EXPERT OPINION

COMPASS LEXECON

WHEN INFORMATION IS NOT (MARKET) POWER

USING QUANTITATIVE TECHNIQUES TO SHOW THAT INFORMATION EXCHANGE DID NOT FACILITATE COLLUSION

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Abstract

On January 2015, the French competition authority claimed that some car rental companies infringed competition law by sharing monthly information related to revenue, number of contracts signed, market shares and average contract value at twelve airports in France. The Authority was concerned that this information exchange could facilitate collusion. Compass Lexecon examined the rental companies' behaviour and market outcomes, using a range of statistical techniques. We showed that the information exchanged did not provide a reliable basis for coordination, that the rental companies did not appear to use the information as the Authority's theory predicted and that information exchanges did not cause changes in market outcomes. This led the Authority to drop its objections.

Introduction

On 12 January 2015, six car rental companies[1] received a statement of objections from the French Competition Authority ('the Authority').

The Authority objected to the rental companies' sharing of historic economic and commercial data relating to monthly revenue, number of contracts signed per month, monthly market shares and monthly average contract value at twelve airports in France. The Authority considered that this exchange of information provided a basis for several possible infringements, such as:

- co-ordinating to maintain market shares, which would have ensured no undercutting amongst car rental companies; and
- a general anticompetitive impact of the information exchanged on the autonomy and independence of the car rental companies in setting their commercial strategies.

We demonstrated that such objections were not consistent with the facts of the market, by conducting empirical analyses to assess the possible effects of the dissemination of information. We showed that, in the case at hand, the information exchanged did not provide a reliable basis for coordination.

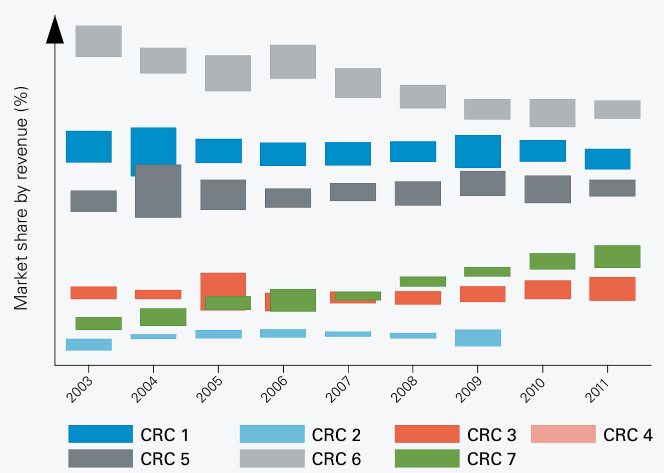
Our analysis had a decisive impact, as it led the Authority to drop its objections.

Market shares were more variable than the Authority had believed

The Authority was concerned that firms were coordinating to stabilize market shares and noted the relative stability of annual market shares in the five largest French airports between 2003 and 2011.

We showed that this alleged stability only appeared when looking at annual market shares. This approach hid considerable monthly variation. By way of example, Figure 1 below shows the intervals within which monthly market shares of various rental companies varied in the Paris Roissy CDG, after controlling for seasonality.[2] In some years, a company's monthly market share could vary by more than 5 percentage points. Similar patterns were observed in other airports.

Figure 1: Minimum and maximum monthly market shares by value after accounting for seasonality, Paris Roissy CDG, 2003 - 2011



CRC = Car Rental Company

Notes: The lower limit of a given block represents the minimum monthly market share of the car rental company in a given year at this airport, while the upper limit of the block represents the maximum monthly market share of that car rental company in that same year.

All opinions expressed here are those of the authors, who are employees of Compass Lexecon.

1. Europcar, Avis Budget Group, Citer, Hertz, Sixt and EDA. Compass Lexecon worked for Avis throughout the case.

2. During one year, variations in the monthly market shares of a particular rental company at a particular airport may reflect the characteristics of this rental company and of the (residual) demand for its services. In particular, demand from "leisure" and "corporate" customers are subject to different seasonal patterns. Under these circumstances, depending on the balance in its customer portfolio, a car rental company may see its residual demand vary from one month to the next, in different proportions than those experienced by other rental companies with other customer portfolios. Analysing monthly variations in market shares while controlling for seasonal effects remove fluctuations associated with the weight of a particular segment during a particular month of the year.

