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"Quantity" and "quality" in economic assessments

Check Against Delivery
Seul le texte prononcé fait foi
Es gilt das gesprochene Wort

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Ladies and Gentlemen,

It is a pleasure to be back before you at this important annual gathering to discuss recent developments in the economics of competition policy.

A year ago on the same occasion, I set out some initial thoughts on the relationship between law and economics in competition enforcement.

I referred to the increasingly important role of economic analysis in our cases, across all our competition law instruments. I recalled how this development had been sometimes promoted by the Commission itself, and how in other instances it was the Luxembourg Courts that invited us to make more progress. I also mentioned how these developments had occurred in parallel to organic changes at DG Competition that led us to integrate economic analysis more deeply in our case-handling routine. I called this a "step-change" in the place of economic thinking into our enforcement work.

Last year I focused on telling you about the inter-relation between law and economics in putting together a coherent story, in building a solid case that would stand the Courts' careful scrutiny.

Today I want to look at one aspect of that story in rather more detail, and I will do this against the background of three merger cases, two of which we decided this year – *Olympic/Aegean* and *Western Digital/Hitachi* – and one which we had decided previously – *Ryanair/Aer Lingus*.

The aspect I want to consider today is the relationship between quantitative and qualitative economic analysis, and how this relates to the legal burden of proof to which the European Commission is subject.

I will first contrast the case assessment we followed in *Olympic* with that previously carried-out in *Ryanair*; I will then share further considerations on the Commission's framework for analysis, and will go into the detail of how this framework was applied in the recent HDD merger.

All of these cases are useful illustrations of how the Commission draws from an extensive set of evidentiary elements to take its decisions.

We take into account quantitative *and* qualitative information to put together a coherent story. This is similar to the old journalistic habit of explaining the who, what, when, where, how and why. Though admittedly the stories we write tend to be rather more complex.

In doing so, we face a number of constraints. These relate to the availability and solidity of data, to the limits of economic knowledge and, of course, we are also constrained by the very precise time limits of the Merger Regulation. This last point should not be taken to imply that antitrust has no time constraints: we still have to take decisions within a timeframe that is meaningful for the conduct in question; we cannot ruminate forever. So even though antitrust has no formal legal deadlines, we are still constrained.

Ultimately, what we are looking to establish in each case is whether or not there is a likelihood of consumer harm. This is the concept that governs our enforcement action and in order to obtain an answer, we have to make the best use of the available data, within the given time, and against the background of the existing knowledge.

This means that the so-called "priors" must play an important role. For example, we know from the economic literature and previous case handling experience that monopoly is more problematic for competition than duopoly, or about the concerns that can arise when from three market players, we would be left with only two. Not always of course, but it's an indication. This is also why we know that the higher the concentration levels, the higher the possible effects on competition.

Allow me to start by contrasting what we did in *Ryanair* with what we did in *Olympic* and to look at what this means for current and future practice.

1. What we did in *Ryanair*, what we did in *Olympic*, and what this means for current practice

1. 1. Ryanair/ Aer Lingus

In the *Ryanair* case, DG Competition economists conducted three sets of empirical analysis that aimed to complement and reinforce the extensive qualitative evidence that was also available. They were able to do so because the data at hand were complete, accurate, and adequate for the methodologies for which they were used.

The quantitative analysis in *Ryanair* was intended to inform issues such as the absence of airport substitutability and the closeness of competition between the merging parties. It consisted of three complementary parts:

- a survey of passengers out of Dublin;
- a price correlation analysis to show lack of airport substitutability; and
- a price regression analysis determining the price impact of having either one or both of the carriers on a particular route.

The price regression analysis generated strong evidence that prices were significantly higher in markets in which only one of the two carriers was present.

This quantitative analysis was particularly compelling because it was fully in line with the qualitative evidence that suggested that Ryanair and Aer Lingus were close competitors and that their merger would not have been a good deal for the affected passengers. The merger would have eliminated Ryanair's only significant competitor on more than thirty routes, on which 14 million passengers fly each year. And this is why we prohibited it.

As you know, our theory was later upheld by the General Court in 2010. The Court supported the Commission's findings but also recalled that quantitative analysis can be useful, but is by no means mandatory.

Indeed, not all cases are suitable for such sophisticated analysis.

2.2. Olympic/ Aegean

In the proposed *Olympic/Aegean* merger on which we decided in January of this year, specific matters relating to intermodal substitutability arose: for instance, would ferry services constrain air services on several routes to Greek islands, and to what extent?

