

## The Orange Juice Distribution Channels: Some Characteristics, Opportunities and Threats

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### Problem Statement, Objectives and Procedures

The fruit juice market is growing for several years, and will be continuing to expand, mainly because these products are aligned with general trends regarding food and beverage consumption.

Several changes are taking place in the fruit juice distribution channels environment in Europe, a growing importance of food-service, the penetration of the global beverage brands (mainly Coca-Cola/Minute Maid and Pepsi/Tropicana), the concentration in retailing and also in the FCOJ (Frozen Concentrated Orange Juice) supply. These changes are threatening and also bringing opportunities to companies.

This paper has two objectives. The first is to provide a general overview about the agents in the European marketing channels of the FCOJ, focusing on the final juice consumers, retailing, food service and the beverage industry. The framework for this part is build up of the marketing channel concepts and functions (Stern *et al.*, 1996; Berman, 1996; Rosebloom, 1999), and data was gathered from the literature about fruit juices and provided by European companies in interviews.

The second objective is to produce a strategic analysis of these agents in the channel, listing opportunities and threats for the following years, using the strategic SWOT (strong and weak points, opportunities and threats) analysis (Johnson & Scholes, 1997). According to the Authors, "a SWOT analysis can be a useful way to summarise the relationship

between key environmental influences, the strategic capability of the organisation and hence the agenda for developing new strategies (p. 174)". The analysis will not be done for a particular company, but for the whole industry, and further, as a suggestion, each company can use the listed points to evaluate itself.

This second objective was reached through qualitative interviews with the agents involved in the distribution channels in Europe, discussing their possible strong and weak points, and opportunities and threats for their position in the channels.

### Understanding the European Marketing Channel of FCOJ

Which marketing channel to analyse?

First a concept should be known. Marketing channels are defined as "a set of interdependent organisations involved in the process of making a product or service available for consumption or use" (Stern *et al.*, 1996, p.1). They are a part (see figure 1) of the whole food chain (in this case, orange chain) which also includes the supply sector, the producers and the industry (analysed in Neves *et al.*, 1998 and Neves 1999).

The overall orange juice chain is very complex, since the fruit is produced in several countries (but mainly in Brazil and USA) and the juice is consumed in almost all countries. Several by-products are also produced after crushing oranges (approximately 43% of FCOJ, 2% of essential oils, 3% of frozen cells, 49% of pulp and pellets, 1% of D'limonene and 2% of others), each of them with their specific distribution channels, which will

not be analysed in this article.

In order to focus this study, it is necessary to delimitate which channels to analyse and what products to consider. Brazil is the major supplier of the FCOJ to the world, which is the most important product of the chain, and Europe is the major importer of FCOJ. So this would be the most important international part of the chain. The focus will be on the distribution channels for the Brazilian FCOJ industry, mainly in Europe.

The FCOJ is exported from Santos (Brazil) in bulk systems (with dedicated vessels and port facilities at a cost of US\$ 150/t) or in drums (cost of US\$ 300/t). The main ports of arrival are Rotterdam (Cutrale and Dyrefuss), Amsterdam (Cargill), Antwerp (Citrovita/Cambuhy), Gent (Citrosuco) and Hamburg (Citrovita).

After leaving the facilities at the European ports, the juice is sold to bottlers (beverage industry), or can be used by the food industry, as an ingredient of flavoured foods (not the subject of this research). These agents sell the juice to several other agents, grouped in retailing and food-service sectors, before the final consumption.

**Table 1.** Beverage consumption and level of saturation (maximum amount possible to drink per person/year), in 1950, 1975 and 1997 (litres/person/year).

Year	Beverage	Tap water	Level of demand
1950	250	450	700
1975	460	240	700
1997	550	150	700

Source: Roads, 1998. (approximation)

The marketing channels flows work in two way: from the FCOJ industry to the final consumers flows the products, services and communications, through different agents that perform negotiation functions and, from consumer to the FCOJ industry, the payments, product ordering and information flows (fig 2).

