

Tariffs and Cross-Price Elasticity

A Sneaky Additional Challenge to Managing Price in the Face of Tariffs

Rick Miller

Partner, Big Chalk's Marketing Effectiveness Practice

Sharat Mathur

CEO & Founder, Northlight Analytic Partners, Inc.

October 2025

Tariffs continue to reshape the global trade environment, raising costs across raw materials, packaging, and finished goods. For consumer-packaged goods (CPG) companies, these pressures are especially acute. With operations often tied to global supply chains, and with margins already thin, tariff-driven cost shocks are forcing leaders to make difficult pricing decisions.

Consumers, so far, have been shielded from drastic price increases – in part by negotiations between CPG companies and the retailers that sell said products. Both parties have adjusted assortments and sacrificed a bit on profit margins to avoid raising price at shelf. But industry watchers believe it's only a matter of time before prices must go up.

But *how* will they go up? All price-takes are not created equal, and executives have more to worry about than basic elasticities alone.

Ed. note: We acknowledge NorthLight's analytical team for help with the analysis. In addition, **Vinodhkumar Gunasekaran's** work in predictive modeling, pricing science, and optimization frameworks has inspired many of the perspectives reflected in this article.

Elasticities – A Not-So-Simple Metric in Pricing Strategy

In Economics 101, pricing is easy:

- Raise prices, the amount of a product sold goes down
- Decrease prices, the amount of a product sold goes up

But what non-pricing analysts often miss is the difference in types of price elasticities. Economists typically describe two types:

1. **Own-Price Elasticity** – the percentage change in demand for *your product* when *your price* changes
 - Example: If your cereal's price rises 10% and volume sales fall 16%, own-price elasticity is roughly measured at -1.6.
2. **Cross-Price Elasticity** – the change in demand for a *competitor product* in response to your price change
 - Example: If you raise the price of your cereal 10% and your main competitor gains some (or most) of that 16% volume lost, that's cross-price elasticity.
 - This example also works in reverse; if a competitor is forced to take price, and your brand sees a volume uptick, this is also cross-price elasticity – in the opposite (and more favorable) direction.

Both elasticities matter for tariff-driven pricing decisions. Own-price elasticity captures direct shopper reaction, while cross-price elasticity captures competitive substitution risk. Ignoring the competitive elasticity side of the equation – for example by assuming that tariffs will affect everyone in the category equally – is risky. Overestimating loyalty will cost you own-price elasticity volume, while ignoring the strength of your competitors will cost you market share. As the competition for consumer wallets gets fiercer, both matter.

Own-price elasticity captures direct shopper reaction while cross-price elasticity captures competitive substitution risk. Ignoring the competitive elasticity side of the equation is risky for pricing strategy.

Evidence from Four Categories and Three Retailers

How often do cross-price elasticities exert *more* influence than own-price elasticities? Big Chalk used NorthLight Analytics' Gazelle price-promo modeling platform on four CPG categories, with data from three large U.S. retailers, to apply some perspective.

As Table 1 below shows, cross-price elasticity will be the *primary* concern in 50% of the combined product/retailer pricing decisions, and only one-third of the time is own-price the primary strategic factor in a price-take. On some occasions, the own-price versus cross-price consideration factor receives equal weight.

Table 1: Percentage of Time Own-Price Elasticities are More Influential than Cross-Price Elasticities, Sample CPG Categories, 2024

Category	Publix	Target	Walmart
Dry Cat Food	70%	50%	60%
Laundry Detergent	67%	25%	29%
RTE Cereals	44%	40%	70%
Salad Dressing	38%	50%	33%

Source: Big Chalk Analytics and Northlight Analytics, amalgamated price elasticity studies, 2024-2025

In addition to *quantifying* changes in volume, elasticity data provide some valuable additional *qualitative* learnings:

- Dry Cat Food shows strong own-price dominance at Publix (70%) and Walmart (60%). This reflects brand loyalty and low substitutability – pet owners are reluctant to switch formulas even when faced with competitor promotions.
- Laundry Detergent is a more mixed category. While Publix shows high own-price dominance (67%), Target (25%) and Walmart (29%) show that competitor gains from your price take may be high, and damage you suffer from competitor promotions may have a greater impact than your own-price changes. This happens frequently in categories where products are lined up side by side on shelf for easy comparison and private label presence (and value) is strong.
- Ready-to-Eat Cereal results are split, with only 40% and 44% own-price dominance in Publix and Target, respectively, but 70% at Walmart. This suggests that cereal loyalty varies by channel, with Walmart shoppers perhaps more anchored to their household cereal staples.
- Salad Dressing shows weak own-price dominance overall (33–50%), consistent with a promotion-driven, substitutable category where shoppers are willing to switch flavors or brands – not only to seek variety but also to seek the best bargains when competitors run deals.

