Raising Rivals’ Costs In The Tuna Industry

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Abstract: Vertical mergers are mostly perceived in the literature as a way of reducing production and transaction costs. However, vertical restrictions or raising rivals’ costs (RRC) are taken into great consideration by the antitrust authorities as potential consequences of vertical integration. The case of the French tuna industry seems of particular relevance to look at causes of vertical integration and the implications on competition within the industry. In 1994, a major fishing and transportation company has been taken over by a member of the French tropical tuna oligopoly. This company was previously supplying fish for all the canneries without earning extra profits. Since the institutional change, trade has been diverted and the company is now making substantial profits. With regard to this case study, one could hardly conclude that one of the oligopolists has developed such a strategy to intentionally raise its rivals’ costs. Efficiency and security of supply still provide a good explanation of the vertical integration decision. Nonetheless, uncertainty has been transferred from a competitor to the others after the acquisition. Whenever a risk of shortage occurs, uncertainty is increasing for the rivals, and the supplying costs too. Beyond the contribution of this case study to the conditions under which RRC strategy is rational for vertical integration decisions, the consequences for the French antitrust policy are discussed.

Keywords: Vertical integration, Raising Rivals’ Costs, Competition, tuna industry

1. INTRODUCTION

In the 1984 US Merger Guidelines are reported several cases in which vertical mergers fall under the antitrust regulation. In France, vertical mergers undermining competition are also scrutinized by the antitrust authorities. In previous research, integrating a supplier is mainly explained by a cost reduction objective. It is widely admitted that economies of scale or economies of transaction costs are the underlying causes of vertical integration (Morvan, 1991; Perry, 1989; Sekkat, 1992; Williamson, 1975, 1986).

A few works guiding the antitrust legislation have been carried out during the 1970s (Chevalier, 1977; Jacquemin and Jong, 1977; Perroux, 1972) and more recent strands of research show that raising the rivals’ production costs by integrating a supplier remains a rational behavior (Krattenmaker and Salop, 1986, 1987; Salop and Scheffman, 1983, 1987). Since its beginning in 1983, the Raising Rivals’ Costs (RRC) theory has received many criticisms that attempt to reduce its scope and relevance (Brennan, 1988; Coate and Kleit 1994; Granitz and Klein 1996; Lopatka and Godek, 1992).

Therefore further research is required to determine the conditions under which a firm may increase its rivals’ costs by merging vertically with a supplier. On the basis of a detailed case study in the French tuna industry, we show that the integration of a supplier introduces a potential threat of raising supplying costs to the rivals. This threat comes true whenever a shortage of raw materials occurs. The result is a transfer of the supplying uncertainty to the competitors. First, it leads to reconsider the issue of the vertical integration factors. Secondly, it addresses a question to the antitrust authorities regarding their ability to take this kind of competitive asymmetry into consideration.

2. THE FACTORS OF VERTICAL INTEGRATION

The theoretical background of vertical integration (VI) has long been discussed amongst economists. Good syntheses can be found in many books (Morvan, 1991; Perry, 1989; Sekkat, 1992, Carlton-Perloff, 1998). The most recent ones define five motivations behind VI: to reduce transaction costs, to secure the access to a resource, to internalize an externality, to avoid a government tax or to increase the monopoly power (Carlton-Perloff, 1998). This paper will not look at these different motives. Let’s only note that the main economic reason for integration lies in a cost-benefit evaluation, whatever the origin of the costs: production (Stigler, 1951) or transaction (Williamson, 1975).

This last factor (reduction of transaction costs) is the most frequent principle that can be found in the recent
literature by authors who see the physical capital asset within the relationship between firms as the major determinant of vertical mergers (Klein, Crawford and Alchian, 1978 ; Weiss, 1994 ; Williamson, 1975, 1986). In this literature, the risk of vertical integration would have less to do with increasing co-ordination costs than with the lack of incentives to co-operate and to disseminate information (Grossman and Hart, 1986). It is nonetheless difficult to reduce the motives of VI to the mere goal of a more efficient organization. Some authors do not hesitate to address the traditional issue of Industrial Organization : efficiency or market power (Hart et Tirole, 1990 ; Sekkat, 1992) ?