Characteristics of the agents who form

**Fig. 1-** Description of the simplified orange juice chain

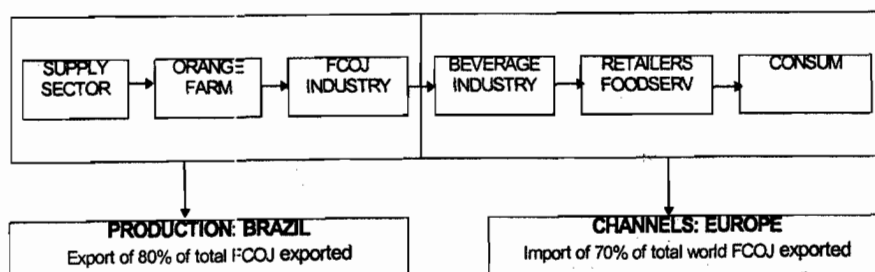
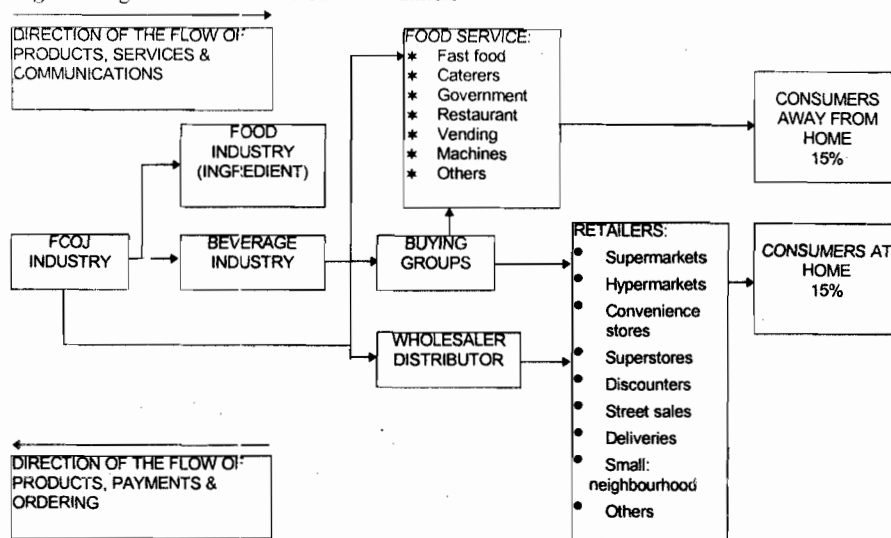


Fig 2. The general FCOJ distribution channels



the distribution channels for the FCOJ chain

This first section is addressed to discuss the European and World consumers, retailing, food-service, and beverage industry (bottling) that are key components in explaining the distribution channels for the FCOJ chain in Europe. World consumption numbers were brought due to the possibility of reaching these through Europe, and to bring an overall picture of the consumption.

### The final consumers

Considering a potential drinking of 700 L/person/year, the beverages are conquering space from tap water since a long time. In 1997, the estimates were of almost 550 L coming from beverages (Table 1).

In the beverages category (table 2), the consumption of soft drinks grew, as an

average, 22% from 1993 to 1997, and fruit juices 14%. FCOJ and diluted orange juice can be used in all categories, except mineral waters.

The total turnover on the world market for fruit juice (Table 3) was of US\$ 30.9 billion in 1996 and growing at rates around 5%/year. When considering the general fruits, more than 60% is consumed "in natura" in the domestic market, around 30% of fruits are processed and the remaining 10% is traded in the international market (Heibroek *et al.*, 1998). The orange fruit shows a quite different picture, with more than 50% of total production being processed, 40% used for domestic consumption (fresh or as juice squeezed at home), and the remaining 10% goes to export markets. Orange reaches almost 50% of world's overall juice consumption.

The major markets are the USA, Japan, Germany, United Kingdom, France and

Russia. Western Europe has a market of more than 9 billion L/year, almost 30% of the world's market. According to Veeneman (1999), on the average, consumers in Western Europe drink around 24 L/person/year of fruit juices, while in Eastern Europe, the consumption is around 5 L/person/year, with a growth of 80% from 1992 to 1996.

Countries in Western Europe still show differences in consumption "per capita", and growth is expected yet in these. Forecasts for 2020 show that these numbers could be 35 and 12 L, for Western and Eastern Europe. Markets where fresh fruit and vegetables are most consumed tend to have lower consumption of juices. Greece, Spain, Italy and Portugal show the smallest numbers (Table 4).

Some mature markets, like the USA, Australia and few countries of Western Europe show slower growth rates in consumption, and are considered stable markets. Even through they are seen as stable, they grew around 15% from 1992 to 1996.

Asia is also considered a promising market, with still very low per capita figures, but with big populations. Consumption in Asia grew 50% in the period 1992/96. South America is also bringing nice results. The consumption in the region grew by 40% from '92 to '96. In Brazil, several production/distribution contracts between FCOJ industry and dairy companies like Nestle, Danone, Parmalat, in order to produce NFC to internal market, are taking place and the market is showing one of the highest growth rates in the world, even with the habit of drinking freshly squeezed juices.

This consumption is being stimulated by several factors.

