The Role of Economic Analyses in Preparing for the First 30 Days of a Merger Review

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The 2010 Department of Justice/Federal Trade Commission Horizontal Merger Guidelines (Guidelines)\(^1\) describe the types of analyses that the agencies would find informative, persuasive, or even dispositive, during a merger review. The Guidelines therefore offer a very good map of the analyses that might be helpful to the parties’ efforts before the agencies. In any given merger review, however, those efforts are often constrained by the lack of some combination of time, budget, or data and information. Such constraints limit the scope of the analysis that an economic expert can pursue and create the need to focus on and prioritize a more limited key set of analyses.

Identifying this key set of analyses helps everyone. It helps consulting economists have confidence that their efforts will be informative to the agencies and to their clients (both antitrust lawyers and parties). It helps antitrust attorneys provide accurate counsel to the parties about the deal’s overall antitrust risk, develop a strategy for agency engagement, and predict the timing and likely outcome of the agency’s investigation. It helps the parties be confident that the work they are paying for is the work that is critical and that matters to the outcome. And, if it leads parties’ antitrust team to present sound determinative economic analyses to agency staff, it helps the agency staff, which is often resource constrained, evaluate the impact of the proposed transaction on competition and consumers. In particular, the key set of analyses can help agency staff quickly weed out non-problematic transactions and focus their limited resources and time on transactions that might be problematic. Importantly, doing the right analysis from the outset also ensures that the parties’ antitrust team is prepared to be helpful and answer questions from agency staff when they arise. At the end of the day, a smooth and informed process, regardless of the outcome, is good for everyone.

In this article, I set forth some thoughts on the analyses I have found informative, based on my experience as a consulting economist and my time at the FTC as Economic Advisor. This is an article intended for lawyers and economists. There is no overall cookie-cutter approach, as every case has its own idiosyncrasies and features based on, among other things, the way competition works in the particular industry, the manner in which the data is kept by the parties, and the scope and quality of the data kept.

The Starting Point

The starting point for a consulting economist is typically a consultation call with outside antitrust counsel about the parties involved in the proposed transaction, background on the industry, and some details about the plan and timing for engaging the agency. Many times this starting point is

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prior to the parties signing the deal, which gives antitrust counsel the option of collaborating with
the economist to provide a risk assessment to the merging parties. Other times, the starting point
may be right after, or around the signing of the deal, when antitrust counsel and the parties begin
to prepare for premerger notification filing.

During this initial call, the economist and counsel may also discuss the objective of the first 30
days of review. For some transactions, the objective is to maximize the chance of clearance in the
first 30 days (or the first 60 days in the case of a pull and refile), and avoid a second request.² For
other transactions, a second request might be considered very likely from the start, and the
objective might be to narrow the product and/or geographic scope of the second request, and/or
to begin advocacy and engage with the agency from the start. The objective will help to prioritize
the analyses that the economist pursues for the first 30 days of the merger review.

After the initial call with counsel, counsel will often ask the consulting economist to provide a
Data and Information Request. In some ways this makes a lot of sense—counsel would like the
economist to be able to begin the analyses as quickly as possible, and a list of the data and informa-
tion the economist would like to have begins that process. The sooner the client can begin to
collect the information, the thinking goes, the sooner the economist will receive the information
necessary for his or her analysis, and the sooner the analysis can begin (and sometimes beyond).

That said, in many circumstances, a pre-data request fact-finding call between the economist
and relevant business executives can be very productive before the economist formulates a data
request. It can be an effective and an efficient way for the economist to begin to understand how
firms in the particular industry compete, what the key areas of concern of the proposed transac-
tion may or may not be, the types of data and information the companies keep, and the types of
analyses that would be informative and can be pursued given the data and information that are
kept. It is also a time that the economist can describe to the business executives the types of infor-
mation that would be useful or informative in an antitrust analysis, and explain why, so that the
business executives have a better understanding of the types of information that would be help-
ful and how it would be used.

