

# FDOC Marketing Impact on Orange Juice Demand



EXECUTIVE SUMMARY  
FOR FLORIDA CITRUS COMMISSION  
May 21, 2008

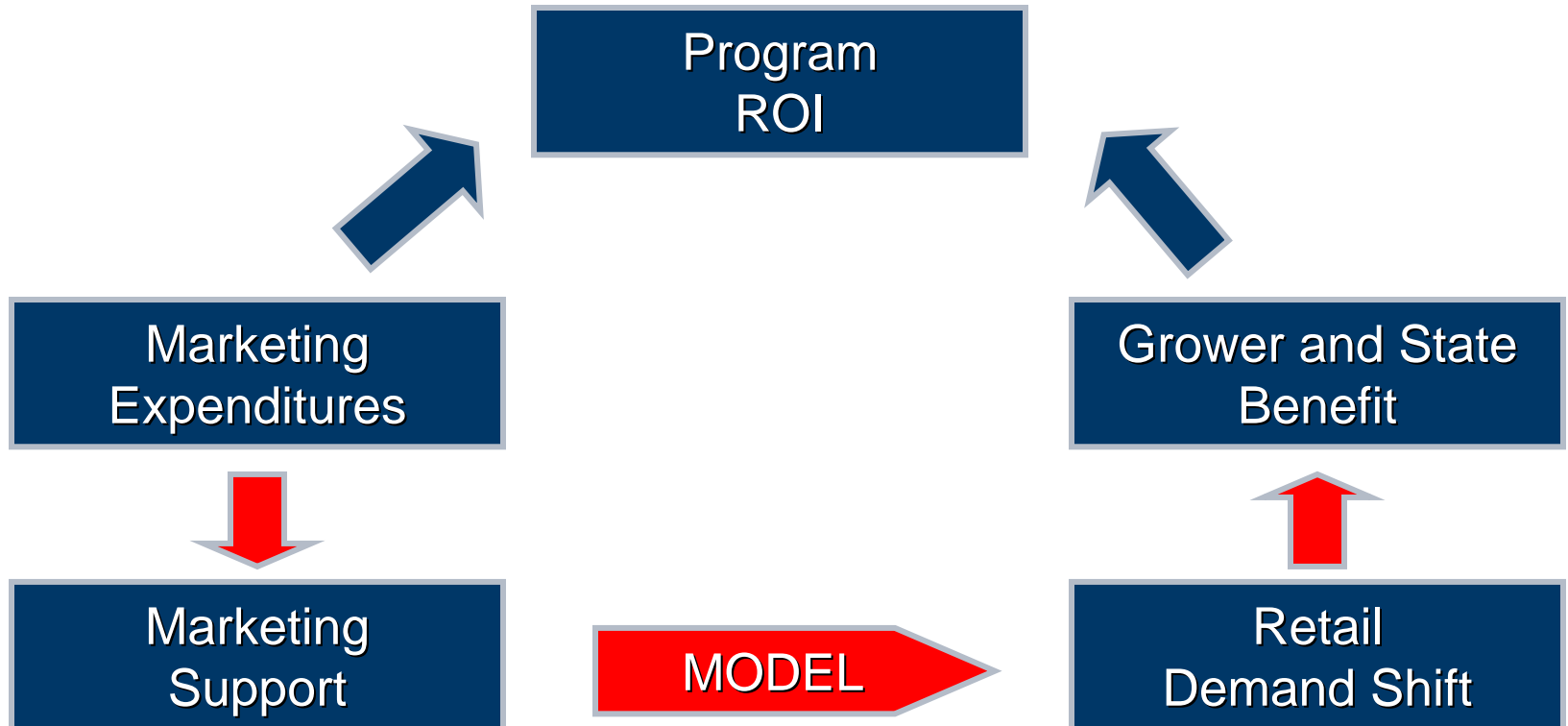
# Project Objectives

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- Measure the impact on U.S. orange juice category demand of:
  - FDOC TV advertising, internet advertising, and public relations
  - advertising and in-store trade promotion of the top-three orange juice brands
  - Any other drivers of U.S. category demand
- Provide recommendations for improving marketing productivity
- Key Deliverables:
  - Econometric models for Northeast, South, North Central, and West regions in the U.S. measuring demand lift of marketing
  - Key marketing productivity metrics and response curves
  - Optimal resource allocation analysis
  - Origami™ web-based scenario planning tool

# FDOC Program ROI

- Calculating ROI requires linking marketing support with incremental demand and linking incremental demand to grower and state benefit.