The beverage industry, through innovation, is launching several new products, like functional drinks (juice based) fruit flavoured, iced teas, sport drinks, energy drinks, fruit flavoured water, fruit based alcoholic beverages, fruit flavoured milk drinks, fruit nectars, dilatables, fruit based carbonates, biological products, exotic flavours, freshly squeezed, fruit juice with juice bits, with yogurt, juice added with vitamins and others.

The main attributes being used in the

Table 2. World volume sales and growth of soft drinks by type, from 1993 to 1997

Product	1993 billion litres	1997 billion litres	% Growth
Carbonated soft Drinks	131.1	158.6	21%
Mineral Waters	46.4	58.3	26%
Fruit Juices	37.0	42.0	14%
Niche Products	16.6	22.9	38%
Soft Drink Total	231.2	281.8	22%

Source: Euromonitor

Table 3. The world market for fruit juices: Volume and value, 1992-1996

Volume/Value	1992	1993	1994	1995	1996
Volume (million litres)	23,635.5	24,681.3	26,170.1	27,361.1	28,772.4
% annual growth	-	4.4	6.0	4.6	5.2
Value (US\$ million)	25,318.8	26,033.4	27,390.8	29,134.0	30,910.8
% annual growth	-	2.8	5.0	6.4	6.1

Source: Euromonitor

Table 4. Per capita consumption of juices and nectars (25 to 99% of juice) in litres/per/person/year, 1972 and 1992 to 1998.

Country	1972	1992	1993	1994	1995	1996	1997	1998
<b>EU</b>								
Germany	12	38.3	39.4	40.4	40.6	41.1	40.2	41.4
Austria	5	29.4	32.7	33.9	34	32.4	32.9	33.3
Sweden	10	25.1	25.7	25.7	25.7	25.8	-	-
Netherlands	3	25.5	23.5	25.2	25.9	26.3	26.7	26.7
Finland	2	20.2	22.9	24.1	24.6	25.1	23.1	22.9
Denmark	10	19.2	20.1	19.5	17.1	16.9	17.0	-
Belgium/Luxembourg	4	18	17.7	18.7	20.2	20.4	20.7	21.0
Greece	2	12.2	12.7	12.8	15.6	14.7	15.2	15.3
France	1	11.7	12.4	15	16.5	17.1	17.9	18.4
Ireland	3	8.5	9.1	10.8	11.4	11.7	12.3	-
Spain	2	12.0	11.7	11.6	11.7	11.7	-	-
UK	2	13.2	13.5	14.4	15.0	15.2	-	-
Italy	2	5.7	8.9	9.3	9.4	9.2	9.6	-
Portugal	-	3.3	3.4	3.7	4.1	4.3	-	-
<b>NON EU</b>								
Australia	-	38.5	39.4	41.5	40.2	41.3	-	-
USA	21	36.8	37.7	38.0	39.0	40.1	-	-
Switzerland	15	31.0	30.6	29.0	29.0	29.7	30.1	29.3
Slovenia	-	-	-	15.7	18.7	19.7	19.5	2.5
Israel	-	20.1	20.5	21.0	21.3	21.5	-	-
Norway	2	14.6	16.8	18.1	18.6	20.5	21.1	21.2
Canada	-	14.2	15.2	16.8	18.4	20.5	-	-
Hungary	-	8.0	9.3	15.2	19.4	20.4	21.8	23.9
Colombia	-	8.1	8.6	13.3	11.9	10.9	-	-
Japan	-	14.7	14.3	15.0	15.4	16.0	-	-
Russia	-	3.7	4.9	5.5	6.1	6.9	-	-
New Zealand	-	9.6	9.7	10.1	10.3	10.3	-	-
Argentina	-	11.4	11.8	11.9	12.1	12.0	-	-
Chile	-	8.8	8.8	9.2	9.4	9.3	-	-
Poland	-	1.8	2.4	2.9	2.3	8.3	10.3	12.8
Slovak Rep.	-	3.4	4.1	5.6	7.7	10.0	-	-
Turkey	-	2.5	2.6	2.6	2.7	2.8	-	-
Russia	-	0	0.3	0.4	0.8	1.8	2.1	4.2
Mexico	-	8.0	8.0	8.3	8.0	8.0	-	-
Venezuela	-	7.9	8.0	7.5	7.3	7.1	-	-
Taiwan	-	4.4	4.9	6.2	6.6	7.0	-	-
Thailand	-	0.5	0.5	0.6	0.6	0.7	-	-
China	-	0.4	0.5	0.5	0.6	0.7	-	-
Czech Republic	-	3.9	4.2	4.4	4.6	5.0	4.9	6.9
Brazil	-	0.4	0.5	0.6	1.1	1.4	-	-
Egypt	-	2.1	2.2	2.2	2.2	2.2	-	-
Saudi Arabia	-	1.6	1.6	1.7	1.9	2.1	-	-
South Africa	-	0.3	0.3	0.3	0.3	0.3	-	-
Indonesia	-	0.9	0.9	1.0	1.0	1.0	-	-
Pakistan	-	0.1	0.1	0.1	0.1	0.1	-	-
India	-	0.1	0.1	0.1	0.1	0.1	-	-

