The European orange juice, fruit juice and nectar markets

By Allen Morris

The European orange juice (OJ) market was born out of U.S. efforts to send orange concentrate to hungry European victims of World War II in 1946. However, in the following decades, the European OJ market existed in an environment where availability of quality OJ was limited except in times of world surplus. Florida's and later Brazil's export strategy was to protect the larger U.S. market and its importers with the highest quality juice, especially during supply shortages. There were only minor local supplies of orange juice available to Europe, mostly packinghouse eliminations from Spain, Israel and Morocco. Thus, supplies of quality OJ for the European market were extremely unstable.

As a result, European juice re-processors, packagers and marketers mainly packaged and sold 100 percent juice blends and juice nectars (fruit juice, water and a sweetener). When OJ was available at prices competitive to other fruit juices, its portion in these products was increased. When OJ became too costly, more apple juice, grape juice or another juice would be substituted for OJ and its portion of the blend would decline. The result was that European demand for imported OJ was more than twice as sensitive to price changes as U.S. import demand for OJ. In 1994, according to Euro-Citrus, a European juice re-processor, only 35 percent of the orange juice in Europe was sold as 100 percent juice. The rest went into blends and nectars.

This worked well for the U.S. market, because when a production shortage reduced U.S. supplies and increased prices, European OJ import demand would decline and Brazil would divert product to the U.S. market. When supplies returned and prices declined, Europe would open up and take more imports from Brazil, keeping them out of the U.S. market. Table 1 illustrates this process during the 1980s.

OJ is priced in U.S. dollars on world markets, so changes in exchange rates between European currencies (now the Euro) and the U.S. dollar can change OJ import prices to Europe, even if they are flat or increasing to the United States. For example, between 1985 and 1988, the U.S. dollar depreciated 37 percent against a market weighted average of the German mark

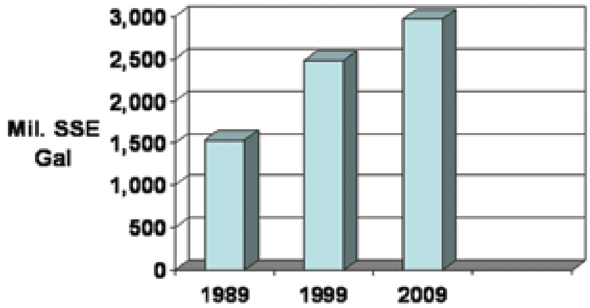
Table 1. Europe's Share of Brazilian Bulk Concentrate Exports Compared to Prices

Year	Share of Exports (%)	Bulk FCOJ Price ($ per metric ton)	Currency Units Per U.S. $[(a)]
1983	51	$1,100	2.930
1985	29	$1,558	4.210
1988	49	$2,217	2.640
2004	73	$1,100	1.244
2006	68	$1,725	1.256
2008	71	$1,850	1.473

(a) For 1977 - 1988, it is a weighted average of the German mark, and the French franc. Weights were determined by each country's share of the European OJ market. Note the increasing values means a depreciating U.S. dollar. For 2004 - 2008, the Euro was used. Note the increasing values means a depreciating Euro.

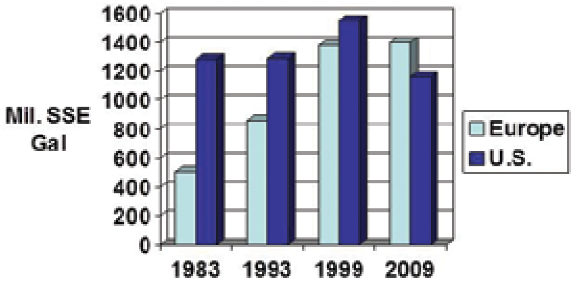
Sources: Foodnews, Florida Department of Citrus, and Board of Governors of the Federal Reserve System

Figure 1. European Fruit Juice and Nectar (FJN) Market During the Period 1989 - 2009



Note: SSE is single strength equivalent
Source: AIJN European Fruit Juice Association Market Report 2010

Figure 2. European and U.S. Orange Juice Markets During the Period 1983 - 2009



Note: SSE is single strength equivalent
Sources: Florida Department of Citrus; Foodnews; Eurostat

and the French franc (major OJ-consuming countries comprising more than half the European OJ market). So in spite of Brazilian bulk concentrate prices that increased from $1,558 per metric ton in 1985 to $2,217 in 1988, and Brazilian supplies that had dropped by 9 percent over this period, Europe increased its share of Brazil's OJ exports from 29 percent to 49 percent over this period.

It wasn't until the 1990s when Florida's OJ supplies rebounded from the freeze-riddled 1980s that Europe began to get a stable supply of quality OJ, primarily from Brazil. However, the European OJ business as well as consumer preferences had evolved as a juice blend and nectar market. As a result, according to discussions with officials from the European Fruit Juice Association, the European market for 100 percent orange juice remains smaller than the market for juice blends and nectars.

Moving to more recent years, it is apparent that price increases have had little impact on Europe's demand for FCOJ imports even though the Euro depreciated against the U.S. dollar between 2004 and 2008 (Table 1, page 31). The European OJ market is very strong because Eastern European countries are substantially increasing their consumption of 100 percent OJ and products containing OJ. More households are becoming new consumers (increasing penetration) in addition to increased consumption per household. In these countries, OJ is behaving like a new and popular product.

