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# Orange Forecast



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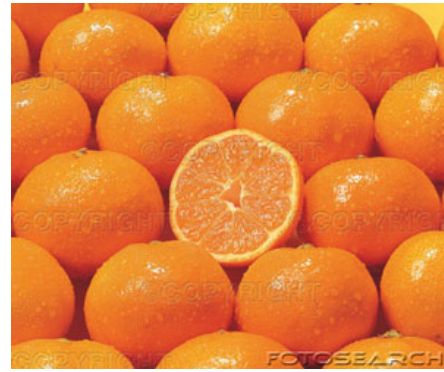
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# Amazing Facts



- People in Nepal almost never peel their oranges, but eat them rind and all.
- Spain has over 35,000,000 orange trees.
- The outside color of an orange has no absolute correlation with the maturity of the fruit and juice inside.
- Oranges were used in cosmetics by ladies of the French court in the 17th-century.
- Lightning kills as many orange trees as any disease.

<http://health.learninginfo.org/facts-oranges.htm>

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# United States Orange Supplies



- The 2006/2007 citrus crop forecasted by USDA's National Agricultural Statistics Service is set to be 10.2 million tons, 12 percent lower than in 2004/2005
- And if it is only 10.2 million tons, it will be the smallest citrus crop since 1990, when Florida experienced intense freezing
- As a result of the lower number of oranges, prices increased per pound for the orange
- Growers who have good orange supplies, should do well financially

# The Trends



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# What are the Problems?

