Response to Gopal Das Varma's *Market Definition, Upward Pricing Pressure, and the Role of Courts: A Response to Carlton and Israel*

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In our article, *Will the New Guidelines Clarify or Obscure Antitrust Policy?*, published in the October 2010 issue of *The Antitrust Source*,[1] we praised the new Horizontal Merger Guidelines[2] as an excellent summary of how the government agencies currently analyze mergers, but also raised concerns about three ways in which the 2010 Guidelines may be unclear to courts and foreign antitrust agencies, which may lack economic sophistication. Those concerns are: de-emphasis of market definition as a tool in antitrust analysis, failure to emphasize sufficiently the role of non-price competition, and excessive focus on particular techniques (such as "upward pricing pressure") rather than general principles for antitrust analysis.

In his reply to our article, Gopal Das Varma takes issue with our critique of the 2010 Guidelines. In particular, he argues that rigorous market definition can itself be a difficult technique for courts to implement or evaluate. He also argues that, for mergers involving differentiated products, it makes sense to shift away from market definition and toward "metrics that seek to measure actual effects," particularly the "value of diverted sales," an index that, according to the 2010 Guidelines (p. 21), "can serve as an indicator of the upward pricing pressure . . . resulting from the merger."[3]

In our view, Das Varma fundamentally misinterprets our main points and thus fails to address our true concerns. In this response, we attempt to clarify our key concerns.[4]

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De-emphasis of Market Definition

Das Varma appears to interpret our concern over the de-emphasis of market definition as a call for agencies and courts to undertake a rigorous approach to market definition and then to compute market concentration as part of a "structural paradigm" that can determine whether a merger is "presumptively anticompetitive."[5] We are calling for no such thing. To the contrary, we believe

[1] Dennis Carlton & Mark Israel, *Will the New Guidelines Clarify or Obscure Antitrust Policy?*, ANTITRUST SOURCE, Oct. 2010, http://www.abanet.org/antitrust/at-source/10/10/Oct10-Carlton10-21f.pdf.

[2] U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines (2010), *available at* http://www.ftc.gov/os/2010/08/100819hmg.pdf [hereinafter 2010 Guidelines].

[3] Gopal Das Varma, *Market Definition and Upward Pricing Pressure: A Response to Carlton and Israel*, ANTITRUST SOURCE, Dec. 2010, at 3, http://www.abanet.org/antitrust/at-source/10/12/Dec10-DasVarma12-21f.pdf.

[4] For a more complete statement of our views, see the comments that one of us filed on the 2010 Guidelines. Dennis W. Carlton, Comment on Department of Justice and Federal Trade Commission Proposed Horizontal Merger Guidelines (June 4, 2010), *available at* http://www.ftc.gov/os/comments/hmgrevisedguides/548050-00034.pdf.

[5] Das Varma, *supra* note 3, at 2.

market definition is not typically the result of a rigorous or formulaic procedure.[6] Instead, in our view, market definition is a crude first step in an antitrust analysis, one that should often be followed by the use of additional analyses. Any attempt to characterize our approach as calling for reliance only on the crude construct of market definition combined with the application of threshold concentration levels creates a straw man. Rather, our point is simply that market definition is often a highly useful first step—particularly for courts, foreign antitrust agencies, or others with limited antitrust experience.

Before describing our concerns with the treatment of market definition in the 2010 Guidelines, we should be clear that we agree with the 2010 Guidelines' statement that "[e]ven when the evidence necessary to perform the hypothetical monopolist test quantitatively is not available, the conceptual framework of the test provides a useful methodological tool for gathering and analyzing evidence . . . ." (Section 4.1.3). We also support the wide range of qualitative and quantitative evidence (e.g., buyer surveys, business documents, industry participants' pricing behavior) listed in this section as potentially useful in market definition.

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However, as noted in footnote 10 of our October 2010 article, in addition to these sources of evidence, we believe that appropriate empirical tests should also be used to ask whether, using any candidate market definition, higher market shares and concentration (in particular areas or time periods) are in fact correlated with margins. In this way, government agencies and courts can confirm whether a particular market definition makes sense via an appropriate empirical test.[7]

In addition, we are concerned with the statement in Section 4.1.4 of the 2010 Guidelines (on differentiated products) that "[d]iagnosing unilateral price effects based on the value of diverted sales need not rely on market definition." This statement could be read—perhaps more broadly than the authors of the 2010 Guidelines intended—to suggest that in many cases, market definition can be skipped altogether. In our view, given the value that market definition can often have as a useful (though admittedly crude) first step, this would be a costly mistake.

Importantly, market definition can serve as a useful screen for frivolous antitrust investigations. *If* the quantitative and qualitative evidence laid out in the 2010 Guidelines points clearly toward a particular market definition, *and especially if* this definition can be confirmed with empirical tests, then it is appropriate to evaluate the merger based on the pre- and post-merger market shares using that market definition. If the share levels and changes are low, then this should end the antitrust analysis.[8] In our view, the ability to screen out frivolous antitrust cases in this way is an enormous benefit that should not be lost by giving government agencies or courts more leeway to ignore market definition.

