

## RIDING THE RADIO MERGER WAVE

Historically, federal regulation was responsible for the highly fragmented nature of the radio industry. As recently as 1992 a company could own no more than one AM and one FM station in a market. In 1992, the FCC allowed radio "duopolies" to own two stations of each service in a market. In 1996, the Telecommunications Act further relaxed these restrictions, increasing the number of stations a company could own in a market to as many as eight with a maximum of five of either service. In the year since the 1996 Act was signed, a wave of radio mergers has occurred. In response, the Department of Justice (DOJ) has allowed some mergers to go forward without change while forcing divestitures in others under threat of a court challenge. Clear policy guidance, however, has yet to be articulated.

Prior to 1996, DOJ had little interest in reviewing radio mergers because FCC restrictions kept ownership concentration very low. After the 1996 Act, however, DOJ was confronted with radio transactions that resulted in substantial consolidation of radio ownership in various radio markets. In some cases, more than one transaction occurred in a given city.

DOJ has focused on several key issues relating to market definition, measures of concentration and safe harbors. For example, is the product market for analyzing radio mergers limited to radio advertising alone, or does it also include television, newspaper, and/or other forms of advertising? Should firm size and concentration be measured by advertising revenue, audience share or signal strength (*i.e.*, the ability to reach listeners)? Where are the safe harbors and where are the areas of concern?

In resolving these questions, DOJ appears to have adopted radio advertising as a relevant market, used advertising revenue as a measure of concentration, and chosen a market share of approximately 40 percent of radio advertising revenue as an informal safe harbor. In cities where restructuring was not required, post-acquisition market shares ranged up to 46 percent. In cities requiring restructuring, post-divestiture market shares ranged from 36 to 46 percent. Market shares of

this size, coupled with the size of existing competitors, resulted in post-acquisition HHIs well above traditional safe harbor levels. It is not clear why DOJ has relaxed its usual standard. Perhaps DOJ policymakers suspect the market may be broader than radio advertising or that collusion in radio advertising is especially difficult.

Other issues considered by DOJ in radio mergers include whether a station can exercise market power unilaterally by buying stations with similar demographic profiles, whether radio stations can price discriminate against certain customers, and whether format changes can discipline price increases. DOJ is apparently concerned that mergers between stations with similar demographics will allow the acquirer to raise the price of advertising to customers seeking these demographics. DOJ appears to believe that format changes by other stations will not discipline a unilateral price increase. In several cities, DOJ has forced divestiture of stations with overlapping demographics. DOJ also appears to be convinced that radio stations can price discriminate against certain customers who desire audiences with certain demographics and are not likely to substitute to other media.

DOJ has also asked some merging parties to explain the likely benefits and efficiency gains from the radio station mergers, though it has not revealed what weight it gives to these efficiency arguments. At issue is whether consolidation of numerous radio stations

### ALSO IN THIS ISSUE

- Computer Simulation Models and FERC's New Merger Criteria
- Estimating Elasticities of Demand in Differentiated Product Mergers
- Selected EI Cases in 1996

---

---

will allow radio to offer broader unduplicated reach to advertisers, making radio a more effective competitor against television and newspapers by reducing the transaction costs of "buying" radio. The parties have indicated a desire to increase their share of advertising revenue by making local radio groups equal in reach to a broadcast television station or a local newspaper. Also, some radio groups plan to develop new sales units to target traditional television and newspaper advertisers.

A clear picture of radio merger enforcement policy has yet to emerge from the reviews performed by DOJ. Despite approving or amending numerous mergers in the radio industry, DOJ has not issued any policy guidelines regarding radio mergers. New transactions, both large and small, continue to appear, despite the absence of safe harbor policy guidance. Even small

transactions are not immune from scrutiny; DOJ has investigated mergers that were too small to be reportable under Hart-Scott-Rodino rules. Moreover, none of DOJ's hypotheses regarding market definition, measures of concentration, and possible unilateral effects has been tested in court. The 1996 Act, by permitting consolidation, recognized the potential for substantial economies of multiple station ownership. It remains to be seen where DOJ and the courts will draw the line between the benefits of consolidation and market power concerns.

*Principal Joseph W. McAnneny and Vice President Michael G. Baumann have worked on several radio station mergers including Cox/NewCity, Paxson/Press and Westinghouse-CBS/Infinity.*

## COMPUTER SIMULATION MODELS AND FERC'S NEW MERGER CRITERIA

Recently the Federal Energy Regulatory Commission (FERC) issued a policy statement describing important changes in how it will evaluate proposed mergers under the Federal Power Act's public interest standard. These changes, which include new standards for merger applications, should lead to significant improvements in procedure and substance not only for evaluation of mergers but also for other matters that raise issues of market power, including decisions on industry restructuring and market-based pricing. These policy changes increase the value of computer simulation models that can provide insights into some of the detailed questions of market power analysis.

