Is the price (pack architecture) right?

The art and science of portfolio optimization

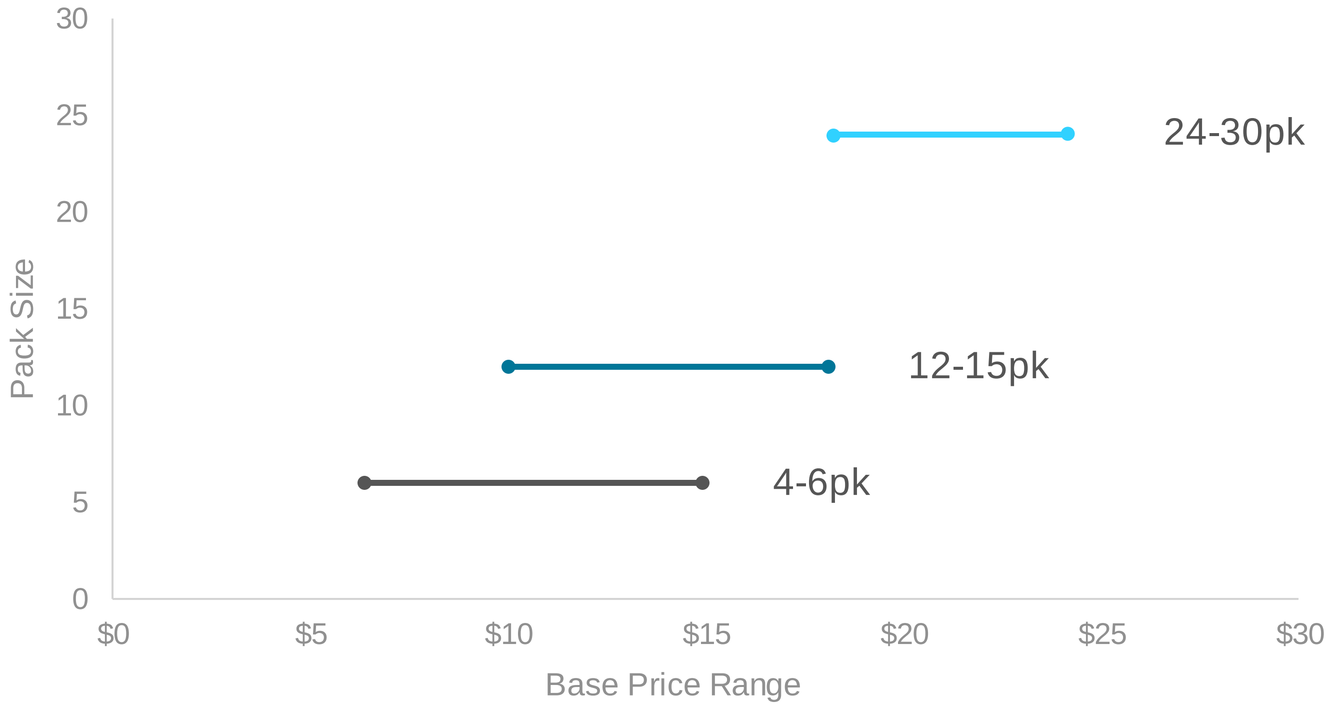
NIQ BASES

BASES R&D Case Study

U.S. Beer and Lager

NIQ BASES

A discretionary segment with price and size differentiation



Source: NIQ BASES Line and Price R&D (2023)

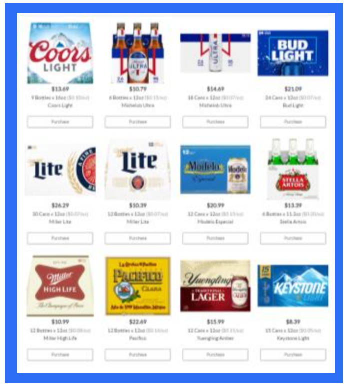
Research questions for consideration

- **Question 1:** Do price increases become riskier when consumer behaviors adapt to an inflationary mindset?
- **Question 2:** How does consumer shopping behavior change when inflation is top of mind?
- **Question 3:** At what point do price increases become less-effective levers for growth?

NIQ BASES

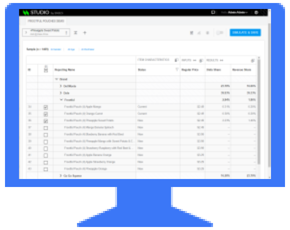
Market-based conjoint to optimize future portfolio & price architecture* for FMCG products

- Category-level simulation tool to simulate future pack/price architectures
- Affords war-gaming and simulation of competitive price changes



- Collect virtual shopping behavior data on existing and future items and price ranges
- Category buyers select which/how many of each item they would buy the next time they shop the category
- 2,676 respondents & 32k shopping trips

- Modeled using advanced choice-based estimation techniques
- Fused with NIQ sales data, distribution, price & elasticity databases



Create simulation tool with:

- Input variables
  - Distribution
  - Shelf Price
- Output-Metrics
  - Unit Sales
  - Revenue Sales
  - EQV Sales

Simulation tool is available to run what-if scenarios

*Final price decisions are at the sole discretion of retailers

Set-up to assess inflationary behavior:

"Current State"

- This group followed our standard approach, where the current category shopper is primed on their past purchases for the category.
- Both sets of results for our other two sample groups were compared with those of this sample.