Source: Wild Heidelberg Seminars, in Fruit Processing 3/98\* Forecast; Roads, 1998; Thompson, 1998 and Euromonitor (based on national statistics).

development and communication of new products are fresh, nutritional benefits, functional (with calcium, vitamins), natural, low fat, low additives, fiber, country region of origin and others. There is a segment that desires organic products, creating an opportunity to organize and co-ordinate "organic chains" to offer juices, perceived with a high value.

These new juices and juice-based beverages are targeted to specific groups and activities, like children, singles, physical exercise, health conscious, adventure, fun, authenticity, different drinks for different occasions and others. New ideas of stimulating consumption in other occasions than breakfast are in practice, trying to replace other

beverages.

Table 5. Fruit juice distribution channels in some countries, in %, for 1997.

Countries	Food retailing	Super stores	Other	Outdoors	Services and catering	Vending machines
USA	71.8	5.1	5.8	-	14.4	3.0
Germany	38.6	51.3	2.5	1.5	5.9	0.2
Japan	44.0	8.8	8.0	0.3	14.0	24.9
United Kingdom	82.0	3.0	3.0	4.0	6.0	2.0
Brazil	90.5	1.3	2.3	1.3	3.9	0.7
France	89.4	-	-	-	9.9	0.7
Australia	46.0	26.0	16.0	2.0	10.0	-
Mexico	26.0	20.0	18.0	-	36.0	-
Colombia	24.0	3.0	47.0	7.0	19.0	-
Spain	64.2	5.0	0.8	2.4	25.8	1.8
China	82.9	8.2	-	3.4	5.5	-
Canada	67.1	4.1	13.4	4.5	7.0	3.9
Russia	56.0	3.0	10.0	12.0	19.0	-
Saudi Arabia	48.0	6.5	6.0	4.0	35.0	0.5

Source: Euromonitor

Also the packaging technology is contributing to increasing consumption, through convenient designs, practical, individual sizes and formats (carton cans), vending packs, ready-to-drink, multi-packs, ambient long shelf life juices/chilled and others also helping to attract consumers.

It is possible to say that the juice (and orange, as the most popular) consumption still have room to grow in the international market. Consumers buy these juices from retailers or from food-service.

#### Retailing and food-Service

Where the juice is consumed will be considered as a form to separate retail and food-service. Retailers are all stores where consumers buy orange juice to drink at home or other places, and food-service are all places (or buyers) where juice is consumed at the buying moment, like fast food chains, restaurants, caterers, industrial suppliers (for workers) and others.

It is important to understand that each of these agents have different specific needs regarding packages, quality, frequency, delivery time, brands, sort and others. Another important difference is that in retail, consumers can choose among different brands, while in food-service normally there is just one brand offered, sometimes not identified.

Table 5 shows that food-service account to different percentages of total juice distribution in several countries. According to interviews, these channels are responsible to around 15% of the total juice final consumption, as an average, for Western Europe.

**Retailing: 85% of juice sales.**

Retailing in Western Europe sold more than US\$ 900 billion in food and beverages in 1998. Retailing is growing more in Eastern Europe, while being more stable in Western Europe.

Food retailing is quite diverse. All kinds of stores are operating together in Europe, from superstores to hypermarkets, supermarkets, discounters, convenience stores, speciality stores and street markets. Their needs and focus diverge, making market segmentation, targeting and company/product positioning very useful strategies for the suppliers of these agents. The functions are shifting in the channel as powerful retailers try to transfer some of them to the beverage industry, and start doing others.

ECR (Efficient Consumer Response) is also a tool to reduce all sorts of costs in the channels and shift power within the channel. The hyper/supermarkets are the most important channel, accounting for around 80 to 85% of total retail orange juice sold in western Europe (Table 6).

**Table 6.** Retail distribution of fruit juices in 1995.

Distribution channel	Volume sales
Grocery Stores/Supermarkets	82%
Warehouse Clubs	7%
Mass Marchandisers	5%
Convenience stores	1%
Others	5%

Source: Euromonitor, 1997

The biggest food retailers operating in Europe are mostly from French and German origin (Table 7). Retail chains used to buy through buying groups, increasing negotiation power and efficiency.