## Model Scope

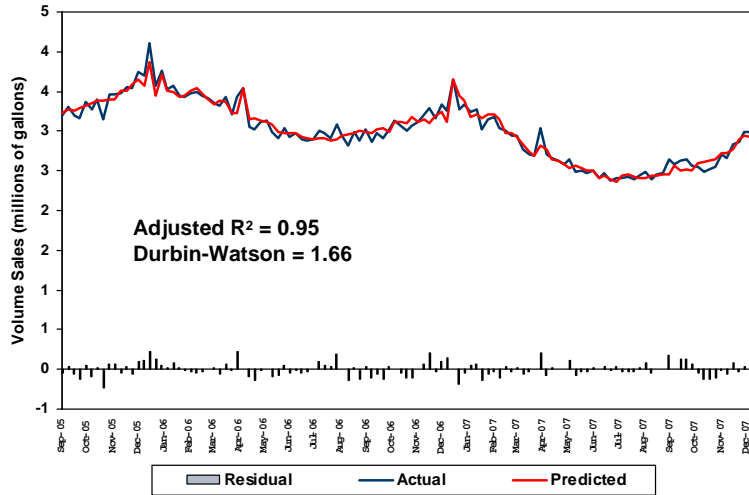
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- Dependent variable
  - Single strength equivalent (SSE) gallons of orange juice sold in food, drug, and mass merchandiser stores measured by ACNielsen.\*
- Time period:
  - 120 weeks: week ending 9/10/05 to week ending 12/22/07
- Nielsen regions:
  - Northeast
  - South
  - North Central
  - West

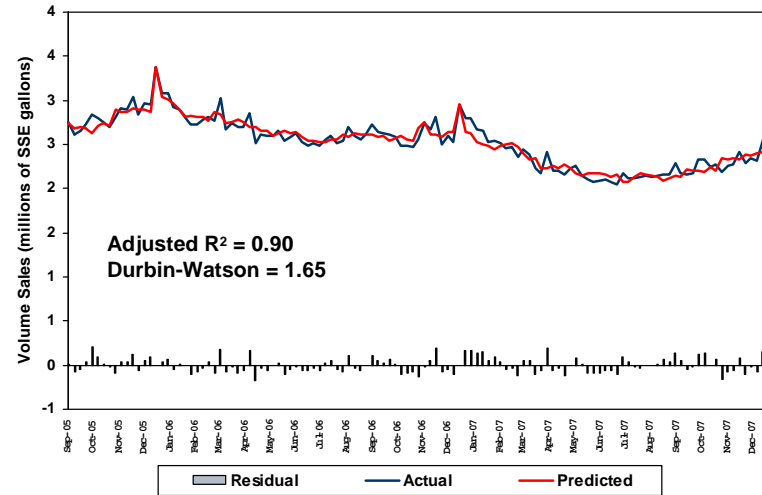
\* Nielsen household panel-based monthly estimates of Wal-Mart volume were also included. In aggregate, Nielsen-measured stores sold 630.7 million SSE gallons of orange juice in 2007, representing 50.8% of total U.S. orange juice consumption. (Source: FDOC, Mark G. Brown)