"Future State"

- The consumer sample is adjusted, in line with economic outlooks.
- Specifically, net incomes of the middle class are reduced.
- Prices of products are increased by 10%.
- This simulates there are **more people with less, and the impact on individual shopping behavior.**

"Crisis Primed"

- Consumers are surveyed on current impact of inflation, their behaviors and their expectations for the next 6 months, before the actual shopping exercise.
- Before the shopping trips, consumer are reminded about their outlook, economic impact and expected impact on their grocery shopping.
- This is to get consumers in the right state of mind and **trigger shopping behavioral changes.**

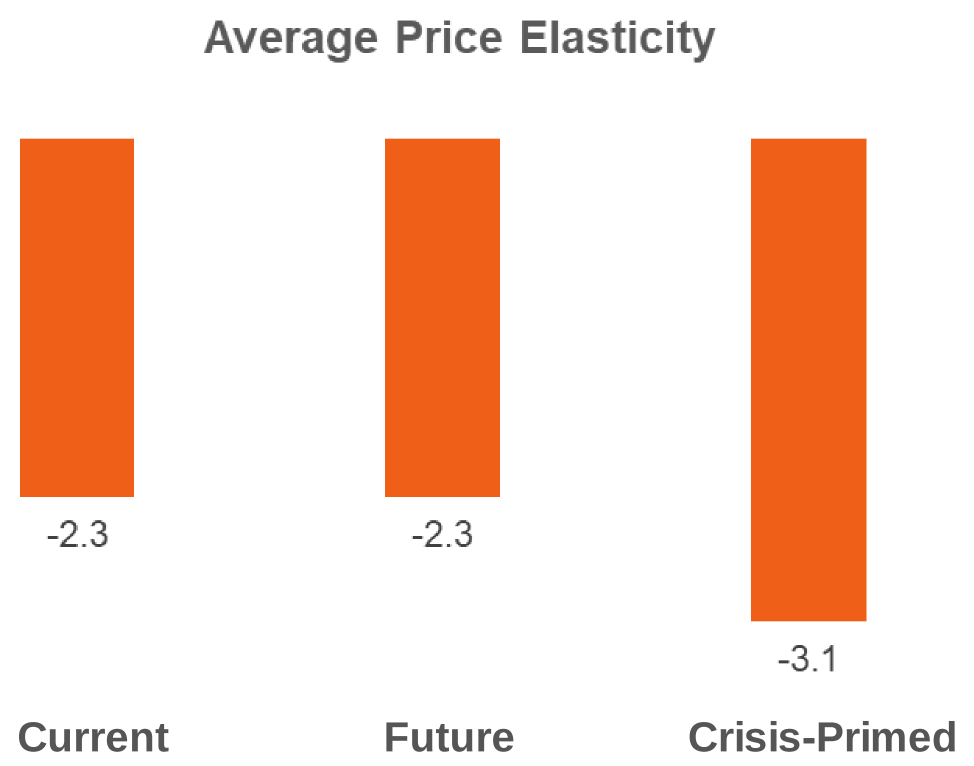
Source: NIQ BASES Line & Price R&D (2023)

Question 1

Do price increases become riskier when consumer behaviors adapt to an inflationary mindset?

Considering net income losses and price increases with the future-state sample, there was no change to price sensitivity

However, there was increased price elasticity when inflation was made top of mind

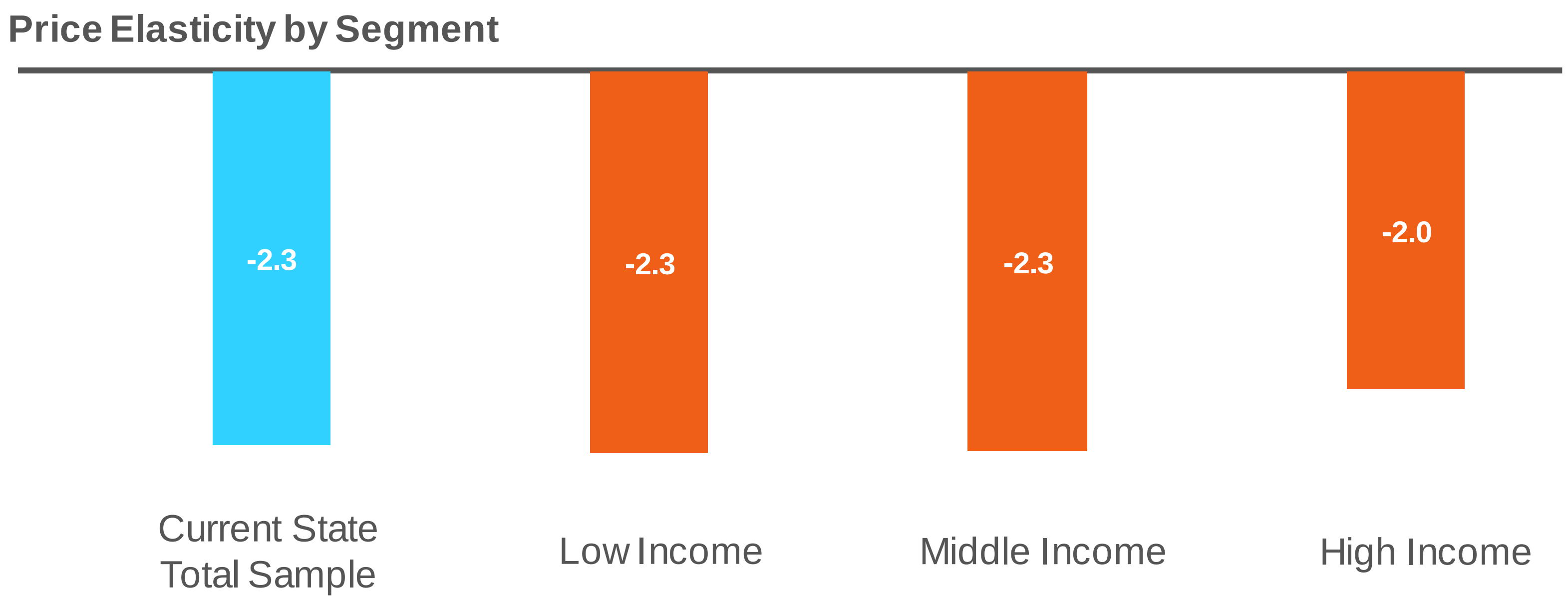


Source: NIQ BASES Line and Price R&D (2023)

Adjusting for future price increase and income loss, price sensitivity isn't that different across low- and middle-income groups