- **California**

  - Several days of freezing temperature in January 2007

- **Florida**

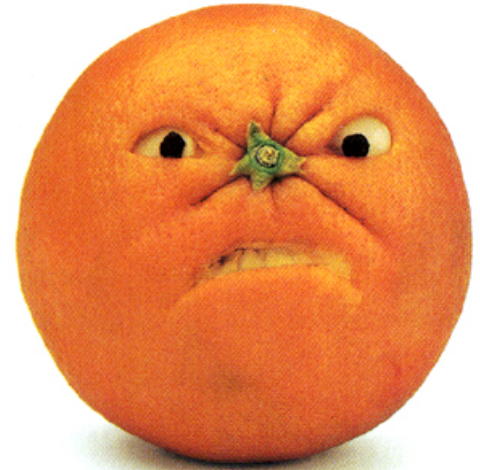
  - Hurricane damage and diseases

- **Texas**

  - Water availability



# California Case



The major source of fresh oranges production in the US and international markets

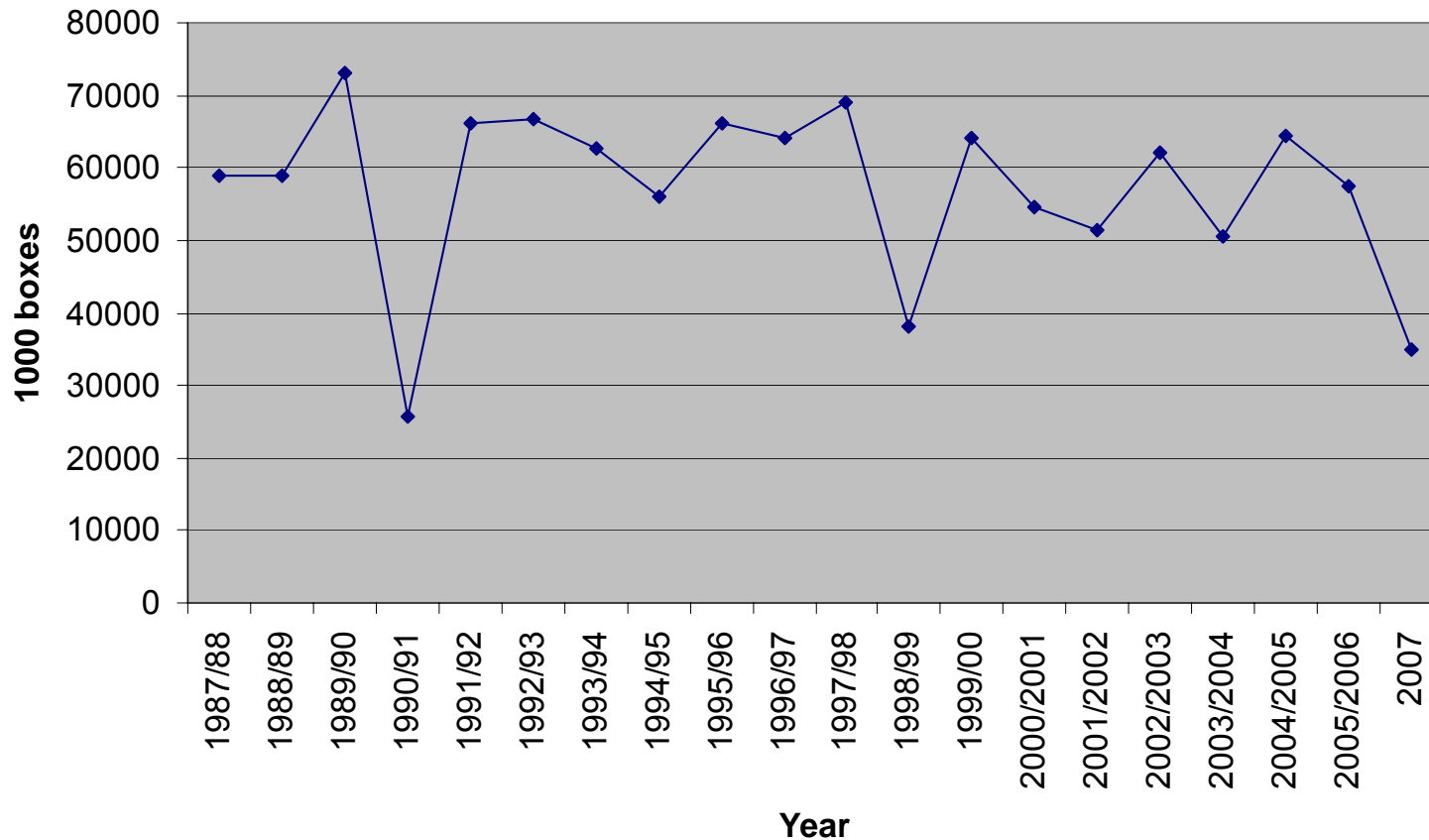
After the freeze in mid-January:

- The USDA's National Agricultural Statistics Service (NASS) forecast from the March survey is for 1.4 million tons, a 39 % smaller crop than in 2005/06
- The damage oranges cannot be sold as fresh, but processed

As a result:

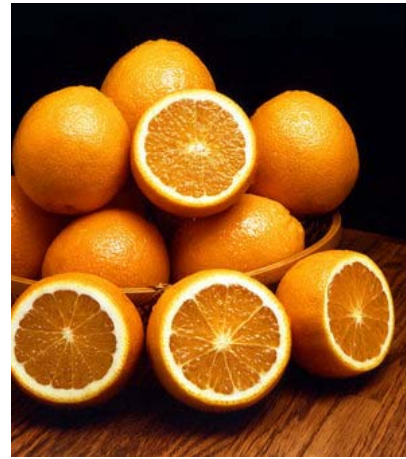
Since there are fewer oranges for fresh use, and the processing market is a residual market in California, growers do not receive sufficient returns from processing oranges to cover their costs of production

# Orange Production in California



Source: United States Department of Agriculture  
National Agricultural Statistics Service