The FERC policy statement identifies three noteworthy positions on how competitive effects are to be analyzed. First, FERC formally adopts the Department of Justice/Federal Trade Commission *Horizontal Merger Guidelines* as the analytic framework for competitive effects, thereby bringing its evaluation of market power into the mainstream of antitrust. Second, FERC specifies a "competitive analysis screen" to discriminate between mergers that raise competitive issues warranting further investigation and those that do not. Third, as a component of the analytic screen, FERC adopts a "delivered price test" as the appropriate method to determine the geographic scope of competition.

Despite its merits, FERC's methodology for determining the geographic scope of competition and for computing market shares and concentration indexes

ignores the role played by the geographic pattern of loads in determining the geographic scope of competition in the supply of energy to any particular group of customers. To determine whether a generator that is not exercising market power would be able and willing to supply a particular group of customers at a specific price, it is not sufficient merely to check that generator's variable costs of production and delivery and the availability of transmission capacity. One must also consider whether sales of energy to the customers in question would require the generator to forego more profitable sales of energy to customers located elsewhere. Well-designed computer simulation models similar to those used in the electric power industry to analyze generation dispatch can be used to do precisely that.

Broadly speaking, four types of computer simulation models that are widely used in the electric power industry might be considered as tools for analyzing market power issues: (1) dispatch/transportation models, (2) dispatch/unit commitment models, (3) load flow models, and (4) load flow/dispatch models. Dispatch/transportation models, which incorporate data on loads, transmission constraints between control areas, transmission losses and pricing, and the determinants of generator costs, have practical advantages compared to the other model types for analyzing market power. One advantage is availability. The Economists Incorporated National Power Model was recently used in testimony on industry restructuring at the Nevada Public Service Commis-

---

---

sion. Dispatch/transportation models enable one to analyze, on an hour-by-hour basis and under alternative assumptions, the ability of one utility or a set of utilities profitably to raise prices above competitive levels by reducing output. The models also estimate the magnitudes of any anticompetitive price increases, the locations of customers adversely affected by the price increases, and competitive generators that would increase output in response to the price increases. These models can be used to provide the information necessary to implement FERC's analytic screen, with the added refinement that they take account of the geographic pattern of loads. A potential limitation of these models—that they do not explicitly incorporate the electrical properties of the transmission grid—can be offset through the complementary use of a load flow model.

Well-designed computer models will also be used in detailed investigations of competitive effects. These models can be used to provide certain, albeit not complete, answers to the ultimate question under the *Merger Guidelines*: will a particular merger create or enhance market power? Properly constructed models

provide information on the ability of one or more utilities profitably to raise prices above competitive levels by reducing their outputs of energy. Computer models have an inherent limitation, however, which implies that they must be regarded as a supplement to rather than a replacement for traditional antitrust analysis. While the models may demonstrate that a utility, or set of utilities, would have the ability to exercise market power by engaging in certain types of behavior, the models do not deal (or do not deal well) with some other theories of anticompetitive behavior. If a type of anticompetitive behavior cannot be modeled adequately, the model cannot be used to demonstrate whether it is a problem. Therefore, analysis of market shares and concentration as part of an investigation of market power will remain important.

*Senior Vice President Mark W. Frankena and Vice President John R. Morris specialize in competition analysis in regulated industries, including electric power, natural gas, and telecommunications. Both previously were employed in the FTC's Bureau of Economics, and they recently testified on the competitive effects of the Primergy merger.*

## ESTIMATING ELASTICITIES OF DEMAND IN DIFFERENTIATED PRODUCT MERGERS

The new emphasis on estimating post-merger price increases in investigations of differentiated product mergers has increased the importance of estimating the sensitivity of sales to a change in price. Several methods exist for measuring this sensitivity—referred to as the elasticity of demand. Data-intensive econometric methods for estimating this elasticity have become more useful with the advent of retail checkout scanning data. Survey data can also provide the necessary information for estimating this elasticity. In addition, the Lerner method of estimating the elasticity of demand has considerable appeal for its simplicity. Each of these methods has shortcomings, but the interest of the antitrust authorities is clear: the estimated elasticity of demand has an important effect on a post-merger price increase and thus on the antitrust agencies' response to proposed mergers.

Econometric estimates of the elasticity of demand require three types of data: prices and quantities of past sales, data on non-price factors influencing demand (e.g., the prices of substitutes) and data to solve the identification problem. The identification problem arises because changes in price affect quantities sold, and changes in quantities sold affect price.

