FDOC Marketing Impact on Orange Juice Demand:
Update Through Q1 2009

Florida Orange Juice.
Healthy. Pure & Simple.

EXECUTIVE SUMMARY FOR
FLORIDA CITRUS COMMISSION
October 21, 2009

MAP
Marketing
Accountability
Partnership

Project Objectives

- Re-estimate response models with data through Q1 2009
  - Consider macroeconomic factors (CPIs, income, gas prices)
  - Consider interactions among marketing drivers
- Measure the impact of additional 4 quarters ending Q1 2009 vs. previous periods on U.S. orange juice category demand of:
  - FDOC TV advertising, public relations, banner ads, and video ads
  - TV advertising and trade promotion of top orange juice brands
  - Media of competitive categories (RTS tea, bottled water, soft drinks, fruit juice, flavored fruit drinks)
  - Base price changes, weather, and macroeconomic variables

Model Scope

- Dependent variable
  - Single strength equivalent (SSE) gallons of orange juice sold in food, drug, and mass merchandiser stores
  - Nielsen Scantrack supplemented with Walmart POS scanner data*
- Time period:
  - 156 weeks: week ending 04/08/06 to week ending 3/28/09
- Nielsen regions:
  - Northeast
  - South
  - North Central
  - West

* In aggregate, Nielsen-measured + WalMart stores represent 52% of total U.S. orange juice consumption. (Source: FDOC, Mark G. Brown)

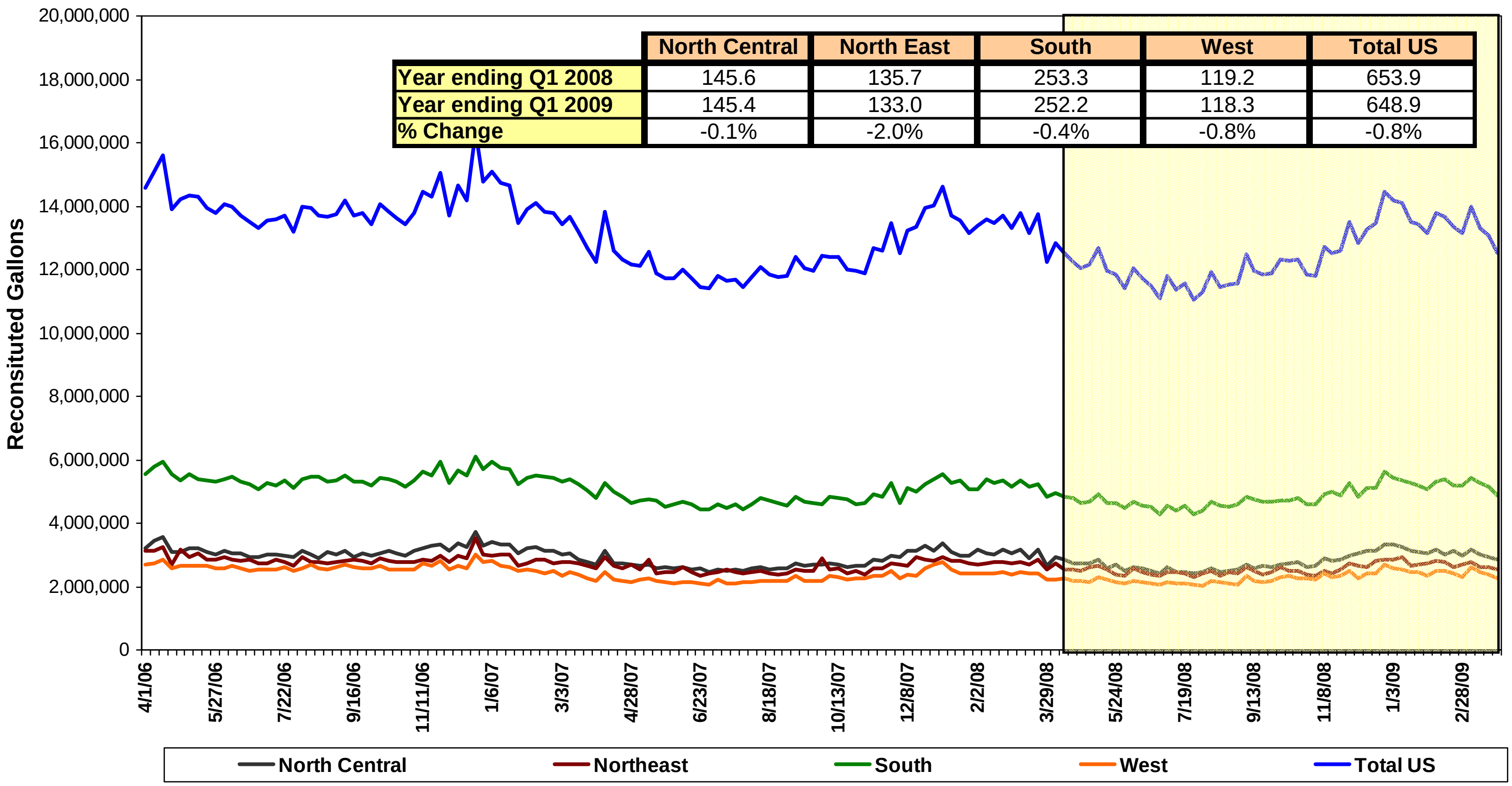
Data Summary

Indicator	Source	Geographic scope	Comments
OJ Sales	Nielsen	Regional	Total (no brand specific)
Promotion, Distribution, Price	Nielsen	Regional	Total (no brand specific)
Network TV and Cable TV	The Richards Group, Nielsen Stradegy	National converted to regional GRPs	FDOC media planning charts
Brand TV	Nielsen Stradegy	National converted to regional GRPs	Minute Maid, Tropicana, and Florida's Natural
Online	The Richards Group	National	Banner ad impressions, search word click-throughs and video ad click-throughs
Public Relations	Golin Harris	National, Regional	Several themes combined into one PR stream
Competitive Category Media *	TNS	National	
Flu Index	CDC	Regional	% of population infected by week
Temperature, Precipitation, Snowfall	NOAA	Regional	Weekly measures, averaged across tracking stations throughout each region
Total CPI, food at home CPI, drink CPI, average gas price	BLS for CPI, Energy Information Administration for gas prices	Regional	CPI measures are monthly, gas price is weekly
Seasonality	MegaStar	Regional, standardized	Seasonal variables created through MegaStar; time periods are the same for all regions