In that perspective, the recent controversy put the emphasis on VI as a means to do harm to a rival. Basically, the Raising Rivals’ Costs (RRC) theory, introduced by Salop and Scheffman in 1983, has been often criticized and evaluated (Brennan, 1988 ; Coate and Kleit 1994 ; Granitz and Klein 1996 ; Krattenmaker and Salop, 1986 ; Lopatka and Godek, 1992).

This theory tries to demonstrate that a firm may operate to raise its rivals’ costs by developing an exclusive relationship with the suppliers. This relationship covers a wide range of contracts, from input overbuying to “naked exclusion” (the supplier is committed contractually or tacitly not to sell inputs to the firm’s rivals) or VI of the upstream company (Brennan, 1988 ; Perry, 1978 ; Schmalensee, 1973).

The latter represents a way of catching market power, as shown in yet old articles under the name of “price squeeze” (Chevalier 1977, Jacquemin 1979). Such a strategy consists in vertically integrating a supplier that cannot be avoided by the horizontal rivals. The intermediate good is sold to the rivals at a higher price than the internal price fixed by the integrated firm. The latter can therefore fetch lower prices for the final good. The non-integrated rivals’ gross margins become “squeezed” between the higher cost of raw materials and the lower price of the final commodities so as to remain competitive.

Many criticisms argued that the RRC theory does not add anything to the traditional theories framing the antitrust policy (Boudreaux, 1990 ; Brennan, 1988 ; Coate et Kleit, 1994 ; Lopatka and Godek, 1992). Indeed it is counter-intuitive as a firm hardly finds an interest in buying inputs at a higher price than those paid by the competitors. Furthermore, a supplier would hardly relinquish part of the demand (like in the case of naked exclusion).

Nonetheless the US antitrust policy reports several cases in which vertical merger can be considered as being anti-competitive : whenever VI sets up entry barriers that foreclose non-integrated firms of the downstream market, or raises irregularly the rivals ‘costs, or refrains competitive behaviors either for the integrated firms or the rivals (Parker, 1998).

In France, the 1986 antitrust Act (Ordonnance du 1er décembre 1986), in its 4th heading devoted to restrictive practices, convicts for anti-competitive behavior those firms having discriminatory and exclusive practices when buying or selling products. Even when close relationship between a supplier and a customer is economically justified (Glais, 1995), vertical operations are likely to affect competition and therefore are carefully scrutinized by the antitrust authorities. A detailed case study of the French tuna industry sheds light on the circumstances under which competition is threatened.

3. THE SUPPLYING CHAIN OF THE FRENCH MARKET FOR TUNA PRODUCTS

As for many industries, the French canning industry has concentrated a lot for the last 20 years. It started long before because only 14 companies have survived in year 2000 out of 250 plants existing after the second World war.

Other moves have changed the nature of this industry. Production includes more processing of new species such as tropical tuna (yellowfin and skipjack) instead of former pelagic species like sardine or mackerel. Since the 1950s, to seek after new raw materials has led companies to move abroad closer to the fishing zones (Côte d’Ivoire, Madagascar, Seychelles Islands). Most of the French production of frozen tuna is caught off the coast of these countries where it is landed (hence exported) for further processing by French-owned plants. Only a very low quantity of fish (less than 20%) is processed in France. On the other hand, most of the final goods are marketed in Europe.

This short description of the value chain demonstrates the important role played by logistics in the supply of the French market, either with intermediate commodities for the processing plants (frozen whole or filleted fish), or with final goods (canned fish). As a consequence, the French industry has set up a few decades ago common facilities to carry (Compagnie BREtonne de CArgos Frigorifiques - Cobrecaf) and sell (SOciété de VEnte de Thon CONgelé - Sovetco) tuna products. The ownership of these two companies has been steadily disputed by the canneries.
4. RIVALRY FOR THE CONTROL OF THE SUPPLYING FACILITIES

Amongst the 20 surviving companies at the end of the 1980s, the four biggest were Saupiquet, Pêche et Froid, Pêcheurs de France and Paul Paulet. At that time, Saupiquet was owned by Compagnie de Navigation Mixte on the stock exchange market, Pêche et Froid had a family structure of capital, Pêcheur de France belonged to the co-operative sector and Paul Paulet is owned by Starkist, the latter being hold by the big US company Heinz. These four companies represented three quarters of the 4 billion French Francs industrial turnover in 1995 (i.e. about 600 million Euros).

