Comment on the U.S. Antitrust Agencies' Draft Vertical Merger Guidelines

Michael Trost*
University of Hohenheim
February 11, 2020

The Upward Pricing Pressure (UPP) approach is a well-established method to assess the unilateral price effects of mergers. It gained in popularity among competition authorities since the U.S. Antitrust Agencies approved it as an important tool for merger control in its 2010 Horizontal Merger Guidelines.[1]

Recently, I have published a research paper in which I extended the UPP approach to mergers of vertically integrated firms.[2] Professor Lawrence White from NYU Stern Business School encouraged me to share the ideas and results of the paper with experts in antitrust and to participate in the current discussion on the proposed U.S. Antitrust Agencies' guidelines for vertical mergers. With this letter I would like to comply with this request. In the following, I will raise some issues concerning the vertical merger guidelines that follows from the analysis of the paper and might be worthwhile to consider in finalizing them. To see the relevance of these issues, I begin with a short overview about the main findings of my paper.

■ Upward Pricing Pressure Indices for Mergers of Vertically Integrated Firms

The main contribution of the paper is the construction of indices that quantify the upward pricing pressure in upstream and downstream markets due to a merger between two vertically integrated firms. These indices specify the gains in cost efficiency that are required to offset the incentive of the merging partners to increase the prices of their products post-merger.[3] Although not explicitly stated in the paper, the model also enables competition economists to specify indices of other kind of mergers; for example, mergers where only one of the merging partner is vertically integrated.

The relevance of the issue tackled in the paper is obvious. In recent years, several of the biggest M&A deals in the U.S. and Europe involved vertically integrated firms; in particular, mergers in the energy, media, and telecommunication industry. Some of them have proved to be highly controversial among antitrust experts and also attracted the attention of the wider public such as the proposed merger between the U.S. telecommunication companies T-Mobile and Sprint.

*Michael Trost, Chair of Microeconomics and Industrial Organization (520C), University of Hohenheim, 70593 Stuttgart, Germany, trost.michael@uni-hohenheim.de.

[1] See Chapter 6.1 in U.S. Department of Justice and the Federal Trade Commission, *2010 Horizontal Merger Guidelines*, August 2010, https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf.

[2] See Michael Trost, *Is the Whole Greater than the Sum of Its Parts? Pricing Pressure Indices for Mergers of Vertically Integrated Firms*, Review of Industrial Organization (2020), published online February 6, doi:10.1007/s11151-020-09747-1.

[3] The derivation of these indices follows the methodological principles already outlined in Gregory Werden, *A Robust Test for Consumer Welfare Enhancing Mergers Among Sellers of Differentiated Products*, The Journal of Industrial Economics **44** (1996), no. 4, 409–413, as well as in Joseph Farrell and Carl Shapiro, *Antitrust evaluation of horizontal mergers: An economic alternative to market definition*, The B.E. Journal of Theoretical Economics **10** (2010), no. 1, 1–41. It is based on the economic model in Serge Moresi and Steven Salop, *vGUPPI: Scoring Unilateral Pricing Incentives in Vertical Mergers*, Antitrust Law Journal **79** (2013), no. 1, 185–214. This model describes price competition along a supply chain with two value creation stages.

In his talk at the 5th session of the Hearings on Competition and Consumer Protection in the 21st Century at the Georgetown University on November 1, 2018, Professor Steven Salop also pointed to recent M&A deals that are both horizontal and vertical. He invoked examples from the health care and door manufacturing industry; the proposed acquisition of Saltzer Medical Group by St. Luke's Health System, and the acquisition of CMI (CraftMaster Inc.) by JELD-WEN.[4]

The paper offers a systematic approach to tackle the competitive consequences of such M&A transactions, and provide measures quantifying the unilateral price effects that are induced by them. In doing so, I strictly adhered to the methodological framework outlined in the 2010 Horizontal Merger Guideline and adopted the UPP approach to derive these measures.

■ Measuring the Unilateral Price Effects of Mergers with Vertically Integrated Firms

The indices quantify the unilateral price effects in the downstream and upstream markets that arise from a merger between two vertically integrated firms. As detailed in the paper, the upward pricing pressure in the downstream market corresponds to the sum of two well-known pricing pressure indices: the pricing pressure index for horizontal mergers `GUPPI`, and the pricing pressure index for vertical mergers `vGUPPI`.[5] In consequence, if such a merger is scrutinized by competition authorities as a "purely" horizontal or a "purely" vertical one, then the pricing pressure induced by this merger is underestimated.

Unfortunately, the upward pricing pressure in the upstream market is not decomposable in such a simply way *a priori* since additional forces that are not captured by the `GUPPI` and `vGUPPI` concepts exist. More precisely, the pricing pressure in the upstream market is in general greater than the one that is predicted by the sum of these indices.[6] The latter sum is therefore only a "cautious" assessment of the upward pricing pressure in the upstream market where "caution" here means avoiding false positive.