# Model Fits

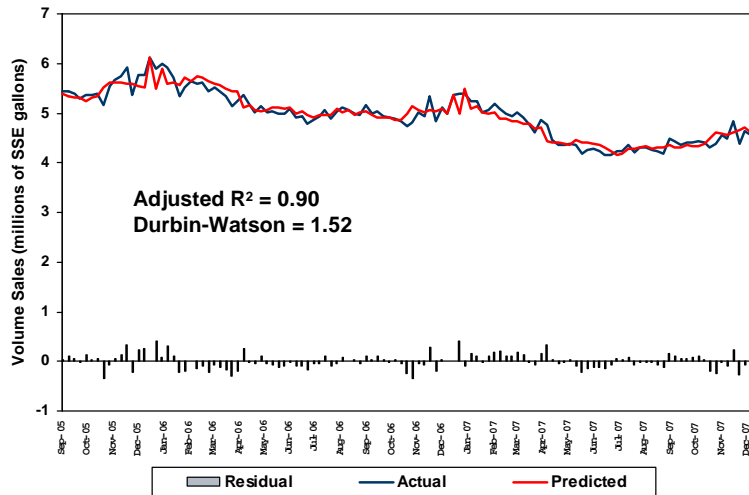
## North Central



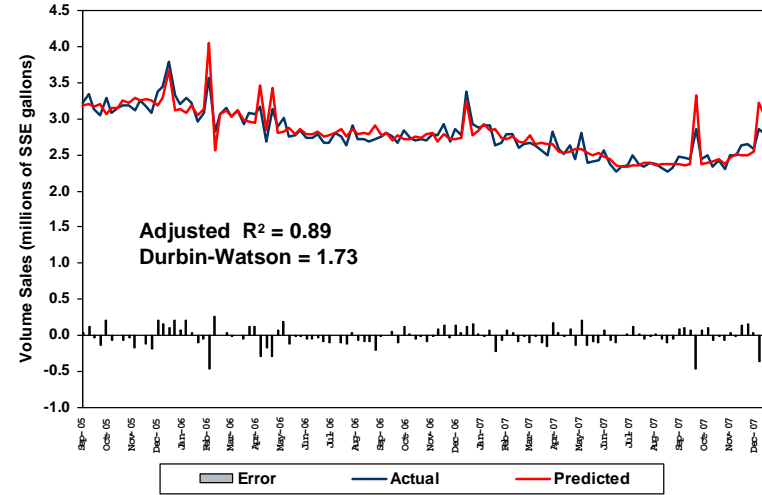
## West



## South



## Northeast



## Total U.S. FDOC Demand Generation

- In fiscal year 2006-07, FDOC marketing increased U.S. retail demand for orange juice by 7.4% or 43.7 million SSE gallons for Nielsen-measured channels.\*
  - FDOC TV and Online increased demand by 5.1% and 2.0%, respectively
  - FDOC PR increased demand by 0.3%

### Total U.S. Demand Increase Due to FDOC Marketing (%)

	TV	Online	PR
Fiscal year 2006-07	5.1%	2.0%	0.3%
Total Model Period	4.9%	1.7%	0.4%

- Adjusting for un-modeled channels, total volume contribution becomes 86.0 million SSE gallons.
  - This implies an increase in price per SSE gallon to FL growers of 5.4 cents\*\*, and an increase in revenue to FL growers of \$50.6 million\*\*\*.

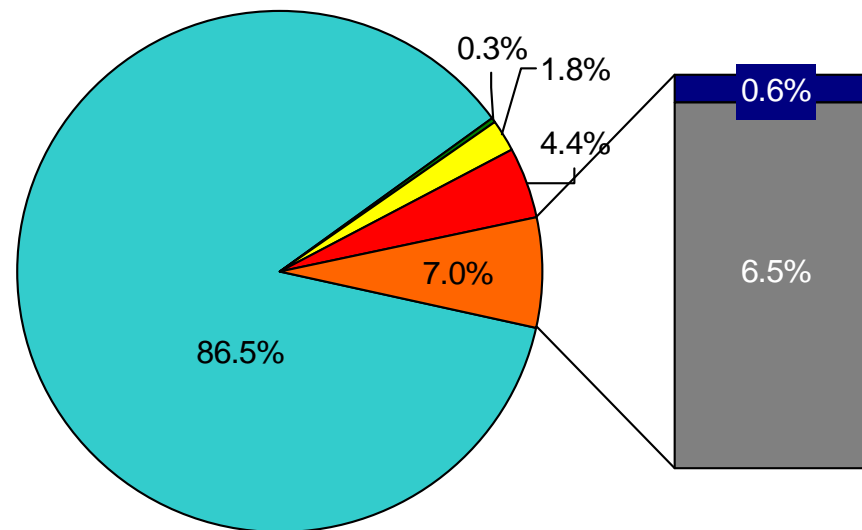
\* Nielsen-measured stores represent 50.8% of total U.S. volume of orange juice sales. (Source: FDOC, Mark G. Brown)

\*\* Based on average price-quantity slope of -0.000625 per million SSE gallons. (Source: FDOC, "The Impact of Generic Orange Juice Advertising")

\*\*\* Based on 941 million SSE gallons produced by Florida growers on average in 2006-07 and 2007-08. (Source: FDOC, Mark G. Brown)

