Votorantim / Fischer / JV
Squeezing oranges, not consumers

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Introduction

Last year the Commission adopted a decision in what has come to be known as the “orange juice case” (1), as it dealt with the creation of the leading orange juice supplier to the European market.

The Brazilian groups Votorantim and Fischer (“the notifying parties”) wanted to merge their respective orange juice subsidiaries Citrovita and Citrusuco in a full function joint venture (“JV”). The JV would become the largest orange juice supplier to Europe and the merged entity would face only two other sizeable suppliers: the Brazilian juice producer Cutrale and the international agricultural and commodities group Louis Dreyfus Commodities (“LDC”).

During the investigation, it became apparent that orange juice is a homogeneous good and that the major suppliers are vertically integrated to varying degrees. The main concerns customers raised were related to price increases by the JV. Consequently, the Commission’s assessment paid particular attention to the ability and incentive of the remaining competitors to counteract any attempt by the JV to increase prices unilaterally. The capacity constraints of the main competitors along the supply chain were therefore investigated in detail.

The decision provides two important insights. On substance, it shows how the Commission approaches mergers in homogeneous goods markets where concentration on the supply side is relatively high. On procedure, the Commission used a considerable amount of economic data obtained from the notifying parties and their main competitors. The outcome of the case shows that the Commission is prepared to clear cases that are examined in-depth early after proceedings are initiated, as soon as sufficient facts are available. (2)

The relevant markets

The main focus of the case was orange juice production and supply, though the Commission also examined a number of by-products of the juice production process. (3)

Most of the orange juice consumed in Europe is imported from Brazil, which is the most important orange growing area in the world and accounts for 38% of global orange production according to industry figures. Brazil’s share of global orange juice production is, at 58%, even higher than its share of fresh orange production. Brazil and the US, which is the second largest producer, together account for 89% of world orange juice production.

Oranges can be processed into two main types of juice: “frozen concentrated orange juice” (“FCOJ”) and “not from concentrate orange juice” (“NFC”). FCOJ is concentrated orange juice from which excess water has been removed by an evaporation process. Transported to Europe by ship, FCOJ is reconstituted by drinks companies before being packaged and sold to consumers. NFC is not concentrated and retains its original volume from the processing plant to the supermarket shelf.

The notifying parties submitted that the effects of the transaction should be assessed on a market comprising the production and wholesale supply of all fruit juices. But the Commission’s investigation confirmed the market was no broader than that of orange juice only. This conclusion was supported, inter alia, by the responses of the many drinks companies contacted as part of the investigation. Moreover, an analysis of wholesale and retail level pricing data did not prove that orange juice and apple (or other) juice(s) exert a significant competitive constraint on each other that would justify including orange juice and other fruit juice products in the same market.

Having concluded that the relevant product market was no broader than orange juice, the Commission then examined whether it would be appropriate to distinguish between FCOJ and NFC. Although the facts collected during the Commission’s investigation pointed towards both limited demand-side and supply-side substitutability between FCOJ and NFC, which could suggest separate product

(1) The content of this article does not necessarily reflect the official position of the European Commission. Responsibility for the information and views expressed lies entirely with the authors.

(2) Case M.5907

(3) The Commission’s decision has already attracted a good deal of attention. See: Dominique Berlin, Horizontal overlaps: The European Commission clears without any condition the merger of activities of two of the main players in the orange business in Brazil after an in-depth investigation (Votorantim/Fischer/JV), Concurrences, N° 1-2012, n°42282, www.concurrences.com.

(4) These by-products included orange oil and essences, orange terpene, citrus pulp and citrus pellets.
markets, the Commission ultimately left this point open as it was not critical for the competitive assessment of the transaction.

**The concerns raised in the initial phase of the investigation**

The qualitative and quantitative evidence examined during the initial phase of the investigation provided support for different (mutually exclusive) theories as to how prices could increase after the transaction.

