



U.S. DEPARTMENT OF JUSTICE

Antitrust Division

**Quantifying Unilateral Effects
in Investigations and Cases**

Addressed by

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Before the

George Mason Law Review Symposium

Antitrust in the Information Revolution:
New Economic Approaches for Analyzing Antitrust
Issues

George Mason University School of Law
Arlington, Virginia

October 11, 1996

Quantifying Unilateral Effects in Investigations and Cases

Now that you've absorbed everything there is to know about this subject from the experts, we'll shift gears to the lawyers' perspective to talk about how we at the Antitrust Division are using these types of analyses in our investigations, case selection and case preparation. For this presentation, at least, you won't see any equations or demand curves.

First of all, at the Department we really have two goals to accomplish, and we're forced, due to the timing requirements of merger reviews, to work on them simultaneously. Those are figuring out whether or not a proposed transaction is likely to be anticompetitive, and if it is, getting ready to go to court to block the transaction. We care about making the right decision, so that otherwise efficiency-enhancing transactions can proceed expeditiously. We also care about winning the cases we do bring because we want to ensure consumers aren't harmed.

Winning merger cases, however, has always been difficult, and has become even more so. District Court judges rarely see a merger they don't like. Even in the 60s, when the government won most of its merger cases, they were seldom won at the district court level. Why is that? I think that one reason is the very nature of the statute. Judges are more accustomed to making decisions based on facts about what happened; in mergers, they are called on to predict what might happen in the future-- something which I think a court is reluctant to do, especially when faced with a merger that may involve many products, only a small portion of which may be anticompetitive, and in the face of local businessmen and women addressing all the advantages of the merger, including claims of efficiencies.

More and more when we go to court, the judges seem to be asking for concreteness; the anecdotal evidence seems less important to them than surveys, which seem systematic, but may be flawed. If the issue is product market, the courts seem to want to know exactly how many customers would be willing to switch. And if it's competitive effects, they want to know how big an effect will result. More and more, in order to persuade a court

that a merger is going to be harmful, we feel the need to do the best we can to quantify.

So, in our investigations and case preparations we are asking both our economists and the parties what effects from the merger can be quantified and how we can best do it. We think it can be a valuable tool, even though the data may have limitations, to use along with other types of evidence, to instruct our internal analysis and either close the investigation or use as another proof to demonstrate to a court that a merger should be blocked. It's important to keep this type of evidence in perspective--it is one type of evidence, not a magic key that allows us to unlock the secrets of the castle. Like all evidence, its accuracy and persuasive value has to be scrutinized.

I thought I'd give you several examples of recent mergers and how we have used these methods in those cases. In the last year we've had an unusually large number of investigations involving differentiated products. And, as you'll see, we've used the data to help us decide to rule out cases and to bring cases.

Fish Sticks (Van de Kamp's acquisition of Mrs. Paul's)

There were three major competitors of branded prepared fish products--Mrs. Paul's, Van de Kamp, and Gorton (and a few minor brands) and Van de Kamp was acquiring the assets of Mrs. Paul's. "Prepared seafood" is seafood that has been processed and then breaded or batter dipped, such as fish sticks or breaded fillets. The principal issue was the product market. If frozen prepared seafood was a relevant market, there might be a case. But if other products--such as fresh seafood, frozen but not prepared seafood (like shrimp) and/or non-seafood frozen products (chicken nuggets) were in the market, there might not be a case.

Quite frankly, some of us were skeptical that there was a prepared fish product market. Intuitively, that seemed too

narrow. But an initial read of the parties' documents suggested that the three national brands competed vigorously and there didn't seem to be substitution to other kinds of fish or non-fish products. Depositions seemed to support that view. Interviews with brokers and grocers gave us another view, however, suggesting that consumers would shift to other products, including other types of frozen convenience foods, if prices increased. We were able to use the data we examined to help sort this out, to conclude that this was not a likely case, and to close the investigation.

