### Interview: Michael R. Baye

#### **Initial Observations**

The Threshold recently had the opportunity to interview Michael R. Baye, the Director of the Federal Trade Commission's Bureau of Economics in Washington, DC. In a discussion focused on merger analysis and enforcement, Dr. Baye shared with The Threshold his insights into merger policy. The interview was conducted by Rhett R. Krulla, of Proskauer Rose LLP, and Carl Shapiro, Transamerica Professor of Business Strategy at the Haas School of Business, University of California at Berkeley.

Michael Baye became Director of the Bureau of Economics of the Federal Trade Commission in July 2007, and is on leave from his position as the Bert Elwert Professor of Business Economics & Public Policy at Indiana University's Kelley School of Business. He received his B.S. from Texas A&M University in 1980, and earned a Ph.D. in Economics from Purdue University in 1983. Michael has held visiting appointments at Cambridge, Oxford, Erasmus University, Tilburg University, and the New Economic School in Moscow, Russia. He has served on numerous editorial boards in economics and in marketing.

Michael is the author of MANAGERIAL ECONOMICS AND BUSINESS STRATEGY, which is in its sixth edition. His research focuses on pricing strategies and their

impact on consumer welfare and firm profits, and uses tools from game theory and industrial organization to derive equilibrium strategies in network industries, mergers, auctions, and contests.

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1. The Threshold: What has most surprised you about the FTC, now that you have had the opportunity to view it from the inside?

Michael Baye: Number one is the quantity and variety of interesting economic issues that cross my desk each day. While I anticipated many of these on the antitrust side, a plethora of important economic topics related to consumer protection, congressional inquiries, and public policy advocacy were not on my radar screen before I joined the Bureau of Economics (BE). I must say it has also been enlightening to see the many internal "checks and balances" that impact decision-making at the FTC.

2. The Threshold: What, if any, changes have you instituted? Why?

*Michael Baye:* This past fall I updated the organizational structure of BE by creat

Frankena) and Deputy Director for Consumer Protection (Paul Pautler), and is charged with coordinating and evaluating the Research and Development efforts of BE staff to ensure that the knowledge base required for our antitrust, consumer protection, and advocacy missions cont

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<sup>&</sup>lt;sup>1</sup> The views expressed by Michael R. Baye in this interview are his own and do not necessarily reflect those of the Federal Trade Commission or any of the individual Commissioners.

consulting economists. She, along with Paul Pautler, also oversees the newly created Office of Applied Research and Outreach, headed up by David Schmidt. This new office replaces the previous Division of Economic Policy Analysis (DEPA) and draws upon the talents of all BE staff to conduct policy relevant research to aid in casework, advocacy, and international outreach

## 3. The Threshold: What are your goals and priorities for the Bureau of Economics?

Michael Baye: My number one goal is to ensure that the Commission has the best possible economic analysis of the issues when making decisions. To this end, I am committed to maintaining and enhancing the strong tradition of economic research that can inform policy, a tradition that dates back to the FTC's predecessor organization, the Bureau of Corporations, and has continued for the nearly 100 years of the FTC's

existence. This traditionnalizatopouT& nornig81 i08 g Ae "K gih&T g "Y Neb "Y 0 g hMih&"

to discriminate between situations where competitive effects are mere possibilities and those where competitive effects are likely. Given the abundance of different models of oligopolistic and competitive interaction, it is not difficult for an economist to identify a specific model that "rationalizes" a particular view of the competitive effects of a merger. But different theories are consistent with given facts. detailed different and knowledge of the underlying industry characteristics and facts of the case, it is possible to identify and refine the appropriate theory for a particular case. I also believe that merger simulations can sometimes be useful, but it is important for the underlying "guts" of the simulations to be carefully linked to the underlying facts and industry characteristics.

9. The Threshold: In some government agencies, Directors insulate themselves, through intermediate layers of management, from the recommendations and analyses of their

organization and microeconomics. They do an excellent job of communicating economic theory and analysis to attorneys, notwithstanding the fact that it is not always easy to communicate complicated theoretical and econometric issues to non-economists.

#### 12. The Threshold:

communicate the analysis in a way courts can understand. While some judges have considerable antitrust experience, many do not. It is important to connect all the dots to ensure that the judge sees that the analytical methodology used in a particular case is in fact consistent with the Guidelines and the law.

## 17. The Threshold: What efforts are you taking at BE to avoid another litigation defeat such as Whole Foods?

*Michael Baye:* We have an appeal pending in the Whole Foods matter, so the jury is actually still out on that one. But the question seems to suggest that a defeat implies that the FTC or BE must be doing something wrong on the antitrust side, and I strongly disagree with that premise. As you know, the vast majority of our merger investigations do not lead to litigation either because the mergers do not raise competitive concerns or because the parties agree to divest assets in markets where there are concerns. So, a scorecard that tracks litigation defeats misses the lion's share of the work we do here in the Bureau of Economics. Moreover, there is a great deal of uncertainty in the outcome of any litigation. As a statistical matter, if one looks over a couple of decades there will naturally be sequences of "wins" and "losses," and such sequences do not imply that things were being done "right" in some periods and "wrong" in others. We in the Bureau of Economics will continue to maintain and develop the skills required to evaluate each case on its own economic merits, to provide our own recommendations to Bureau of Chairman Competition, the Commissioners, and to provide our attorneys with the support they require in the comparatively small number of antitrust cases that are ultimately litigated.

# 18. The Threshold: Some advocates of "critical-loss" analysis assert that all else equal, high pre-merger margins of the merging parties make it unlikely that a merger will be anticompetitive. What role do margins appropriately play in analysis of mergers?

Michael Baye: Unfortunately, critical loss analysis is sometimes abused by experts and is not well-understood by some attorneys and courts. The usual story by "advocates" to whom you refer is that a high pre-merger margin implies a low critical loss—which means a firm doesn't have to lose a lot of sales to make a small but significant and non-transitory increase in price (SSNIP) unprofitable. "advocates" stop their analysis here, wanting the court to erroneously conclude that a profitable post-merger price increase is highly unlikely because the critical loss is so low that it would surely be exceeded by the actual loss that would result from the price increase. In fact, however, an exercise that stops here provides absolutely no useful information about the competitive effects of a merger: Pre-merger, no profit-maximizing firm can increase its profits by implementing a SSNIP-if it could, it wouldn't have been maximizing profits in the first place. Furthermore, a fundamental pricing theorem in economics states that a profit-maximizing firm's pre-merger margin equals reciprocal of its elasticity of demand: The higher the pre-merger margin, the more inelastic the firm's demand at the premerger price, and hence the smaller its actual lost sales from a SSNIP. So, while a high margin does imply a low critical loss from a SSNIP, it also implies a low actual loss. And, based on pre-merger conditions, the implied actual loss must be greater than the critical loss for any profit-maximizing firm, for the reasons mentioned earlier.

What all of this misses is that a horizontal merger that reduces the number of available substitutes makes demand for the merged entity's product more inelastic than it was pre-merger. Given the fundamental pricing theorem, the fact that the firl

encourage active discussion early to minimize the burden of data provision while ensuring that we have the data needed to do the relevant analyses. If a practitioner is hiring an