

Sources of Information and Evidence in Merger Investigations: An FTC Economist's View

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I. Overview³

An HSR investigation involves the evaluation of a very large amount of evidence derived from documents, depositions, quantitative data and analyses, and third parties under very substantial time pressures. The objective of the agencies is to attempt to develop all important pieces of evidence. However, agency staffs have to be ready to litigate against a proposed transaction, and have to prepare for litigation starting early in the investigation, since there is not sufficient time to adequately prepare for litigation if preparation begins late in the investigation. Necessarily, this puts a substantial burden on the parties to the proposed transaction to insure that all the important evidence that support their contentions is developed and transmitted and communicated effectively to staff, and eventually to management and agency heads.

Time is important. Data, quantitative analysis and other complex evidence requires time to be assessed. A White Paper submitted late in the process that requires considerable time to properly assess is unlikely, given time and resource constraints, to be given as thorough an assessment as it might deserve. This is *particularly* true of economists' White Papers. Any sort of empirical analysis is going to require time to assess the data and the analyses, and a meaningful dialogue between outside economists and the Bureau of Economics.

II. Transparency

Over the past decade the FTC has become more transparent in revealing potential concerns and the bases for those concerns. Under Chairman Muris, we are trying to increase our transparency. You should expect to be told of our potential concerns and representative bases of those concerns. This includes Commission economists' assessment of the parties' economic analyses. Of course we cannot be totally transparent. We have access to information and data that cannot be shared with outside parties, and we have to be prepared to litigate should the Commission decide to challenge a transaction. Nonetheless, if you listen carefully and engage in productive

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³ For a more extensive recent discussion of economics-related issues in FTC investigations see Interview with David Scheffman, the FTC's New Director of the Bureau of Economics, September 26, 2001, American Bar Association Section of Antitrust Law, "Brown Bag" Program, *The Antitrust Source*, (January 2002), (*available at* <<http://www.antitrustsource.com>>). You may also be interested in the transcript of an FTC Roundtable with leading industrial organization economists held in the Fall of 2001, in which various economics issues relevant to merger investigations were discussed, (*available at* <<http://www.ftc.gov/be/empiricalroundtabletranscript.pdf>>).

discussion, you should be able to be reasonably clear about our potential concerns and their bases. Although there is obviously an important role for advocacy, merger investigations generally turn on facts rather than advocacy. By far the most effective response to our potential concerns is development and effective presentation of facts that might allay those concerns.

III. Customer Opinions

Customer views are generally very important in merger investigations. Customer views are solicited prior to the issuing of a 2nd Request (and sometimes have are a significant factor in the decision not to issue a 2nd Request), and when a decision is made to issue a 2nd Request, a significant component of the investigation focuses on customer opinions. Customer views are important not only to understanding the relevant market in which to assess the merger but also to understanding the potential effects of the mergers. Customers provide information on what alternatives they have to the products or services sold by the merging parties and the importance of price and other factors to their decision. Customers are also frequently well positioned to assess the potential impact of the merger on prices and other competitive factors. Merger investigations with significant customer *antitrust* concerns typically generate affidavits by customers stating the nature of their concerns. Agency investigations of customer concerns are extensive, and attempt to insure that customers' concerns are based on concerns that prices will increase anticompetitively post-transaction, rather than concerns with vendor/customer relations. The agencies attempt to insure that the views of customers that are solicited can be viewed as reasonably representative of a substantial base of (in, aggregate, of volume of commerce) customer views.

There are a number of important factors that bear on the importance of customer opinions.