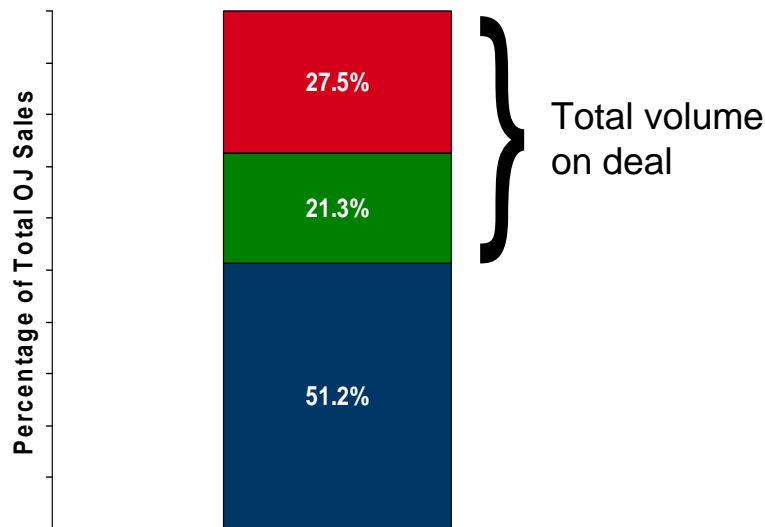
## Branded Demand Generation

- Branded marketing and promotion efforts also contributed to U.S. orange juice volume in fiscal year 2006-07.
  - Branded TV (only in the Northeast) contributed 0.6%
  - Trade promotions contributed 6.5%
- Total marketing-driven orange juice volume contribution (FDOC and branded) was 13.5%.

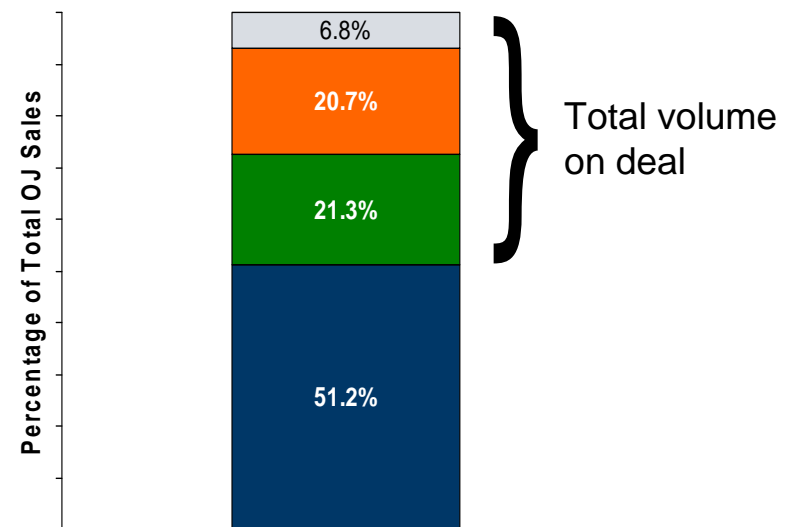


# Trade Promotion Impact

- Nearly half (48.8%) of orange juice volume was sold on branded in-store trade promotion.
- Of this, more than half (27.5%) was incremental to the individual brands.
- Of this brand-level incremental volume, approximately three quarters (20.7%) was being switched among brands.
- Only 6.8% of volume was incremental to the total orange juice category due to branded in-store trade promotion..