A challenge that the consulting economist sometimes faces is that data kept by the parties in
the ordinary course of business is not generally organized in a way used by antitrust economists
to evaluate the competitive implications of a merger. Instead, that data is organized to help the firm
run its business and report for accounting and management purposes. Because of this, there are
inevitably challenges to get the right data for the antitrust analyses, a process that might require
the merging of diverse data sets within or between the companies. But often these challenges are
overcome, or at least reduced, by a pre-data request fact-finding call or a follow-up call to clari-
fy and confirm the proper interpretation of the data. For example, economists are often interest-
ed in marginal costs, and variable cost may be used as a proxy for marginal costs. On the other

² The Hart-Scott-Rodina Act (HSR) Act requires that parties to certain mergers and acquisitions submit premerger notification filings and wait
30 days before consummating the transaction. The pull and refile, or the “withdraw and refile” process allows the acquiring firm to with-
draw its HSR filing and refile again by providing an additional 30-day waiting period for the agencies to conduct a preliminary review the
transaction. See Premerger Notification Office Staff, Bureau of Competition, Fed. Trade Comm’n, Getting in Sync with HSR Timing
on what the agency finds, it can: (1) terminate the waiting period and allow the parties to consummate their transaction (often referred to
as an “early termination”); (2) let the waiting period expire, which allows the parties to consummate the transaction; or (3) if the initial review
has raised potential competition issues, the agency may extend the review and ask the parties to turn over more information so it can take
a closer look at how the transaction will affect competition (often referred to as a “second request”). See Fed. Trade Comm’n, Merger Review:
hand, company profit and loss statements often keep track of categories of costs that are based on accounting categories such as COGS (Cost of Goods Sold), SG&A (Selling, General, and Administrative Expenses), labor, etc. In order to get to an estimate for variable costs, an economist can work with a finance executive to identify in a more granular way costs that are variable versus fixed.

Once the economist has an understanding of the competitive dynamics in the industry, and the data and information that might be available and useful, she or he can better map out the substantive analyses that may be informative for the transaction.

**Substantive Analyses of Competitive Effects**

A key area of inquiry in a merger analysis is closeness of competition i.e., how closely the merging parties’ products and/or services compete. In some industries, products are differentiated, and products sold by different participants in the market are not perfect substitutes for one another. Sellers that sell closer substitutes tend to compete more directly. In order to understand whether (or to what extent) competition will be lost post-merger, economists and lawyers alike are interested in the extent to which the merging parties (and their products) compete head to head, are close substitutes to each other, or are first and second choices to the merging firms’ consumers. The more closely the parties and their products and/or services compete, the more likely that some competition would be lost as a result of the merger. In particular, absent merger-specific efficiencies, if a significant share of consumers regard the products of the merging firms as their first and second choices, and repositioning of the non-parties’ products (or entry) to replace competition lost through the merger is unlikely, consumers would likely face a price increase post-merger. In such cases, the merged firm would likely find it profitable to unilaterally raise the price of one or both products above the premerger level, because it would recapture a relatively large share of any lost sales through its merger partner. The likely price increase is greater, if the share of recaptured sales is higher, and the share of recaptured sales is likely higher for products that are closer substitutes.

Alternatively, if a significant share of consumers do not regard the products of the merging firms as uniquely close substitutes, or if the other firms in the industry are able to reposition themselves fairly easily and quickly to become the next best alternative for the affected consumers, then those consumers would be less likely to face a price increase. In that case, the merged firm may not find it profitable to increase prices, because it would not be able to recapture a large enough share of lost sales—instead consumers would turn to the repositioned rivals. Indeed, the agencies’ own public analysis of consent orders frequently references how closely the merging parties compete.

To understand the degree of competition between the merging parties and their products, and, to some extent, the degree of competition between them relative to other market participants, several types of analyses can be informative and fairly straightforward to implement.