** Added for the model update.*

Total US OJ Sales By Region

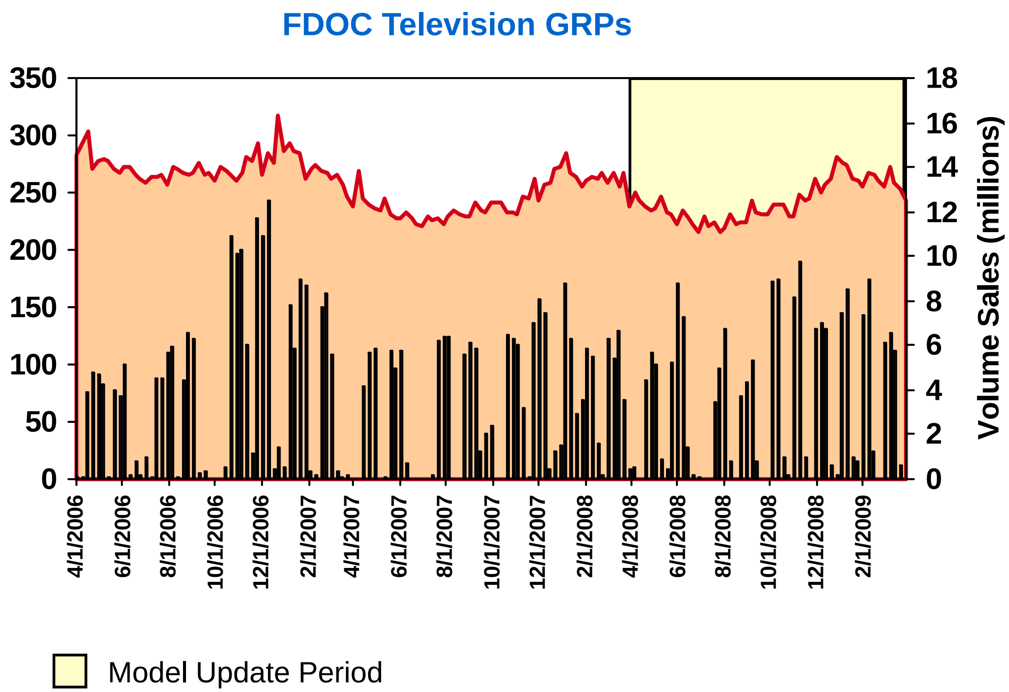
- OJ sales declines slowed to -0.8% vs the prior year, down from declines of -3.6% in the prior year and -13.3% two years prior.
- The largest decline was in the Northeast and the smallest in North Central.



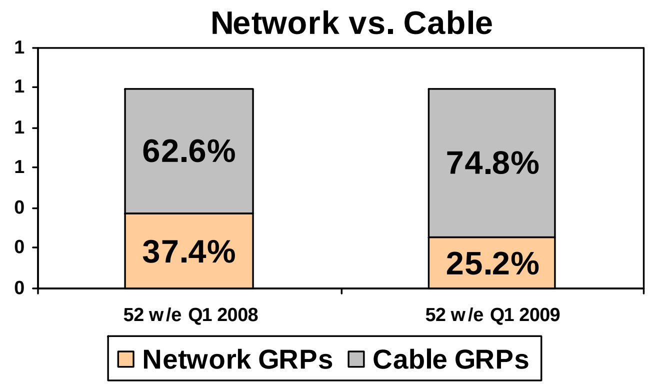
	North Central	North East	South	West	Total US
Year ending Q1 2008	145.6	135.7	253.3	119.2	653.9
Year ending Q1 2009	145.4	133.0	252.2	118.3	648.9
% Change	-0.1%	-2.0%	-0.4%	-0.8%	-0.8%

U.S. Media Trends – Television

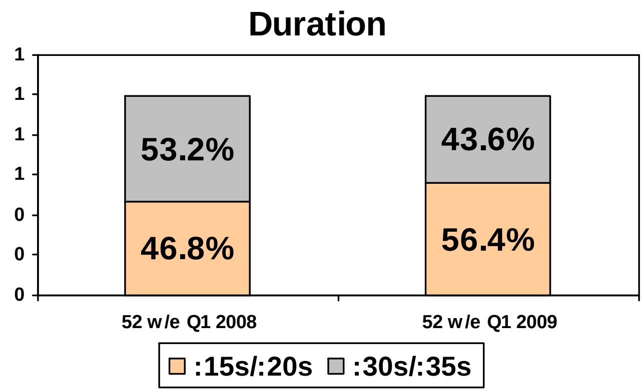
- FDOC TV spend during the period dropped 11% vs. the prior year to $12.4 million primarily due to a drop of 13% in cost per GRP.
- FDOC TV totaled 3,576 GRPs for the 52 weeks ending Q1 2009, up from 3,503 in the prior year.



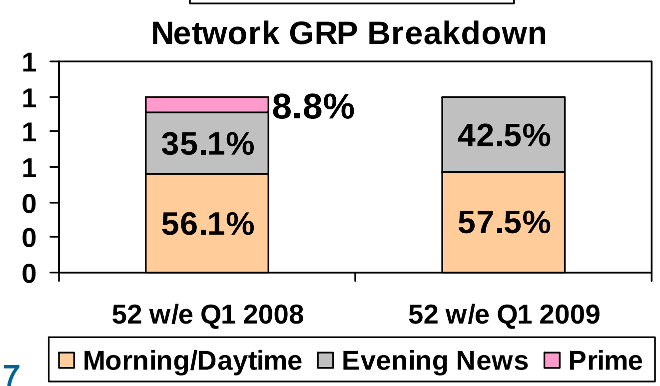
U.S. Media Trends – Television*



- During the 52 weeks ending Q1 2009, there was an increase in cable TRPs from 63% to 75% of total FDOC TRPs over the prior period.



- The duration mix also changed, with :15/:20 ads favored over longer ads for the 52 weeks ending Q1 2009.



- Network prime was eliminated from the latest plan, but the total proportion of morning/daytime and evening news network TRPs was similar between the two periods.

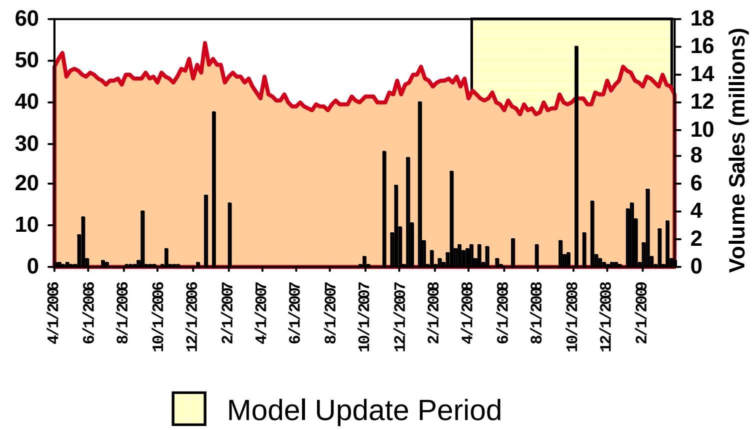
* Based on TRP splits.

Marketing Accountability Partnership

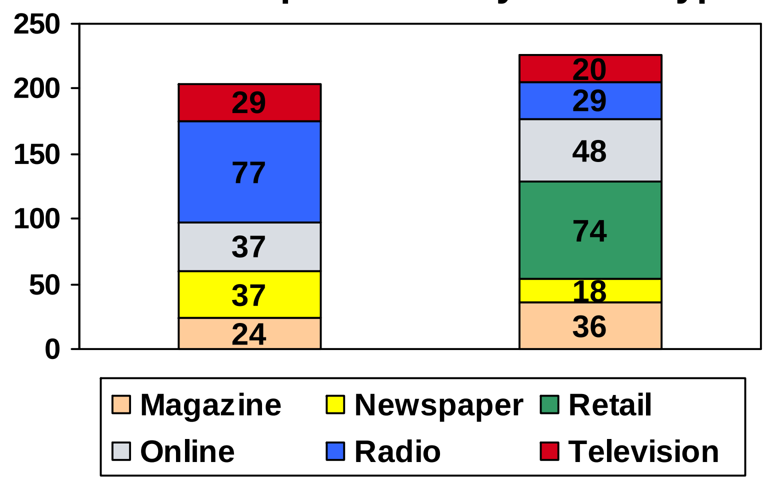
U.S. Media Trends – PR

- PR impressions increased, driven mainly by an in-store event in October 2008.
- PR spending dropped slightly despite the increase in impressions, to $0.8 million from $1.0 million in the previous period.
- The PR media mix changed, resulting in a lower cost per impression.
  - Retail PR saw the largest increase, from 0 to 74 million impressions due to coverage in weekly circulars and in-store audio announcements in October 2008.
  - Gains in online and magazine were smaller but also significant.
  - Significant drop in radio impressions and a smaller drop in newspaper and television impressions.