Our economists explored all of the available quantitative data and concluded that – as I will explain shortly - far less data were available in this case than in that of *Ryanair*; and of the data that were available, much were unreliable. As a result, the empirical work conducted was by necessity less extensive and less sophisticated.

Nonetheless, our market investigation was comprehensive. The evidence gathered included hundreds of questionnaires to market players – competitors, ferry operators, customers, consumer associations etc; minutes of meetings with the parties and third parties; industry reports; and the parties' own internal documents. Readily available quantitative data were also requested from both merging and third parties. DG Competition economists explored all of the available quantitative data and decided to carry out more modest analyses, in line with the limited value added that was expected on account of the data limitations. Indeed, as every economist knows, you cannot get more information out of data than what is in it in the first place.

So what did we do? Our team undertook a descriptive analysis of the quantitative data which led to questions regarding the competitive dynamics of every route and which was used to reconstruct several different candidate markets and to compute different indicators of market power.

This analysis proved helpful to inspect the weighted average fare evolution for the different fare classes and between the different operators that served the routes of concern. A similar exercise was pursued for passenger data. This initial analysis prompted us to send further queries to the parties, competitors, ferry operators, and the national railway company. All these insights led to a better understanding of the sophisticated yield management techniques that were used by the merging parties.

Of course, the parties repeatedly referred to the econometric and survey analysis in the *Ryanair* decision as the benchmark for a prohibition decision. Apart from the fact that eventually this was not necessary to reach our conclusions, we could simply not replicate the level of sophistication used in *Ryanair* because three key pre-conditions for such analysis were not met:

> **First:** Not all the necessary data were available to implement the relevant empirical methodology and the data were not of adequate quality. For example, we had requested directional data and time-of-purchase data, but these were not available from at least one of the parties. Other data, on passengers and revenues, used by the parties for their Discounted Cash Flow analysis were also not in line with the parties' own internal documents or with the data used in the counterfactual analysis. These are just some of the problems we faced.
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> **Second:** Empirical analysis in mergers necessarily involves the use of historical data. However, the historical data that were available could not tell us much in terms of the likely impact of the merger on future competition. Indeed, Olympic Air had only started operations in October 2009 which meant that its data were limited to a few months. We accepted the parties' argument that the past - the period before the Olympic privatization - was not a good predictor for the future in this case. In the end, time series with only eight observations were available for each route. Any analysis based on so few observations is not exactly "robust". By contrast, in *Ryanair/Aer Lingus* we had monthly observations for six years, so around 70 observations for each route.

> **Third:** There was not sufficient variability in the data to identify references for comparison. We use econometrics to discover how changes in certain variables explain changes in other variables. However, if the explanatory variables do not change – or only change very little – econometrics is not of much help.

In addition, the parties had also sent us their own econometric analyses but these submissions were subject to numerous methodological concerns. We also noted that some of their results actually supported some of our findings. For example, that there exists a differentiation between price-sensitive and relatively non-price-sensitive passengers. Their selection of routes was also problematic, as it excluded important overlap routes. And finally, the presence of Olympic was not taken into account in the estimation, due precisely to the absence of usable data.

I think that by contrasting these two mergers, we can see that the appropriate analytical approaches that the Commission will follow, will differ substantially depending on the available data.

2. Framework of Analysis

So what does this mean for the framework of analysis in current and future case practice?

Well, simply that the Commission will continue to use the best evidence available, specific to each case, and in light of the particular time constraints presented by each case.

We will tailor-make the level of sophistication of our quantitative analysis to adjust it to the specific features of the case. And of course, I would like to recall that economics and econometrics are not always about pure, perfect, data. As painful as it may be for an economist such as myself, figures are not everything and very often they are fairly broad-brush.

Competition policy is not based on numbers accurate to three decimal places and – as seen earlier – data are not always as reliable as necessary. Data can include errors, come from unreliable sources, be incomplete or too aggregate and so on. This is also why it is important to choose a good methodology that fits the requirements of a particular case.

We always appreciate discussions with the parties on the appropriate methodology. But in the end we must make our own choice and of course be ready to defend this choice in court if necessary.

This brings in issues such as the merging parties' and third parties' data in terms of quality and accessibility, as well as, in particular under the Merger Regulation, timing constraints.

The newly adopted Best Practices for the submission of economic evidence already give useful guidance on how to make the tight deadlines of the procedure compatible with careful consideration of economic evidence. For example, they clarify that where parties plan to submit data in connection with an empirical analysis conducted at their own initiative, they should warn DG Competition in advance of the planned timing and scope of such a submission. Parties should submit results that they intend to rely upon or discuss in a meeting with DG Competition, including data and code to facilitate replication, at least two working days before the meeting.