Thus, accurately estimating the elasticity of demand requires separately identifying the effect of price on quantity and the effect of quantity on price. The identification problem can be solved using information on the costs of producing the product, but the necessary cost data may not be available. Another way is to combine information on changes in demand for the product in different areas. This method is promising because retail checkout scanning data typically are available by metropolitan area, but it requires changes in demand in the different areas to be independent of each other, and that requirement often will not be met.

If detailed data on prices and quantities are unavailable, a consumer survey may provide the means for estimating the elasticity of demand. In surveys, respondents are asked what their purchases would be given a certain set of prices. The econometric analysis then can use the survey responses in place of data on actual purchases. The antitrust authorities have been reluctant to use consumer surveys, but the recent use of a survey by the Department of Justice indicates that this attitude is changing. Surveys, however, are costly and time consuming, particularly given the limited

## SELECTED EI CASES IN 1996

**Westinghouse/CBS Acquisition of Infinity Broadcasting:** EI President Bruce M. Owen worked with Jones, Day, Reavis & Pogue to assist Westinghouse/CBS in its acquisition of Infinity Broadcasting. The Department of Justice, which reviewed the \$5 billion merger of the nation's top two radio station groups, required only minimal divestitures.

**Caterpillar Parts Litigation:** EI Principal William C. Myslinski, working with Howrey & Simon, testified on behalf of Caterpillar regarding competition issues and damages in this case involving vertical restrictions on the sale of replacement parts for export by Caterpillar dealers. The court and the jury found in favor of Caterpillar.

**Securities Litigation:** Defendant R.P. Scherer prevailed against plaintiff Ocap in this securities litigation involving the sale of a Scherer subsidiary. EI Principal Peter R. Greenhalgh testified on behalf of the defendant who was represented by Simpson, Thacher & Bartlett.

**Ciba-Geigy/Sandoz Merger:** EI Principal Philip B. Nelson led the economic analysis before the Federal Trade Commission in the merger of Ciba-Geigy and Sandoz to form Novartis. The merger, which was one of the largest in history with over \$27 billion in assets, involved overlaps in flea treatments, herbicides, gene therapy and other areas. The merging parties were represented by Kaye, Scholer, Fierman, Hay & Handler.

**PacificCare/FHP Merger:** EI Vice President John H. Preston and Senior Economist Stephanie M. McAree worked with Hogan & Hartson, Konowiecki & Rank, and Sheppard, Mullin to gain approval for this merger of two large California-based HMOs. The FTC issued a second request that focused on Medicare health insurance products in Southern California, but did not oppose the merger after considering entry and the ability of other Medicare HMOs to expand their networks.

**Airline Reporting Corporation Litigation:** EI President Bruce M. Owen and Principal Margaret E. Guerin-Calvert worked with Jones, Day, Reavis & Pogue on behalf of ARC on antitrust litigation that challenged ARC's airline ticket clearing services. The court found in favor of ARC.

time available during a Hart-Scott-Rodino review. Moreover, the survey must be designed very carefully.

The Lerner method of estimating elasticity of demand is based on the principle that a profit-maximizing firm will price so that the inverse of its margin will equal its elasticity of demand. Thus, to measure the elasticity of demand for a firm's products, one need only find the margin, which is defined as the difference between price and marginal cost as a share of price, and invert it. The Lerner method, however, presents a number of potential problems. Measuring marginal cost may be difficult using accounting data. Moreover, the method makes many assumptions, including that a firm operates with perfect information concerning its costs and the demand for its products. These assumptions will not hold perfectly for any firm; the accuracy of the Lerner method will depend on the extent to which they are violated. Given the Lerner method's acceptance at the antitrust agencies, however, any study suggesting that the elasticity of demand is very different than that implied by the Lerner method should explain why the Lerner method does not apply.

An additional difficulty is that the Lerner method determines the elasticity at the point on the demand curve at which the firm is producing, but not how that elasticity will change if price changes. The change in the elasticity depends on the form of the demand curve which, in turn, may have an important effect on the estimated price increase. In a recent merger, the price increase estimated using one form of the demand curve was four times the price increase estimated using another form of the demand curve, even though the elasticity and all the other parameters of the model were the same. The appropriate form of the demand curve is often difficult to determine even using econometric analysis, but more flexible functional forms may successfully address the problem.

Any method of estimating the elasticity of demand is imperfect. Whether done on survey or actual data, an econometric analysis will involve choices concerning issues such as the variables to include in the model and the form to assume for the demand equation. Any estimated elasticity of demand should be thoroughly tested to see how sensitive it is to those choices. Nonetheless, the available methods often can provide a reliable estimate of the elasticity of demand.

*Senior Economist Henry B. McFarland has estimated elasticities of demand for several matters, including differentiated product mergers.*