Research Working Papers

An Experimental Analysis of Quality Misperception in Food Labels

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October 19, 2023

Consumers' misperception of labels alters sellers' strategic responses and can increase quality and total welfare in food markets.

RWP 23-11, October 2023

The size and distribution of surplus in markets where credence quality attributes of food (e.g., organic, non-GMO) are conveyed through some informational mechanism (typically labels) crucially depend on 1) how information changes consumers' perception of quality and 2) producers' strategic choice of quality provision in response to changes in consumers' perception of quality. This paper examines the hypothesis that consumers' misperception of quality information can provide incentives to sellers to increase quality and offset the lower quality that exists in markets where firms imperfectly compete in quality and prices. Using previously derived theoretical predictions of a two-stage game in which firms sequentially choose qualities—which are misperceived by consumers—to then simultaneously choose prices, I conduct a laboratory experiment that emulates changes in consumers' perception of quality and examines their effects on producers' provision of quality and market surplus. My results indicate that total surplus increases mainly with overvaluation of the high-quality product, confirming theoretical predictions. But contrary to the theory, I find that low-quality sellers try to compete by raising their quality levels too much when low quality is overvalued, dampening their quality-adjusted prices. As a result, welfare approaches first-best only when the high-quality product produced by the market leader is overvalued. These results highlight the importance of examining the market structure when designing informational policies.

JEL classifications: C9, Q18

Article Citations

- Scott, Francisco. 2023. "An Experimental Analysis of Quality Misperception in Food Labels." Federal Reserve Bank of Kansas City, Research Working Paper no. 23-11, October. Available at https://doi.org/10.18651/RWP2023-11

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