FDOC PR Impressions



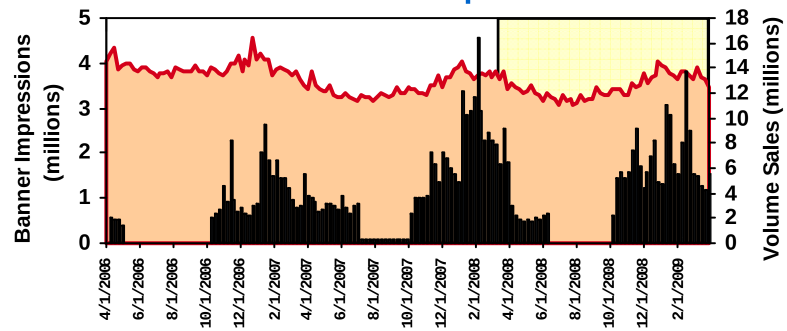
Total PR Impressions by Media Type



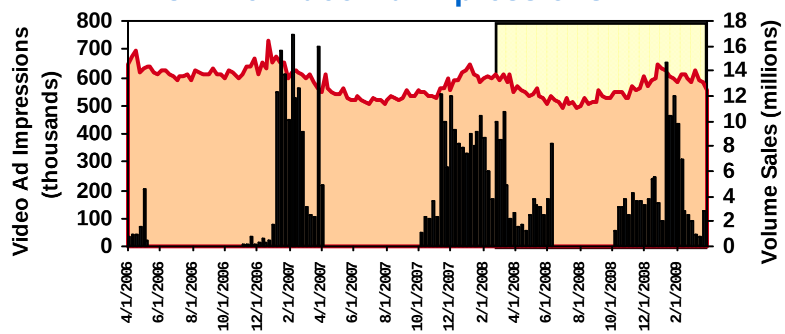
Key U.S. Trends – Online Media

- Online spending increased to $1.3 million during the 52 weeks ending Q1 2009, up from $1.1 million in the prior year.
- Banner ad execution is seasonal.
  - Longer hiatus in the current year
  - More consistent impression levels in the current year.
- Video ads are also seasonal.
  - Fewer impressions in current year.

Online Banner Ad Impressions



Online Video Ad Impressions



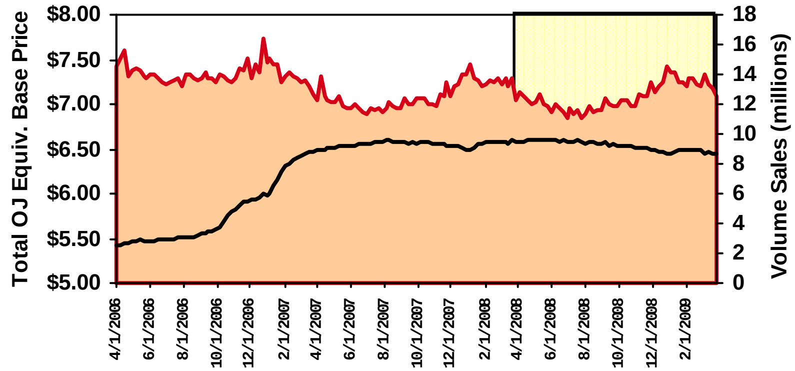
Model Update Period

Key U.S. Trends – Pricing and Promotion

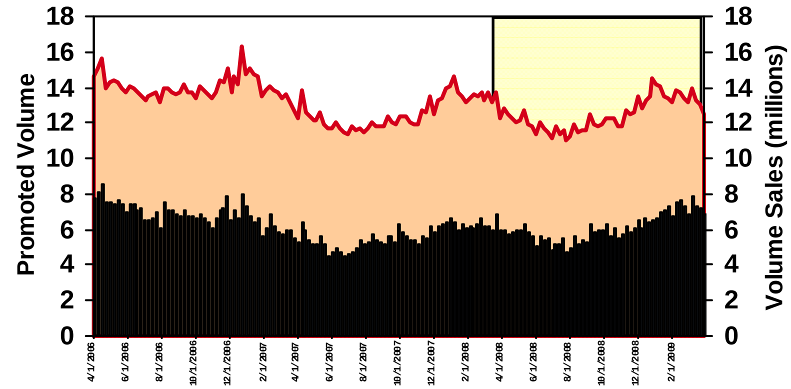
- Base price slightly decreased from an average of $6.55 for the 52 weeks ending Q1 2008 to $6.53 in the current year.

- The percentage of total volume on in-store branded trade promotion increased to 49% from 45%.
  - Temporary price reductions increased to 20% from 17%
  - Average promoted price discounts increased from 14% to 18%
  - Features and displays saw very small percentage increases.