Unsurprisingly, high-income consumers are the least price sensitive

Future-State Shoppers

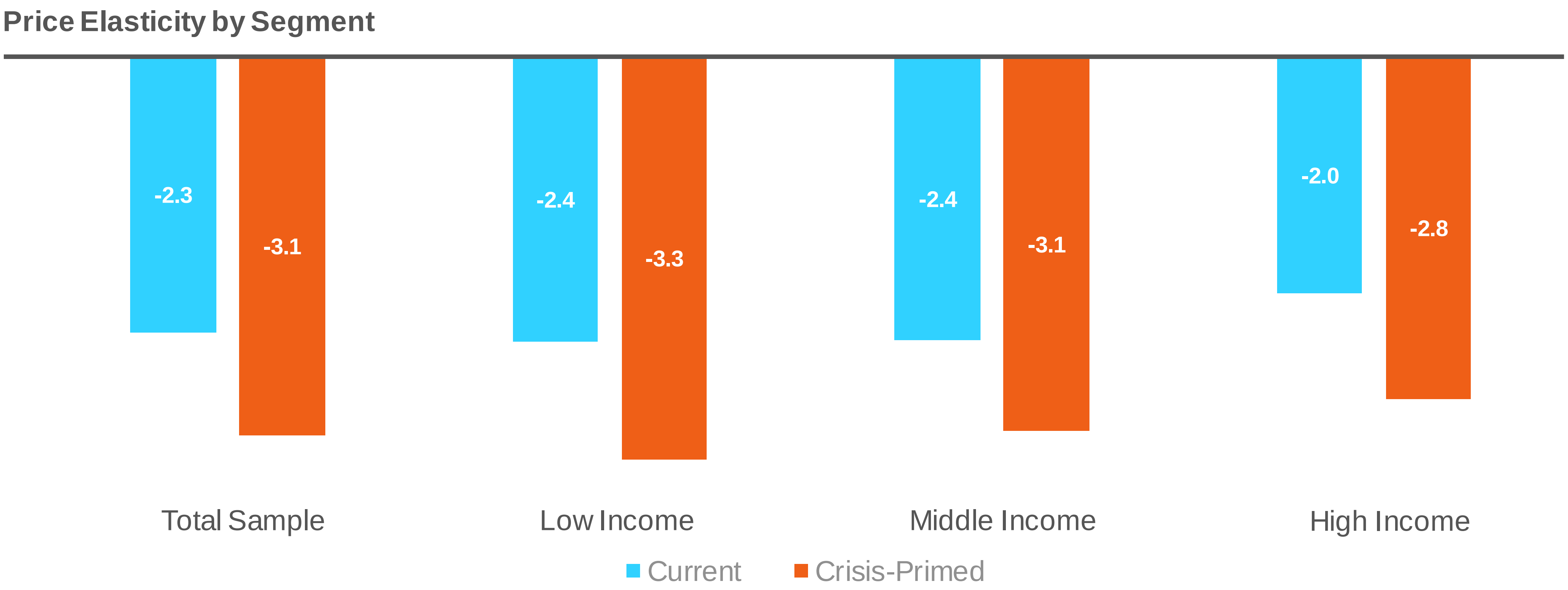


Source: NIQ BASES Line and Price R&D (2023)
Average Item Level Price Elasticities with all products at 100% distribution. Elasticities will be lower in actual business scenario simulations, due to line pricing, promotion activity and actual distribution

But with inflation front and center, consumer price sensitivity jumps dramatically

High-income consumers are still less price sensitive, but more sensitive than those in the future-state group

Crisis-Primed Shoppers



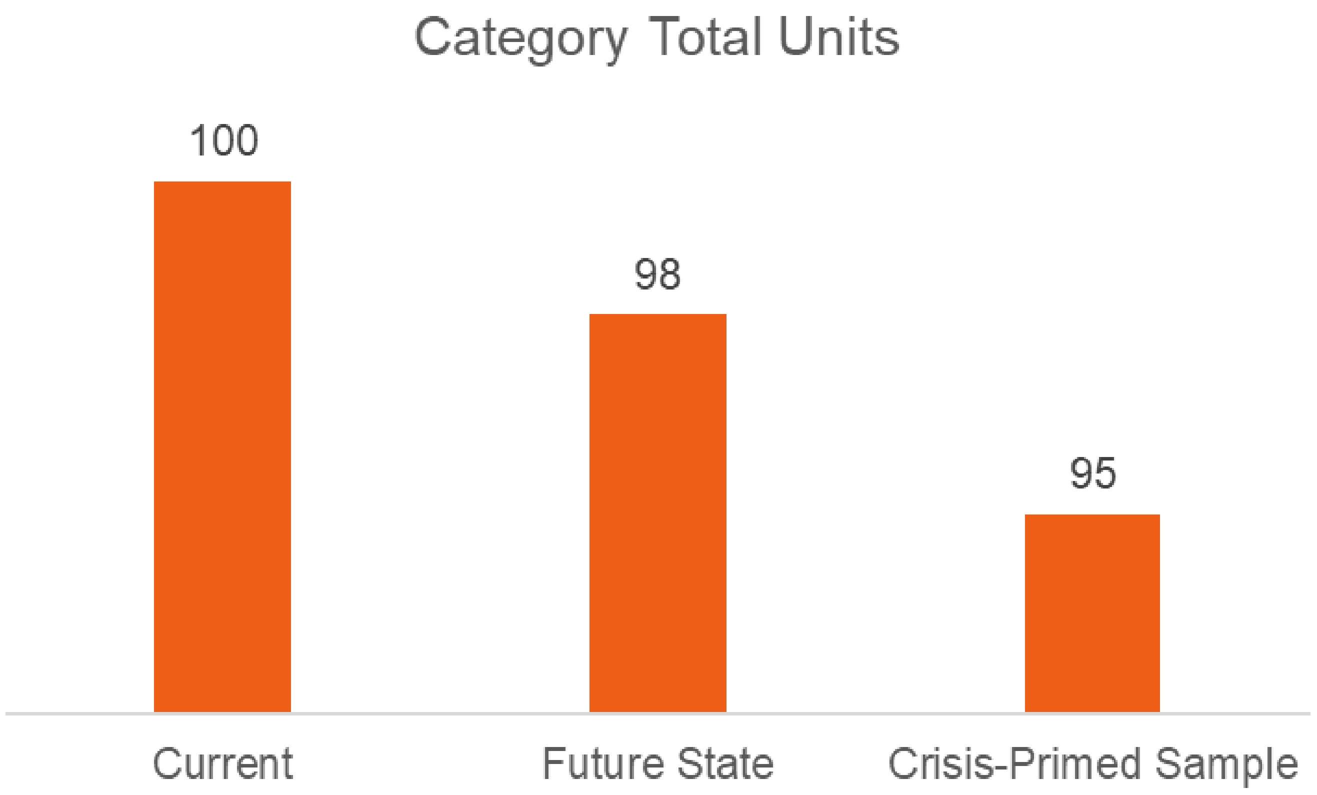
Source: NIQ BASES Line and Price R&D (2023)
Average Item Level Price Elasticities with all products at 100% distribution. Elasticities will be lower in actual business scenario simulations, due to line pricing, promotion activity and actual distribution

