OJ marketplace changes — implications for growers

By Allen Morris

During the 1970s, 1980s and early 1990s, U.S. retail orange juice (OJ) prices and delivered-in processed Florida orange prices on an annual basis were about 90 percent correlated. Similarly, in the 2006-07 season when processed orange prices increased, reflecting a reduced orange crop following the 2004 and 2005 hurricanes, wholesale and retail OJ prices also increased significantly and OJ consumption declined (Table 1).

However, Florida's crop partially recovered in the following season and fruit prices declined, but retail OJ prices remained high. The result during that and the next season was low OJ consumption, high and increasing OJ inventories and low cash market fruit prices, below growers' break-even costs. Retailers were increasing their profit margins at the expense of Florida citrus growers.

Table 1. Florida Orange Crop, Fruit Prices, Retail OJ Volumes and Prices, and OJ Inventories, 2003-04 to 2009-2010

Season	Orange Crop (mil. boxes)	Orange Prices $ per lb. Sol.	Retail Prices $ per Gal.	Retail Volumes (mil. SSE Gal.)	OJ Inventories (mil. SSE Gal.)
2009-10	134	1.58	5.51	606	549
2008-09	163	1.06	5.61	627	673
2007-08	170	1.39	5.91	624	624
2006-07	129	2.11	5.71	650	363
2005-06	148	1.33	4.69	745	446
2004-05	150	0.91	4.41	795	603
2003-04	242	0.71	4.34	807	795

Sources: USDA National Agricultural Statistics Service, Florida Citrus Processors Association, Florida Department of Citrus

For most consumer food products, retail and commodity prices are not correlated. Corn flake prices do not fluctuate with corn prices and soft drink prices do not fluctuate with sweetener prices. But corn prices and sweetener prices comprise less than 1 percent of corn flake and soft drink prices, respectively. For OJ, oranges were about 30 percent of the retail price until the 2007-08 and 2008-09 seasons when retail prices didn't

Table 2. Processed Orange Prices as a percent of Retail OJ Prices

Season	Percent of Retail Price
2009-2010	29
2008-2009	19
2007-2008	24
2006-2007	37
2005-2006	28

Source: Data in Table 1

Table 3. Market Share (%) Among Major U.S. Food Retailers, 1998

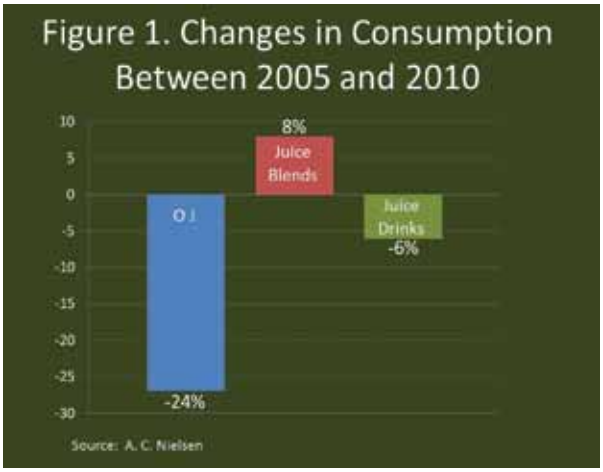
Company	Share	
Kroger	9.6	
Albertson's	8.0	
Wal-Mart	7.1	
Safeway	5.6	
Ahold USA	4.4	Top 5: 34.7%
SuperValu	4.0	
Fleming	3.4	
Winn-Dixie	3.1	
Publix	2.7	
A & P	2.3	Top 10: 50.2%

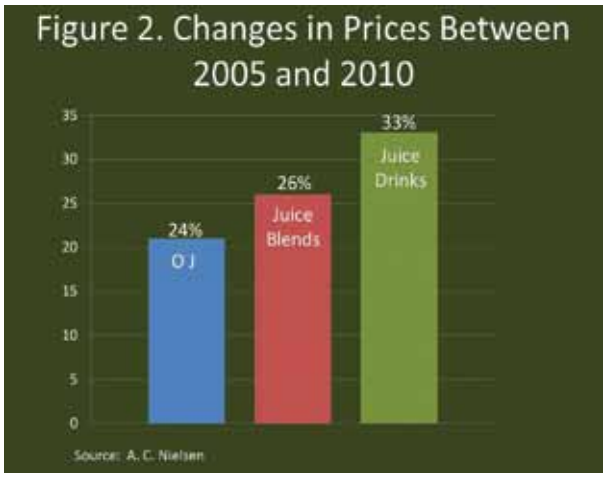
Source: Supermarket News

Table 4. Market Share (%) Among Major U.S. Food Retailers, 2008

Company	Share	
Wal-Mart	29.0	
Kroger	8.6	
Costco	8.1	
SuperValu	5.0	
Safeway	5.0	Top 5: 55.7%
Loblaw Cos.	3.5	
Publix	2.7	
Ahold USA	2.4	
Delhaize America	2.1	
C&S Wholesale	2.1	Top 10: 68.5%

Source: Supermarket News





decline with orange prices, resulting in wider retail margins. By 2009-10, oranges were again about 30 percent of retail OJ prices. So the price transmission process still happens; it just takes about two seasons longer than it used to (Table 2, page 29).