What Should CPG Leaders Do?

Model Both Elasticities and Understand the Impact on Your Business

The data shows that neither own-price nor cross-price elasticity is *universally* dominant. Things change by category and retailer. Leaders must incorporate *both* into pricing decision models, recognizing that shopper response and competitive dynamics interact. But this requires *a lot* of analytics! Decision makers should invest in a fast, AI-based modeling solution that can generate the required analyses quickly and efficiently.

Know Your Elasticity Zones

Categories behave differently and have different characteristics and dynamics. Pet care offers more room to pass through costs due to loyalty. In contrast more substitutable categories such as salad dressings and laundry require closer monitoring of competitor moves.

Figure 1. Cross-Price versus Own-Price Elasticity Zones

High Cross Elasticity	<i>Competitive Risk Zone</i> (e.g., Laundry Detergent at Target)	<i>High Sensitivity Zone</i> (e.g., Salad Dressing at most retailers)
	<i>Limited Sensitivity Zone</i> (e.g. Dry Cat Food at Walmart)	<i>Own Sensitivity Zone</i> (e.g., Dry Cat Food at most retailers)
Low Cross Elasticity		

Customize by Retailer to Help Sell-in

Elasticity dynamics shift dramatically by retailer. CPG leaders should not assume that a single pricing strategy will work everywhere. Instead, build **account-specific** playbooks that reflect each retailer's shopper base and competitive environment.

Elasticity insights are not just academic – they provide leverage in retailer discussions. Demonstrating where shoppers are more brand-loyal (own-price dominant) can justify higher cost pass-through, while recognizing cross-price risks can fuel creative promotion planning, differentiated pack strategies, and ultimately share conquering.

Conclusion

Tariffs are an unavoidable reality of global supply chains, but their impact on CPG companies depends heavily on shopper response and competitive dynamics. The evidence across categories and retailers shows that both own-price and cross-price elasticities matter. Their relative weight varies by product type, retailer environment, and local shopper behavior.

For CPG leaders, the right question is not, "Which elasticity matters more?" but rather, "In this category, with this retailer, at this moment – how do own-price and cross-price effects combine to shape shopper behavior?" Answering that multi-layered question, with precise data, will be the key to protecting margins and market share in a tariff-driven world.



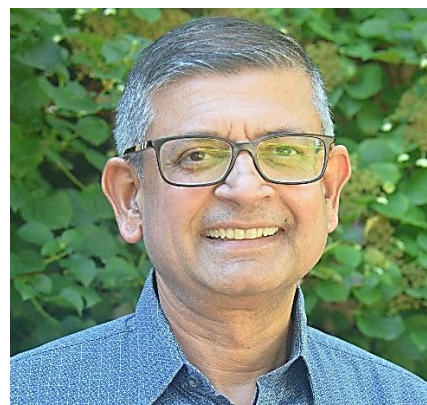
About the Analysts:

Rick Miller leads Big Chalk's Marketing Effectiveness Practice, which helps brands understand the return they get on their media investments (through marketing mix models) and helps brands understand what's growing or hindering consumers' perceptions of their brands.

rick.miller@bigchalk.co

Sharat Mathur is founder and CEO of NorthLight Analytic Partners, an advanced analytics software company. He has expertise in corporate strategy, revenue management, price and promotion, and portfolio optimization. He previously was EVP of Analytics with IRI/Circana as well as With Booz Allen and Archstone Consulting, serving clients in an array of industries.

sharat.mathur@northlightanalytics.com



About Big Chalk

Big Chalk is a marketing analytics company based in Chicago, IL. We provide brands in CPG, general retail, quick serve restaurants, and other consumer-facing categories insights, data, and outsourced staff to help them grow their businesses. www.bigchalk.co



About Northlight Analytics

Northlight Gazelle is the next generation in AI-powered SaaS price optimization. It provides models for consumer packaged goods and adjacent industries in a matter of minutes delivering a full set of consumer and retailer insights related to pricing and promotion. www.northlightanalytics.com