The four rivals were supplied for all or part of their inputs by Sovetco, whose majority of shares was hold by Cobrecaf\(^1\). The latter was founded in 1965 by André Delhemmes in Concarneau, major landing port of tropical tuna in France. The company is involved both in tuna fishing and freezing transport. In 1994, it owned directly or not a fleet of 7 freezing cargos and 13 fishing purse-seiners, employing some 433 workers (out of which 390 sailors) for a turnover of 500 million FF (76 million Euros).

In 1987, the capital of Cobrecaf is shared between the Delhemmes family (64%) and Starkist (36%). In 1988, in spite of an offer from Starkist, the members of the Delhemmes family sold their shares to the CFPM company (Compagnie Financière de Participation Maritime), this firm being equally hold by Pêche et Froid (Delpierre family) and Sopar-Cofibois (a fishing company) (Charneau, 1989). The capital of Cobrecaf had the following structure until 1993 (figure 1):

![Figure 1](image1)

Figure 1: Simplified structure of Cobrecaf’s capital in 1993

While the industry is facing a major worldwide demand crisis due to dolphin by-catches in tuna fishing, the Delpierre family, owner of the Pêche et Froid company, sold 58.44% of the shares in 1993 to OPTORG, holding company of the Moroccan group ONA (Omnium Nord-Africain). An anonymous charge was then laid against this operation on November 16\(^{th}\), 1993. At that time, ONA was already involved in the industry through its association with the co-operative group Pêcheurs de France, one of the four biggest companies in France.

The matter is submitted to the Competition Council (in charge of the implementation of the antitrust policy in France) by the Ministry of Economy. Referring to article 38 of the 1986 Act, the Council stated that this concentration “did not bring a sufficient contribution to the economic progress to compensate the harmful effects on competition” (Conseil de la Concurrence, Avis n° 95-A-1, February 7\(^{th}\), 1995). However, it added that “this acquisition could be authorized by the Ministry of Economy provided that the two companies Pêche et froid and Starkist are not in a collective dominant position on the national market of canned tuna through the control of Cobrecaf”.

A steady dispute took place between Sopar-Cofibois and ONA about the control of CFPM. In July 1994, after several law proceedings, P. Le Flanchec, head of Sopar-Cofibois, sold his shares of CFPM to Paul Paulet (Starkist). Unfortunately, the two new share-holders of the company (Starkist and ONA) did not get along either. The Quimper trade court decided the liquidation of CFPM. The Competition Council also asked Starkist to smooth down its position by selling part of its shares in Cobrecaf. In October 1994, 16 % became the property of the canning Italian firm Palmera. The breaking-up of CFPM was definitive in November 1995, as a merger between CFPM and Cobrecaf was accepted by the trade court of Quimper. At the same time, the Ministry of Economy, advised by the Competition Council, decided that Starkist and ONA could not own individually more than 36% of the new company. In order to comply with the Ministry recommendations, Starkist sold 18% to the US maritime transport company US Marine Chartering (USMC). The capital of Cobrecaf became:

![Figure 2](image2)

Figure 2: Simplified structure of Cobrecaf’s capital in 1996

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\(^1\) The shares of Sovetco belong to a holding company (Sovetpar) in proportion of each vessel’s capital. For the time being, Sovetco is mainly hold by Cobrecaf and an independent tuna fishing company, Chevannes-Merceron-Ballery (CMB).
Interestingly, Starkist is one of the major customers of USMC and the latter could easily be considered as an allied in the board of Cobrecaf. The new breakdown of the capital gave the control of Cobrecaf to the US company Starkist. Moreover, after a long dispute with Starkist, ONA offered a gentlema agreement in 1995. This agreement resulted in a common strategy within Sovetco to sell frozen tuna (DGCCRF, 1995).