Total OJ Average Weekly Base Price



OJ Volume on Promotion

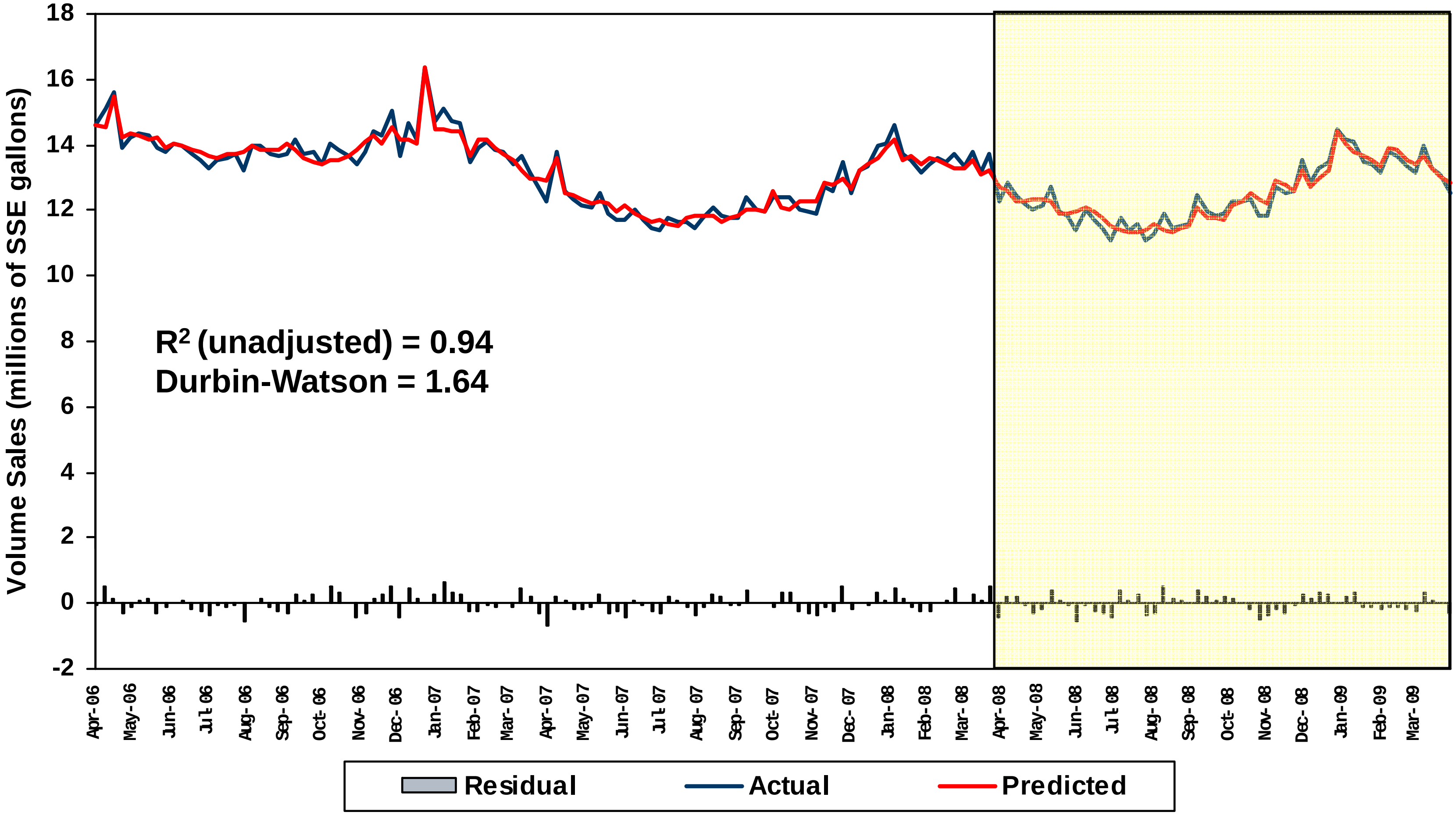


Model Update Period

Marketing Accountability Partnership

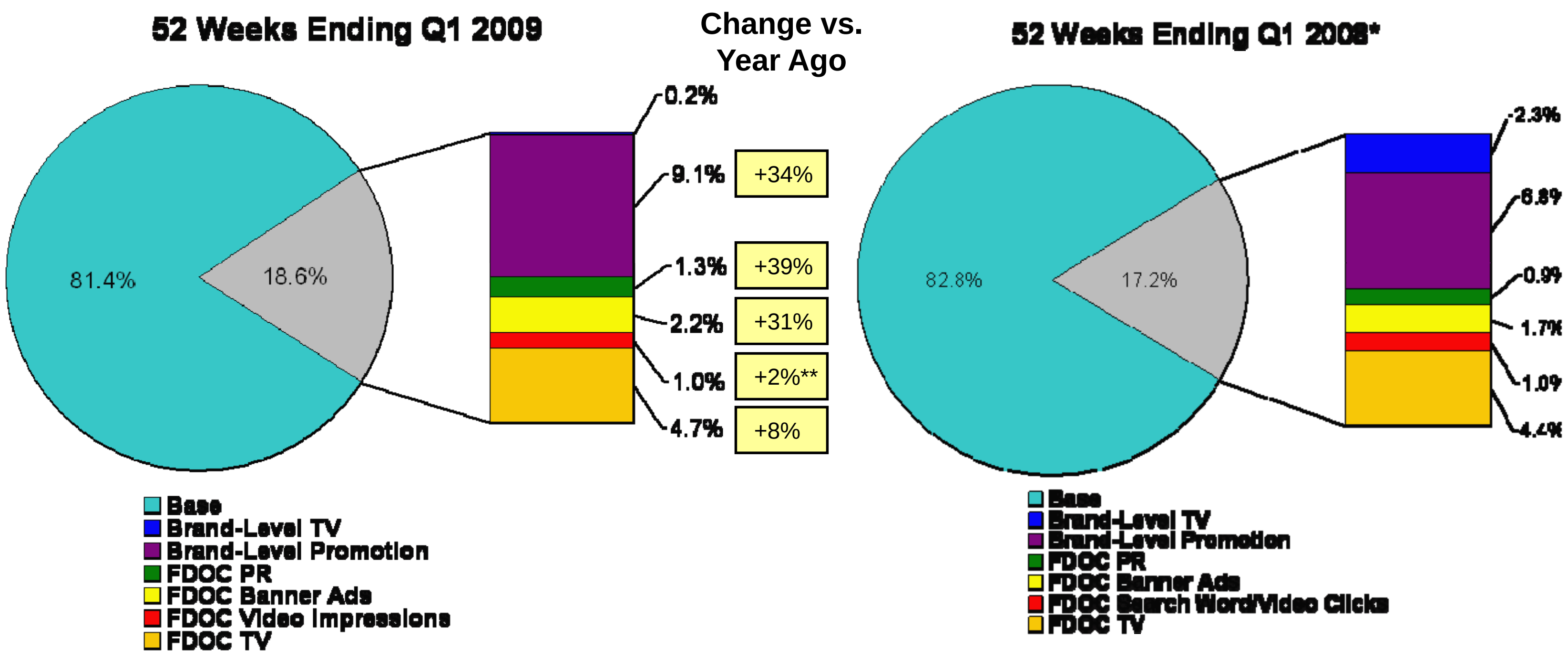
U.S. Model Fit

- Total U.S. fit was calculated by rolling-up the four regional model results, with continued high accuracy though Q1 2009.



Year ending Q1 2009 Volume Contribution – Total U.S.

- Marketing and and promotions (FDOC and brand-level) drove 18.6% of volume sales during the 52 weeks ending Q1 2009, up from 17.2% during the prior 52 weeks.



* Results for 52 weeks ending Q1 2008 based on prior model.

** +2.4% represents video impressions in 52 weeks ending Q1 2009 vs. search word and video clicks during 52 weeks ending Q1 2008.

Total U.S. FDOC Demand Generation

- FDOC marketing increased U.S. retail demand for orange juice by 9.6% or 60.3 million SSE gallons for Nielsen-measured channels in the 52 weeks ending Q1 2009, compared to 8.3% (58.9 million SSE gallons) during the prior 52 weeks.
  - FDOC TV increased demand by 5.0%.
  - FDOC online activity increased demand by 3.3%.
  - FDOC PR increased demand by 1.3%.

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

	TV	Online Activity	PR	Total FDOC Marketing
52 Weeks Ending Q1 2009	5.0%	3.3%	1.3%	9.6%
52 Weeks Ending Q1 2008[4]	4.6%	2.8%	0.9%	8.3%
% Change	+9%	+18%	+44%	+16%

- Projecting for un-modeled channels, total volume contribution is 115.9 million SSE gallons.[1]
  - This implies an increase in price per SSE gallon to FL growers of 7.2 cents[2], and an increase in revenue to FL growers of $74.8 million[3].
  - During the 52 weeks ending Q1 2008, the price increase was 5.6 cents per SSE gallon.

