Willingness to Pay a High-Premium for Organic Produce: An Econometric Analysis

Ramu Govindasamy* a, Surendran Arumugamb, Isaac Vellangany, and Burhan Ozkand d

*Professor and Chair, Department of Agricultural, Food, and Resource Economics, Rutgers University, 55 Dudley Road, New Brunswick, NJ 08901, USA
Email: govind@sebs.rutgers.edu

bPost-Doctoral Research Associate, Department of Agricultural, Food, and Resource Economics, Rutgers University, 55 Dudley Road, New Brunswick, NJ 08901, USA

cTeaching Assistant Professor, Department of Agricultural, Food, and Resource Economics, Rutgers University, 55 Dudley Road, New Brunswick, NJ 08901, USA

dProfessor and Specialist in Farm Management, Department of Agricultural Economics, Faculty of Agriculture, Akdeniz University, Dumlupinar Boulevard, TR-07058 Campus Antalya, Turkey

Abstract

U.S. consumer demand for organically produced goods has grown continuously since the USDA established national standards for organic production and processing in 2002 (www.USDA.gov). Organic food sales have increased from approximately $11 billion in 2004 to an estimated $35.9 billion in 2015. As previous literature suggests, a large portion of consumers view organics favorably, but very few routinely choose to buy organic food over conventional food. It is assumed that this is due to—among other things—socioeconomic disparities.

The objective of this paper is to predict the characteristics of consumers who are willing to pay high premiums for organic produce in the mid-Atlantic United States. In the context of this paper, a high premium is defined as at least 16% more for organic fruits and vegetables compared to conventional produce. Data were collected from 1,100 consumers using a private online survey company. A logit model was developed to predict which consumers are more likely to pay a high premium for organic produce.

Results indicate that the overall model is highly significant, with a correct prediction rate of 71%. Those who have a graduate degree and an annual income above $100,000 are more likely
to pay high premiums. Moreover, those who use food advertisements, certified organic labels, and natural labels to purchase produce are more likely to pay high premiums. Caucasians are more likely to pay high premiums, as are those who frequently buy at farm direct markets. As expected, consumers who think that organic food tastes better than conventional food and those who switch supermarkets to buy organic produce are more likely to pay high premiums. Those who want to buy organic jam, jelly, marmalade, juices, sauces, and dried chips are more likely to pay a high premium for organic produce. Those who regularly shop at more than one food store are less likely to pay a high premium. The model indicates that those who are influenced by the naturally grown label and prefer conventionally grown but local produce are less likely to pay high premiums. Those who consider buying organic food to be a waste of money are less likely to pay a high premium for organic fresh fruits and vegetables. Producers of organic vegetables and fruits can target customers with these specific traits to enhance their profitability.

**Keywords:** high-premium, logistic regression model, mid-Atlantic region, organic fresh produce, willingness to pay

@Corresponding author.

**Acknowledgements**

This project was supported by the Federal-State Marketing Improvement Program (FSMIP), U.S. Department of Agriculture (USDA), Agricultural Marketing Service (AMS), grant 15FSMIPNJ0005.