■ Investigating Whether the Merging Parties Overlap in Their Market Activities

Summing up, the main conclusion of the paper is that the unilateral price effects of mergers involving at least one vertically integrated firm might substantially differ from the ones of "purely" vertical mergers (i.e., mergers between firms that operate exclusively at different stages of the supply chain so that their activities do not overlap). As detailed above, the former effects are affected by additional forces that do not prevail at "purely" vertical mergers. To figure out whether such additional forces exist, an in-depth review of the merging firms' activities is imperative and should be the starting point of any merger analysis.

[4]See page 18 in the transcript of Federal Trade Commission, *5th Hearings on Competition and Consumer Protection in the 21st Century*, Georgetown University Law Center, November 1, 2018, https://www.ftc.gov/system/files/documents/public_events/1415284/ftc_hearings_session_5_transcript_11-1-18_0.pdf. Further examples of recent mergers that are both horizontal and vertical are discussed in Steven Salop, *Analyzing Vertical Mergers to Avoid False Negatives: Three Recent Case Studies*, Georgetown Law Faculty Publications and Other Works (2019), no. 2151, doi:10.2139/ssrn.3360420.

[5]The `GUPPI` quantifies the upward pricing pressure induced by a horizontal merger, while the `vGUPPI` quantifies the upward pricing pressure induced by a vertical merger. The former index was introduced in Steven Salop and Serge Moresi, *Updating the Merger Guidelines: Comments*, Georgetown Law Journal (2009) and the latter index was derived in Moresi and Salop, *supra* note 3.

[6]As can be seen from Equation (13) in Trost, *supra* note 2, this holds if the downstream division of a merging partner accommodates an increase in the price of an input offered by its upstream division with increasing the price of its output.

This finding might have the following implication on the U.S. Antitrust Agencies' Vertical Merger Guidelines: The vertical merger guidelines should inform its users (judges, lawyers, counselors, etc.) that one of the first steps of merger control is to review the merging partner's activities and to examine whether their activities overlap. Such an announcement might help to prevent that the protagonists wrongly classify the merger as "purely" vertical (or "purely" horizontal) and that they base their analysis of the competitive harm inflicted by the merger on inaccurate assumptions.

The consequences of such misclassifications are demonstrated in the paper. If, for example, both merging partners are vertically integrated, but the protagonists of the merger review consider these mergers to be "purely" vertical, the protagonists might substantially underestimate the unilateral price effects in the downstream and upstream market due to the merger. If one of these protagonists is the antitrust agency, this would entail an increased risk of a false negative.

■ Drawing a Demarcation Line between Vertical Mergers and Other Mergers

Against the backdrop that some of the largest M&A transactions in the last decade involved vertically integrated firms, it might be worthwhile to reconsider whether the new vertical merger guidelines should address such transactions. If so, they should point out that the antitrust agencies' analysis of the competitive harm might be more comprehensive for such mergers than for "purely" vertical mergers. The guidelines could be even more informative with regard to this issue and disclose that in order to assess the horizontal effects that are inherent in those mergers, the antitrust agencies might also apply the principles outlined in the 2010 Horizontal Merger Guidelines.

In this context, I would point to a potential ambiguity in the guidelines with respect to the treatment of mergers encompassing vertically integrated firms. Since such mergers are neither "purely" horizontal nor "purely" vertical, there might arise confusion among the mergers' protagonists about which of the Safe Harbor thresholds are applied to their case: the one specified in the 2010 Horizontal Merger Guidelines, or the one specified in the (proposed) 2020 Vertical Merger Guidelines, or another one (e.g., the one that requires that the previous two thresholds have to be met).[7] In my view, the antitrust agencies should tackle this issue in their revised merger guidelines and give a hint how they will proceed in such cases.

But even if the U.S. Antitrust Agencies decide to focus only on "purely" vertical mergers in their new vertical merger guidelines, it might be beneficial to inform the users about the area of application of these guidelines. For this purpose, the guidelines should explicitly demarcate this area and provide some clarity what the antitrust agencies mean by vertical mergers.

This could be done by stating a unambiguous definition of a vertical merger or a list of criteria that a merger has to satisfy to be classified as vertical. For example, the guidelines could define vertical mergers as mergers where either the merging partners operate exclusively at different stages of a supply chain or the merging partners produce complementary products. Alternatively, one could provide a non-definition of vertical mergers by quoting examples of non-vertical mergers. Examples of non-vertical mergers would be a merger between a upstream or downstream firm and a vertically integrated firm or a merger between two vertically integrated firms.

[7] The 2010 Horizontal Merger Guidelines states that the U.S. Antitrust Agencies usually do not challenge horizontal mergers resulting in markets with a HHI less than 1500. The proposed 2020 Vertical Merger Guidelines states that the U.S. Antitrust Agencies usually do not challenge a vertical merger where (i) the merging parties have a share in the relevant market of less than 20 percent, and (ii) the related product is used in less than 20 percent of the relevant market.