[1] Nielsen-measured stores represent 52% of total U.S. volume of orange juice sales. (Source: FDOC, Mark G. Brown)
[2] Based on average price-quantity slope of -0.000625 per million SSE gallons. (Source: FDOC, "The Impact of Generic Orange Juice Advertising")
[3] Based on 1,032 million SSE gallons produced by Florida growers on average in 2007-08 and 2008-09. (Source: FDOC, Mark G. Brown)
[4] Results for 52 weeks ending Q1 2008 based on prior model.

FDOC Marketing Demand Generation

- The demand generated by FDOC marketing activity increased during the 52 weeks ending Q1 2009 vs. the prior period for the three measurable media channels.
- Between the 52 weeks ending Q1 2008 and the 52 weeks ending Q1 2009, the increase in demand per 1,000 GRPs was greatest for banner ads.

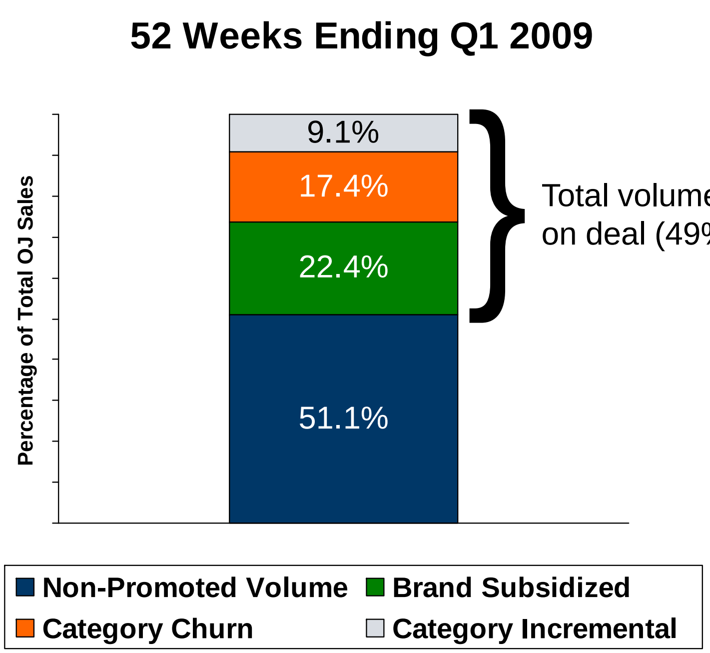
Demand Increase Due to FDOC Marketing Activity

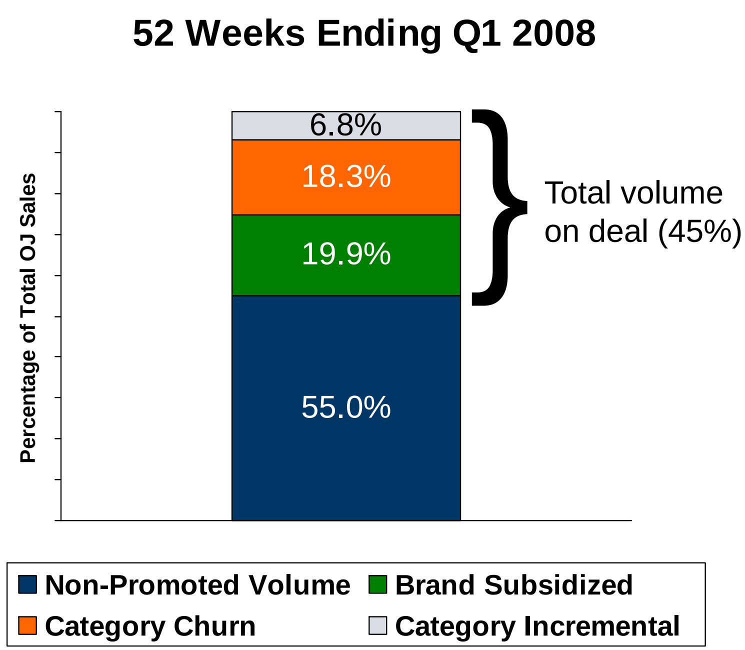
	TV	PR	Banner
52 Weeks Ending Q1 2009	5.0	1.3	2.3
Total GRPs	3,576	176	42
% Demand per 1,000 GRPs	1.4	7.3	55.1
52 Weeks Ending Q1 2008*	4.6	0.9	1.7
Total GRPs	3,503	159	51
% Demand per 1,000 GRPs	1.3	5.8	34.1

* Results for 52 weeks ending Q1 2008 based on prior model.

Branded Trade Promotion Dynamics

- The percentage of OJ volume sold on in-store promotion increased to 49% during the 52 weeks ending Q1 2009 from 45% in the prior period.
- Category volume incremental due to promotion increased substantially to 9.1% (10.0% demand generation) from 6.8% (7.3% demand generation).



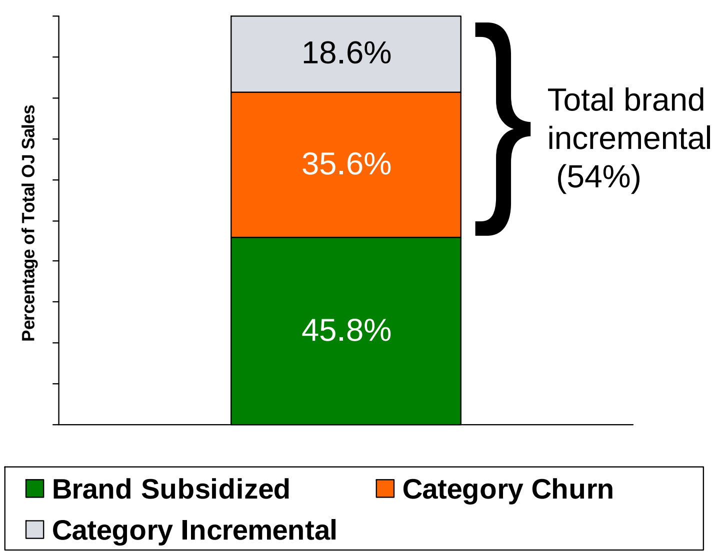


* Subsidized and incremental brand level estimates from Nielsen

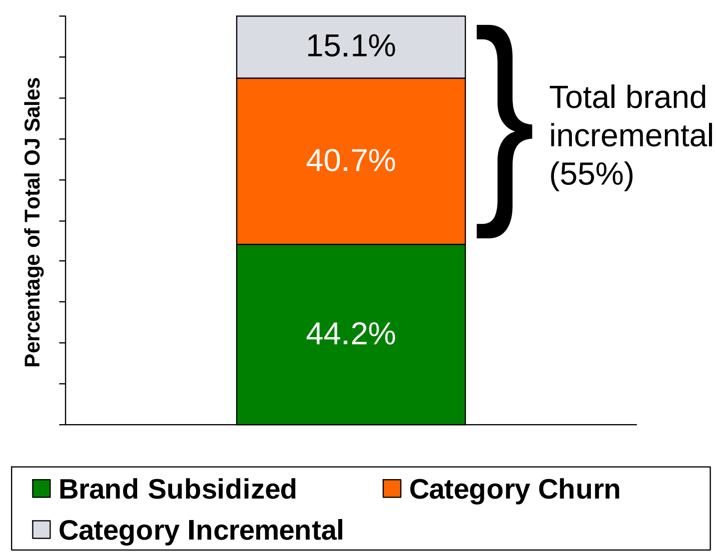
Branded Trade Promotion Dynamics

- Brand incremental sales made up about the same proportion of promoted sales in the 52 weeks ending Q1 2009 (54%) vs. the 52 weeks ending Q1 2008 (55%).
- But the percentage of brand incremental sales that were incremental to the category (i.e. were not just churn) increased from 27% to 34%.