Question 2

How does consumer shopping behavior change when inflation is top of mind?

Strong contraction of total category with crisis-primed shoppers

Losses with net-income loss is in line with in-market observations



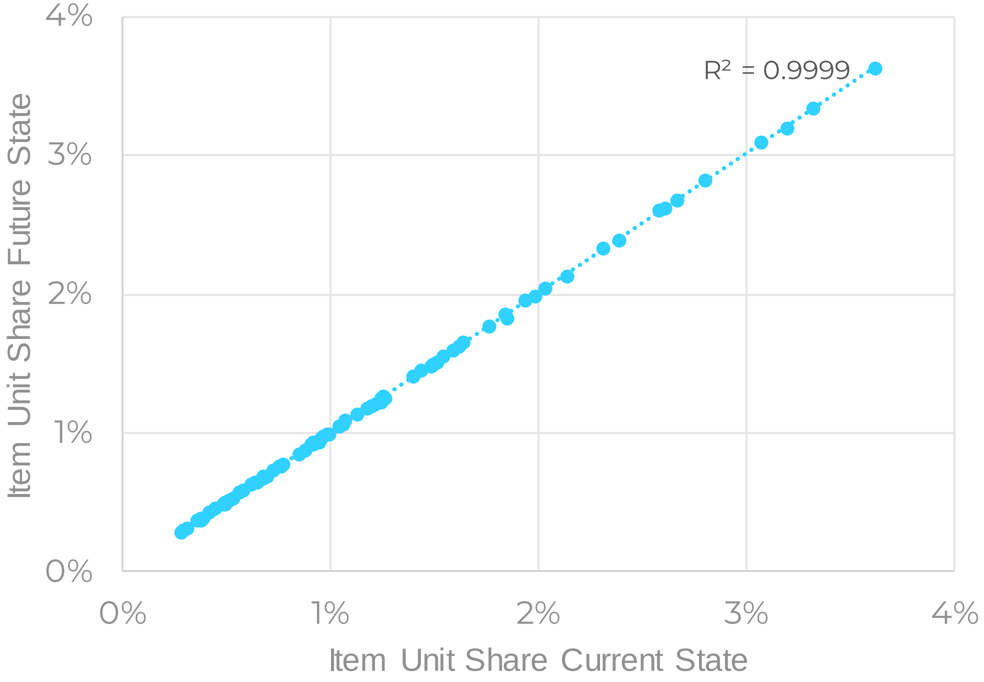
Source: NIQ BASES Line and Price R&D (2023); Index vs. Current

NIQ BASES

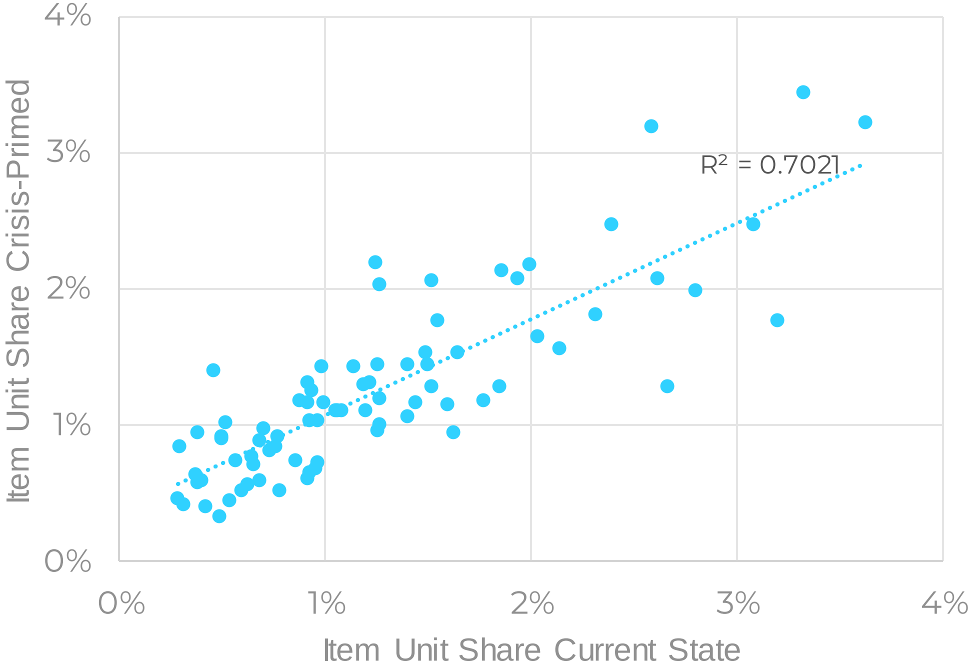
Net income loss (future-state sample) creates only marginal changes to item preference