- (i) Customers may have credible bases for concerns that the transaction would be likely to result in anticompetitive price increases.
- (ii) Alternatively, customers may be in a situation to provide credible evidence that they have sufficient "clout," that they have a reasonable basis for concluding that they could thwart any anticompetitive price increase, or that there are other credible reason why an anticompetitive price increase is unlikely.
- (iii) In some cases, customers may be too numerous or varied for the investigation to adequately cover the possible range of opinions that exist.⁴ In such cases, stratified surveys of a broader range of customers may be important.
- (iv) In some cases, customers have a range of opinions on the proposed transactions. This variation of opinions is often a function of a customer's competitiveness, buying power, and relationships with companies in the market. It is important to assess what underlies the differences of opinion and whether the reasons for the differences suggest more or less emphasis should be placed on customer complaints.
- (v) In some cases, the direct customers (*e.g.*, distributors) are not sufficiently knowledgeable about the market to assess antitrust-related issues. For example, at times direct customers may believe that are able to simply pass along price increases (and may profit themselves from higher

⁴ See *United States v. Sungard Data Sys.*, 172 F.Supp. 2d 172 (D.D.C. 2001).

prices) and thus are not well positioned to provide information about the potential effects of the transaction.

(vi) Customers may not have adequate information to assess the potential effects of the transaction. Thus, in some cases, customers complaints may have less weight if other factors not considered or known by customers suggest the merger would not substantial reduce competition. In other cases, customers may not be concerned about a deal because they are not aware of plans of the merging parties that might suggest additional competition between the parties in the future.

Perhaps the most important task for counsel in dealing with business executives who are still at the point of contemplating a transaction with a competitor in a concentrated industry is to impress on them the importance of assessing how customers who might be impacted by the transaction would view the transaction. In my experience, too frequently business executives enter into transactions agreements without a knowledgeable assessment of customer views. This is of importance not just for antitrust review. A considerable body of research on transaction *outcomes* identifies as one important reason why many transactions do not end up fulfilling their *ex ante* expectations, particularly, financial expectations, is that the combined entity loses a substantial volume of business. Thus it is very important for business reasons to assess how customers would view a proposed transaction.

IV. Competitor Opinions

Competitors can be important sources of information for understanding the competitive environment, and in some cases on the likely effects of a proposed transaction. Competitors can provide information on pricing strategies, substitution possibilities, the nature of competition and the requirements (and likelihood) of entry. Such information is usually gathered through interviews with the competitors, requests for documents and data and potentially depositions of relevant witnesses. In cases where serious antitrust concerns are raised by the merger, the information gathered from the competitor through interviews or other means is frequently memorialized in affidavits.

However, the motives of competitors must be carefully considered in assessing the information provided. The most common presumed effect of an anticompetitive transaction, increased prices, would generally be a benefit to competitors, who would be unlikely to complain about such a transaction. Alternatively, competitors generally have an incentive express negative views about a proposed transaction that would result in a stronger competitor and competition.

Competitor views are often communicated with the assistance of antitrust counsel, sometimes with the assistance of antitrust economists. The agencies attempt to thoroughly assess the “real” underlying bases of competitor concerns. There are situations in which both competition and competitors are likely to be harmed by a proposed transaction, but such situations are probably not common. The more objective the information is that is provided, the less problematic this issue may be. Providing supporting documentation or data can also be important to ensure that the information provided by the competitor can be supported. The importance of gathering objective information from competitors does not depend on the theory of the case - it is an

important element of discovery in all cases (*e.g.*, in obtaining sufficiently accurate estimates of market shares).

V. Documents

Documents also play an important role in merger analysis. Documents provide information about how the merging parties and other interested parties view the industry in their normal course of business. These documents can provide information about what competitors the parties and others focus on, possibilities for substitution, the importance of various competitors in the market (currently and potentially in the future), what changes may occur in the market going forward and how pricing is set. Documents are also important for understanding the merging parties plans for the acquisition - what efficiencies are anticipated and whether the merging parties anticipate more or less competition after the transaction is consummated.

The importance of documents to the decision to challenge a transaction varies by transaction. In some cases, there are “hot” documents that indicate that the authors of the documents see an anticompetitive potential in the proposed transaction. Of course, such documents can be extremely important in merger investigations and in litigation.⁵ It is important for counsel to provide credible factual bases for benign interpretations of documents if they exist. As discussed at the outset, the time pressures of a merger investigation push the agencies to be prepared for litigation from a fairly early stage in the investigation. Although certainly the intention is to conduct thorough investigations developing all credible evidence, there necessarily is a substantial burden on the parties to develop and put forward credible evidence that supports their contentions.

