

Consumer Demand Analysis of Fresh Tomatoes

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Introduction

- The demand for fresh vegetables has steadily risen over the past decade. This has caused a change in consumption pattern in fresh tomatoes. In 1981, the average per capita consumption of fresh tomatoes was found to be 12.3 pounds. In 2008, this number was found to have increased to 18.5 pounds. In 2010, tomatoes were the highest selling fresh market vegetable, bringing in revenues equivalent to 1.4 billion U.S. dollars. The increasing desire of consumers to purchase fresh tomatoes at the retail level encourages research on This study will perform a market analysis of fresh tomatoes in the Dallas-Ft. Worth metroplex.

Data Source

- Data used for the model will come from AC Nielsen Homescan data, which provides information on quantity and expenditures. Homescan data was collected monthly from various supermarkets. Specifically, data used for this study will be from January 1st-December 31st, 2012.

- AC Nielsen is a research company that collects consumer data on various products across the nation. Data collected included information on company brands, types of tomatoes, prices, and quantity sold.

Objective

- The purpose of this study is to provide information on the demand elasticities for fresh tomatoes at the retail level. The study will also aim to provide producers and retailers with more knowledge of how price changes affect consumer behavior and the level of competition between the various types.

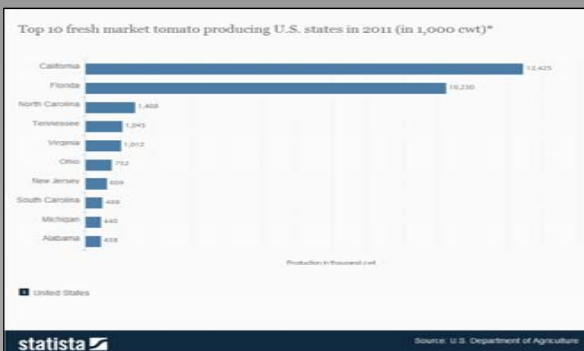


Methods

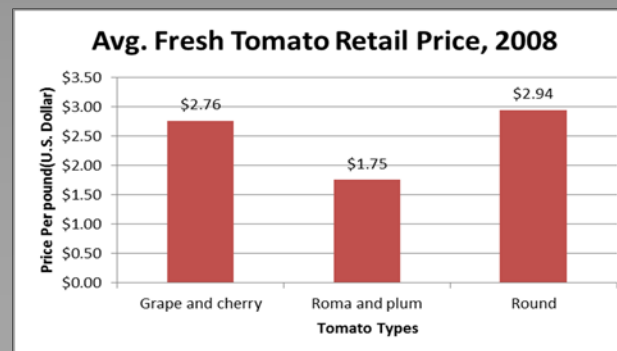
- To estimate demand elasticities of various tomato types an Almost Ideal Demand System model will be used. The AIDS model was introduced by Deaton and Muellbauer (1980) and includes product prices and quantities, an aggregate price index, and expenditure share equations.

Preliminary Results

- Current data yielded results showing that regular tomatoes held majority of the market share for YR 2012 out of all the various types (approx. 41.1%).
- Nature Sweet represents more than half of total fresh tomatoes sold at the retail level (approx. 55.7%)
- Preliminary estimates show that total fresh tomato sales in the Dallas-Ft. Worth metroplex was at least 12 million dollars for YR 2012.



Source: U.S Department of Agriculture (2008).



Source: AC Nielsen Survey (2008).

Further Research

- Conduct a thorough Literature Review of demand system models.
- Estimate the various elasticities for various tomato types.
- Identify trends and summarize key findings.
- Determine implications of key findings to local farmers.