Concentration, global expansions and operations, private labels, category management and others are major issues regarding retailing. Recycling of packages is also a major concern, and in 2002, 15% of all juice packages will also have to be returned to the store, in order to recycle, making it necessary to organize the reverse channels.

Retailers offer several services to consumers, like spatial convenience, promoting product availability, smaller lot sizes, assortment breath, and lower

**Table 7.** 20 biggest European food retailers: sales in Europe, 1996

Company	Origin	Food sale US\$ billion	Total Sales US\$ billion	Share of Private label (%)
Intermarche	France	26.3	32.4	-
Rewe	Germany	25.0	30.8	-
Aldi	Germany	22.8	26.5	99
Metro/Makro	Germany	22.4	49.2	-
Promodes	France	21.1	27.5	-
Edeka/Ava	Germany	20.7	24.5	-
Auchan	France	20.3	28.0	-
Tesco	United Kingdom	16.9	22.5	42
Sainsbury	United Kingdom	14.7	17.3	57
Carrefour	France	14.4	22.7	-
Tengelmann	Germany	13.1	17.6	-
Leclerc	France	12.4	23.4	-
Lidl	Germany	11.5	13.2	-
Casino	France	9.1	12.1	25
Asda	United Kingdom	8.2	10.3	30
Safeway	United Kingdom	8.2	9.6	41
Systeme U	France	7.2	8.1	-
Cora	France	6.7	8.8	-
Coop	Switzerland	5.9	8.3	-
Marks & Spencer	United Kingdom	3.9	9.7	100

Source: M+M Eurodata, Rabobank, 1998.

delivery time. These are the general services provided. Depending of the formats, more services are provided, making the price and service variation quite large. Even freshly squeezed juice is sold by retailers, reaching the highest juice prices.

Depending on the type, the retailers perform all the distribution functions: product ownership, stocks, negotiation, promotion to final consumers, backward information flow (data and research), finance and they also take some risks.

#### **Food-service (food away from home: 15%)**

The food-service is made of several kinds of companies. Fast-food chains, industrial

caterers (for workplaces, schools, hospitals, prisons) and restaurants. There are more than 1,5 million food-service outlets in Europe. According to Euromonitor (for Germany, France, UK, Italy and Spain), catering (including contract and self-operated) had around 23% of market share in 1997, fast-food restaurants 4%, hotels/cafes and bars 41% and other restaurants, with 31%. The total food-service market in each of these countries is around 40 to 60 US\$ billion/year. The number of fast-food outlets is growing. Table 8 shows the major contract caterers and sales in Europe, for 1998.

In Western Europe, food-service account to approximately 25% of total food and

**Table 8.** Major contract caterers in Europe in 1998 and sales in US\$ million

Name	Operating countries (first = origin)	European sales
Compass	UK and several other	3,784
Sodexo	France and several other	3,699
Granada	UK	1,127
Avenance	France, UK, Netherlands, Spain	976
Aramark	USA, Belgium, Germany, Spain, UK, Hungary	750
SV-Service	Switzerland, Germany	294
Pedus Service	Germany, Belgium, Lux., Italy	270
Groupepe Apetito	Germany, France, UK, Netherlands	243
Gruppo Onama	Italy	241
Sogeres	France	235

Source: Rabobank, 1998

**Table 9** Major manufacturers and brands of fruit juices in Europe, in 1998.

Country	Producer	Main brands
Germany	Eckes	Granini, Hohes-C, (Koch's, La Bamba
	Stute	Stute
	Dittmeyer (P &G)	Valensina, Punica
	Tiha	Riha Richard Hartung
France	Emig	Emig
	Seagram	Maxime Delarue & Looza
	VJF Joker	Joker, Florida, Poupie, Super Poker
	Marie Brizard	Cidou
	Hero	Les Verges D'Alsace, Rea
	JFA Pampryl (Pernod Ricard)	Pampryl, Bamba, Agruma
UK	Pepsi	Tropicana
	Del Monte Foods	Del Monte, Fruit Burst, Outspan
	Nesle	Libby's C, Um Bongo, Moonshine
	Coca-Cola	Five live
	Gerber Foods	Southern Delight, Sun Pride, Sunny Delight
	Mitsubishi	Prince's
Netherlands	Rixtel	Applesentje, Cool Best, Gondappeltje, Dubbel Drank
	Vrumona	Rivella, Sisi
	Hero	Hero
Italy	Massalombarda /Conserve	Valfrutta, Yoga, Jolly
	Zuegg	Apply, Skipper, Frutta Viva, Soft
	Pannalat	Santal
	Confruit	Confruit
	Del Monte	Del Monte, Batik

Source: produced by the Authors using data from Euromonitor/trade interviews

beverage expenditures by consumers, almost half of the percentage spent by Americans (50% in food away from home). Although it is a growing market segment due to the growing out-of-home expenditures, demand for convenience, increasing time pressure and desire for fun.