The transaction could have given rise to non-coordinated effects. The JV would become the world’s leading orange juice producer and largest supplier of orange juice to the EEA with a market share of 40-50%. Furthermore, on the overall market for the production and wholesale supply of orange juice (encompassing both FCOJ and NFC) to the EEA and, alternatively, in a market for the production and wholesale supply of FCOJ to the EEA, the concentration would have reduced the number of main competitors from four to three. The theory of harm was therefore based on the JV being able to increase prices and decrease output, without being counterbalanced by the remaining competitors, notably due to capacity constraints.

Moreover, Citrovita was the only large FCOJ producer which was not yet active in NFC, so it could have been a potential entrant in the latter segment. Consequently, the transaction could also possibly have led to the elimination of a potential competitor, again a non-coordinated effect.

Finally, the transaction could also have given rise to coordinated effects since it would reduce the number of main competitors from four to three.

The information gathered from the many recipients of the Commission’s requests for information, conference calls, and internal documents combined with market data analysis pointed mainly to a potential distortion of competition via non-coordinated behaviour, notably through an increase in prices.

In order to analyse thoroughly the above theories of harm, the Commission opened an in-depth investigation of the case (“phase two”) on 7 January 2011. This investigation also aimed to assess the impact of the proposed JV on a number of orange juice by-products.

**The phase two investigation**

The phase two investigation explored in detail the various strategies, in particular output reduction, through which the JV could achieve higher prices.

As identified at the end of the phase one investigation, several elements pointed towards non-coordinated effects. The JV would have a combined market share of 40-50%; as the clear market leader, it would be the main beneficiary of a price increase; and the number of alternative suppliers would be limited. These concerns were supported by a number of customer responses to the Commission’s requests for information sent in phase one.

Against this background, the in-depth investigation involved more far-reaching and detailed data requests to the notifying parties and their main competitors, complementing the phase one requests. Specific attention was given to elements with particular importance for switching and capacity constraints, i.e. the varieties of oranges available for processing, the distance between the various plants and orange groves and the existence of idle capacity at the various stages of production (access to oranges, processing, storage/logistics and transport).

This quantitative approach was complemented by comprehensive requests for information addressed to the notifying parties’ customers as well as to their main and smaller competitors in the orange juice market. The investigation was widened through extensive telephone interviews with Brazilian orange growers and further requests for internal documents addressed to the notifying parties.

**Homogeneous products and low switching costs**

In homogenous markets, a merger is less likely to result in anti-competitive effects the lower switching costs are for customers and the less capacity-constrained competitors are. However, both conditions have to be fulfilled simultaneously. Low switching costs ensure that customers can shift their purchases away from the JV in case of a price increase, while the absence of capacity constraints ensures that competitors can respond to such a shift in demand by significantly expanding output, provided they have an incentive to do so.

During phase one, the Commission already had some indications that the relevant product markets were largely homogenous. The phase two investigation enabled the Commission to deepen its understanding of the characteristics of FCOJ and NFC as well as the procurement market, where fresh oranges are traded.

Based on this investigation, the Commission concluded that although there are differences in taste and quality between oranges produced in Brazil and other countries such as Mexico, Cuba or Spain, these differences are rather limited across oranges produced in Brazil. Orange groves are concentrated...
in São Paulo State, a region known as the “citrus belt”, which is as large as Belgium. More than 90% of the oranges processed into juice in Brazil come from the citrus belt. Moreover, all the main orange juice producers have processing plants in the region and procure almost all their orange requirements within the region. Since they all face similar or even identical supply conditions for their inputs and apply the same processing technology, their orange juice has similar characteristics.