52 Weeks Ending Q1 2009



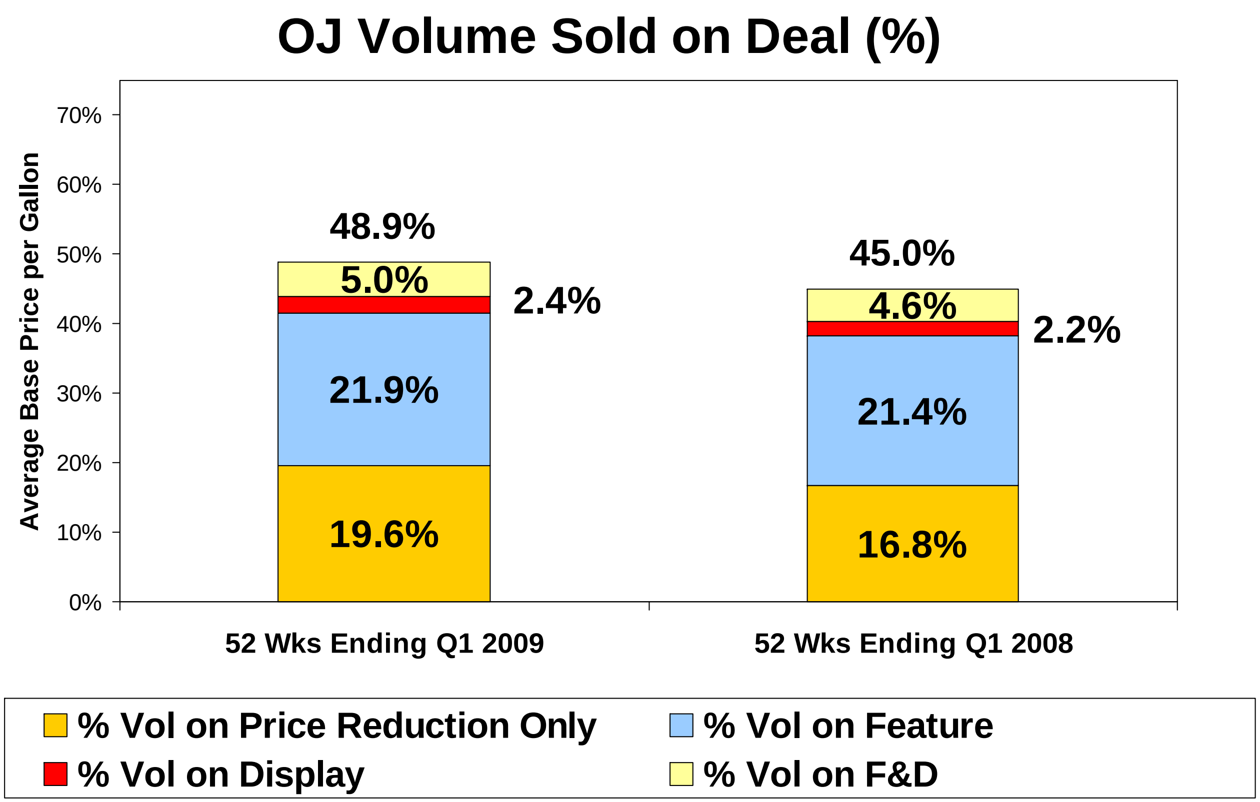
52 Weeks Ending Q1 2008



* Subsidized and incremental brand level estimates from Nielsen

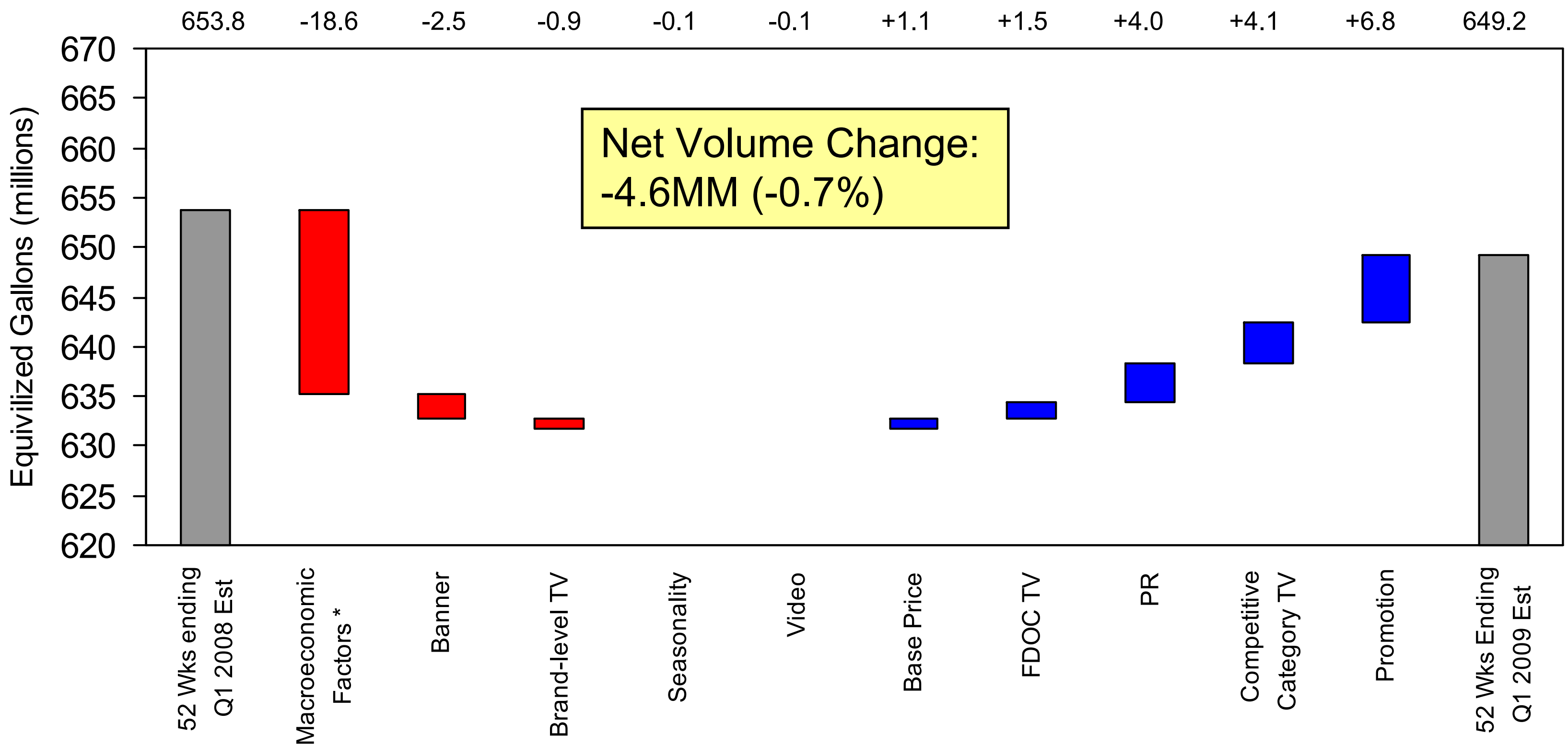
Branded In-Store Promotion Activity

- In Nielsen measured stores, sales on temporary price reduction increased 2.8%.
- Volume sold on feature and/or display increased by 1.1%.