We got IRI data for 64 cities and regions. (Data from Information Resources, Inc. which maintains a data base called Infoscan with price and quantities of products scanned in supermarkets with at least \$2 million in annual sales. Infoscan data, thus, provides a sample of stores in each local area.) The data were for all "prepared fish products" by brand (Mrs. Paul's, Van de Kamp's, Gorton's, and minors), and for "prepackaged raw frozen seafood." It did not include fresh fish or non-seafood frozen items. We had revenue and quantity data by week for 108 weeks. The data was quite detailed--30 SKUs (stock keeping units, such as 12 oz. boxes or 8 oz. boxes) for each of the major brands, 200-400 more SKUs from other brands, and 15 SKUs of private label brands in each city.

We used the data to estimate demand elasticities, both at the market level and the individual firm level. The market elasticities were used to test whether various product groupings would fit the Merger Guidelines market definition. We also estimated individual firm demand at both the brand level and sub-brand level. The resulting own and cross elasticities were used to gauge the degree of substitutability between Mrs. Paul's and Van de Kamp's and the ability of the merged firm to profitably sustain a unilateral price increase for those brands.

Whenever you're dealing with data, there are going to be a number of choices to be made about how to organize it, and various assumptions to be used in the models (such as demand).

These will be important for the litigator to understand, for if results vary according to the choice you make, you have to be prepared to defend that choice, which means getting sufficient industry facts from documents or other sources to support it.

In this case, we tried it a number of different ways, to see if there was any sensitivity to the different methods.

What did we learn? Our results showed that products outside frozen prepared seafoods were as good a substitute for breaded seafood and fish sticks as other products with the frozen seafood category, such as frozen shrimp or crab cakes. As to possible competitive price increases, the results were mixed. While there appeared to be some substitutability between Mrs. Paul's and Van de Kamp's, consumers also seemed to be very sensitive to price increases. The fact that we got inconsistent results helped us to decide that we should not bring a case, as did evidence about the various ways the frozen food grocery business varied from the white pan bread business which I will discuss in a few minutes. Let me be clear, we look at all the evidence and then decide whether we believe there is a competitive problem.

Mascara (L'Oreal's acquisition of Maybelline)

This merger involved a large number of cosmetic products, but the initial indications were that, if there was a problem, it was most likely in mascara--a cosmetic used to darken, thicken and lengthen eyelashes. It sells for \$4.00-6.50, but may be less, for it is often promoted. Used by three out of every four American women, mascara has no substitutes. It is sold on a no-frills basis through mass retail outlets--discount chains like Walmart, drug stores, and grocery stores. It is also sold through direct distribution--through sales forces of Mary Kay and Avon. It's a substantial market with \$270 million in sales. The mascara sold via the mass retail chain and directly is similar in terms of price, quality and brand image. Let's call it "popular" mascara.

Mascara is also sold in department or specialty stores. The brands sold there are known as "prestige" brands, and are sold on a full-service basis. Prices are higher--ranging from \$11 to \$20. These include such brands as Clinique, Elizabeth Arden, Estee Lauder, and L'Oreal's Lancome (made and distributed by a separate division from the L'Oreal brand). The evidence we saw suggested that prestige mascara was not in the same product market as popular.

Maybelline ranked number one in the U.S., in popular mascara sales; and L'Oreal was third. Only two other majors sold popular mascaras--Revlon (Revlon and Almay brands), and Proctor and Gamble (Max Factor and Cover Girl). Together, all four majors accounted for 90% of all popular mascara sales.

At issue in the investigation was how extensively the two brands competed, and whether consumers would pay more for L'Oreal or Maybelline in the future. The parties argued that the two brands had different images: that L'Oreal was "high end" with a higher image and price, positioned closer to the lower end department store brand like Clinique, whereas Maybelline had a lower image and was closer in price to Cover Girl, Avon, and a so-called "dollar" brand, "Wet 'N Wild". While it appeared that L'Oreal and Maybelline were not each other's next best substitute for many consumers, the evidence showed that L'Oreal had come down in price and was moving closer to Maybelline in both price and image, so that consumers were beginning to switch between the two. Given that this industry had extremely high margins, we wondered if they were close enough substitutes to enable them to raise prices profitably. If it did, past industry practice suggested closer substitutes would follow any post-merger price increase.