The agencies are interested in whether transactions are likely to lead to substantial efficiencies.⁶ Ordinary course of business documents providing discussion and analyses of potential efficiencies are generally quite important in the assessment of the credibility of efficiency claims. What you have actually achieved on past transactions that were reviewed by the agencies or in analogous transactions are also relevant to our inquiry.

⁵ See, for example, *FTC v. Staples, Inc.*, 970 F.Supp. 1066 (D.D.C. 1997).

⁶ See 1997 revision of *Merger Guidelines*.

VI. Investigational Hearings / Depositions

Investigational hearings and depositions are another important source of information to the agencies in analyzing mergers. Most frequently, such hearings involve witnesses from the merging parties as the agencies seek to get on the record the opinions of the parties and explanations for information found in documents or data. Some depositions are also geared towards better understanding what information is available from the company and how such information is maintained. Depositions and investigational hearings are used not only to inform the investigation but also in preparation for potential litigation. Because of the short time frames associated with merger review, the agencies must prepare for litigation as they are conducting the investigation. The documents used as exhibits at investigational hearings and the direction of questioning can provide information about the areas where the agency is focusing its investigation. Where applicable, issues raised in such hearings are best handled by responding with factual responses clarifying the interpretation of testimony and/or documents.

VII. Economists and Economic Analysis in Merger Investigations in the U.S.A.: My Assessment of the FTC Experience

Merger investigations generally turn on factual rather than theoretical issues. Information gleaned from customer, competitor, and third party opinions, documents, and depositions are often used as a basis of conclusions of important factual issues. In my experience, these sources of evidence are not always a reliable basis of factual conclusions. A few examples follow. These sources of evidence may indicate that the customer base of a company has certain characteristics, but the database of customer invoices may indicate that the customer base is different in some important respects. Similarly, documents from company X may indicate that company Y is a close competitor for a certain group of customers, but a comparison of customer invoices for X and Y may indicate something else. Documents may suggest that firms in the industry almost always follow each other's list price changes. However, review of the data may confirm this or show that actual transactions prices do not follow this same pattern. Similarly, documents may suggest a fairly uniform set of prices are charged to customers but the data may suggest something different.

For many years now I have taught MBAs, and until returning to the FTC, I was a business consultant. In my experience, business people sometimes do not have the facts right and say or write documents indicating something that is not quite right or sometimes is totally wrong.⁷ Indeed, it is often one of the most important tasks of a business consultant to try to figure out what the facts really are.

The economists and accountants at the Commission focus on helping to develop the "hard" facts, *i.e.*, facts that can be developed by "hard" evidence, such as quantitative data. A significant part

⁷ Business people are not unique in this regard. Recall that in speaking of the law Justice Holmes stated "[w]e have been cocksure of many things that are not so." (Oliver Wendell Holmes, *Natural Law*, 32 Harv. L. Rev. 40 (1918), *reprinted in The Essential Holmes* 181 (Richard Posner ed., U. Chi. 1992).

of the work of accountants and economists at the FTC involves analyzing databases or other source data to get at important factual issues. These analyses can involve summarization of pricing, sales, capacity and other data as well as more sophisticated econometric analyses. Moreover, the former is generally an important pre-cursor to the latter as understanding the basic underlying data is important to understanding what types of econometric tests are useful and feasible. Often, fact-based analyses do not involve sophisticated statistical or economic analyses. They can be as simple as sorting a customer database by customer size, location of customer, types of products sold by customers, *etc.*, to reveal important characteristics of customers or other relevant facts.

One of my missions in my return to the FTC is to increase the input of the economists and accountants in developing quantitative evidence and other relevant “hard” facts. However, it is very important for the outside parties and their consultants to do their part in developing the relevant quantitative evidence and other “hard” facts.