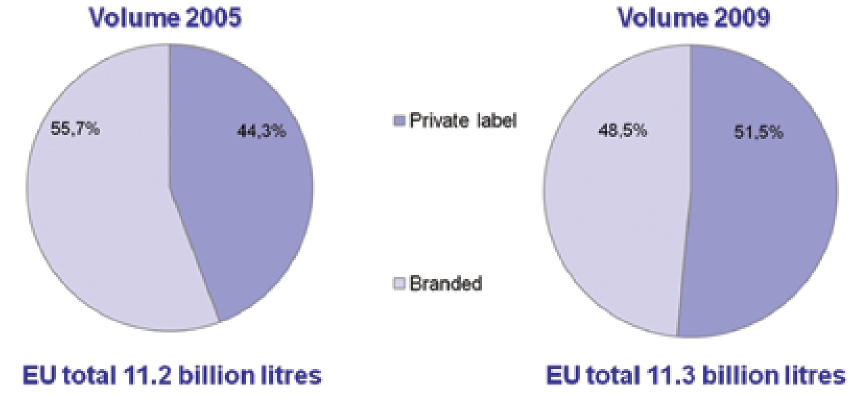
In the 20 years between 1989 and 2009, the European fruit juice and nectar (FJN) market has grown by 93 percent (Figure 1). Between 1983 and 2009, the European OJ market almost tripled, while the U.S. market declined by 10 percent (Figure 2). In fact, the European OJ market is now much larger than the U.S. market and growing, whereas the U.S. OJ market is declining. Private label comprises 52 percent of the market, up from 44 percent in 2005 (Figure 3, page 33). The growth in private label was due to price-conscious consumers affected by the recession buying a lower-cost alternative rather than switching to another beverage. More than two-thirds of the FJN market was take-home consumption, while only 13 percent was consumed in restaurants (Figure 4, page 33). Carton packaging is preferred, although plastic and glass are important also. Germany prefers plastic packaging while the UK, France, Spain and Poland prefer cartons. Orange is the most popular flavor (35 percent), with apple (15 percent) and juice blends (12 percent) second and third.

The top five consuming countries in Europe — Germany, France, the U.K., Spain and Poland — comprise 72 percent of the FJN market. Germany is by far the largest consumer, using about twice as much as France and close to three times as much as the UK. In a study by Zenith International, it was found that fruit juice was preferred twice as much as nectar. The European FJN market is predominantly for shelf-stable products. Only 18 percent is chilled. From-concentrate juices comprise most of the market, but NFC (juice never made into concentrate) is growing in importance. Not-from-concentrate has grown from 20 percent of the European juice market in 2005 to 25 percent currently.

The total orange juice market in Europe is 1.4 billion single strength equivalent gallons (SSE). About 23 percent of this is NFC. More than 90 percent of the concentrate and 60 percent of the NFC — a total of about 75 percent — of the European market is supplied by Brazil. The rest is from the United States, Mexico and packinghouse eliminations from Mediterranean countries.

A frequently given reason for the lack of growth or decline in the U.S. OJ market is that domestic production is down. That was the reason given in the major freeze years of the 1980s when consumption declined by 14 percent, and it's the reason given for the 25 percent decrease in OJ consumption since 1999. If reduced domestic OJ supply is why Florida can't supply more to the U.S. market, then why are U.S. exports of OJ up by 24 percent over the past five years? Europe experienced steady growth in OJ consumption through both of the supply-reduced periods that Florida claims prevented it from supplying a larger market (Figure 2). And Europe has no local source of supply other than a small amount of packinghouse eliminations from Spain, Morocco and Israel. Europe also has little orange juice advertising (appeals to the consumer to buy the product). But it is very big on merchandising (appeals to retailers to promote the product). We are just the opposite — very big on advertising and not very big on merchandising.

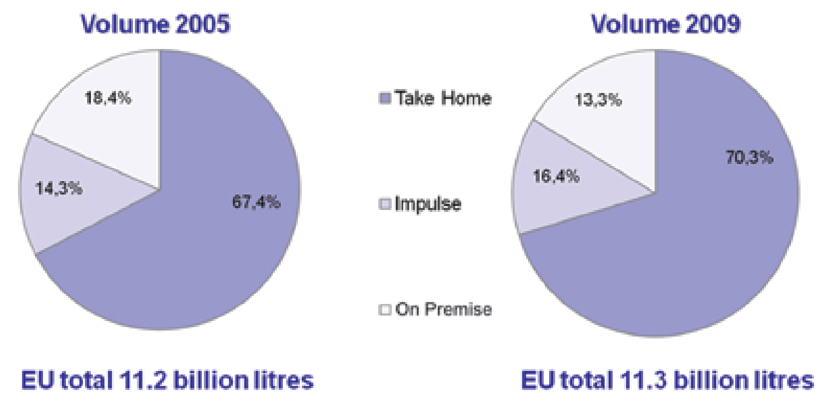
Figure 3. EUROPEAN PRIVATE LABEL VS BRANDED FJN MARKET 2005-2009



Note: 2009 sees notable shift to lower-cost, private-label offerings

Source: AIJN European Fruit Juice Association Market Report 2010, Zenith International

Figure 4. EUROPEAN FJN SALES CHANNELS 2005-2009



Note: Take Home is juice purchased for home consumption; Impulse is bought without prior plans to buy; On Premise is consumed in restaurants.

Source: AIJN European Fruit Juice Association Market Report, 2010, Zenith International

Note: An economic analysis of the U.S. OJ market can be found at www.crec.ifas.ufl.edu.

Allen Morris is an associate Extension scientist and economist at the University of Florida-IFAS' Citrus Research and Education Center.