However, there are big shifts in shopper choice when inflation is top of mind (crisis-primed shoppers)

Current vs. Future-State Sample



Current vs. Crisis-Primed Shoppers

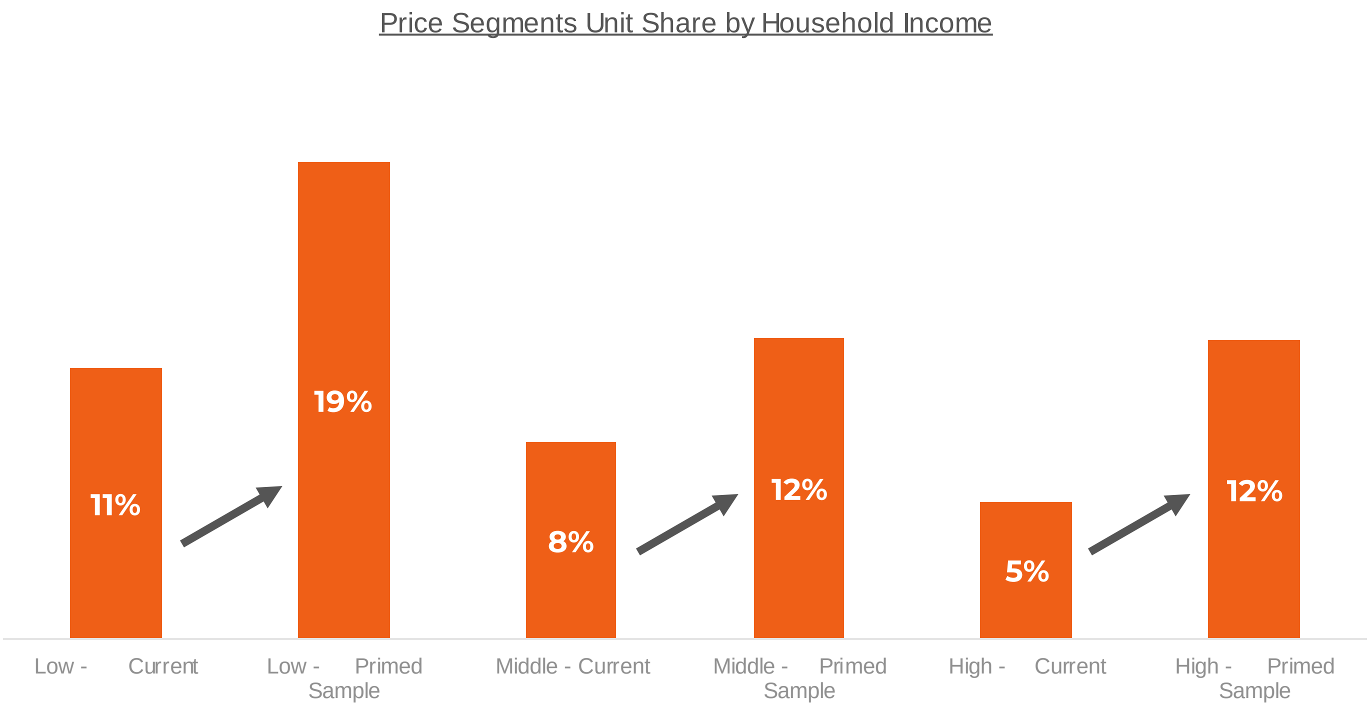


Source: NIQ BASES Line and Price R&D (2023)