# Orange Price in California

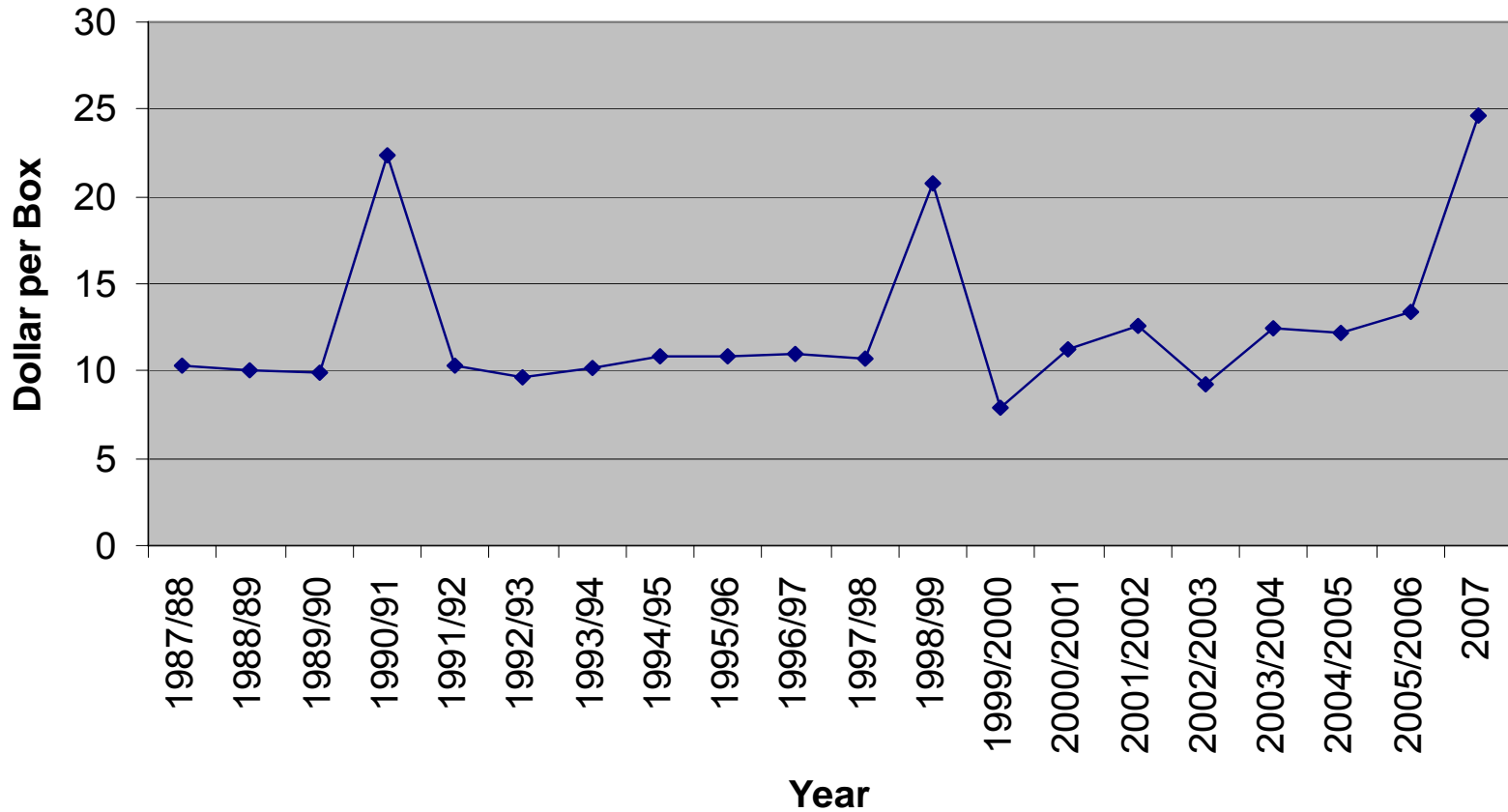


- \$9.49 (November 2006) to \$24.69 per 75 lbs box (February 2007), and the last time price reach the mid-\$20s was in 1991, another freezing year
- The retail market tend to respond rapidly to reports of supply shortages

As a result:

Consumers' preference changes since there are many more fresh fruit available today. The customers shift their preferences to other fresh fruits, so the demand of oranges is more elastic today in comparison to 1990

