New goods with new attributes: combining revealed and stated preferences to assess the effect of a novel quality label in the food industry

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Abstract:

This paper evaluates the effect on market shares and consumer surplus of the introduction of a Good Agricultural Practices (GAP)-labeled product in the frozen fried potatoes (FFP) industry. We first estimate a model of household demand in Mar del Plata, Argentina, using scanner data and demographic information. We find that higher income individuals are more concerned about health and nutrition, and that younger and lower-income consumers are more price-sensitive. Then we postulate that a properly GAP-labeled FFP is available in the market, and we assess its effect by using the estimated utility function and prior information about consumers' declared willingness to pay (WTP) for sustainably produced potatoes. We find that the older the individual, the greater the influence of the hypothetical introduction of the GAP-labeled product; the relationship is less conclusive in the case of income. Finally, we predict the results of a greater consumer surplus extraction by fixing a higher price for the new product, and we calculate the maximum increase in the marginal cost that the firm would be able to afford if farmers charge higher prices for GAP fresh potatoes

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Soda consumption and brand loyalty

Abstract

The consumption of sugar-sweetened sodas in the United States shot up from the 1960s through the 1990s among both children and adults of all demographic and socioeconomic groups, and became a mainstay of American culture. Although the consumption levels have been declining in the last several years, the dietary habits it created raised public health concerns since the consumption of sugar drinks is related to poor diet quality, weight gain, and type 2 diabetes. Several studies investigate soda consumption patterns and determinants, as well as socio-economic heterogeneity in consumption and the effect of advertisement. In the economics literature, efforts have been made to develop demand models that fit the particular characteristics of this kind of product (Dubé, 2004, 2005; Chan, 2006; López and Fantuzzi, 2012), but the main interest has been focused on analyzing the effect of tax policies in soda consumption. Although initially some studies suggested that sodas should be taxed to improve public health, there has also been a growing body of literature opposing soda taxes. In particular, Wang (2015) finds substantially low own-price elasticities of soda which result in very small public health gains from soda taxes.

The market for sodas is characterized by a high degree of differentiation and the importance of brand names. Brand loyalty is a critical component to profitability in the soft drink business, as it is manifest in vast evidence provided by the media. Understanding the degree and impact of brand loyalty is especially important in light of the 'decline of big soda' in the last decade, where consumers have increasingly substituted sodas for bottled water, a line of business less profitable for soda companies since consumers seem to have less brand loyalty for water brands, which makes it harder to compete in the grocery store with low-margin companies specialized in water. It may also be related to the low effectiveness of soda taxes found in the literature, as advertising –which creates and reinforces brand loyalty– has been suggested as an important variable to take into account when evaluating excise taxes (Berning, 2011).

The aim of this paper is to fill this gap in the literature, by measuring brand loyalty and incorporating it into the analysis of soda consumption in the United States. Using panel data on household purchases and store-level data from Nielsen and IRI, I can exploit cross-section and time variation in brand loyalty to determine the heterogeneous ways in which brand loyalty may be affecting soda consumption and, in particular, the elasticity to substitute sugar drinks for healthier alternatives. Exploring this channel in purchasing behavior results in recommendations that help better targeting policies intended to encourage consumers' healthier habits, by better understanding their conduct and preferences.

JEL Codes: D12, H20, I18, L66.

Key Words: soda consumption, brand loyalty, fat taxes.

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