Crisis-primed shoppers shift to lower-priced products

Migration to better value products occurs across all income levels

Budget beer

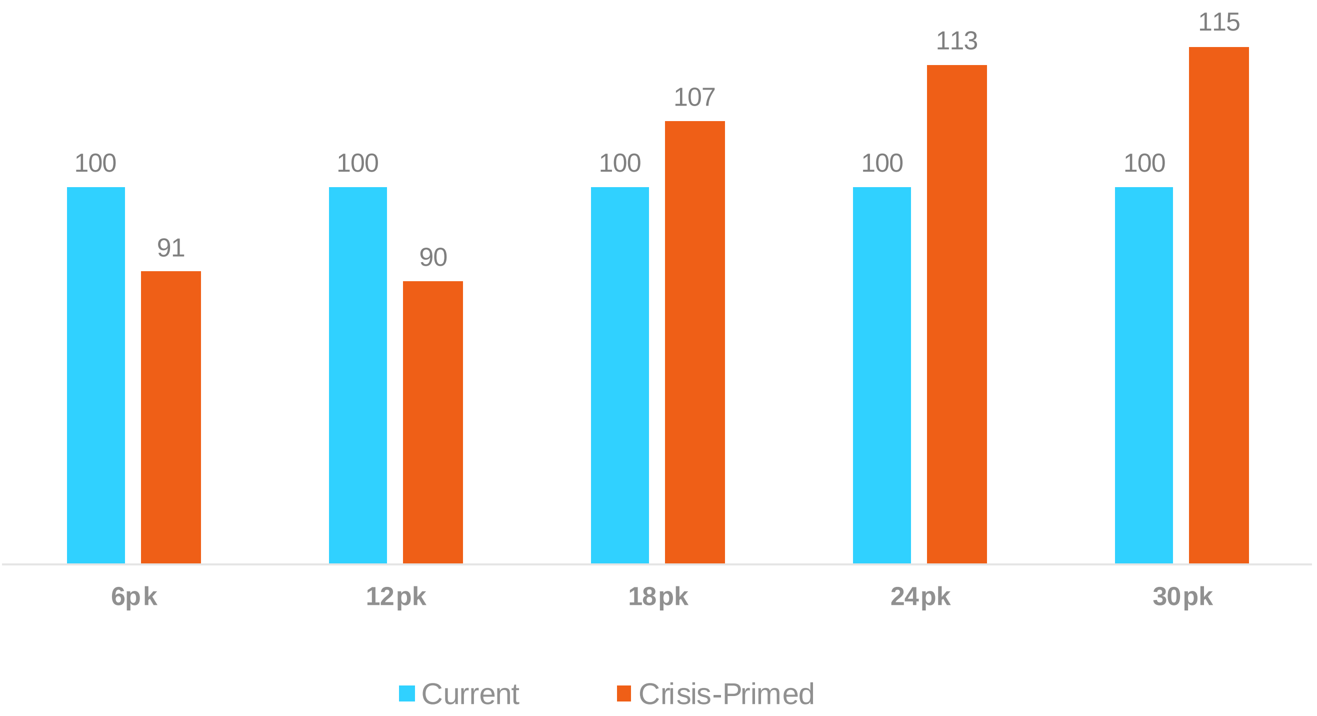


Source: NIQ BASES Line and Price R&D (2023)
All products at 100% distribution. Will slightly change in actual business scenario simulations due to POS execution, promotion activity and actual distribution

Crisis-primed shoppers seek out value via pack size

When inflation is top of mind, shoppers migrate to larger multipack sizes

Unit Sales Index – Multipack Size

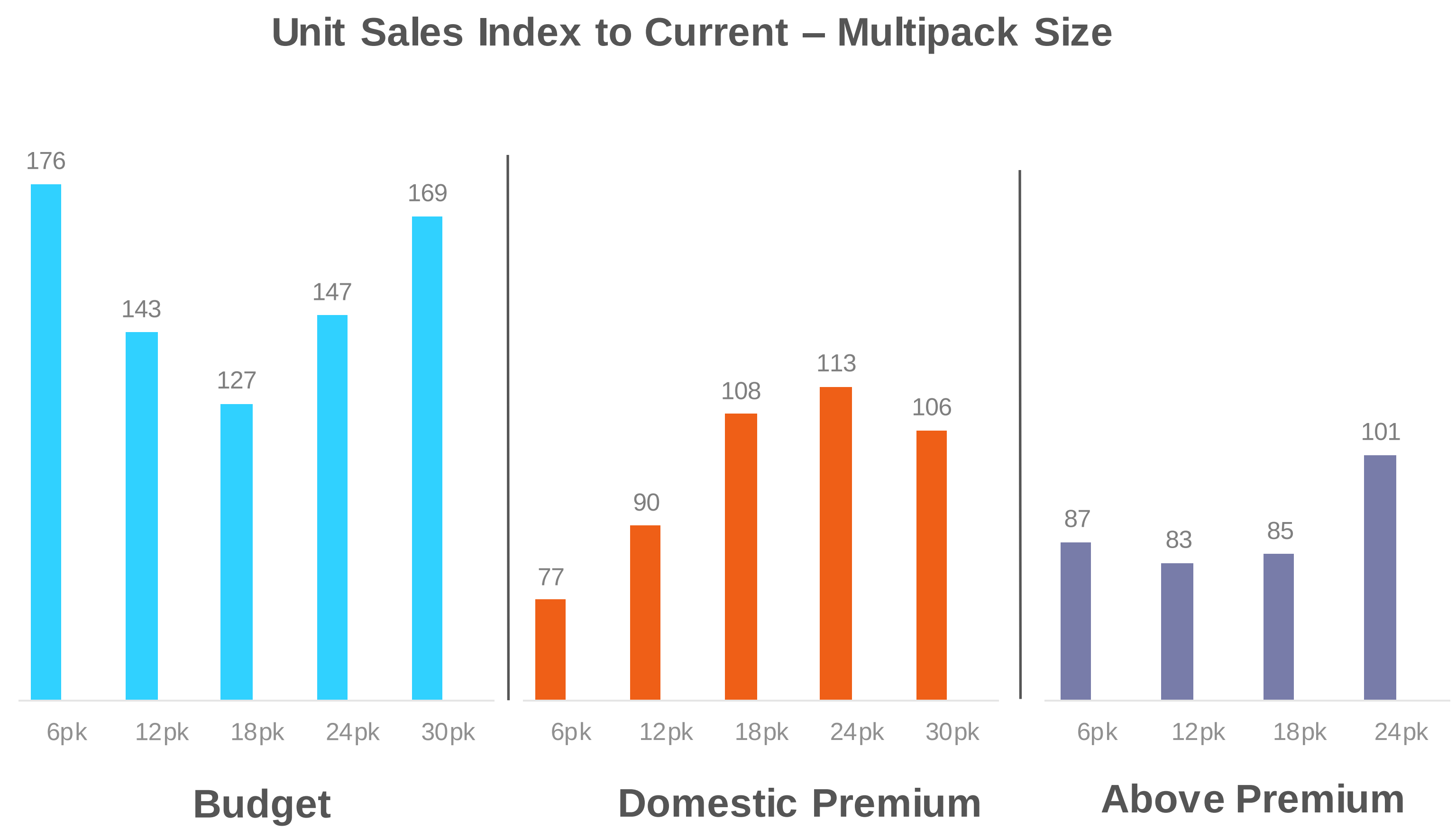


Source: NIQ BASES Line and Price R&D (2023)
Unit Sales Index 100 and market share change = Current State
All products at 100% distribution. Will slightly change in actual business scenario simulations due to POS execution, promotion activity and actual distribution

Shoppers spend ~5% less per ounce

by seeking out multi-packs or trading down

Crisis-Primed Shoppers



Unit Sales Index 100 and market share change = Current State
All products at 100% distribution. Will slightly change in actual business scenario simulations due to POS execution, promotion activity and actual distribution