Of course, Das Varma is correct that in other cases—perhaps including Whole Foods' acquisition of Wild Oats—available evidence may not resolve the controversy about the proper definition of the market or, even if no such controversy exists, may not resolve whether the resulting pre-

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[6] For more on this topic, see, for example, Dennis W. Carlton, *Market Definition: Use and Abuse*, COMPETITION POL'Y INT'L, Spring 2007, at 3.

[7] For more on such empirical tests, see Dennis W. Carlton, Use and Misuse of Empirical Methods in the Economics of Antitrust, Keynote Address, Annual Conference of the Competition Law and Policy Institute of New Zealand (Aug. 2010).

[8] As we noted in our October 2010 article, *supra* note 1, the standard for how low the shares need to be to end the investigation should not necessarily be based on uniform HHI cutoffs. Rather, if at all possible, the empirical tests described above—applied to the specific industry in question—should be used to identify the range of market shares/concentration levels for which changes in shares (on the order of those resulting from the merger) have not historically led to significant price increases. If such empirical evidence is not available, then it does seem reasonable to rely on the low threshold in the 2010 Guidelines, absent countervailing factors.

dicted change in market concentration should trigger concern. We agree that in such cases it is appropriate to consider additional evidence on the likely competitive effects of the transaction, rather than limiting debate to the appropriate market definition and its implications for threshold concentration levels. Market definition is a first step: it will not resolve the antitrust concerns in all cases, but that is hardly a reason to skip the step altogether and thus potentially lose the power of the screen where it does apply.

Finally, we note that the fact that market definition is controversial in many cases (and that analysis is often required beyond this first step) does not mean that evaluation of market definition is not useful to the remainder of the investigation. Quite the opposite is true: as we have already indicated, and as the 2010 Guidelines themselves note, market definition tees up the questions at the heart of all merger analyses: which firms constrain the prices of the merging parties and to what extent does the merger reduce the power of those constraints? In the Whole Foods matter, the market definition debate isolated a critical question regarding the extent to which Whole Foods and Wild Oats pricing was constrained by "conventional supermarkets." And there is no sense in which market definition asked this question in the wrong way—to the contrary, to prove its case, the government would have needed to demonstrate that the merger of Whole Foods and Wild Oats would lead to a significant price increase, which is precisely the same thing as saying that the market is narrow and concentration is large under the 2010 Guidelines' (hypothetical monopolist) approach to market definition. In our view, by setting this critical question up in a way that focuses on which firms are most relevant to constraining prices (rather than jumping right to cross-elasticities, diversion ratios, or other more complicated metrics), market definition often provides a more manageable framework for courts and others to grapple with available evidence.

Focus on Upward Pricing Pressure

Das Varma also takes issue with our concern about the emphasis in the 2010 Guidelines on the upward pricing pressure (UPP) method for evaluating mergers.[9] Once again, he does not address our actual concerns. In particular, much of his response on this point consists of a defense of the use of cross-price elasticities, diversion ratios, and the UPP test (or its more sophisticated counterpart, merger simulation) as part of antitrust analyses.[10] We agree that these techniques can be useful; indeed, we frequently use them ourselves (along with many other techniques) as part of a complete antitrust analysis. However, our concern is that specifically identifying the UPP technique in the Guidelines will elevate its use over that of other techniques and effectively guarantee that it will be used on a regular basis as evidence in antitrust cases. As a result, the use and development of other techniques may be discouraged.

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[9] Das Varma notes that "the 2010 Guidelines do not refer explicitly to the specific UPP test that was proposed in an article by Joseph Farrell and Carl Shapiro." Das Varma, *supra* note 3, at 3. Though possibly merely a semantic observation, his statement seems to imply that we are wrong to say that the 2010 Guidelines are endorsing the UPP approach of Farrell and Shapiro. It is true that the 2010 Guidelines contain no explicit cite to Farrell and Shapiro's paper on the topic. *See* Joseph Farrell & Carl Shapiro, *Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition*, B.E. J. THEORETICAL ECON.: POLICIES & PERSPECTIVES, vol. 10, issue 1, art. 9 (2010), http://www.bepress.com/bejte/vol10/iss1/art9. However, as we noted in our October 2010 article, *supra* note 1, the 2010 Guidelines refer at some length to the specific computations outlined in Farrell and Shapiro's paper. *See* 2010 Guidelines, *supra* note 2, at 21. In our experience, it appears now to be common practice to present these computations to the antitrust agencies as part of economic presentations on mergers. Hence, as we predicted, the effect of the 2010 Guidelines has been to emphasize this particular method for merger analysis.

[10] Note that market definition is not divorced from the concepts of elasticities, cross-elasticities, diversion ratios, and merger simulation. For the connection, see, for example, Carlton, *supra* note 6.