This agreement was confirmed by the head manager of Pêche et Froid\(^2\), resulting in a new breakdown of the share-holders. In accordance to the judgment of the Competition Council, ONA was allowed to buy part of the USMC shares to reach the blocking minority within the administration board (another small part was sold to Palmera in the same move). The new share-holding structure became in 1998: Starkist 36\%, Palmera 16\%, USMC 14.66\% and ONA-Pêche et Froid 33.34\%.

One could easily conclude that Starkist-Paul Paulet took control over Cobrecaf after the law dispute of 1993-95 and found an agreement with the minor share-holder ONA-Pêche et Froid in order to define the common strategic line of Cobrecaf. This line appeared to have affected the positions of both companies.

5. THE IMPLICATIONS OF THE CONTROL OF COBRECAF BY STARKIST

Since Starkist-Paulet became the decision maker within the Cobrecaf board, the economic results have increased significantly (table 1). The turnover had not stopped declining between 1990 and 1994, partly because of the falling prices of tuna, when it stabilized once after the conflict between Starkist and ONA. The improvement of the net result is even more outstanding since 1994. For the following years, it reached some very unusual values in such an industry.

Once assured the control over Cobrecaf, hence over Sovetco, the two major share-holders Starkist and Pêche et Froid started to divest in France and to invest abroad substantially in processing facilities closer to the fishing zones. In 1994, Starkist closed down the cannery of Pornic in France and re-invested 10 million US$ in Ghana to modernize the PCF plant (Pioneer Food Company) shared with the local firm Mankoadze. The plant, whose production was stopped in 1987, was thereafter expected to produce 30 to 40,000 tons of canned tuna for the European market. At that time, Starkist also took a 60\% share in a big tuna canning factory on the Seychelles Islands. The firm announced a modernization plan of its new-controlled factory to supply the European market through Paul Paulet.

ONA-Pêche et Froid undertook similar operations at the same time. First closing down its 20,000 tons factory of Etel (Le Bayon, France), the company upgraded its canning plants of Côte d’Ivoire to suit to the European safety standards and mostly to raise its processing capacity up to 45,000 tons. The cannery was supplied both by the own fleet of the group (three vessels providing 40\% of the fish) and by Sovetco for the remaining 60\%.

The lock-outs in France and the development of processing capacities in Ghana, Madagascar or Seychelles Islands were likely to divert trade flows of tuna products. For the time being, Sovetco does not sell any more frozen tropical tuna in France. In 1995, 30,000 tons of fish were landed in Concarneau (France), falling down to some 12,000 t in 1996 and only 1,000 tons in 1997.

This new policy introduced a threat to the competitors’ supply. Except CMB which is marketing its tuna products through Sovetco, only two other fishing companies are competing on the French market: ACF-Armement Coopératif Finistérien- and Saupiquet Armement, hold by Saupiquet. ACF owned 13 vessels mainly fishing for Pêcheurs de France, both belonging to the same co-operative group. Saupiquet used to be a full member of Sovetco for several years, when a dispute split up the structure for the first time in 1988. If the other companies re-joined the structure afterwards, Saupiquet never did. With six vessels, the company can supply the plants settled in France with tuna fillets and part of the overseas canneries (Côte d’Ivoire, Senegal), the remaining raw materials being bought from Sovetco.

Consequently, the rivals of Starkist and ONA rely on the selling policy of Sovetco for part of their raw materials. This dependence does not create much trouble in case of abundance. However, in the periods of shortage, Sovetco tends to supply first its share-holders’ owned canneries. Indeed, the logistics of Cobrecaf-Sovetco has no equivalent in terms of price and quality (DGCCRF, 1995). The rivals must therefore buy fish from other trading companies at other conditions. They then have to face extra costs of supply.