In the end, we always have to take decisions based on the available evidence. This means that our cases are always about the likelihood of an anticompetitive effect arising, even if we sometimes can't put an exact figure on that. As John Maynard Keynes put it "*it is better to be roughly right than precisely wrong*".

Which brings me to a few final considerations in light of our recent decision in the HDD case.

3. HDD case as further example of framework for analysis

The latest example of how economic analysis is integrated in a merger case is the *Western Digital/Hitachi* decision adopted on 23 November and concerning the hard disk drive industry.

The planned merger would have reduced the number of players in that industry from four to three, and in some markets from three to two. As I mentioned above, our "priors" mean that even this limited amount of information should already start to ring warning bells – at least in the markets in which the number of competitors is reduced from three to two.

Naturally, our assessment of the impact this would have had on consumers was based on more than just these numbers.

For instance, customer submissions and other qualitative evidence showed that security of supply is important for HDD customers. Given industry specificities, these customers strongly need to use multiple sources of supply.

The Chief Economist Team collected commercial data on transactions of customers with the parties and their main competitors. We also collected data on the participation of the parties and their competitors in customer bids. These data confirmed that most customers indeed multi-source their HDD supplies, which supported our finding that the presence of a third supplier really *did* matter. Customers use this supplier for a part of their purchases or use its presence as a tool to get better prices from the other two.

We therefore found that if only two suppliers remain, they would be complementary supply sources and would thus have a guaranteed share of customer purchases. They would therefore compete less intensively than when the third supplier was present.

The bidding analysis also showed that Hitachi participated in most bids and was an important competitor. With the help of this analysis, we concluded that its removal from the market would result in a higher price path and be harmful for consumers. As you know, we ultimately succeeded in clearing the merger under the condition that Western Digital would divest assets that would allow a competitor to replace Hitachi as the third supplier on the market.

I would also add that the decision is worth reading for our analysis of the parties' efficiency claims. For instance, we looked closely at whether efficiencies would be sufficiently passed on to consumers. We concluded that that depends on the change in the market that a merger brings about.

To put it simply, the more competition there remains on a market, the more likely it is that merging companies pass efficiencies on to consumers. Consequently, as the market would have become less competitive after the merger, we could not conclude that there were efficiencies to outweigh the negative impact on prices and consumers.

This last example also shows that when we build a case, we add the priors with the story of harm and a layer of data if it matches-up. We use the best evidence that is available, and that we can reasonably use according to the theory of the case and we fit data in when possible and when it strengthens the case.

Indeed, our presumptions or theories of harm are not set in stone. We need to tell a story where economic evidence and analysis validates these presumptions. And we also use economic reasoning and econometric analysis to avoid relying only on the data adduced by parties.

Taken together, these factors make the robustness of the case, which can then be tested in Court. As I said last year, when we ultimately have to prove our cases, we do this to a legal standard, not an economic one; we are using economic analysis to support the construction of legally robust cases.

I strongly believe that our cases meet a very high standard and we will strive to maintain this in the coming years. The Best Practices for economic evidence will undoubtedly also help. They have already helped parties come forward with improved submissions over the last months and have helped us gather quantitative data and to limit the scope of data requests.

Conclusion

I wanted to finish on a few words on how all this fits into the Commission's mission in competition cases, because it's important not to lose sight of the forest for the trees.

Our primary mission is to provide an efficient, stable and predictable enforcement environment.

In doing so, we have to grant parties all their relevant due process rights. But we also seek to enforce competition law without undue delay. This is both in the interests of consumers and businesses. We prevent harm from arising, but we also offer market players a predictable and quick answer to their merger plans. We thus use quantitative and qualitative data to strengthen the economics of our competition cases. These cases are often tested before the General Court and recent judgments highlight the great intensity of the standard of review currently applied by the Court.

Finally, I want to stress that, in our experience, well-founded quantitative analysis has the capacity to lead to satisfactory results for parties. But such economic analysis takes time. This is why in a merger process with tight deadlines, a satisfactory economic analysis will therefore crucially have to rely on the parties and their advisors.

In order to allow us to use such analysis to the best of our knowledge, it is very important that the firms' legal advisors alert the Commission very early in the process about likely economic submissions and that we discuss from the very beginning about relevant data and empirical approaches.

The most important point to remember, however, is that we must all work towards the best evidence available, not the best evidence imaginable.

Thank you.