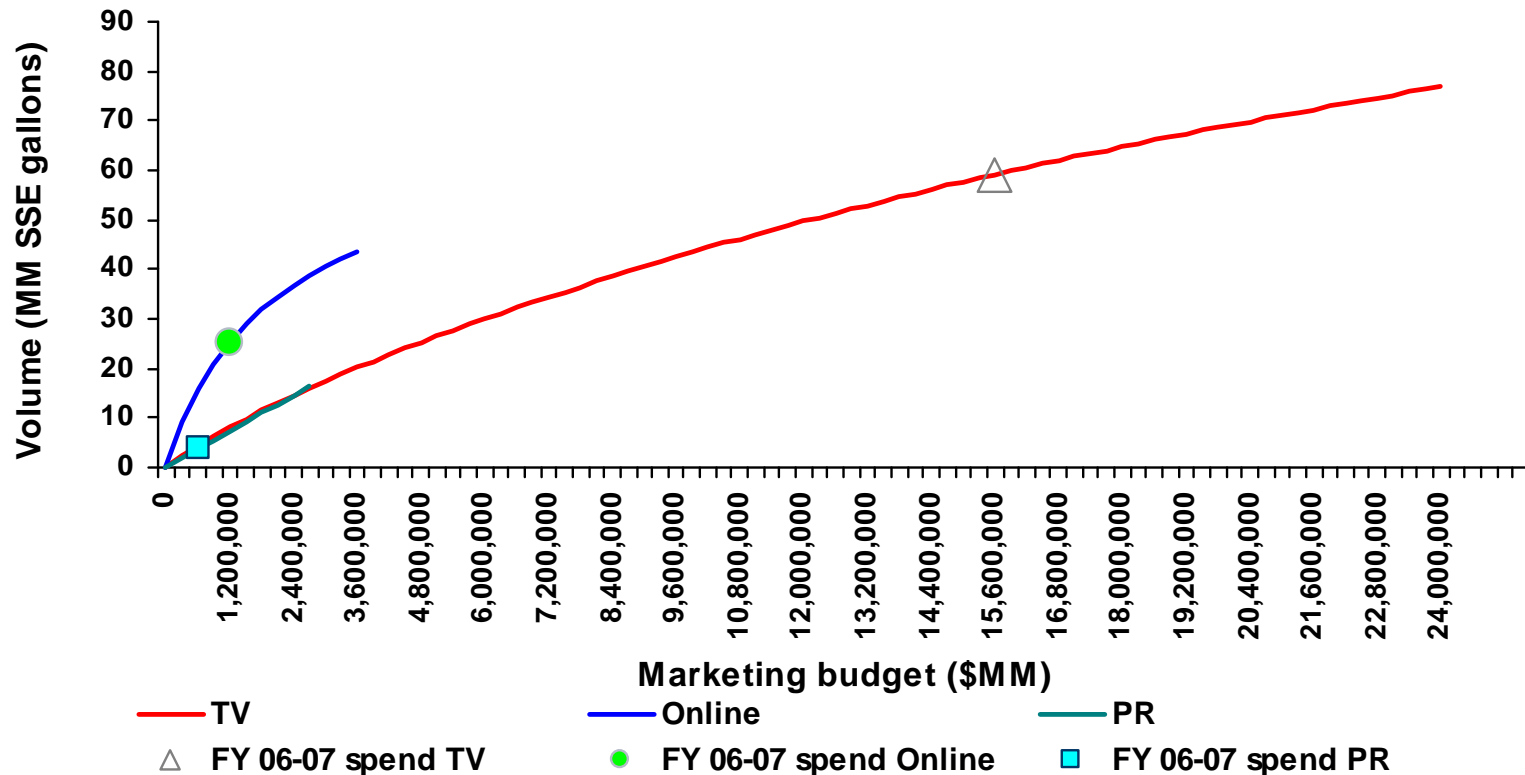
■ Brand-Level Incremental Promotion Volume\*  
■ Brand-Level Promotion Subsidized Volume\*  
■ Base Volume



■ Base Volume      ■ Brand Subsidized  
■ Category Churn      ■ Category Incremental

# Marketing Response Curves

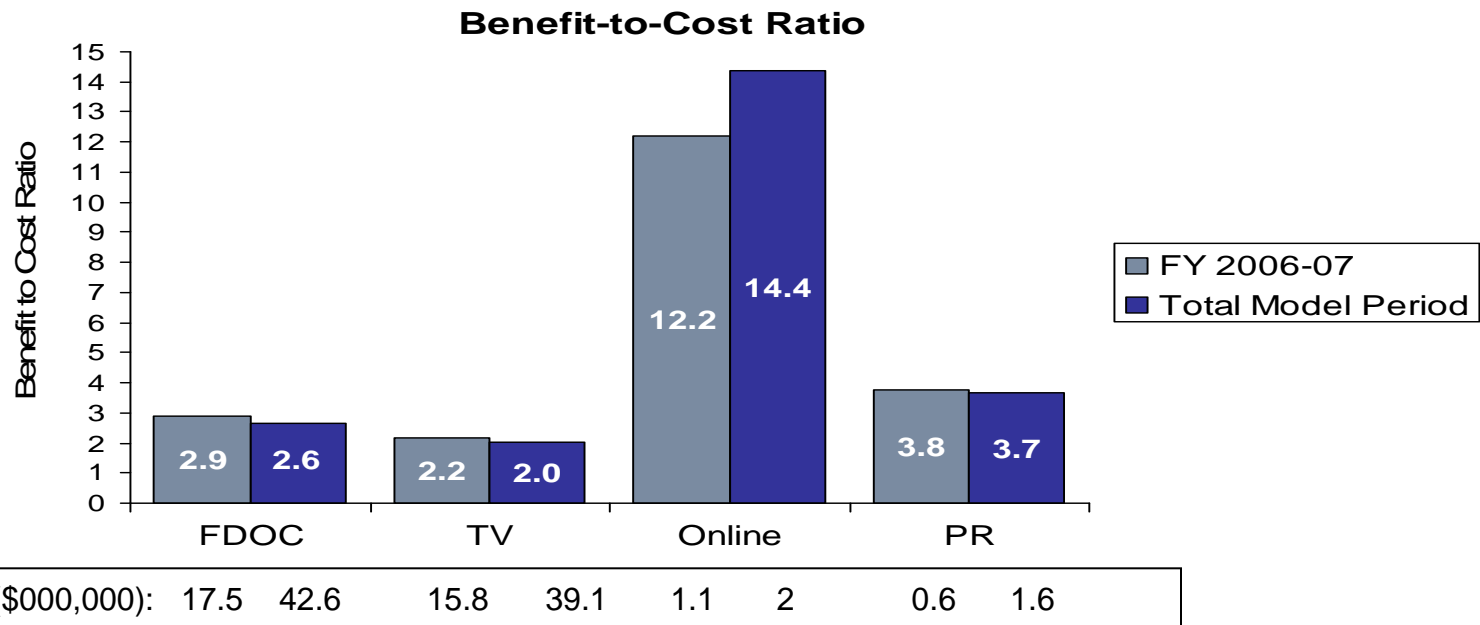
- Online shows the best response at low levels but also shows the most diminishing returns.
- PR did not show diminishing returns; however it is not clear how much the effect can be scaled.
- TV shows very little diminishing returns even at high budget levels.