**Win/Loss Analysis.** The first type of analysis, a win/loss analysis, also known as a bidding analysis, is no stranger to many in antitrust who work on analyzing the potential competitive effects of proposed transactions. To the extent companies keep track of data on the results of each merging party’s efforts to acquire new business or maintain existing business, such data can

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3 Guidelines, supra note 1, § 2.21.

be analyzed to understand questions such as: (a) how frequently do the merging parties compete against each other? (b) when they do compete, do other competitors also compete for the same sales? (c) how effective are the other competitors at gaining sales that the merging parties both compete for (e.g., do the other competitors win from time to time)? (d) how significant are the sales that the parties both compete for, to each individually?

If the merging parties keep track of bidding and win/loss data, and if it is fairly clean and user-friendly, then answering these questions is normally a fairly simple exercise that involves straightforward statistics. To put a rough time frame on this analysis, if the win/loss data is fairly organized and straightforward to interpret, this analysis could be accomplished in a matter of days, rather than many weeks or months. Typically, companies tend to systematically track win/loss data if they compete in industries in which firms compete via bids or Request for Proposals (RFPs), or in which sales are relatively concentrated with relatively few customers. In other words, it would be both feasible and informative for firms in such industries to keep track of their wins and losses against other competitors and help determine how the firm can be more competitive in the ordinary course of business. Moreover, larger firms or firms with dedicated sales personnel often keep win/loss data through software like salesforce.com. On the other hand, firms in industries in which sales are relatively dispersed, such as in retail, are less likely to keep track of wins and losses in a database format but may keep track of customer purchase patterns via data gathered through loyalty card programs.

Even for firms in industries in which sales are relatively concentrated, some do not keep track of this type of data or the data is very incomplete. In those circumstances, a win/loss analysis could be pursued by analyzing the merging parties’ sales data. From the parties’ sales data, the economist could infer the merging parties’ possible wins and losses to each other. For example, as a start, an economist can use the parties’ sales data to determine the merging parties’ top customers for each year in the last few years. A simple comparison of such a list can show whether either of the parties have lost major customers during those years or if sales to a major customer have shifted from one merging party to the other, based on discussions with company executives or sales reps. If there were lost sales to each other, the economist can determine how significant and frequent they were, and whether those losses were a result of direct competition with each other. If the data does not reveal lost sales, this may suggest that the merging parties do not compete head to head, at least not for the same customers, which suggests that the merging parties are differentiated, have complementary businesses, and/or tend to compete for different segments of the marketplace.

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This type of analysis involves examining the sales data over time, establishing what might be wins/losses to each other, and matching customers across the two parties’ databases. These tasks are not difficult to do, but may take some time because comparing customer data across databases may require careful data cleaning and standardization. The data cleaning aims to ensure that data as received from the parties are free of anomalies, outliers, and are comparable across parties, while the standardization involves customer name standardizations to facilitate name matching. This could take possibly anywhere from two to four weeks on average after receiving the sales data from the merging parties. The amount of time this would require can also depend on the size of the sales data, i.e., how many customers the parties have (are we matching 50 customer names or 2000 names?), how comparable the sales data are across parties, and whether the analysis only needs to focus on the top customers, top wins and losses, or it needs to cover all (which could depend on the results of an initial analysis and the percentage of the companies’ sales that are covered by the top customers).
**Entry or Exit Analysis.** Another type of analysis that can be informative at this stage in evaluating competitive effects, if applicable, is an entry or exit event analysis. It may be that one of the merging parties has a new and competing product that entered the market in recent years or that one of the merging parties started to compete with the other merging party in a segment of the market or in a geographic region that it did not compete in before. Alternatively, one of the merging parties may have exited one of the segments of the market or a geographic region where it previously competed with the other merging party.

These events might form the basis of a natural experiment that would allow an economist to analyze the impact of such events on the merging parties to gauge (and possibly quantify) how closely the parties compete. One would expect that an entry event by merging party A would not have had significant impact on merging party B’s sales if merging parties A and B were not close competitors. On the other hand, if merging party A’s entry suggested that a large percentage of the sales gained by A came at the expense of merging party B, this could suggest that A and B are close competitors. Sometimes merging party A’s entry may not have a significant impact on B’s sales or on other competitors’ sales. This may be a possibility if A entered with a product that is serving a new demand. The product is different enough from existing products that it induced consumers who were not in the relevant market to purchase.

