Introductory Comments by Luke Froeb

Estimating the Price Effects of Mergers and Concentration in the Petroleum Industry : An Evaluation of Recent Learning

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Good morning. I am grateful to the panelists for being with us today to share their expertise on issues raised in examining the competitive effects of mergers and concentration in the oil industry. I welcome the audience who have joined us here today.

Antitrust policy is best thought of as a continuing process of experimentation, evaluation, and reform. It has taken us at the FTC 90 years for us to get where we are today, and it would be a terrible conceit to think there is nothing more to learn about how best to design and enforce these laws.

At the FTC, we have an ongoing program to both characterize our enforcement actions, including decisions not to pursue, and to estimate the consequence of the decisions.

But following up on the FTC's decisions is not easy. The discussion of the panel today will evaluate the techniques and assumptions used in analyses of merger effects in these studies, as well as the many and various difficulties in conducting a study of merger effects that is of sufficient reliability to inform policy.

Note, this analysis is similar in thought process and questions asked to what the enforcement agencies do when deciding whether or not to take an enforcement action in the first place. In a merger investigation where the merger has not yet occurred and the enforcement agencies are deciding whether or not to seek to block the deal, the agencies are trying to compare two states of the world – "with" and "without" the merger – to determine whether prices are likely to be higher in the state of the world with the merger. However, in these investigations, since the merger has not yet occurred we do not have information on the state of the world with the merger and, thus, inferences must be drawn about prices and other competitive elements based on theory informed by the industry facts.

In the ex-post situation we will be discussing today, the merger has occurred, there are data on the "world with the merger," and inferences need to be drawn on what the price in the markets would have been but-for the merger, that is in the "without merger" state of the world. Because there are actual observations on both the post merger world and on the world before the merger, empirical techniques can be employed to answer the merger effect question using natural experiment techniques where the merger is the natural experiment.

Many critical conceptual and methodological issues are involved in properly and reliably estimating the price effects of mergers or concentration changes. We will have three separate panels, each moderated by one of the experts, on broad categories of conceptual and methodological issues. For example, one area where we expect lively discussion is on how to isolate the price effect of a merger from other factors that also affect prices. Addressing this issue is multi-faceted as economic modeling choices, selecting appropriate variables to control other factors, and technical econometric estimation technique choices, all come into play. Remember, we are not working under laboratory conditions here, the data are drawn from the real world and, taken on their own, reflect an experiment that does not control for other factors that also affect prices, for example demand or supply shocks unrelated to the merger. The analyst, however, must control for other factors in order to isolate the effects of the merger.

Another large topic that will be discussed is what is called "robustness testing." Researchers need to make lots of assumptions and decisions in specifying the models and the data used to estimate the price effects. Robustness testing involves techniques to see whether and to what extent the results of the model are sensitive to other, equally plausible, decisions or assumptions.

This afternoon, after the discussion of the issues raised by these two studies, we will have a panel that ties this back to public policy issues. In a discussion moderated by two of our experts, the panelists will discuss the implications of the current learning from these two studies for antitrust merger policy in the petroleum industry. They will also, we hope, be providing fruitful areas for additional economic research.

To aid in their preparation for today's conference, the FTC staff provided the panelists copies the May 2004 GAO Study, "Effects of Mergers and Market Concentration in the U.S. Petroleum Industry" and the March 2004 Bureau of Economics Working Paper "The Economic Effects of the Marathon-Ashland Joint Venture : The Importance of Industry Supply Shocks and Vertical Market Structure." The FTC staff also provided correspondence between FTC staff and GAO staff on technical questions regarding GAO's estimations; an FTC staff technical report entitled "Robustness of the Results in GAO's 2004 Report Concerning Price Effects of Mergers and Concentration Changes in the Petroleum Industry;" and a document containing "GAO Staff Comments on the Marathon Ashland Study."

While oil mergers and the two studies form the basis for this conference, in a sense they are but a case example for enforcement policy R&D. The issues that are likely to be raised and addressed today are similar to those that researchers face in doing any ex post studies of merger policy decisions. Thus, we believe, and are hopeful that, the experience today and the critiques and guidance provided by our panelists, who truly are the leading econometricians and economists in the field, will be useful to us and to academics and others as we continue to develop expertise in enforcement R&D generally, as well as the specifics of analyzing mergers ex post.

We are privileged today to have panelists that every economist would rank at the very top of the profession. In alphabetic order :

Dr. Dennis Carlton is a professor of economics at the University of Chicago Graduate School of Business. Dennis is a leading academic in the areas of industrial organization and econometrics, areas in which he has published many research papers. People are often most familiar with Dennis's work because he is co-author of one of the best, and most popular, textbooks in Industrial Organization. Dennis often provides advice to firms and to the government as an economic expert in antitrust matters. He has done work previously for the American Petroleum Institute.

Dr. Jerry Hausman is the John and Jennie S. MacDonald Professor of Economics at MIT, where he has taught for 30 years. Jerry is a recipient of the John Bates Clark Award, granted annually to an economist under 40 who has made the most outstanding contributions to economics. Jerry has published numerous papers in econometrics and applied microeconomics, fields in which he is a renowned expert. Indeed, several econometric tests bear his name. Jerry also appears as a economic expert in antitrust matters, although none in the oil industry.

Dr. Ken Hendricks is a Professor of Economics at the University of Texas - Austin who is spending this academic year as a visiting professor at Princeton University. Ken also is an expert in industrial organization economics — notice a theme here – specializing in auction theory and in empirical applications of game theory. Like his fellow panelists, Ken is well published in the fields of his specialties. Ken consults for both businesses and the government as an economic expert for antitrust cases. Ken provided such expertise to the FTC when he was hired by us to analyze competition of the bidding for crude oil exploration rights in BP-Arco matter in 2000. Ken has not been involved as a consultant in oil mergers recently. Ken is acknowledged in the GAO Report as an expert who reviewed the GAO's econometric models.

Dr. Scott Thompson is currently Assistant Chief of the Economic Regulatory Section for our sister agency, the Antitrust Division of DOJ. Scott attended Stanford and Wisconsin and taught econometrics at the University of Minnesota. He joined the Antitrust Division in 1995, and his won the Assistant Attorney General's Distinguished Service Award in 2001. Scott's has conducted and overseen numerous merger and price fixing investigations, and has conducted follow up studies to enforcement actions at the Department of Justice.

Dr. Hal White is a Professor of Economics at the University of California - San Diego. Hal is an expert in econometrics and statistics. Indeed, Jerry Hausman told us that Hal was among the best econometricians in the world today — those of you who know Jerry will recognize what a huge statement this is (Jerry did, however, claim some small credit as he proceeded to tell us that Hal was one of his former students.). Not surprisingly, Hal has a long list of published research in econometrics. Like Jerry, he also has an estimator named after him. Hal offers his economic expertise to businesses through consulting. He has not consulted in the oil industry on any merger matters.

Finally, I want to introduce Dr. Chris Taylor. Chris is Deputy Assistant Director for Antitrust in the Bureau of Economics here at the FTC. Chris is co-author, together with Dr. Dan Hosken also of the FTC, of one of the studies that forms the basis of today's conference "The Economic Effects of the Marathon-Ashland Joint Venture : The Importance of Industry Supply Shocks and Vertical Market Structure" which was released as a Bureau of Economics Working Paper in March 2004. Chris has spent a significant portion of his time over the past few years working on matters in the petroleum industry, including the development and implementation of the FTC's on-going gas monitoring project. To start the conference off, Chris will present both of the GAO study and the BE working paper.