# Orange Price in California



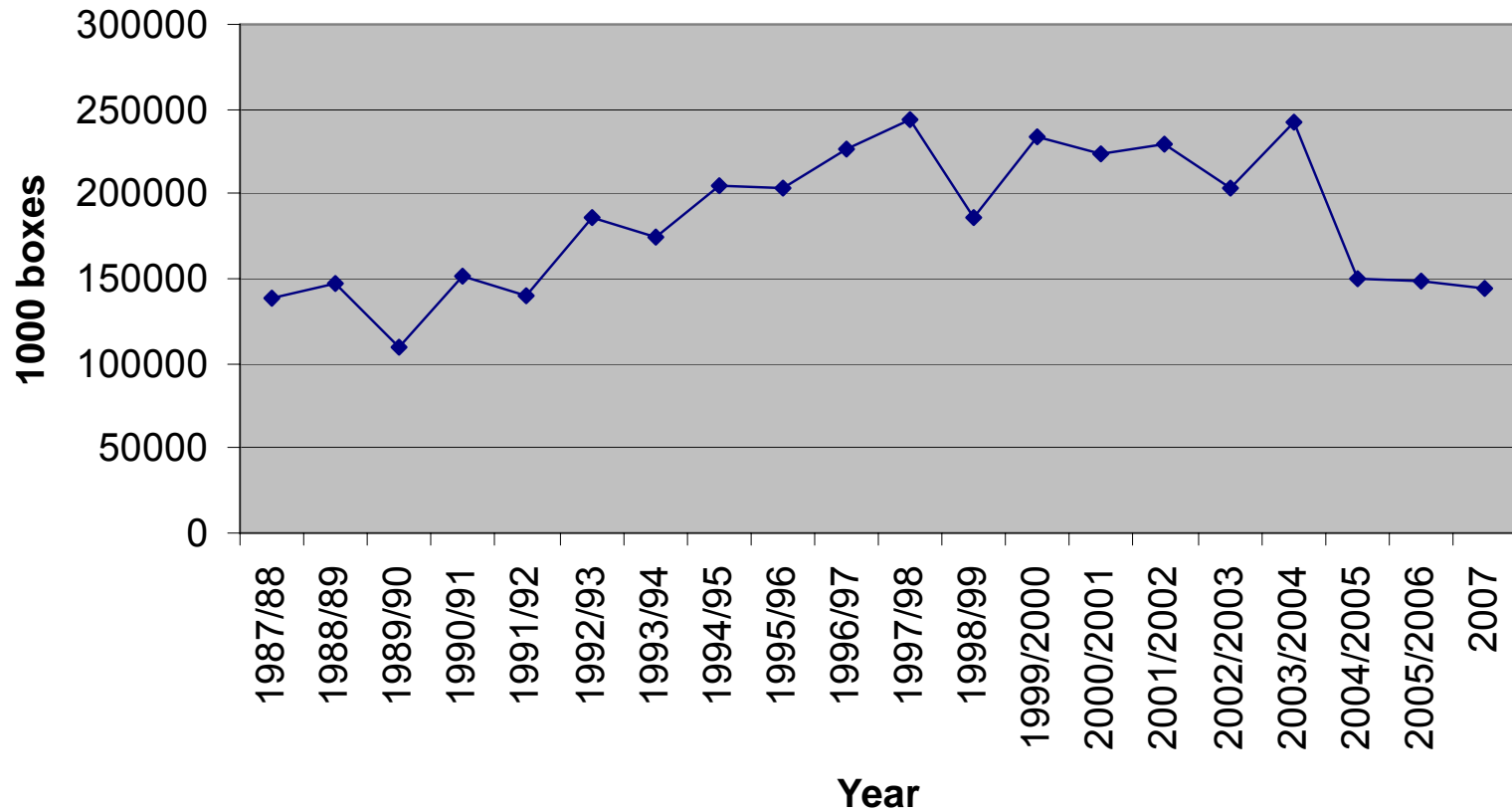
Source: United States Department of Agriculture  
National Agricultural Statistics Service

# Florida Case



- The second largest state for fresh oranges production
- Recuperating from hurricane damage during the 2004/05 and 2005/06 seasons and from loss of trees from citrus diseases
- The 2006/07 orange crop (including Temples) is forecast to total 5.9 million tons, 11 percent below last season and 12 percent below 2004/05, both hurricane years

# Orange Production in Florida



Source: United States Department of Agriculture  
National Agricultural Statistics Service