Entry or exit analysis requires information and dates of the entry (or exit) events for the merging parties, and the merging parties’ sales data covering a time period before and after the events. While every case is different, and a lot can depend on how clean or messy the parties’ sales data are, one should budget a minimum of two weeks to pursue an analysis of this type.

**Pricing Variation Analysis.** A related analysis, though it need not involve entry or exits, is to compare merging party A’s prices (or other competitive variables) when it faces competition from merging party B versus when it does not. Instead of exploiting the natural experiment of entry and exit events to tell us about how much of a competitive constraint merging party A poses on B, and vice versa, when they competed versus not, this analysis would take advantage of the variation in outcomes based on where A and B compete versus where they do not.

Known by some as the “Staples” analysis, this analysis can be informative if competition is relatively local, say in a given city, region, or even smaller areas, and the merging parties do not both compete in all of the areas. The variation would allow an economist to estimate the extent to which competition between A and B matters, controlling for other differences between the areas where A and B compete and where they do not.

Alternatively, this analysis can also be implemented to show pricing constraint or lack thereof, when the merging parties compete head to head for certain customer contracts, versus when they do not, as learned from the win/loss analysis. This analysis would require information on the locations of the merging parties and other rivals, the merging parties’ sales data, ideally for at least two years, and win/loss data if one intends to use the merging parties’ presence in bidding situations as the variation in the analysis. Again, while every case is different, and a lot can depend on the data readily available, one should budget a minimum of two weeks to pursue this type of analysis.

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5 In 1997, the D.C. District Court granted the FTC’s request for a preliminary injunction blocking the Staples-Office Depot merger. **FTC v. Staples, Inc., 970 F. Supp. 1066 (D.D.C. 1997).** Among other evidence, the FTC presented econometric evidence through a systematic empirical study of Staples’s pricing, and showed that Staples’s prices were lower when Office Depot had a greater presence nearby. See, e.g., Jonathan B. Baker, Econometric Analysis in **FTC v. Staples, ABA Antitrust Section Econ. Comm. Report (July 18, 1997),** [https://www.ftc.gov/public-statements/1997/07/econometric-analysis-ftc-v-staples].
**Geographic/Spatial Competition Analysis.** For industries that involve high transportation costs to deliver products or services to customers, such as cement or industrial gas, an analysis of the merging parties’ distances to customers, vis-à-vis third-party producers’ distances to the customers, can be very informative about the relative closeness of the parties and its rivals. In these industries, distances to the customers is an important component in the cost of the product and therefore in the competition among firms. All else equal, producers that are farther away would incur substantially higher cost in freight, and thus be less price competitive, than producers that are closer to the customer. A merger between two firms that are closest to the customer, without a third party nearby, may mean the merger would likely eliminate the competitive constraint that the merging parties imposed on each other to gain that customer’s business. However, if a third party is also nearby, or if there is a lower cost producer that can ship to the customer competitively for longer distances, these third parties would likely continue to exert pressure on the merged firm post-merger. On the other hand, for many customers, the two merging parties may not be the closest supplier. For these customers, at least one other third-party producer is closer than one of the merging parties, and the constraint they can impose on the merging party would continue post-merger.

This analysis allows the economist to identify the customers (if any) that would likely experience a price increase post-merger, as well as the extent of the likely price increase. The analysis requires information on the merging parties’ locations, customer locations, other rivals’ locations, and estimates of production and freight/delivery costs for both merging parties and rivals. If product delivery relies on terminals and rail, such information should also be included in estimating freight/delivery costs to the customers. Depending on the number of supplier and customer locations, the data, computation, and time requirements for this analysis can be significant. However, for certain cases it may be probative to implement the analysis on a sample of customers in selected regions, which would significantly reduce the requirements.

