CPI's North America Column Presents:

U.S. Vertical Merger Guidelines: Recommendations and Thoughts on EDM and Merger Specificity

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The U.S. Antitrust Agencies' Draft Vertical Merger Guidelines ("Guidelines") are commendable in many ways; in particular, the Agencies' faithfulness to the traditional antitrust approach based upon the economically sound consumer welfare standard and the treatment of elimination of double-marginalization ("EDM") as separate and distinct from other efficiencies. The Guidelines, however, would be improved with revisions such as the following:

1. Specifics on how the Agencies will implement the principles set forth in the Guidelines. The Guidelines state throughout that the Agencies "may consider" certain factors; this language should be revised to say "will" or "usually will" consider.

2. An explicit recognition that empirical evidence indicates that vertical mergers are generally procompetitive or benign and, as the Agencies have previously stated, "vertical mergers merit a stronger presumption of being efficient than do horizontal mergers." The Agencies went on to state that: "It is not necessarily the case that a vertical merger poses greater risk of competitive harm the greater is the market power of each merging party. This counsels that great care be taken when analyzing vertical mergers."

3. A clear statement that the government has the burden on EDM given that such calculations are part of the math of the raising rivals costs ("RRC") argument and the two cannot be analyzed in isolation before evaluating their net effect. In other words, EDM can prevent RRC, not just net it out. The *prima facie* case should not, however, extend to netting the two out, but rather to showing that the merger is likely to result in RRC.

4. Clarification that the relevant inquiry for RRC is the effect on downstream competition, and that raising the cost of an upstream input with no downstream effects does not warrant intervention.

5. Explicitly requiring both the incentive and the ability to engage in anticompetitive conduct given that, without the ability there can be no harm, and lack of incentives is a strong indication that there are legitimate business reasons for the deal.

6. A more robust discussion of the coordination problem presented by vertical dealing and that achieving EDM (and other efficiencies) through contracting presents challenges given the costly process of forming, administering, and enforcing contracts with independent suppliers. These issues are nicely discussed in the Agencies' 2007 OECD Note on Vertical Mergers, which states that: "By improving coordination between the merging parties and thereby mitigating problems such as double markup and moral hazard [*e.g.*, holdup or free riding], the overwhelming majority of vertical mergers increase efficiency."

7. Replacing the 20 percent market-share language with a clear safe harbor and increasing the relevant market share threshold (but not necessarily the "related product" threshold) from 20 percent to at least 30 percent.

I focus here on #3 and #6.

EDM as Part of the Math of Raising Rivals Cost

The relevant inquiry for RRC is the effect on downstream competition; raising the cost of an upstream input with no downstream effects does not reflect a merger that substantially lessens competition or creates a monopoly. Whether the merged firm raises the downstream price is an element of the firm's marginal cost ("MC"). There is an inherent tradeoff that is affected by the upstream and downstream margins, and thus one cannot assess RRC without determining the extent of double marginalization prior to the merger. In other words, the effects on downstream prices cannot be predicted without also calculating the benefits from EDM (*i.e.* the lower MC for the downstream product and the emergence of a more cost-efficient downstream producer, which generates downward pressure on prices in the downstream market). According to Dennis Carlton et al. (2019), "most vertical models," including the DOJ's in *AT&T/Time Warner*, automatically generate the efficiency effect of EDM when analyzing anticompetitive effects, *i.e.*, EDM is inherent to the model.

EDM and RRC arise from fundamentally the same economic changes in incentives—firm-wide profit maximization—and, as a consequence, tend to move together in magnitude. As former FTC Chief Economist Francine Lafontaine stated at the FTC Hearings, EDM is "at least implied by the same mechanism that would give rise to the anticompetitive harm." Similarly, Dan O'Brien explained that the same levers that tend to grow RRC will also tend to grow EDM. Models show a close correlation between RRC and EDM. For example, if you take the model from Sheu & Taragin (2017) and perform comparative statistics (*e.g.* asked what if the diversion ratio between downstream firms increased?), you would find that the changes that increase RRC also increase EDM.