Indeed, most customers in the EEA confirmed that the four main players, Citrovita, Citrusuco, Cutrale and LDC, were equally able to provide FCOJ in the requested volumes and quality. Quotes are usually requested from all main players, multi-sourcing is a common practice, switching costs are low – all suppliers have their terminals located in the same area in the EEA (Ghent, Antwerp and Rotterdam) – and switching takes place on a regular basis. The Commission also undertook a detailed analysis of customer-level sales data from the JV and its competitors, including all sales of FCOJ and NFC by the four main suppliers for the years 2006-2009. Figure 1 shows an example of the data analysis undertaken for a large customer:

**Figure 1: Example of a customer X in the EEA switching its FCOJ requirements between suppliers during the period 2006-2009 – Source: market investigation**

![Customer X - Share of Suppliers for FCOJ](image)

Customer X tends to use at least three suppliers but over time it reallocated its purchases from Supplier A (who was the main supplier in 2006) to Supplier C (who was the main supplier in 2007-2009). As of 2008, customer X bought only minimal volumes from supplier A. Customer X also started purchasing FCOJ from supplier D in 2008. For all the largest customers, similar yearly changes can be observed.

In conclusion, the in-depth investigation showed that suppliers competed closely with each other, that switching costs were low and that all four suppliers were generally seen as highly interchangeable by customers.

Therefore, should the JV unilaterally increase its prices following the merger, their customers would face no difficulty in switching significant sales to the notifying parties’ competitors unless these competitors encountered significant barriers to expansion.

**Spare capacity along the supply chain**

While the homogeneity of the product and the ability of customers to switch suppliers are important elements limiting the risk that the proposed transaction would harm customers, this is only one part of the story. In addition, it was necessary to demonstrate that competitors could respond to any strategy leading to output restrictions and price rises. Thus, the ability of competitors, in particular LDC and Cutrale, to expand their production of orange juice became another cornerstone of the case.

As the supply chain for orange juice (FCOJ or NFC) involves several stages – starting with the orange and ending at the port in Europe – the ability to expand production could encounter several bottlenecks. So the Commission investigated plant level capacity and production data at each level of the production and supply chain of orange juice (and FCOJ in particular) starting with the processing capacity as well as storage and transport/logistic facilities available to the notifying parties’ competitors. Detailed data on the procurement of oranges were requested from the notifying parties and their main competitors.

Starting at the procurement level, the phase one investigation identified a number of constraining factors: the land available for planting orange trees, the growing conditions, demand for oranges from the fresh fruit market, the proximity of oranges to the processing plant, as well as the specifications and quality standards of oranges demanded by the bottlers. It was already argued that the four main suppliers were located and procured their oranges from within the citrus belt and therefore were able to deliver almost identical products. The in-depth investigation showed that several suppliers had recently invested in new orange groves beyond the replacement of old trees, ultimately increasing their in-house capacity. Moreover, a detailed analysis of the four main suppliers’ contract portfolios confirmed that each year a significant number of contracts and respective volumes of oranges become available on the procurement market to all processors. This meant that even if the JV were to reduce its procurement of oranges – with the ultimate objective of decreasing output and increasing prices for orange juice – these oranges would in all likelihood be available on the spot market to its competitors. Finally, while the area of land available for growing oranges was limited and faced
competition from other crops, in particular sugar cane, improved technology, better disease control and denser planting were expected to result in increased orange yields from existing groves.

The Commission therefore concluded that there were hardly any capacity constraints at the level of fruit procurement.

In order to assess the capacity constraints at the processing level, the Commission compiled during the in-depth investigation capacity utilisation data on a monthly basis for each plant of the four main orange juice suppliers. This refined approach enabled the Commission to take into account the seasonality of the orange processing industry and to analyse capacity constraints during the peak of the harvest season. The analysis led to the conclusion that spare capacity for orange juice exists at the processing level for the notifying parties’ competitors. For one competitor, about 10-20% of total processing was not utilised in the last two years and the capacity utilisation was even lower just before or just after the peak month. Though some competitors indicated that during the peak of the crop season they fully utilised their capacity in most (but not all) plants, others exhibited spare capacity.