\(^2\) In the Fishing newspaper (Le Marin, 20th November, 1998), the chairman-director André Ferras said: “Starkist and Pêche et Froid managed to find a good balance. We both have the same interests”.
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<td>Turnover</td>
<td>237.4</td>
<td>188.0</td>
<td>169.1</td>
<td>152.1</td>
<td>128</td>
<td>132.2</td>
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<td>Net result</td>
<td>n.d.</td>
<td>-4.8</td>
<td>-2.3</td>
<td>+1.6</td>
<td>+33.4</td>
<td>+18.9</td>
<td>+19.5</td>
<td>12.0</td>
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<td>% NR/T</td>
<td>-</td>
<td>-2.5%</td>
<td>-1.4%</td>
<td>1.0%</td>
<td>26.1%</td>
<td>14.3%</td>
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Table 1: Results of Cobrecaf, maritime freezing transport division
(Source: CRCI Bretagne)

6. DISCUSSION

6.1. Raising Rivals ‘Costs

Cobrecaf-Sovetco used to work as common facilities for the whole French industry, just as non-profit organizations. All the canneries were able to use it more or less equally, except in a few reported cases\(^3\). This situation remained after 1988 and the new sharing of the capital between Starkist, Sopar and Pêche et Froid. This fragile balance was broken up in 1993 when ONA took over Pêche et Froid.

This operation was the starting point of the conflict for the control of Cobrecaf between Starkist, ONA and SOPAR. At the end of the conflict, two major shareholders had the power, Starkist and ONA. Starkist was clearly the decision maker, and managed to get on with the minor share-holder ONA. Thereafter the economic results of the company recovered significantly, both share-holders divested in France and invested quite importantly abroad (Madagascar, Seychelles, Ghana).

In case of fish abundance, the control over Cobrecaf-Sovetco by Starkist has no direct consequence on the rivals’ supplying costs. There is no restriction of quantity, nor raising prices. Sovetco has no incentive to refuse to sell fish to some of the processors, because the latter would find frozen tuna without any problem. On the other hand, a scarcity in the Atlantic fisheries would bring out a different situation: this new share-holding could affect the marketing strategy.

Starkist can put the pressure on Sovetco and thus push the rivals to buy raw materials from other sources (mainly from the Indian Ocean), passing through other trading and transport companies (Sea Deal, Interpral, Secopa, etc.). Purchasing fish caught in the Indian Ocean increases significantly the freight cost, thus raising final prices of the canneries\(^4\). In such a case, vertical integration would raise the costs of the non-integrated firms\(^5\).

6.2. The Factors of Vertical Integration

The previous statement puts the emphasis on the causes of vertical integration. Clearly, the purpose of cost reduction lies under the decision of Starkist and ONA to take control over Cobrecaf. The development of production capacities requires supply security by internalizing a supplier that has no actual substitute on the market. However, such a monopolized control introduces a threat to the rivals in case of shortage. When it happens, the threat comes true and produces cost asymmetry between companies competing on the same final market.

In other words, the case study shows that the two explanations of vertical integration are more complementary than substitutes. When scarcity results in a greater uncertainty for the firms, a company is likely to secure its supply by integrating a supplier (Williamson, 1975, 1986). If successful, this strategy introduces a threat to the rivals’ supply by increasing their uncertainty. Therefore an objective of production and transaction cost reduction motivates the decision of

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3 SAPAL, Senegal factory of Saupiquet had faced problems of supply all along the 1970s, partly due to unfavorable delivering policy of Sovetco (Charneau, 1989, p. 49); ACF laid a charge against Cobrecaf-Sovetco at the end of the 1980s after the latter had refused to carry ACF fish on its freezing cargos. Cobrecaf was finally discharged.

4 A man in charge of buying fish in a Starkist’s rival company explained during a face-to-face interview that he faces some problems in supplying the factories in case of scarcity in the Atlantic Ocean. “The extra-cost is estimated to 1.20 to 1.30 FF per kilo; if it is charged on 10% of the total raw materials, the overall cost is increased by 10 to 20 centimes per kilo”, he said.

5 Interestingly, Saupiquet took over the trading company Sea Deal in 1997.
vertically integrate the asset specificity of a supplier. However, this decision finally results in raising rivals’ costs whenever a shortage of fish occurs.

For a company involved in an industry where exists such a risk, two strategies may cope with it. The first one is to adopt a collective behavior with the competitors by setting up a joint supplying structure. This common organization may benefit to the whole industry by spreading out the costs of a potential shortage of raw materials to the whole industry. Sovetco appeared to work like this until 1993.

The second one is more opportunistic because control over the late joint structure pushes the holding company to use it for its own interest in case of shortage, while the company still works in a common fashion in other cases. Sovetco appears to follow this line since 1994 and the acquisition of Cobrecf by Starkist.