An exception to this general relationship is noted in the Guidelines: when "the downstream firm cannot use the inputs from the upstream one, for example, because it uses an incompatible technology." Another possible exception is when the merged firm uses different types of contracts pre- and post-merger. For example, suppose that pre-merger an upstream firm supplies downstream firms using two-part tariffs. If post-merger the integrated firm decides to charge a positive linear price, then there could be RRC without EDM. If the facts specific to the deal and industry precluded certain types of contract pre-merger (or would require a shift in contracting practices post-merger), then this could affect how we evaluate the ability of the merging firms to achieve RRC or EDM.

Even in the absence of a change in the type of contract, it is still theoretically possible that a vertical merger could result in RRC without realizing EDM. However, the Agencies would need to show some stickiness preventing the upstream division from selling to its downstream division at MC. The same stickiness would not prevent the firm from raising prices through contract, for example, when it is common to have long-term contracts that prevent costs from dropping with the firm post-merger. Logical consistency is needed, under which the firm has the ability and incentive to optimize its prices. The government would need a theory as to why RRC is possible while EDM is not given that the incentives come from the same place.

The factors determining EDM also determine the extent of RRC. If one were to argue that the organization of the merged firm would preclude EDM, that would entirely undercut any RRC theory because the same organizational situation would prevent the coordination required for RRC. For example, Professor Steve Salop has argued that the effects of EDM may be reduced or reversed if the downstream division's opportunity cost does not equal MC, which "relates to the unilateral incentives of the downstream division of the merged firm to raise price as a way to increase the profits of the upstream division. . . . this incentive flows from the benefits to the upstream division of selling more inputs to rivals when the downstream division raises it price." A second Salop example is that "agency costs may lead some integrated companies to have their divisions treat one another at arm's length, in order to dampen competition or to compensate executives according to their performance and maintain the managerial efficiency of each division, which . . . would suggest that double marginalization would not be eliminated." While these situations may prevent EDM, they would almost certainly also prevent RRC.

Although it is possible that certain situations might prevent EDM but not RRC, we should not entertain the possibility that merged firms will not act efficiently to maximize profits. As Salop explained in his article criticizing Judge Richard Leon's decision in *AT&T/Time Warner*, "instructing corporate divisions to ignore the interests of the corporation is inconsistent with fundamental antitrust law and economics that a rational firm maximizes the totality of its profits." Likewise, as former DOJ Chief Economist Carl Shapiro stated at the FTC Hearings, "I do not think we have any alternative, as antitrust economists, [other than] to continue to assume that in all merger analysis . . . the merged entity operates as a unified entity that maximizes overall profits." If, however, the government were to presume such irrational behavior then, at the very least, it should have a heightened burden in proving RRC.

Another point, made by Das Varma & De Stefano (2018), is that EDM and RRC effects feedback on one another, and thus must be figured out together. Specifically, the authors show that EDM and RRC are "inseparably linked because the size of EDM is an important determination of the strength of the RRC incentive." In other words, reliable predictions warrant an equilibrium analysis that incorporates the dependence of RRC on EDM. Through a series of simulation examples, the authors show that, "[w]hen the link between EDM and RRC is taken into account, predicted price effects of a vertical merger can turn out to be significantly different relative to those predicted" by analyzing the two in isolation.

The authors go on to explain:

> The intuition for the link between EDM and RRC is as follows. Even if the merged firm were to leave its wholesale prices to rivals' unchanged, EDM – and any resulting decrease in the downstream price of the merged firm – serves to shift demand from rivals to the downstream division of the merged firm. The shift leaves rivals with a reduced demand relative to premerger. The merged firm's optimal post-merger wholesale prices depend on the characteristics of these reduced demands facing rivals. Thus, the extent of EDM – which determines the extent of demand shift – is a determinant of the merged firm's RRC incentive.

An equilibrium analysis would also take into account the effect of EDM on the incentives of a rival to pass through any increase in wholesale price. As Das Varma & De Stefano explain: "First, the EDM-induced efficiency of the merging downstream firm creates downward pressure on the rival's retail prices as it seeks to compete against a more efficient competitor. Second, a reduction in rivals' demand (due to EDM-induced demand shift) also puts downward pressure on the rival's retail price. Whether, and by how much, a rival increases its retail prices when it faces a higher wholesale cost depends on the mitigating effects of these downward price pressures."