The analysis confirmed the ability of competitors to expand production at the processing level using different avenues in case of an orange juice price increase: some respondents indicated that they could theoretically process up to 10-20 million boxes of additional oranges (in particular by lengthening the production season in order to process the late season fruit), while others replied that they could bridge potential shortages of oranges with stored orange juice as well as by processing additional boxes using their spare capacity. (6)

After processing the oranges into juice, the product needs to be shipped to ports in the EEA and so capacity constraints in relation to transport/logistics could prevent competitors from expanding their supply. However, during the initial investigation as well as the in-depth investigation, almost all competitors confirmed that there are no possible capacity constraints in transport/logistics. While at the time Citrosuco was shipping orange juice for LDC under a contract expiring in 2012, there were no indications that LDC would be short of transport capacity if Citrosuco did not renew the contract and instead shipped FCOJ produced by Citrovita. First, such a reallocation of transport would free up third-party capacity (especially in view of the fact that at the time Citrovita was renting space on third party vessels), which could be used by LDC. Second, the investigation confirmed that alternatives should be available in the market for bulk transport (namely the possibility of leasing space for bulk transportation on third-party vessels). Finally, no substantiated concerns were voiced about potential storage capacity bottlenecks at the terminals in Brazil and in the EEA. Consequently, the Commission concluded that no capacity constraints existed in relation to transport or logistics in the supply of orange juice.

Given the absence of capacity constraints at all levels of the supply chain, the ability of the JV’s competitors to expand production in case of an orange juice price increase was established. However, that ability alone is only a necessary, but not sufficient, condition to counteract a price increase. Thus, the Commission also looked at the incentives of competitors to increase supply. Respondents in the market investigation, in particular the main competitors Cutrale and LDC, highlighted a particular feature of the orange juice production process, namely the importance of economies of scale. According to them, orange juice producers have an incentive to use as much capacity as possible in their plants since “the higher […] capacity usage rates during the season, the lower the per unit processing cost will be.” Indeed, if the JV were to reduce output following the transaction, the optimal reaction of competitors would be to increase their sales. When a competitor sets its output level pre-merger, profit optimization implies that the margins gained on additional quantities equal the profit lost due to the depressing effect that the output expansion would have on the prices of existing sales. If the JV decreased its production to push up prices, the competitors’ additional margins on the additional quantities would increase, giving them an incentive to expand production in response. Due to the absence of capacity constraints in this market, however, competitors would be able to serve the freed demand without substantially increasing marginal cost, which means that the impact on price of such an output reduction would necessarily be limited (and hence not profitable for the combined entity).

As a result, competitors would not only have the ability, but also the incentive to use existing spare capacity to counteract a potential price increase by the notifying parties. Although the proposed transaction would result in the creation of the leading supplier of orange juice, in particular of FCOJ, to the EEA, the Commission was able to conclude that the establishment of the JV would be unlikely to result in anti-competitive effects in the market for the production and wholesale

(6) A box is the standard term in the industry for 40.8 kg of oranges.
supply of orange juice (or alternatively of FCOJ) in the EEA. (7)

**Conclusion**

The case showed in an exemplary way the relevance of the Horizontal Merger Guidelines, which provided the analytical ground for assessing the case. Indeed, the decision carefully analysed potential non-coordinated effects in a homogeneous product market using the concepts of closeness of competition, switching costs, alternative suppliers and the importance of spare capacity. Moreover, the outcome of the case demonstrated that the Commission is prepared to clear cases which warrant an in-depth examination early after the initiation of proceedings, once sufficient facts are available.

(7) The in-depth investigation also ruled out the possibility that the creation of the joint venture could lead to an increased risk of coordination on the orange juice market, as the transaction increases the asymmetry in market share between the main suppliers and does not appear to change the current situation in a way that would make coordination more likely, stable or effective. The Commission also concluded that the proposed joint venture would not lead to anti-competitive harm in the NFC orange juice market, in which Citrovita was not active and was not perceived as a potential competitor to Citrosuco. In the case of the by-products obtained from the orange juice extraction process, the Commission concluded that the JV would continue to face competitive pressure from the same companies that are already active on the orange juice market. In addition, alternatives exist for some of the by-products in certain end applications.