# Major Orange Juice Companies



- Florida Natural
  - The cooperative, the body of Florida Natural, was organized in 1933 by a group of growers to market their crops
  - One of the largest organizations of growers and producers, with a membership base of 13 grower associations
  - Made up of more than 1,000 grower members who own more than 50,000 acres of citrus groves
- Tropicana
  - Started in 1947 by Italian immigrant Anthony Rossi
  - Tropicana—a division of PepsiCo, Inc. since 1998—is now one of the world's leading producers and marketers of branded fruit juices
- Minutes Maid
  - Purchased by the Coca Cola company in 1960, the world's leading marketer of premium fruit juices and drinks

# The Strategies



## ■ Florida Natural

- The products are sold in almost every major US supermarket and in more than 60 countries around the world
- Produces 5 different kinds of NFC orange juice, 3 different NFC ruby red grapefruit juice, 5 other kinds of juice; apple, lemonade, etc.  
→Product Differentiation

## ■ Tropicana

- United States is the company's largest sales area and rapidly growing in Europe, Latin America and the Asia-Pacific region

## ■ Minutes Maid

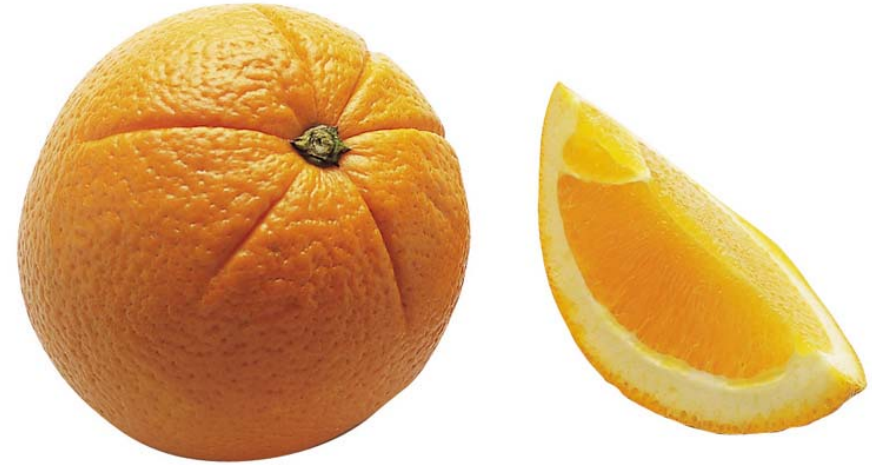
- Minute Maid blends orange juices from Florida, Costa Rica, and Brazil to get the quality it wants

# Tendencies



- Tendencies to vary retail orange juice prices
  - Form (e.g., Frozen Concentrate, Not From Concentrate, From Concentrate)
  - Shipping distance from primary producing region (e.g., shipping distance from Florida)
  - Product attributes (e.g., calcium and pulp content)
  - Socioeconomic attributes of the consumer (e.g., average household income in the market area)

# Vertical Integration



- Warehouse Consolidation
  - Vertical Integration
    - Cost effective
      - Frequent and timely delivery schedule
      - More precise stock mix
      - Warehouse expansion in location
      - Compatibility of electronic inventory-ordering systems
      - Determent of new entrant and weaker competitors
  
- Warehouse consolidation is efficient and leads to lower retail prices

# Price Discrimination

- Third-Degree Price Discrimination
  - Market power by charging different prices to different segments of consumers.
    - The data reveals that the highest percentage increases in price occurred in markets with high household incomes
    - Transportation costs and the subsequent retail prices of orange juice will increase with the distance between point of purchase and point of processing



# Analysis

- With half the orange production in California being destroyed by the freezing temperatures, prices increased dramatically in order to meet the loss in supply and increase in demand.
- Consumers will be hurt dramatically, as the price per bushel of oranges is increased from 17 dollars to 35 dollars a bushel after the freeze
- Growers worried about summer output of crops in Valencias, as one grower said he would be happy to get 50% of what he planted
- With little foreign help, expect retail prices to skyrocket, triple
- Storms have caused orange juice prices in Florida to increase and Jamba Juice started charging 25 cents more for their juices containing oranges after the freeze in California and storms in Florida.





THANK YOU.