The needs of fast food chains are different from small restaurants, which even can buy the juice at the nearest supermarket and these are also different from restaurants with higher-perceived value. Caterers also have different needs depending on where the meals are going to be offered, and brands can be of higher and lower importance (for instance, for airplanes or for workers meals). Caterers and fast-food chains have a growing international orientation and concentration is taking place.

Price comparisons are difficult, and due to the convenience offered to the consumers (environment, service), the product can reach the highest final prices for the chain. Sometimes a consumer can pay US\$ 2 for a glass of 200 mL of orange juice, more than the price of one litre in the supermarket.

Food-service companies also perform several marketing channels functions, taking title and ownership of products, negotiating, promoting, gathering information, financial flows and other services. Mainly as service companies, their needs are also differing regarding

packages, quality taste brands assortment, delivery and other services.

### The Beverage Industry (Bottling)

The bottling industry buys the FCOJ mostly from the Brazilian production. Prices for bottles fluctuated a lot in the last ten years (from US\$ 900 to more than US\$ 2,000/t), bringing high uncertainty.

A large numbers of bottlers are operating, more than 400 companies in Germany and 600 in the rest of Europe, giving a total of more than 1,000 companies (larger than 3 million L/year). It is one of the most fragmented sectors of the soft drinks market, with low margins and general excess capacity of around 30% in Europe (source: Flussiges Obst).

According to Heijbroek *et al.* (1998), no individual company has more than 5% of European market share. **Table 9** shows the major companies with activities in fruit juice in Europe and the main brands.

The juice companies are becoming part of bigger multinationals beverage companies (the food companies are not so active in beverage markets), with

**Table 11.** Market share of brands and private labels in 1997

Market shares	USA	Germany	UK	France
% 3 Biggest	46.7%	31.5%	27%	27.6%
% Private Label	33.5%	31.5%	31%	33.8%
Other Brands	19.8%	37.0%	42%	38.6%

Source: Euromonitor, in Heijbroek *et al.*, 1998.

several acquisitions and mergers. Some examples: Eckes merged with Granini in 1994, and is the larger European player, operating in Germany, Austria, Czech and Slovak Republic and Hungary. Seagram bought Tropicana in 1988 and Dole juices in 1995, Coca-Cola bought Minute Maid in 1960, Pernod Ricard bought Orangina in 1981 and Pepsi bought Tropicana from Seagram in 1998 (US\$ 3.3 billion).

With the entrance of the multinationals and acquisitions, concentration is getting higher. The top 10 bottlers had around 28% of market share in 1992 and 36% in 1997 (**Table 10**).

**Table 10-** Market shares for the Top-10 juice companies in Europe, in 1992, 1994, 1995 and 1997.

Year	Market shares for the top 10 bottlers
1992	27.7%
1994	29.1%
1995	31.2%
1997	36.2%