Moreover, we tested whether the evolution of market shares over time exhibited an increasing or decreasing trend (that is, they were non-stationary) or, to the contrary, remained constant around a certain value (i.e., they were stationary). We showed that for some operators, market shares were non-stationary. Hence, not only there was variation in market shares over time, there were trends in the market shares that did not conform with the theory of harm that the Authority had put forward.

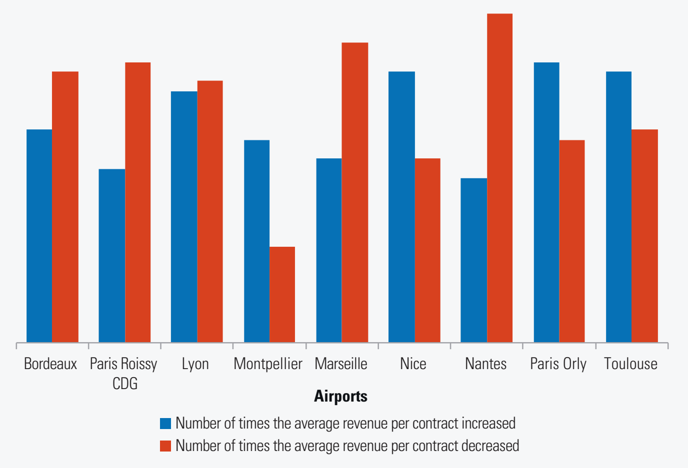
These observations contradicted the allegation that market shares had been stable over time, and therefore the concern that the information exchanged may have enabled a co-ordinated conduct.

Prices were not adjusted to stabilise market shares as the Authority's theory required

The Authority claimed that a car rental company whose market share deviated from the hypothetical collusive level would adjust its prices in an attempt to bring its market share back to the agreed level. For example, a company which was winning more than its allocated market share would be expected to raise prices to reduce its sales.

Such a theory is easy to test. We examined whether rental companies did adjust their prices in the direction expected following changes in their market shares. The data did not show any relationship of this kind during the period of the alleged practices. On the contrary, as we show in Figure 2 below, rental companies experiencing an increase in their market share were about as likely to increase their prices as to decrease them.

Figure 2: Frequency of price increases and decreases following an increase in market share, 2003 – 2011.



We confirmed this observation with a regression analysis, which allowed us to account for seasonal factors. We showed that the average monthly price tended to decrease following an increase in market shares in the preceding month. These findings contradicted the Authority's allegation that car rental companies would adjust their prices to maintain the alleged collusive equilibrium in market shares.

The exchange of information did not affect car rental companies' behaviour during the period of the alleged practices

The Authority also alleged that the exchange of information between car rental companies had a general anticompetitive impact, because it helped them to monitor their competitors and thus determine their own strategies.

This theory of harm can also be tested empirically. In particular, if the Authority's allegations were correct, and the information exchanged affected rental companies' behaviour, then that information should be valuable when predicting their behaviour.

We used a Granger causality test to see whether we could explain (in a statistical sense) rental companies' behaviour using the information they were exchanging. We tested whether the average monthly revenue per contract of a given car rental company was (at least partly) explained by the information that had been exchanged during the preceding month: the average monthly revenue of other car rental companies.

Our results showed that no such relationship existed, which contradicted the Authority's objection that the information exchange affected car rental companies' strategies during the alleged infringement period.

Conclusion

There is ample case law and economic theory on how and when information exchanges allow collusion to occur, but empirical evidence is scarce. However, sometimes a simple examination of the facts can help. The Authority's concerns in this case might have been legitimate in principle, but (i) they did not match the facts of the industry and (ii) there was no evidence that the information exchange led to any changes of behaviour.

The biologist T. H . Huxley once described science as "the slaying of a beautiful hypothesis by an ugly fact". Here, the facts slayed the Authority's hypothesis and it wisely reacted to this evidence by ending its investigation.