Total U.S. Source of Volume Change vs. Year Ago

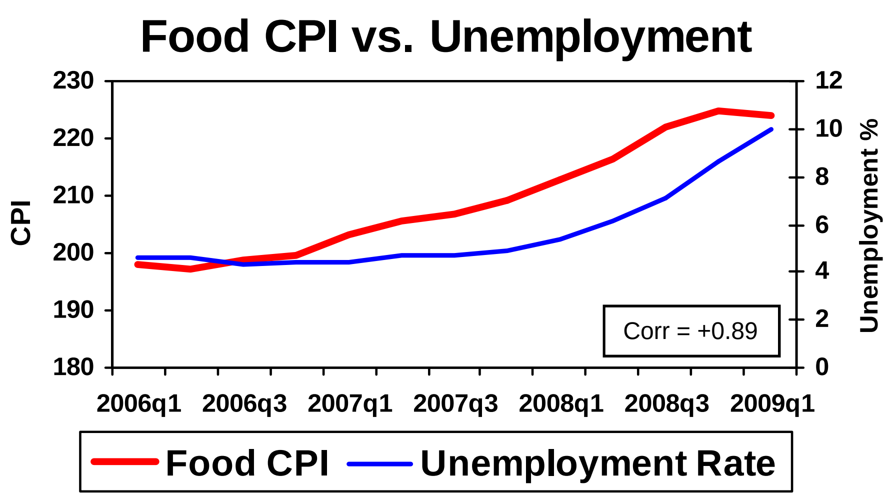
- Increased category marketing, decreasing competitive category advertising, and declining base price offset a significant decline from a downturn in the economy.

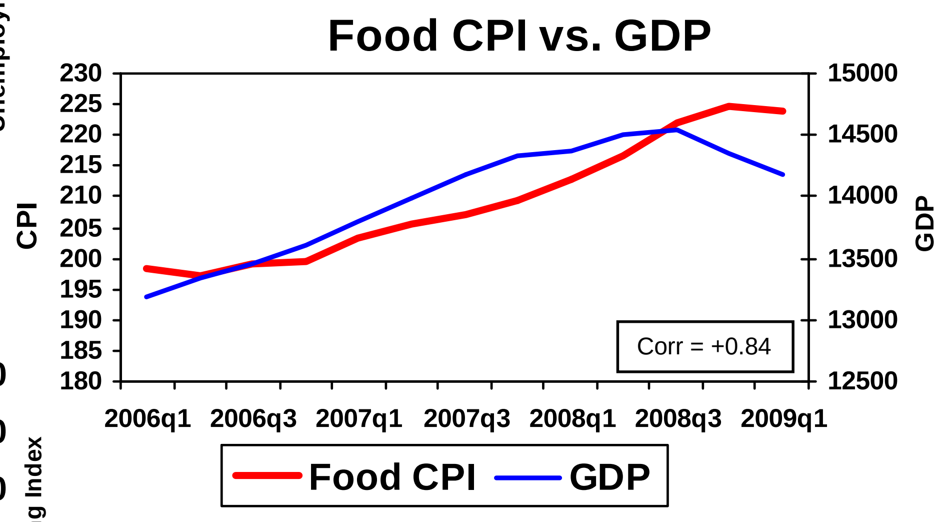


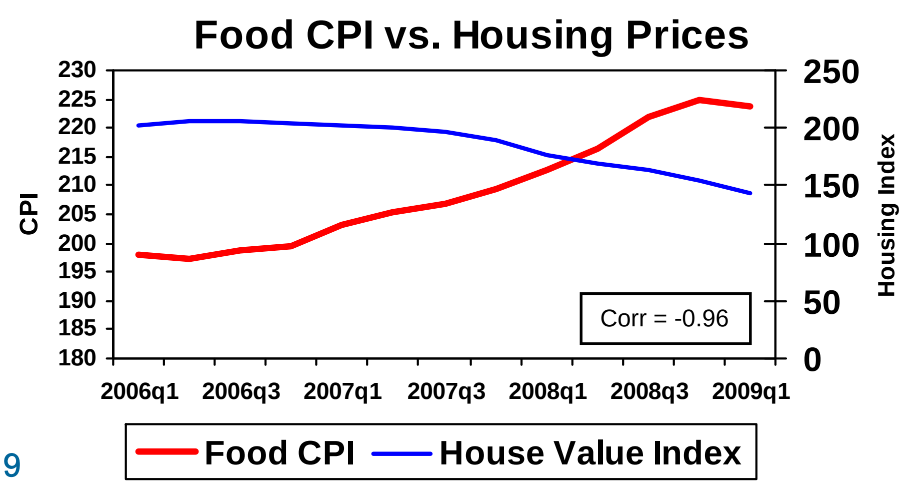
* The modeled variable was CPI. CPI has a strong negative correlation with housing prices and a strong positive correlation with unemployment during this period and was therefore used as a measurable surrogate for the impact of the recession. Food CPI growth in excess of OJ category price growth would otherwise be expected to have a positive impact on OJ demand.

U.S. Food at Home CPI vs. Economic Indicators

- Food at home CPI had strong negative correlation to home prices and strong positive correlation to unemployment during this period, so it likely acted as a surrogate for broader macroeconomic factors.



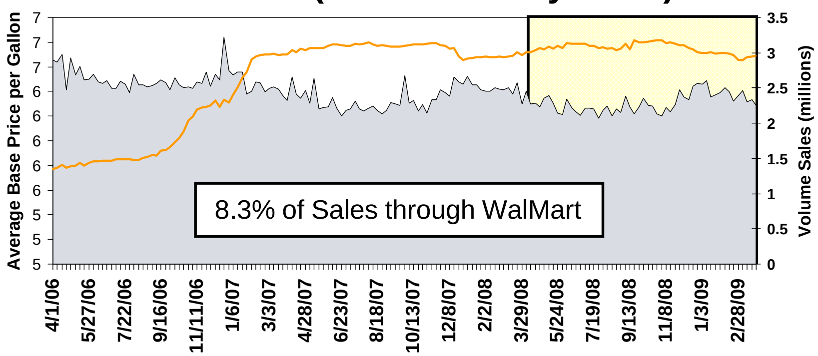




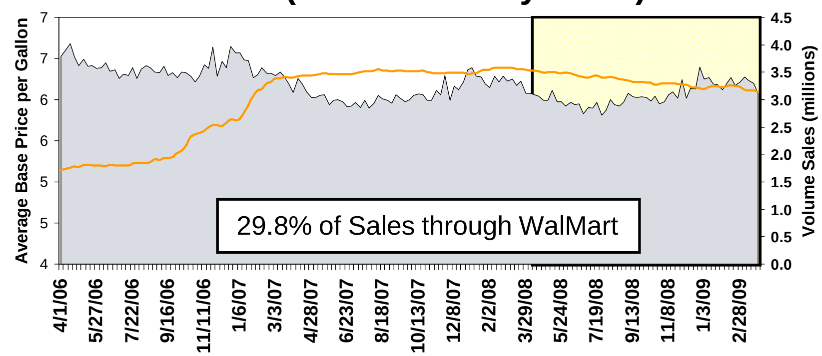
Base Price Elasticity

- Base price elasticity was highest in the West and lowest in the South.*
- Regional price elasticity variation may be due to the prominence of EDLP retailers in the South and variation in the importance of Walmart (for which base price was not applicable)