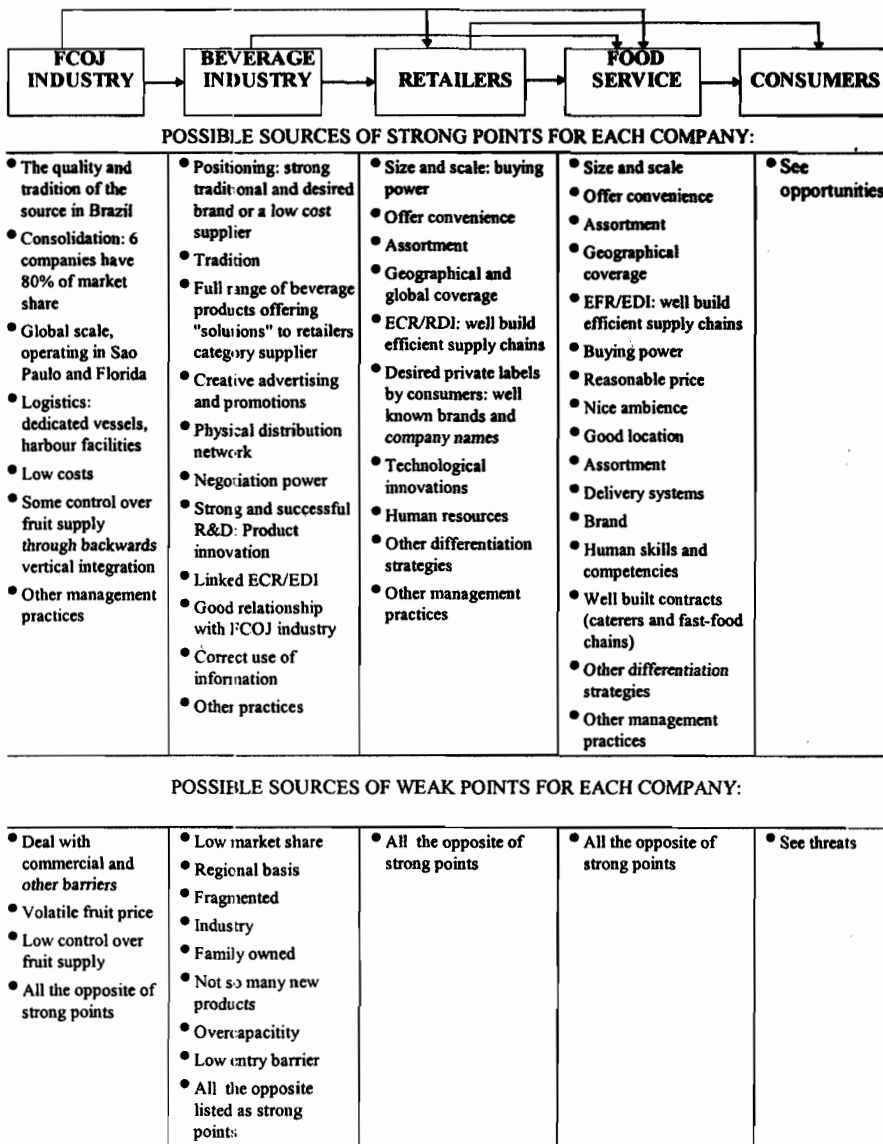
Source: M + M Eurodata in Eckes, 1998.

In the USA, where the multinational beverage companies dominate the market, the concentration is higher (3 biggest with almost 47%). Adding this share with the share of private labels, the 4 major brands have almost 80% of market share (**Table 11**).

Bottlers perform all the typical marketing (distribution) channel functions, taking physical possession and ownership of the product, reprocessing the FCOJ, transforming it in several types of products, providing inventory storage, product transportation, in most times adding a brand, providing information to consumers, adding a sales force, doing marketing research, packages, negotiating, financing (credit checks), taking risks, ordering and doing the payments.

Technological and capital entry barriers are not so high due to relatively low investments in packing lines (estimates indicate that US\$ 1 million cost for a line

Fig 3. The distribution channels: analysis of possible strong and weak points



The second objective of the article is to discuss the 'SWOT' analysis produced by the Authors based on the interviews.

**Strategic analysis**

**Discussion of managerial implications**

Several changes impact the food chains. Consumer sending messages of needs and desires, an increasing number of innovative new products launched by the food industry, a general concentration in almost all industries/sectors involved, and a strong movement towards reducing transaction costs, mainly due to the lower margins in the chain. All these changes have a high impact on the channels.

Analyses of the strong and weak points for each individual case (company in the channels), in order to access competitiveness.

The discussion of what could be strong and weak points in each of the channel parts is summarised in Fig. 3. These listed points can be sources of strong points and power for the companies. The same analysis relating to the weak points.

Fig. 4 lists the opportunities and threats for the companies involved in the orange juice distribution channels. The companies in this juice chain which have less of the possible strong and desired points listed and have more of the weak points listed, are more subject to the threats listed.

These lists of possible strong and weak points, opportunities and threats are far away to be exhaustive. Other factors can be listed. But a major lesson is that several opportunities exist. Recognising market segments and their respective needs, and organising vertical co-ordinated chains (agri-systems, as proposed by Zylbersztajn & Farina, 1998) is a major issue. These specific chains, for example could be organised to satisfy the very specific and different needs of discounters, full service retailers, or fast-food chains, or organic juices segments, among others.

A reduction in transaction costs through these more "contract stable" agri-systems (chains), taking advantage of aspects like lowering stocks, better financing, more

with a capacity of around 10 to 15 thousand packs/hour and also these companies can make free the investment for more future payments in packages material).

The physical assets of the bottling industry are not so specific, because they can be used for the bottling of other beverages and also be removed, with acceptable reallocation costs. Major package suppliers are Combi block and Tetrapack. Some location specificity exists, mainly regarding to juice transport costs and the need to be near quality water supply. Time specificity exists due to the frequency of delivery desired by supermarkets with ECR and fast-food chains, and the product shelf life.

