were up. Similar to pint pricing, this suggests basic ranges that may shift customer decision making, though you should be balancing those buckets with a range of other factors.



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