**GUPPI Analysis.** Finally, the Guidelines prescribes a way to implement a first-blush effects-based analysis for analyzing mergers involving differentiated products by using the Gross Upward Pricing Pressure Index (GUPPI). The Index helps to evaluate the effect of the proposed merger on competition and prices. Simply put, it relies on only two primary pieces of information—diversion ratios and margins—to estimate the amount of upward pricing pressure the merger would bring. The Index is meant to be simple to implement, and gets at actual competitive effects rather than focusing on the structure of the market (e.g., number of firms, market shares, concentration) to infer the effect that the merger would have on competition.

But is the GUPPI really a short-cut effects-based analysis? A reason for the Herfindahl-Hirschman Index’s (HHI) popularity as an initial screen is that it is simple to implement once market shares are determined. GUPPIs, however, require different information than HHIs, information about diversion ratios and margins. Some use market shares as proxies for diversion ratios, but actual diversion ratios might be quite different from these proxies. And, calculating margins is

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6 Guidelines, supra note 1, § 6.1.

7 The HHI is a commonly accepted measure of market concentration calculated by squaring the market share of each firm competing in the market and summing the resulting numbers. It approaches zero when a market has a large number of firms of roughly equal size, and reaches a maximum of 10,000 points when a market is controlled by a single firm. See, e.g., U.S. Dep’t of Justice, Herfindahl-Hirschman Index (July 31, 2018), https://www.justice.gov/atr/herfindahl-hirschman-index. The Guidelines describe the HHIs, and agencies generally consider markets in which the HHI is between 1,500 and 2,500 points to be moderately concentrated and markets in which the HHI is in excess of 2,500 points to be highly concentrated. Guidelines, supra note 1, § 5.3.
a complex exercise itself. Note that the win/loss analysis and the entry or exit event analysis described above can yield estimates for diversion ratios that can be much more reliable than estimates based on market shares. Thus, an informative GUPPI analysis requires prices (that one can calculate from the sales data), detailed profit and loss statements for the merging parties to estimate margins, and the data and information necessary to estimate diversion ratios, through win/loss or entry event type of analysis described earlier. A GUPPI analysis based on shares can be done in a matter of a few days, but GUPPIs that are based on estimates of diversion ratios can take up to two weeks or more to implement.

Substantive Analyses on Entry and Efficiencies
Substantive analysis of competitive effects is one key component of merger analysis, but the overall potential effect of a transaction needs to account for the effects of any entry and repositioning, and cognizable merger efficiencies. Quantitative analysis showing that entry and repositioning would be timely, likely, and sufficient is not common during the first 30 days of a merger review. More often than not the analyses for the first 30 days has a greater focus on competitive effects, although qualitative, descriptive information about entry and repositioning is helpful to bring up with the agency. Similarly, quantitative analysis of cognizable merger efficiencies in the first 30 days is rare. However, it can be helpful for the economist to review the parties’ efficiency estimates to get a preliminary understanding of the likely overall effect of the transaction on competition, net of the possible price effects, if any.

Data and Information Request
As discussed earlier, an economist’s data and information request should be based on the analysis that the economist plans to pursue and the objective at this stage. Many times, it would typically include:

- **Sales data:** Monthly or quarterly sales data by customer by product or product type, showing net revenues, volumes, costs/margins (if available at this level of detail), customer location (ship-to address, state, country), customer type (e.g., distributor vs. manufacturer, or segment), product segment, and store/manufacturing/plant location;
- **Bidding, win/loss data, and/or Customer Relationship Management (CRM) data:** Any sales staff data (e.g., salesforce.com data) identifying customers that sales personnel have contacted, including information such as current supplier(s), willingness to switch suppliers, opportunities, wins/losses, frequency of contact, and any competitive intelligence kept in the ordinary course of business;
- **Profit and loss data:** Detailed financial reports, profit and loss statements showing margins (gross and net) over time for different product and application categories, as well as cost information and cost category breakdowns; and
- **Industry data:** Estimates of market shares, and overall industry trends.