Das Varma is correct that UPP indexes would not be the only evidence on which a court would be asked to evaluate a merger,[11] but they will surely be important evidence in many cases, with their use supported by citation to the discussion in the 2010 Guidelines. This raises at least two specific concerns.

First, using the upward pricing pressure technique as an important source of evidence in merger cases could be a recipe for confusion in the courts or at foreign antitrust agencies that lack economic sophistication. On this point, Das Varma himself refers to the value of diverted sales (the metric that underlies the UPP technique) as a metric "that seek[s] to measure actual effects" of mergers on prices.[12] It is not. In fact, contrary to the view of many highly sophisticated individuals to whom we have spoken, the UPP technique does not seek to measure the magnitude of a merger's expected effect on prices. Even if all of the assumptions underlying the UPP technique are correct, the technique reveals nothing about the magnitude of any price effects from a merger but at most reveals only the direction (up or down, after accounting for efficiencies) of "pricing pressure."[13] Moreover, the UPP index for a specific product cannot even reveal whether the pricing pressure on that product is positive or negative—at best, the UPP technique says only that if the UPP indexes (net of merger-induced efficiencies) are positive for *all* products involved in the merger, then (if all other assumptions underlying the technique hold), the price of all these products will rise (by some undefined positive amount) following the merger.

[M]any individuals fall into the traps of . . . viewing the magnitude of UPP indexes as predictive of the magnitude of price changes.

In our experience, many individuals fall into the traps of viewing the UPP index for one particular product as predictive of the direction of the merger-induced price change for that product and/or viewing the magnitude of UPP indexes as predictive of the magnitude of price changes. Neither of these views is correct. Given that economists commit these errors, we are deeply concerned about what could happen in courts or at foreign antitrust agencies that lack economic sophistication.

Second, not only is there no theoretical basis to say the UPP index predicts the magnitude of merger-induced price changes, we know of no empirical evidence that the UPP index even serves as a useful guide. It could be that the UPP index is always a good predictor, that it is a good predictor only if certain conditions hold, or that it is rarely a good predictor. Based on the extant economic literature, we simply do not know.

We would have preferred that, rather than refer to specific analytical techniques, the 2010 Guidelines: (1) stressed general principles for antitrust analysis, (2) identified economic measures that are often useful in assessing merger effects (market shares, concentration levels, cross-price elasticities, diversion ratios), and (3) emphasized the need for empirical evidence to identify which specific economic measures and techniques are most predictive in particular industries. With this approach, the 2010 Guidelines could have noted that, in differentiated product markets, measures of cross-product substitution often provide information beyond that contained in concentration measures, with the ultimate question of which measures and techniques are most relevant for a given merger appropriately based on empirical evidence.[14]

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11 Das Varma, *supra* note 3, at 6.

12 *Id.* at 3.

13 Farrell and Shapiro are themselves quite clear on this point. *See* Farrell & Shapiro, *supra* note 9, at 19.

14 As an example of the type of empirical evidence that would be useful, see Craig Peters, *Evaluating the Performance of Merger Simulation: Evidence from the U.S. Airline Industry*, 49 J.L. & Econ. 627 (2006). Peters examines previous airline mergers to ask whether merger simulations yield accurate predictions. He finds that simple regressions of price on measures of market concentration actually yield more accurate predictions, on average, than merger simulations, suggesting that in this industry, defining a market and computing concentration levels may yield useful evidence.

We stress that our comments indicate only what we view as the appropriate subject matter for merger guidelines. We, of course, value the development and refinement of new approaches and techniques for merger analysis and have often used these approaches and techniques before the antitrust authorities. However, in our view, the discussion of such techniques should be contained in periodic commentaries on the Guidelines (e.g., the 2006 Commentary),[15] in which the antitrust agencies can provide timely updates on the techniques they currently find most useful, including a more fulsome discussion of the strengths and weaknesses of those techniques.

Conclusion

We appreciate the opportunity to engage in this dialogue with Das Varma. It is this type of discourse on the 2010 Guidelines that we hope will lead to more clarity on how the Guidelines should be used by courts, foreign antitrust agencies, and others. There are certainly many areas on which we agree with Das Varma, notably that market definition is a crude technique and that more sophisticated tests like upward pricing pressure or merger simulation can be useful. However, we do not believe that the limitations of market definition mean that it should be omitted from antitrust analysis, as we believe market definition provides a useful screen for frivolous antitrust investigation and a useful framework to help judges and foreign antitrust authorities avoid egregious errors. In contrast, we are concerned that reliance on the upward pricing pressure technique as a standard piece of evidence could *generate* errors. More generally, we disagree with the elevation of particular techniques over others in the Guidelines, particularly when the evidence supporting the superiority of such techniques is lacking. ●

[15] U.S. Dep't of Justice & Fed. Trade Comm'n, Commentary on the Horizontal Merger Guidelines (2006), *available at* http://www.justice.gov/atr/public/guidelines/215247.htm.