We used Neilson ScanTrak data, which is collected at mass market outlets (but not for convenience stores and smaller drug stores). We had no data for direct sales, department stores, or outlets like Sears, Body Shops, and The Cosmetic Centers. At first we were only given the data on a monthly basis. That

contained so few observations that it wasn't helpful. Finally we got the data for 156 weeks for the entire U.S., for eight individual metropolitan areas, for each brand and by outlet (drug/grocery/mass merchandisers).

The parties argued the data were unreliable--the mass market was too narrow and ignored close substitutes like Avon for Maybelline and Clinique for L'Oreal; and it was also too broad since neither Maybelline nor L'Oreal competed much at all.

We used the data to estimate demand at the brand and sub-brand level, and then we simulated the possible effects of the merger on prices. What we learned was that at most there might be a small price increase. Small differences in the methodology mattered as to whether there were any price increases predicted. And that was before considering possible entry or product repositioning or efficiencies. We considered the information, along with information in the documents and from the interviews, and decided to close the matter.

Bread (Interstate Bakeries Corp. acquisition of Continental Baking Co.)

This merger involved the combination of Continental, the largest baker of fresh bread in the U.S. and the maker of Wonder and Home Pride brands, with Interstate, the third largest baker with its different labels (such as Weber's, Mrs. Karl's, Butternut, and Sunbeam). We decided that the relevant markets were white pan bread sold to retail consumers in five geographic areas--Chicago, Milwaukee, Central Illinois, Los Angeles and Southern California. "Pan" refers to the fact that bread is baked in walled pans that shape the loaf. White pan bread is made with softeners and preservatives that give it a soft texture and allow it to stay fresh for several days. Bakers have extensive delivery systems and provide the service of putting bread on the shelves and removing stale bread.

In each of the markets, Continental and Interstate were leading sellers of white pan bread, which sells for at least twice the price of private label (owned by the supermarket chain) and secondary labeled bread. In Central Illinois, LA and San Diego, they were the only substantial sellers. In Chicago and Milwaukee, there was one additional substantial seller.

The investigation indicated that consumers have a strong preference for white pan bread over other varieties, and for premium over other types of white pan bread. They also have strong preferences for particular brands. Thus, if the price of a particular premium brand were increased slightly, few customers would shift away, and of those who did shift, most would switch to other premium brands of white pan bread. Thus, it appeared likely that after the merger, the merged firm could raise prices of either Continental or Interstate brands. Entry was unlikely due to the cost of establishing a premium brand, as demonstrated by several large bakers who had failed to be successful in selling white pan bread (Pepperidge Farm, owned by Campbell Soup, and Oroweat, owned by Kraft).

We had IRI data by week with the quantity sold and average price for each premium fresh bread product. For example, there were eight variety groups (white; wheat; Italian, French, and sourdough; rye and pumpernickel; grain, protein and fiber; fruit and nut; diet, and all other). There were also data for each of the nine different Wonder premium white bread products (due to differences in sizes and shapes of the loaves and different added ingredients). We used the data to estimate demand for Chicago and LA. We aggregated the data to the brand level for each product group, corresponding to different loaf sizes and variations in additives. The estimated demands were used to demonstrate that white pan bread was a market. Documents and depositions were confirmatory. We were also able to establish that the markets were local because the firms could price discriminate and arbitrage was not possible. We then simulated the predicted price increases. For example, in Chicago, we

believed that a price increase for both Continental's brands and for Interstate's brands would be very substantial. We were able to show that a price increase that would not have been profitable before the merger (because of substitution away to the brands of the other firms, particularly the acquired firm) would now be profitable.

Based on our review of all the evidence, we were prepared to challenge this transaction. We filed a case, along with a proposed settlement, including either Continental or Interstate's brands in the relevant markets, along with any other assets needed to sell white pan brand (including plant and distribution).

Let me sum up. We at the Antitrust Division are evaluating all of the relevant evidence to determine whether or not a merger is anticompetitive. You can expect that we will be trying to get additional data from firms when it's called for, such as IRI and Neilson data, as well as data on margins (at the most disaggregated data level from financial documents, i.e. cost and revenue data). When we have the data available, we are using it to aid in helping us reach a conclusion and if necessary to prepare for litigation.