



## Levy, Young Discover the Price of the 'Real Thing'

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Over the past few decades, fluctuations in consumer prices have become as American as baseball, apple pie—and Coca-Cola. But not so long ago (1959, to be precise), thirsty citizens nationwide could enjoy a Coke and a smile for the very same price the soft drink carried at its introduction in 1886: a nickel.

It's an achievement in price stability that is not likely to be surpassed in the U.S. (or any other) economy anytime soon, and now it's been documented by an Emory economics professor and doctoral student in the paper, "The Real Thing: Price Rigidity of the Nickel Coke, 1886–1959."

The study began a few years ago when Daniel Levy, associate professor of economics and director of graduate studies for the department, took his children to the World of Coca-Cola museum in downtown Atlanta. There he learned of a product whose price and quality remained stable throughout two world wars, the Great Depression, a couple federal lawsuits and numerous supply hiccups and shortages.

Levy returned to work and recruited the aid of his graduate assistant, Andrew Young, now a PhD student in economics, and the two began researching the how—and, especially, the why—of the long, happy life of the nickel Coke.

"There were huge volatilities in the economy," Levy said. "You'd expect markets to react, so it was a big puzzle. As economists, we wanted to explain it."

And they did—mostly. The two first demonstrated that the nominal price rigidity occurred alongside similar stability in product quality. Indeed, especially in Atlanta, the tales of former Coca-Cola presidents Asa Candler and Robert Woodruff guarding the "secret formula" of Coca-Cola syrup and steadfastly refusing to compromise it with less-expensive alternatives have become the stuff of legend.

Levy and Young then proved why several accepted theories of price rigidity were not applicable to Coca-Cola. They finally settled on a combination of reasons, first and

foremost being the relationship—the “implicit contract,” as the authors describe it—between the Coca-Cola Company and the American public.

For decades the company centered its advertising on two points: the quality of the “Real Thing” (as opposed to a dizzying array of copycat beverages) and its nickel price. In fact, the wedding of Coca-Cola marketing materials and the nickel price is what kept retailers from raising the price on their own; neighborhood soda shops couldn’t very well sell fountain Cokes for a dime when a full-page ad on the back cover of the new *Life* in the magazine rack advertised it for a nickel.

But another reason was technological. By 1950, more than 400,000 coin-operated vending machines sold bottles of Coca-Cola for a nickel apiece all across the country, and the vast majority of these machines were unable to accept multiple coins or make change. As more machines had popped up, retrofitting them all to take dimes or quarters and make change became increasingly expensive, which is partly why Coca-Cola resisted the price change, Levy and Young surmised.

One piece of evidence for this theory is the fact that in the early 1950s, Woodruff asked his friend Dwight Eisenhower (who just happened to be president of the United States) to petition the U.S. Treasury to mint a 7.5-cent coin—and Eisenhower complied! The Treasury, however, declined.

“We learned a lot about the history of the United States—through the lens of Coca-Cola, of course,” Levy said about the research, and to be sure, the paper is filled with anecdotes gleaned from internal Coca-Cola documents that are as rewarding to its readers as the economic analysis itself.

Levy and Young have presented the paper several times, including once at a conference of the American Economic Association and again at the University of Michigan. They are presently making final revisions before submitting it for publication.

As macroeconomists, the pair now hopes to discover other products that have demonstrated comparable price rigidity and determine what effect these products have in aggregate on the U.S. economy.

“The theory is that economies become more stable as governments become more skilled at tinkering and making minor adjustments,” Levy said. “But it’s possible that economies become more stable as prices become more flexible.”

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