Of course, when data is available and such analyses are appropriate to the relevant issues, economists do use statistical and economic modeling and estimation to try to shed light on key factual issues. In a recent paper, my co-author and I discuss various important issues that should be considered when conducting econometric analyses in the context of an antitrust matter.⁸ We note that an econometric study useful for decision-making at the FTC has the following characteristics:

1. Poses an empirical economic issue that is relevant to the matter at hand;
2. Utilizes an economic model that is consistent with economic theory;
3. Utilizes an economic model that is consistent with the key institutional factors and the facts in the setting being modeled and generates results that can be evaluated in the context of other evidence;
4. Uses data that are appropriate to the task and provides relevant results and interpretations that realistically take into account the limitations in the data;
5. Uses statistical techniques and tests of statistical precision that are suitable given the data and the economic issues;
6. Generates results that stand up under various tests of “robustness;”
7. Can be sufficiently explained to and incorporated into the decision-making of non-economists; and

⁸ “*FTC Perspectives on the Use of Econometric Analyses in Antitrust Cases*” (available at <http://www.ftc.gov/be/ftcperspectivesoneconometrics.pdf>).

8. If conducted by “outside economists, the data and details of the modeling are provided with sufficient time and explanation that FTC economists can replicate and sufficiently understand the analyses and conduct their own tests.

In my experience, the most common deficiencies in studies submitted to the FTC are in #3, 4 and 6-8. When done well, such quantitative analyses can provide important factual information (*e.g.*, evidence bearing on whether two products or companies are particularly close competitors), that can be used to understand the competitive dynamics in the industry and help test the theories of competitive harm that are being considered with regard to the merger.

For example, with the appropriate data, statistical estimates of own-price and cross-price elasticities of demand can provide important information with regard to the breadth of the relevant market and the extent to which the two merging parties are close competitors. This approach has been taken in many consumer products mergers, providing detailed information about the extent of substitution among various products.⁹ Such estimates from structural demand models can then be incorporated into simulations models that attempt to estimate the impact on price from a merger. Simulation models provide a convenient way of putting together the estimates of own and cross price elasticities to assess their potential implications. In my view, however, because this sort of analysis involves a compounding of many important assumptions along with complex econometric estimation, simulations can be best used as crude indicators rather than solid evidence.

Scanner data can also be used for many other analyses. For instance, information about when products are on promotion is generally available in scanner data at the city/chain level. This information can be used to assess the impact on own and competitor volumes when a product is on promotion and can sometimes lead to different conclusions on the magnitude of cross-elasticities than structural demand estimates. In addition, details at the product level are often available and can be used to assess the frequency and importance of new product introductions. Scanner data is also useful to assess whether there are important geographic differences in pricing, shares or the number of competitors and can be used where appropriate as discussed more below in conducting “natural” experiments.

Because scanner data involves retail sales while consumer products mergers generally involve competition at the wholesale level, it is also useful when possible to analyze manufacturer level data – that is information on sales, pricing and promotion at the manufacturer level. Manufacturers compete (on price) through list pricing and promotional spending (including consumer coupons and payments to retailers for placing products on temporary price reductions and at times on feature or display). Data from manufacturers is frequently available, at least at an aggregate level, regarding average gross prices (*e.g.*, before promotional spending), and the

⁹ The FTC Bureau of Economics recently put out a paper, “Demand System Estimation and its Application To Horizontal Merger Analysis, (available at <http://www.ftc.gov/be/workpapers/wp246.pdf>). This paper provides a discussion of potentially significant issues that we believe economists engaged in quantitative analyses of scanner data in connection with branded products mergers investigations should consider in their analyses.

level of promotional spending which can then be used to calculate average net prices. There also may be information about whether the promotional spending is targeted at particular geographic areas or competitors from documents or other information. Financial data from the manufacturers can also be used to assess the profitability of past entry/expansion plans and as inputs into analyses of the likelihood of entry.

Another common analysis is to use “natural experiments” to test theory of economic harm. For instance, if different geographic markets have different market structures (e.g., some have two competitors, some have three, some have four), it is sometimes possible to use data and statistical analyses to analyze whether pricing varies based on these differences. As a first pass, one could compare average pricing in the different regions. However, it is likely that there will be other factors that vary across these regions and thus a statistical approach that controls for these factors is likely to be necessary. A variant of this analysis was conducted in the Office Depot/Staples matter. Another natural experiment can involve assessing the impact of new entry. If the entry had a significant and sustained impact on pricing, this would potentially be consistent with a merger having a negative impact on pricing (depending upon who are the merging parties and whether additional entry is likely). Depending on the availability of relevant data, it may be possible to conduct statistical analyses that are relevant to this issue.