The main reason for this is likely consolidation among retailers. In 1998, the largest five retailers represented about a third of the market. Now they are more than half of the market and the largest 10 are now about two-thirds of the retail marketplace (Tables 3 and 4, page 29). So competition to lower retail prices is less than it used to be; consequently, price declines in response to lower fruit prices take longer.

This is bad news for Florida growers. Given the inherent weather-induced volatility of citrus prices, when prices go up, so will retail prices. But when fruit prices decline, it may take retail prices as long as two years to decline. The result is lower OJ consumption and increasing OJ inventories, which then result in reduced fruit prices. As an example, between 2003-04 and 2006-07, Florida orange production declined by 47 percent and orange prices more than doubled. In response, retail OJ prices increased 36 percent, OJ consumption declined by 23 percent and OJ inventories increased by 85 percent (Table 1). The result: Orange prices dropped to $1.06 per pound solids, which is below current costs of production.

There's nothing the citrus industry can do to shorten the lag time between fruit and retail price declines. But there is something that can be done about low fruit prices in response to high retail OJ prices – grow OJ demand. This will fix a much larger, potentially fatal problem faced by the Florida citrus industry.

Between 2005 and 2010, U.S. per capita OJ consumption in all U.S. retail outlets declined by 24 percent (Figure 1.) but because of reduced OJ supplies, retail OJ prices increased by 24 percent (Figure 2). OJ prices were not the only juice prices that increased. For example, prices of 100 percent juice blends, substitutes for OJ, increased by even more, and are higher than OJ prices (Figures 2 and 3). Unlike OJ consumption, consumption of juice blends increased by 8 percent over the same period (Figure 1.).

Why is OJ consumption declining and consumption of juice blends increasing? Because juice blends are more effectively advertised and merchandised than OJ. And although fruit prices are at record highs, they will not stay that way unless the citrus industry does something to increase the demand for OJ. Back in 2000, the grapefruit sector decided that with processed grapefruit prices more than twice as high as they had been a few years earlier, there was no need to continue their effective grapefruit juice marketing program. Within a few years, grapefruit prices were less than half of what they had been, even though the crop was less than half of what it had been.

When freezes reduced supplies in the 1980s, growers reasoned that the citrus industry couldn't supply the market it had, so why increase the advertising taxes to grow demand. It would only benefit importers. Consequently, OJ advertising expenditures dropped 18 percent below pre-freeze levels. The result was a disaster. Between 1983-84 and 1992-93, combined OJ production from Florida and Brazil increased by 87 percent, inflation-adjusted per capita disposable incomes increased by 37 percent, and retail OJ prices declined by 29 percent in inflation-adjusted dollars (Table 5,

Table 5. Changes in the U.S. OJ Market and the Economy Between 1983/84 and 1992/93

	1983/84	1992/93	Change	
OJ Prod. (million SSE gal.)				
Florida	593	1,131		
Brazil	865	1,595		
Total	1,458	2,726	+87%	
Per capita disposable				
Income (1987$)	13,209	18,153	+37%	
Retail OJ Price ($ per gal.)	3.50	3.39	-3%	(-29% in 1993$)
Retail OJ Market (million SSE gal.)	856	808	-6%	
Florida Processed				
Orange Price ($ per lb. sol.)	1.24	.68	-45%	

Sources: FDOC, A.C. Nielsen, Florida Citrus Processors Association, U.S. Dept. of Commerce, U.S. Bureau of Labor Statistics

page 31). So there was a lot more supply, purchasing power was up significantly, and retail OJ prices had declined. Retail OJ market volume tumbled in spite of all this, and orange prices dropped by 45 percent to $.68 per pound solids ($1.03 in 2010 dollars). Between 1980 and 1994, juice blends and drinks increased their share of the fruit beverage market from 24 to 43 percent, while the OJ share of this market declined from 47 percent to 35 percent (Table 6).

The Triple Crown marketing program that effectively advertised why OJ was different from other beverages and why that difference had value restored growth to the OJ market. An effective merchandising program staffed with 21 merchandisers who regularly visited retailers and pointed out how to increase their profitability by promoting OJ also contributed to restoring market growth.

The same thing can restore the market now, through use of an OJ advertisement that is more effective in showing consumers why OJ is different from other beverages and why that difference has value, and restoring a merchandising effort that covers the majority of the retailers. Creating a more effective merchandising program will no longer require employing 21 merchandisers because of retailer consolidation. It can probably be done with three at relatively little incremental cost.

Some may ask why increase demand for OJ when the industry can't supply the current market. The answer is to increase Florida growers' revenues and profits, thus enabling them to survive huanglonbing (HLB) until a control or a cure is found.

Table 6. Changes in the U.S. Fruit Beverage Market, Selected Years, 1980-1994

	1980	1989	1994
	(Percent Share of Market)		
Orange Juice	47	40	35
Juice Blends and Drinks	24	34	43
Other Juices	29	26	22

Source: AC Nielsen via FDOC

The citrus industry can control its destiny. Will we learn from past mistakes, or pay the price of repeating them?

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