\* Nielsen-measured stores represent 50.8% of total U.S. orange juice consumption. (Source: FDOC, Mark G. Brown)

# FDOC Marketing Benefit-to-Cost Ratios

- In fiscal year 2006-07, FDOC's \$17.5 million marketing investment increased U.S. retail demand for orange juice by 43.7 million SSE gallons in Nielsen-measured channels (86.0 million adjusted for all channels\*).
- Benefit to FL growers of \$50.6 million\*\* and benefit-to-cost ratio (BCR) was 2.9.
- All media have BCRs greater than 1.0.
- PR and Online had the highest BCRs in part due to lower investment levels.

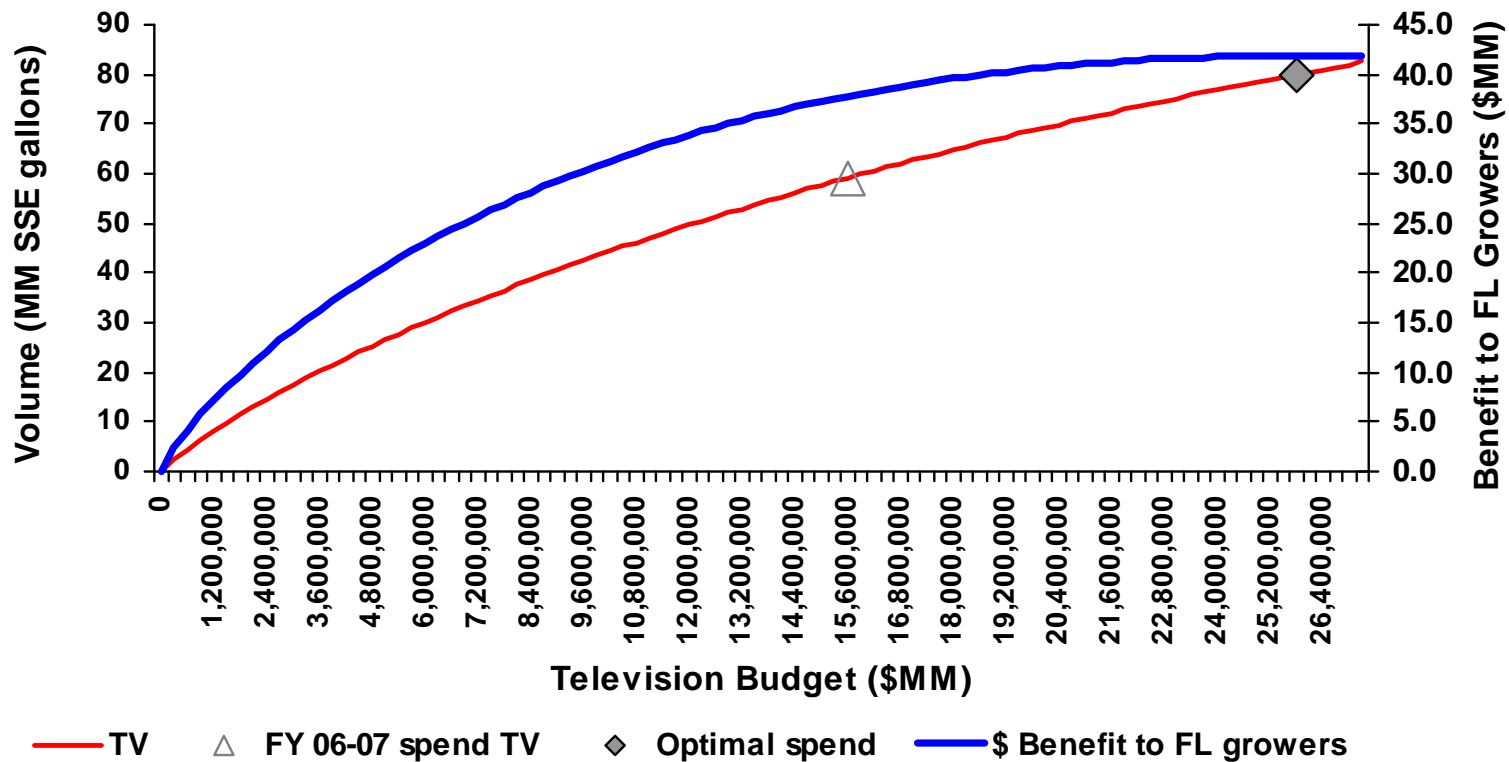


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# Optimal TV Budget Level

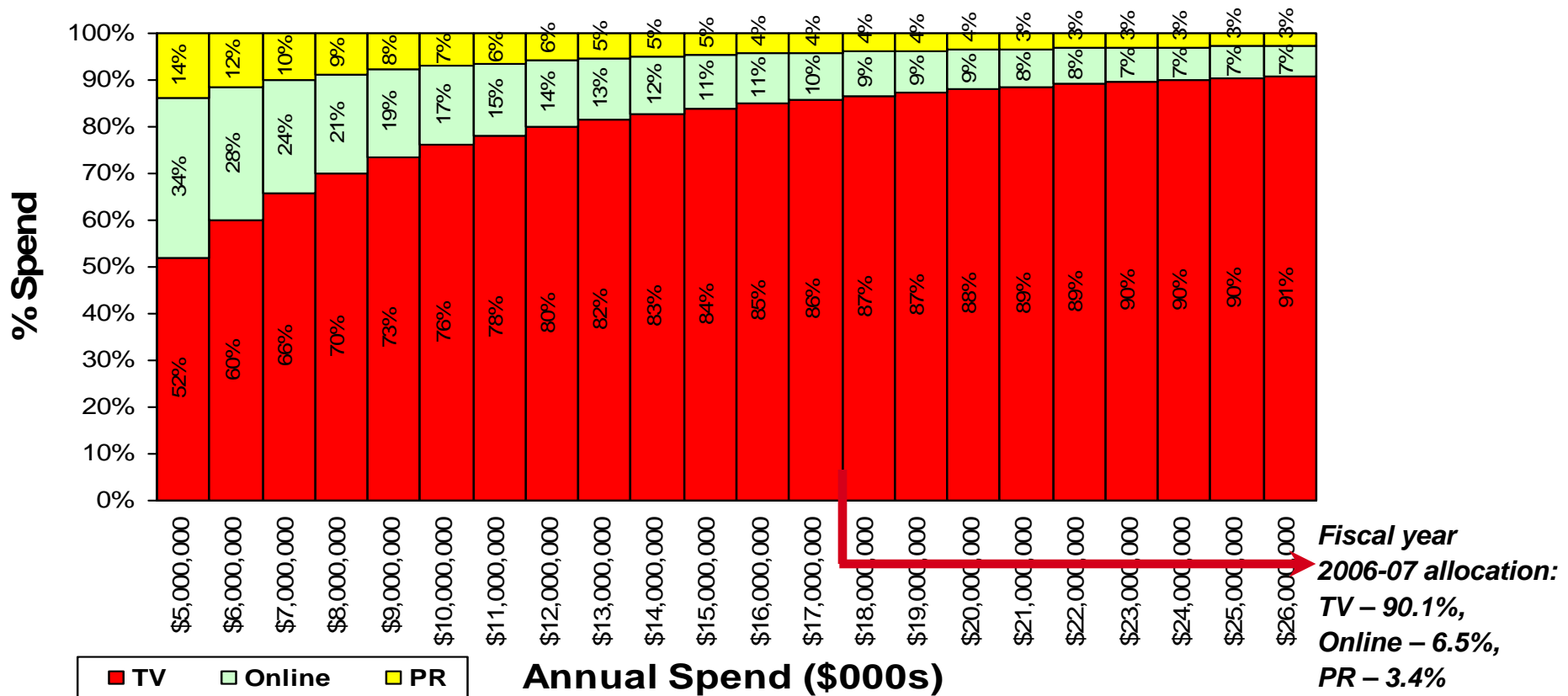
- Optimal budget for TV is \$25.8 million versus \$15.8 million spent on fiscal year 2006-07.