6.3. The Implications for the Antitrust Policy

The case study shows how vertical integration of a supplier has resulted in asymmetrical relations between the producers of canned tuna. VI is indeed the factor of market domination formalized by the RRC theorists (Krattenmaker and Salop, 1986, 1987; Salop and Scheffman, 1983, 1987). The features of domination are nonetheless fairly different from those stated by these authors. The objective is not to fully foreclose a competitor of the upstream market (naked exclusion), but to transfer the supplying risk previously supported by the whole industry to the sole competitors excluded from any property right on the supplier.

One should note that the antitrust authorities have not prevented this transfer of risk, mainly because the consequences are not so detectable. The strategy is quite different from the more obvious price squeeze strategy. The latter says that control over a supplier gives higher prices of intermediate goods for the rivals as compared to the internal price of the integrated firm (Chevalier, 1977). In the present case study, the price levels of raw materials bought by the canneries to Sovetco do not change, and follow pretty well the pattern of worldwide prices. On the other hand, what may change is the quantity sold through the organization to some processors, pushing them to buy somewhere else. The vertical restrictions are casual (in case of shortage) and represent only a small part of the rivals’ supply, making the strategy less perceptible and less condemnable by the antitrust laws. Such an observation then legitimates the control of vertical mergers by the antitrust policy, taking into better consideration the transfer of the supplying risk.

More generally speaking, firms on a market are considered to comply with the competition rules as far as the competitive behaviors are fully autonomous (Glaes, 1999). It seems nevertheless difficult to ignore the interdependence of firms’ decisions, and mostly the consciousness of this interdependence by the major oligopolists of the tuna industry. More specifically, one should hardly consider that the firm undertaking to reduce uncertainty by internalizing a transaction ignores the consequences for the rivals in terms of raising their own uncertainty.

The results of this strategy are clearly demonstrated by the commercial positions of the canneries after the vertical merger. The example of Ghana shows that French exports of frozen tropical tuna to this country (mainly marketed through Sovetco) have increased significantly since 1995. With this new source of supply, Ghanaian exports of canned tuna to France or the United Kingdom have increased substantially. The latter has started to substitute Ghanaian tuna in 1995 (5,000 t in 1995, 12,000 t in 1998) for previous French exports to the UK which fell down to 2,400 t after taking off in the mid-1990s (5,800 t in 1995 and 7,000 t in 1996).

The vertical control of the marketing chain by Starkist and the re-allocation of its investments, combined with the consequences for the rivals’ supply in case of shortage and the trade diversion on the European market, deserves greater scrutiny by the antitrust authorities. The whole strategy of the company has to be analyzed, even though the vertical merger only covers one segment of the worldwide market. A strategic decision should only be evaluated in a globalized context by the antitrust authorities as soon as the competitors do not restrict their competitive field to a single territory.

7. CONCLUSION

In recent works, various authors have attempted to demonstrate that vertical integration is sometimes explained by a willingness to do harm to the competitors (Krattenmaker and Salop, 1986, 1987; Salop and Scheffman, 1983, 1987). This research shows a more shaded result, as the reduction of transaction costs still appears as a good reason for VI. In the tuna canning industry, it is not possible to prove that the decision of taking over a supplier is planned to prejudice the rivals’ interest. The main reason seems to be the security of supply along with the development of production capacity.
However, the vertical merger introduces a potential threat of raising costs which comes true in case of shortage of raw materials. Consequently this threat produces a casual asymmetry between the competitors according to the property rights on the supplier. The individualization of property rights, formerly hold collectively by the industry, has resulted in a new sharing of the supply risk, for the profit of the share-holder and to the detriment of other processors. Such an observation is not really taken into consideration by the antitrust authorities for two reasons. First, it is hardly detectable. Secondly, the worldwide field of competition between firms does not fit with the national enforcement of the antitrust policy.

Possibly, similar strategies can be observed in other industries where a structural uncertainty frames the supply of raw materials, like in the fishing industry. This issue could be dealt with in future research work, in order to better understand how the control over a supplier may affect the downstream competition. Last but not least, it seems necessary to re-consider the implications of vertical integration within the antitrust policy in the context of globalization.

References


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