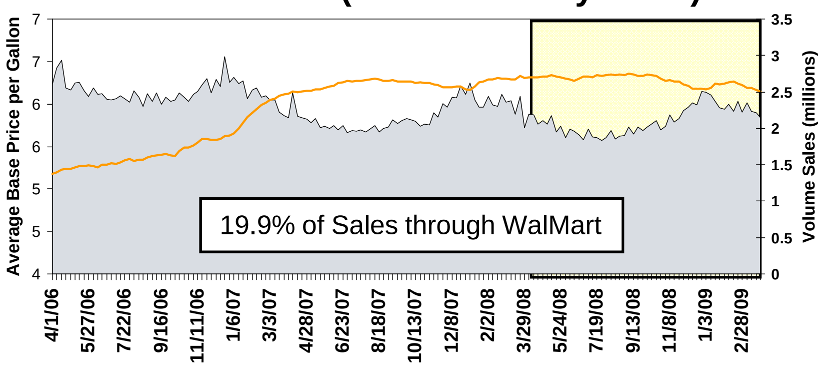
Northeast (Price Elasticity - 0.91)



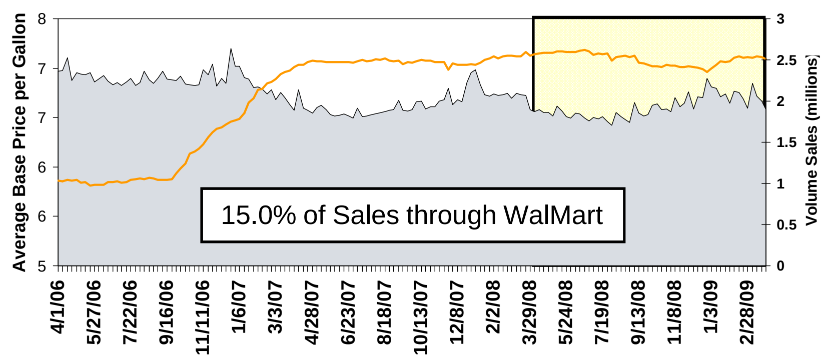
South (Price Elasticity - 0.51)



North Central (Price Elasticity - 0.85)



West (Price Elasticity - 1.07)

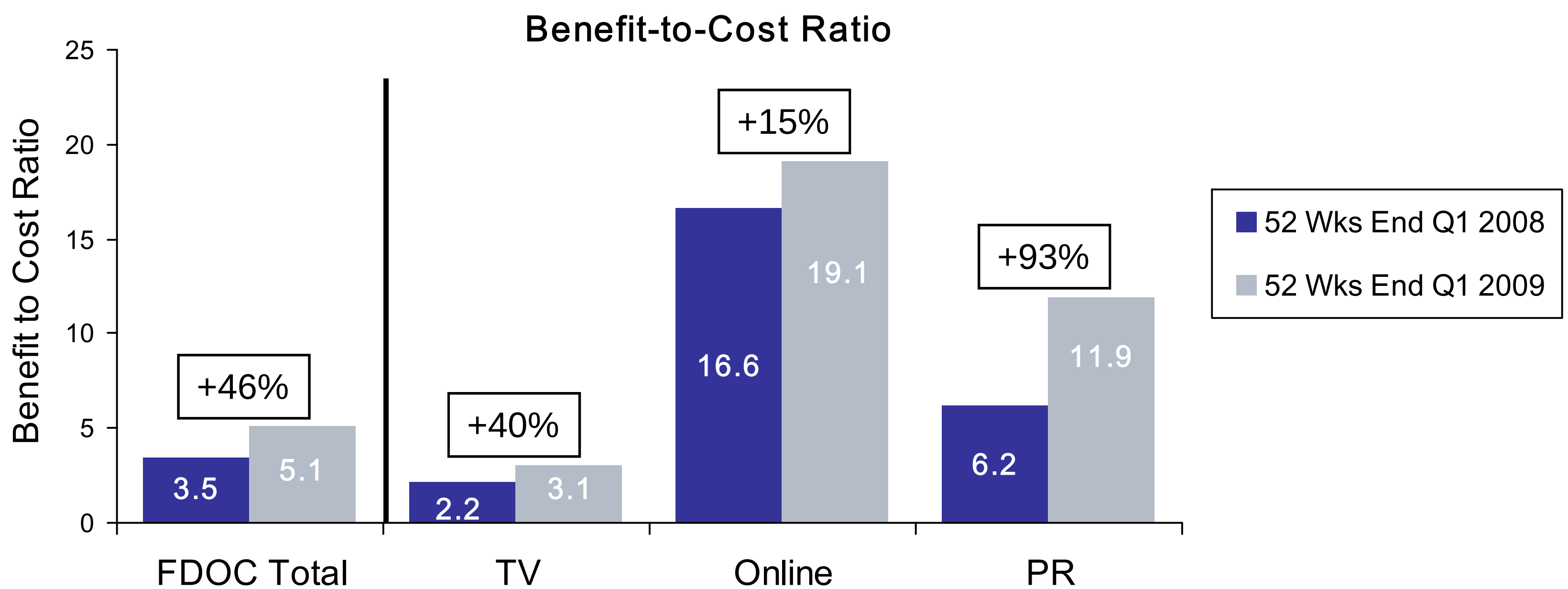


Volume Sales (millions) — Base Price

 * Price variable is measured through Nielsen-measured stores only. Price elasticity is based on sales in both Nielsen-measured and WalMart stores.

FDOC Marketing Benefit-to-Cost Ratios

- FDOC's $16.1 million marketing investment increased U.S. demand for orange juice by 115.9 million SSE gallons in all channels[1] and generated a benefit to FL growers of $74.7 million[2].
- The overall benefit-to-cost ratio (BCR) was $5.1:$1, up 46% from the prior 52 weeks.
- PR and Online have the highest BCRs in part due to lower costs.



Spend ($000,000)	16.2	14.6	14.0	12.4	1.1	1.3	1.0	0.8

[1] Nielsen-measured stores represent 52% of total U.S. volume of orange juice sales. (Source: FDOC, Mark G. Brown)

[2] Based on average price-quantity slope of -0.000625 per million SSE gallons (Source: FDOC, "The Impact of Generic Orange Juice Advertising") and 1,032 million SSE gallons produced by Florida growers on average in 2006-07 and 2007-08. (source: FDOC, Mark G. Brown).

Next Steps

- Update models with data through Q3 2009. Results expected by January 2010.
- Consider adding competitive category pricing and volumetric data as independent variables for next rebuild.
- Consider designing forward media plan to create experiments that can be read with subsequent modeling waves to get learning for improving media ROI.
  - Creative
  - Network
  - Daypart
  - Duration
  - Geography