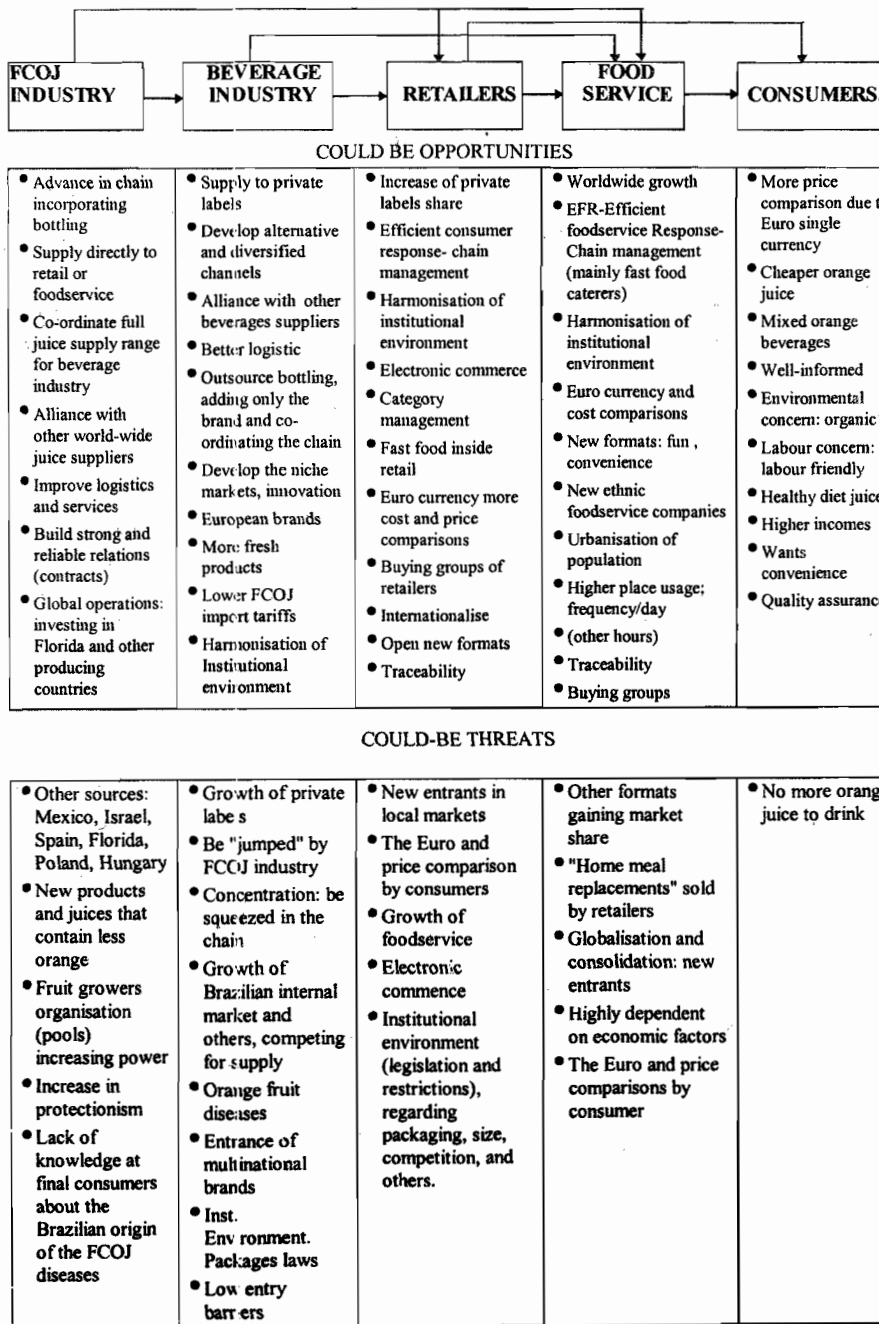
One of the most important specificities are related with technology, for instance the high quality ingredients monitoring

process to bring ingredients monitoring process to bring uniform tastes during all year, research for new product development, requiring specific human assets. Brand is also an important and specific asset. Licensing and distribution agreements are also common in the juice industry, with specific relationship investments.

The needs of the beverage industry in the supply of FCOJ depend on their market positioning (in terms of quality, prices and brand). Due to delivery times Product comes in vessels from Brazil), stock costs (refrigerated) and seasonally supply, the logistical process is very important. Also blending and differentiation through adding frozen cells and other attributes is an important alternative. The more differentiated companies regarding quality also have strong co-ordination efforts monitoring the fruit production and crushing.



Fig. 4. The distribution channels: analysis of possible opportunities and threats



connected logistics and smoother flow of products, faster information flow, more creative promotions and fast adaptability to external impacts are important actions for the companies.

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