All this points to the conclusion that, when the government's theory is RRC, it should have the burden on EDM. After all, what would it mean for the parties to have the burden given that one cannot determine RRC without analyzing EDM? In other words, the government cannot make a prima facie case that the deal "substantially lessens competition" given that EDM can prevent RRC in the first place.

Contracting as An Alternative to Vertical Integration

As Shapiro explained at the FTC Hearings, when an upstream firm mergers with a downstream firm, EDM is "an efficiency which is different than other types of efficiencies [in that] . . . it is going to be achieved. . . . we have to assume that the merged entity operates as a single entity to maximize overall profits and that means elimination of double marginalization. . . . So, the key question then is, is it merger-specific? It is not about verifiability." Salop argued that EDM resulting from vertical mergers is neither certain nor merger-specific, a point upon which Shapiro concurred, explaining that "EDM can sometimes be eliminated with non-linear prices or quantity-forcing contracts." In response, former FTC Chief Economist Francine Lafontaine explained that “quantity forcing and two-part tariffs do not easily generate the same outcome as what a vertical merger could do because of demand uncertainty, risk aversion, information asymmetries, all sort of incentive problems.”

That said, pre-existing EDM by contract may not preclude RRC. For example, a pre-existing contract on favorable terms relative to the rest of the market may still result in the ability and incentive post-merger to further raise prices to rivals. However, with complicated non-linear contracts there is likely the same symmetry problem discussed in the section above, *i.e.* if double-marginalization was solved via pre-existing contract, it is possible that one or both firms also achieved RRC via contract. In that case, the merger would have no effect because, as Rey & Tirole (2007), explain, if an upstream monopolist can use contracts to preserve its monopoly profits (*i.e.*, solve EDM and pull all the profit upstream), it can effectuate RRC. As Lafontaine explained at the FTC Hearings, “vertical contracts give rise to the same potential anticompetitive concerns if they are used to achieve results of vertical mergers. Incentives to raise cost to non-integrated [firms] is the same if succeed in resolving issues using contract.”

With respect to the difficulties of achieving EDM through contract, as I explain in a recent article, vertical integration characteristically has extremely powerful justifications, including avoiding the costly processes of forming, administering, and enforcing contracts with independent suppliers and customers; a firm’s choice of organization and extent of rapid product or geographic expansion; and enhanced control of upstream or downstream functions.

As Klein, Crawford, and Alchian (1978) explain, even with long-term contracts that explicitly include price and price protection clauses, not all elements of future performance can be specified. “Due to uncertainty and the difficulty of specifying all elements of performance in a contractually enforceable way, contracts will necessarily be incomplete to one degree or another.” This creates the possibility for transactors to take advantage of the contract in order to appropriate quasi-rents. As Klein further suggests in a later work, “transactors choose contract terms, including vertical integration, in order to economize on their limited (and often unequal) amounts of private enforcement capital and thereby to define an optimal self-enforcing range for their contractual relationship.” Within Klein’s framework, the primary advantage of vertical integration is the increased flexibility that transactors gain by avoiding the use of rigid long-term contracts to supplement their reputational capital.

Indeed, the primary result of vertical integration is the substitution of direct management for reliance on the external market. The costs and benefits of such integration depend on a wide range of circumstances that agencies and courts are unlikely to be able to adequately evaluate and make judgments superior to those of the merging parties. As Klein explains, “[i]t is difficult for judges, as it is for economists, no matter how smart and well-intentioned they may be, to understand fully the economic intent and purpose of all the complex contractual terms [including vertical integration] transactors use in their contracts.”

Conclusion

There has been considerable debate over whether the state of our economic toolkit is such that the Agencies should issue guidelines at this time. Given that the Agencies are continuing to review vertical mergers, transparency into their analysis could prove helpful. This of course depends upon how the Guidelines are used and whether the Agencies remain flexible in their approach as the economics evolve. In any event, given that the Guidelines will almost certainly issue in final form, the above recommendations are offered in the spirit of helping to improve and clarify the analysis and to increase predictability for stakeholders.

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