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# Optimal Allocation of Spend

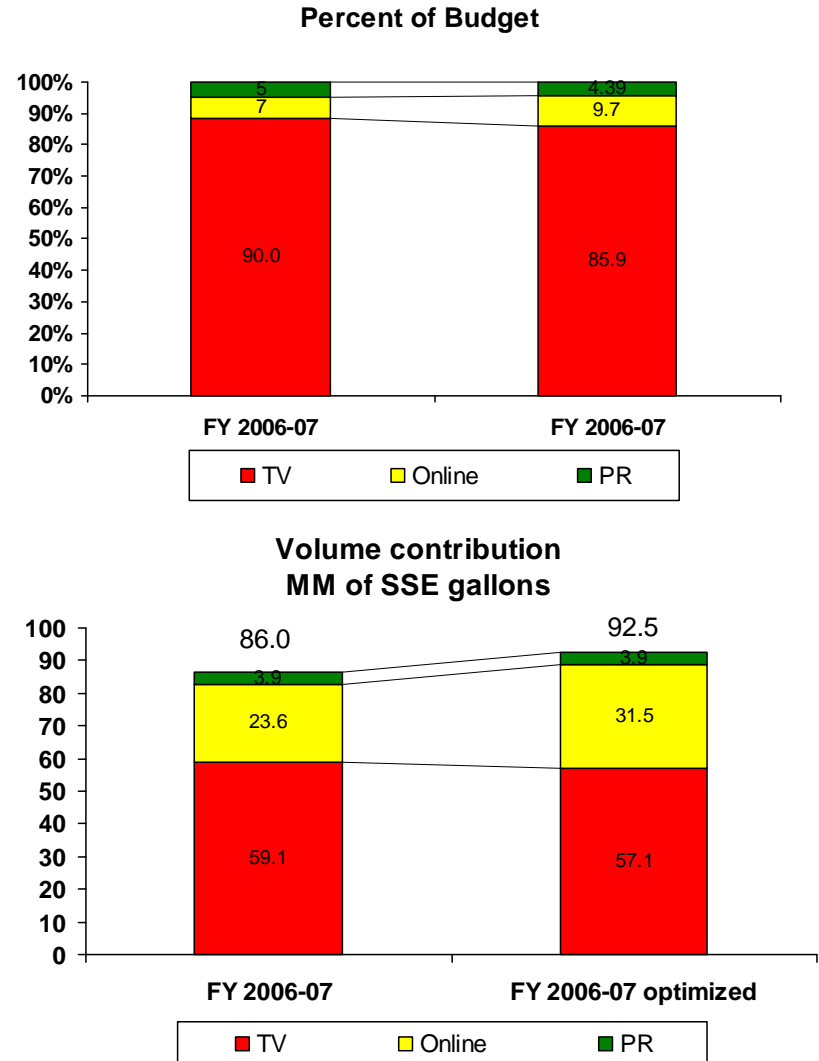
- At low budget levels, online and should be a prominent FDOC's marketing mix. As budgets increase, TV should assume a more dominant role.
- PR and Online were capped to reflect lack of experience at much higher levels of spend.



Note: PR and online were constrained at 1.3 and 1.5 times the Fiscal year 2006-07 spend level, respectively.

# Optimized Volume Contribution

- An optimal allocation of 85.9% for TV, 9.7% for Online and 4.4% for PR in 2006-07 would have been expected to increase FDOC-driven demand by 7.6% or 6.5 million SSE gallons.
- The optimized 2006-07 budget would be expected to produce a slight decrease in demand due to TV while helping PR and Online drive incremental volume.



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## Next Steps

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- Clarify financial parameters, especially grower benefit per SSE gallon of incremental demand generation.
- Study potential for leveraging regional response differences with spot media.
- Implement Origami™ scenario planning tool to support predictive applications and optimization
- Update models through Q1 2008 and include/test:
  - Food price index
  - Department of Commerce's disposable income
  - Interaction between FDOC TV and branded trade promotions.