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Other than data, the economist might normally be interested in the information contained in the following types of documents:

- Existing company documents and analyses that identify key competitors (domestic or international), competitive strengths and weaknesses of each competitor, and the range of competing products offered by those firms;
- Existing company documents and analyses that provide estimated market shares by product category and/or product segment and by geographic regions (if available);
- Existing company documents and analyses that show or discuss levels and changes in prices, costs, and margins over time for the different products/product categories and geographic regions;
- To the extent available, company documents and analyses that show or discuss current or potential customers and future plans for different products/product categories; and
- Information, documents, and presentations on expected efficiencies from the merger. In particular, documents and any presentations that show any merger-specific efficiencies, in categories such as potential benefits from combining product lines, manufacturing locations, distribution and/or manufacturing cost reductions, procurement, and/or R&D.

Together, the qualitative and quantitative information described here can serve as a very useful basis for beginning the substantive analyses. In some cases, as noted in the previous section, implementing these analyses may require additional information.

In some cases, publicly available data sources can also be helpful, to complement the merging parties’ internal data. For example, in health care, data pertaining to inpatient and outpatient hospital services are available through the American Hospital Association, Centers for Medicare and Medicaid Services, or the states’ hospital associations. In the agriculture industry, the U.S. Department of Agriculture publishes a number of reports and economic data on the production and overall prices of agricultural products. In retail, Nielsen publishes data on retailers, including store location, characteristics, and size, that can be useful for an economist’s analysis.

In some cases, the agency may request data from the merging parties through a Voluntary Access Letter in the initial 30-day period. Such requests often include the types of information described here, including win/loss information and sales data. In such cases, the economist and team can have a helpful role in understanding and submitting the data specifications to the agency.

### Presenting to and Engaging with Agency Economists in the First 30 Days

Whether to present and engage with an agency’s economists in the first 30 days is a judgment call that is typically made by the antitrust counsel on the team, often in consultation with the consulting economist. The benefits of having an economist engage with the agency staff can include an alignment on any economic analysis that can be particularly informative and any key areas of focus. During an early meeting, the consulting economist can also provide helpful information to the agency economists and lawyers based on initial analyses. On the other hand, some practitioners prefer to avoid having the economist engage at an early stage, in the belief that the agency could view it as a signal that the proposed transaction could be problematic. However, given that merger review has become much more data intensive, even in the initial phase, the engagement of an economist early on for most cases has become common place. In some instances, economists do not appear in front of the agency in the first 30 days because the nature of the agency’s inquiry in the first 30 days does not always require significant economic analysis or an economist’s presentation to answer. However, as merger analysis and the inquiry into whether a given proposed merger would substantially lessen competition is inherently an eco-
nomic analysis, engaging in the types of analysis described above proactively can ensure that the team is ready to provide helpful information to the agencies as they review and conduct their analyses on proposed transactions.

**Conclusion**

In any given merger review, one is often constrained by time, budget, and/or data and information. Such constraints limit the analyses that an economic expert can pursue, leading to a need to focus on, or prioritize, a more limited set of analyses. Identifying the focus, or the priorities is productive for everyone. The results of the economic analysis can help the antitrust attorneys in their overall assessment of the antitrust risks, provide counseling to the business clients on timing, align expectations with respect to possible outcomes, and where appropriate, determine a strategy with regard to timing. During this process, counsel and the consulting economist can work closely to get up to speed on the key industry facts, and involving the consulting economist in discussions with business executives early on can help the economist identify the relevant issues at an early stage by asking the questions that are informative for the economic analysis. In doing so, the consulting economist can also more quickly offer insights into any potential, good arguments for the merger review.

Ultimately, agency staff appreciates credible, sound economic analysis, as it can help to lessen the burden on agency economists, allowing them to allocate their limited resources and time efficiently. Implementing the right analysis from the very beginning also ensures that the team is prepared to answer questions from agency staff when they arise.