NIQ BASES

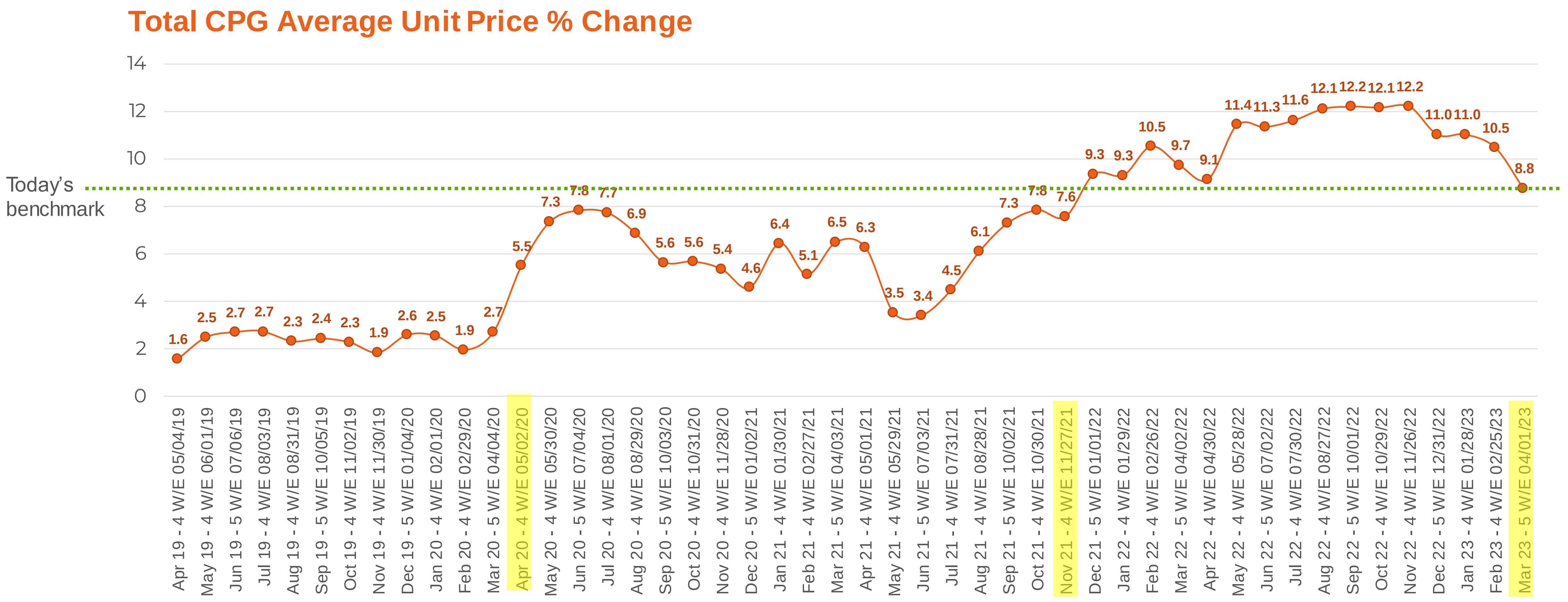
Question 3

At what point do price increases become less-effective levers for growth?

"60% of the CPG companies […] implemented multiple price increases in the last 18 months. But given the cost-of-living crisis, these measures may be reaching their practical limits."

"Five pricing moves for CPG in a cost-of-living crisis." https://www.bcg.com/publications/2023/cpg-nrm-solutions-during-cost-of-living-crisis

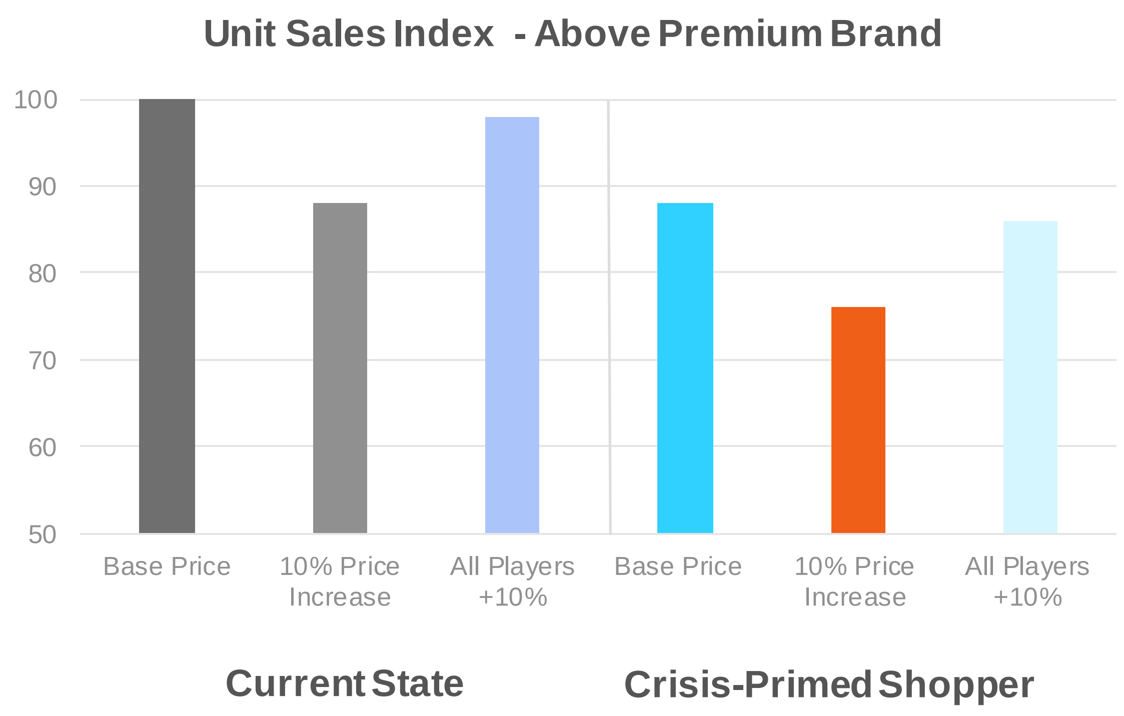
The long view back: CPG inflation has been plaguing consumers since April '20. We still have long road back to the "normal" 2-3% range