Quantitative analyses are also relevant to the analysis of whether a merger increases the likelihood of coordinated interaction.¹⁰ An important initial focus of such analyses is to assess the current nature of competition in the market: (1) if the market is consistent with existing coordinated behavior, one might conclude that a merger is likely to make such coordination more effective or sustainable; or (2) if the market is not consistent with existing coordination, one must explain how the merger will change the market outcome and make coordination likely. Examples of quantitative analyses that can be used to address such issues: (1) how variable is pricing across customers at a point in time and over time; (2) how close do competitors’ prices move together; (3) what are the trends in capacity, output and customer shares; (4) are there significant new product introductions; (5) do transaction prices closely follow list prices; (6) is there a clear “leader” in announcing list price changes; or (7) does one of the firms act as a maverick.

Although a large volume and variety of various data is often required to be produced in compliance with a 2nd Request, and is sometimes available from other sources, there generally is limited time for agency economists and accountants to analyze these data. Parties generally retain antitrust economists or other experts to assist in putting forward the parties’ views and evidence. Such experts are often (and best) employed at an early stage, e.g., before the

¹⁰ For a more in-depth discussion of quantitative analyses that can be conducted to analyze whether a merger increases the likelihood of coordinated interaction, see Cruise Ship Investigation Analyses (<http://www.ftc.gov/be/hilites/ftcbeababrownbag.pdf>) and “*Empirical Analyses of Potential Coordinated Effects*” (<http://www.ftc.gov/be/seminardocs/gmucoleman.pdf>)

transaction is filed. This gives them time to provide an economic assessment of the potential antitrust issues, and also provides time for experts to collect and analyze various data.

In some situations an economist's input on a particular issue can be useful even when there is limited opportunity for quantitative analyses related to the issue. Economists can be useful in providing an economics and perhaps a business framework for understanding a proposed transaction. For example, an economist can be useful in describing a firm's economic and financial incentives in various situations, even when a precise quantification of these incentives might not be calculable.

In my experience over 20+ years inside and outside the antitrust agencies, it is not very effective to have economists simply submit statistical or other quantitative analyses when they are not sufficiently knowledgeable about the industry and transaction, and when they are not familiar with evidence derived from documents and depositions. It is important that your antitrust economist spend considerable time with your executives, and in assessing some of the relevant business documents. In my view it is usually best to have your antitrust economist be involved as early as possible and in all substantive issues related to the investigation. When your economist participates in presentations during the investigation, she will be asked about issues that go beyond the four corners of any submissions, and thus should be prepared to deal with major substantive issues.

Interaction Between Outside and FTC Economists

It is very important that interaction between the agency and economic experts occurs early on. We are working to facilitate that interaction. We will generally be willing to be open in sharing data and analyses (subject to confidentiality and potential litigation issues). Early discussions can help to frame the types of analyses that would be useful to address the issues at hand and to identify the data that is most likely to be useful in conducting these analyses. From an economics perspective, we see the work by FTC economists to be to frame relevant hypotheses and then attempt to "test" those hypotheses with data or other evidence. We welcome early interaction with the outside economists in the framing of hypotheses. One potential benefit is that this early interaction may result in greater focusing and paring down the requirements of the 2nd Request.

As discussed above, analyses done by economic experts can only be given significant weight if there is enough time for them to have been sufficiently vetted to determine their validity. Economic experts should be prepared to provide backup information about their analyses (not only the data supporting their analyses but programs and descriptions of what they have done). Once submitted and reviewed, continued dialogue between the agency and outside economists is important so that the agency economists can describe their reactions to the analyses submitted and what issues they see with these analyses. The outside economists can then respond to any criticisms or conduct additional analyses as necessary. This interaction should help to resolve issues or to clarify what issues remain.