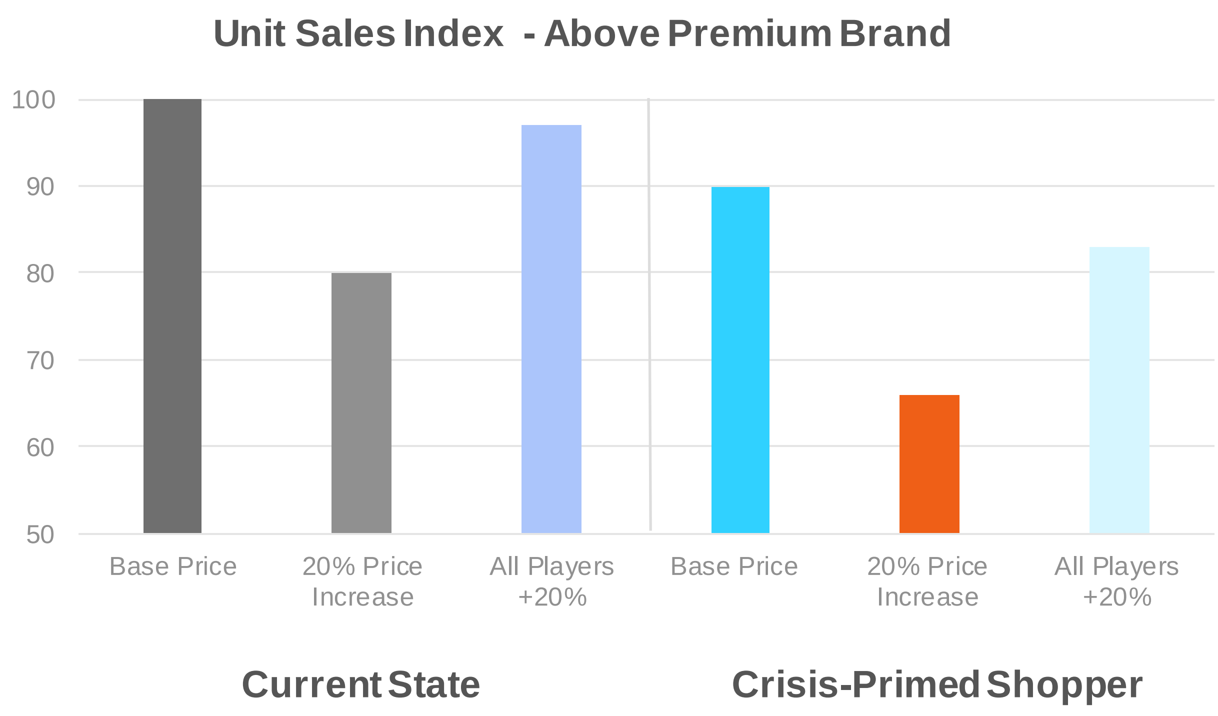


Source: NielsenIQ, Total US xAOC, 4 weekly periods ending April 1, 2023

Pricing decisions are relative—understand your pricing power

If everyone increases price it's relatively safe to do the same. But if competitors begin pulling other levers (like changing their PPA and product mix), price increases alone may not be sufficient





Unit Sales Index 100 and market share change = Current State
All products at 100% distribution. Will slightly change in actual business scenario simulations due to POS execution, promotion activity and actual distribution

Understand your pricing power

A brand's pricing power can change when consumers have inflation top of mind.
To compensate for a loss in pricing power, you must work with the full price mix.

Brand	Price Tier	Pricing Power Index Current	Pricing Power Index Crisis-Primed	Pricing Power Index %pt Change
Brand 5	*Above Premium*	1.38	1.17	-21%
Brand 6	*Above Premium*	1.50	1.26	-25%
Brand 8	*Above Premium*	1.06	1.10	4%
Brand 9	*Above Premium*	1.21	1.14	-6%
Brand 10	*Above Premium*	1.21	1.32	11%
Brand 11	*Above Premium*	1.25	1.49	25%
Brand 12	*Above Premium*	1.89	2.14	25%
Brand 14	*Above Premium*	1.39	1.29	-10%
Brand 17	*Above Premium*	1.22	1.17	-5%
Brand 20	*Above Premium*	0.86	1.02	16%
Brand 22	*Above Premium*	0.81	0.87	6%
Brand 23	*Above Premium*	1.33	1.14	-19%
Brand 24	*Above Premium*	1.26	1.50	24%
Brand 3	Budget	0.64	0.57	-7%
Brand 4	Budget	1.00	0.81	-18%
Brand 13	Budget	0.51	0.64	13%
Brand 15	Budget	0.82	0.62	-21%
Brand 18	Budget	0.54	0.70	16%
Brand 19	Budget	0.73	0.74	1%
Brand 21	Budget	0.63	0.75	12%
Brand 1	*Premium*	1.70	1.38	-31%
Brand 2	*Premium*	1.48	1.30	-18%
Brand 7	*Premium*	1.08	1.13	4%
Brand 16	*Premium*	1.31	1.08	-23%
Brand 25	*Premium*	1.37	1.24	-13%

Pricing Power Index 1 = Brand is likely to maintain share if all increase price; the higher the more likely to gain share if all increase price
All products at 100% distribution. Will slightly change in actual business scenario simulations due to POS execution, promotion activity and actual distribution

NIQ BASES

Key Findings

- Price elasticities remain stable until inflationary challenges are top of mind
- Unit sales contract especially when consumers are reminded of their inflationary challenges
- Consumers across all income segments migrated to better value products when inflationary pressures were made top of mind
- If all competitors increase price, it may be relatively safe to do the same—but pricing power may change when inflationary pressures are top of mind
- Proactively managing portfolio actions, price-mix unit sales, and competitor shifts to product and PPA is key

NIQ BASES

Remember: Value is a spectrum.

Focus on the right brand in the right pack at the right price.

What's next?

Contact your BASES representative for a one-on-one presentation with actionable recommendations.

NIQ BASES