Comments on the DOJ-FTC Draft Merger Guidelines

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The purpose of these comments is to offer some important clarifications of the process of defining (or delineating) relevant markets for merger analysis.[1] These comments will conclude with some recommendations for revisions to the draft Merger Guidelines.

I. Market definition for merger analysis: the "hypothetical monopolist test" (HMT).

Market definition is an important part of merger analysis: If the primary concern of merger analysis is the post-merger creation or enhancement of *market* power, then a coherent process for defining a relevant *market* – within which that post-merger *market* power might (or might not) be exercised – is crucial. Any sensible discussion of *market* shares (or measures that are based on market shares, such as the Herfindahl-Hirschman Index [HHI]) must start with a coherent process for defining that relevant *market*.

The 1982 "Merger Guidelines" that were promulgated by the U.S. Department of Justice (DOJ) provided the first such coherent process: the "hypothetical monopolist test" (HMT).[2] The HMT asks whether a group of firms that compete – if they were prospectively combined into a single firm (the "hypothetical monopolist") – could successfully exercise market power with respect to a specific product (or set of products) and with respect to a specific geographic area, in the following sense: Could this (prospective) hypothetical monopolist successfully bring about a "**s**mall but **s**ignificant **n**on-transitory **i**ncrease in **p**rice" (SSNIP) from the current (or otherwise expected) price level?[3] If yes, then that group of firms would constitute a relevant market for the purposes of merger analysis;[4] and generally, the smallest number of firms that would satisfy the SSNIP test and that contained the two merging firms would be the relevant market for analyzing

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[1] The discussion that follows will focus on issues of the exercise of market power by sellers – which is often described as "monopoly power". Virtually all of the discussion and analyses can be applied appropriately to issues of the exercise of market power by *buyers* – which is often described as "monopsony power".

[2] A discussion of the development of this paradigm can be found, for example, in Werden (1983; 1993; 2003). In 1992 Werden brought to light a pre-1982 article that had described a similar market definition paradigm for merger analysis; see Werden (1992) and Adelman (1959).

[3] A SSNIP of 5% is generally considered to be the measure of "small but significant".

[4] It is important to note that the HMT and SNIPP are generally not useful for market definition in an analysis of a monopolization allegation; see, for example, White (2022).

the merger at hand. (If no, then the group of firms would have to be expanded in "product space" and/or geographic space until the SSNIP test was satisfied.)

With the relevant market specified, the analysis would then turn to the structural conditions – e.g., the number of sellers; seller concentration; conditions of entry; the buyers' side of the market; etc. – that could provide insights as to the likelihood that the merger under consideration would create or enhance market power in that market. The general approach of the 1982 Merger Guidelines would now be described as focusing on "*coordinated* effects".

The HMT was originally developed in the context of homogenous products, for which the concepts of a "price" and a "price increase" were clearest. In principle, the same paradigm could be applied to a group of firms that sell differentiated products. But the application can be more complicated; and, in the context of differentiated products, there is a more straightforward way of addressing market definition (see Sec. II).

II. Market definition specifically for differentiated products.

The 1992 revision to the Merger Guidelines – in which the DOJ and the U.S. Federal Trade Commission (FTC) became joint authors – explicitly expanded the analysis to include also "unilateral effects" that could be achieved through the merger of 2 firms that sell somewhat differentiated products: the possibility that the 2 merging firms could *unilaterally* achieve a significant price increase: a SSNIP. This could arise when one or both of the merging firms' 2 (differentiated) products are the "runner-up" choices for an appreciable number of the partner firm's customers. Prior to the merger, the prospect of losing those customers would be part of the limit on the ability of each firm to maintain higher prices. After the merger those customers would be "recaptured" by the merged firm, and thus the merged firm would find it worthwhile to maintain higher prices.

Although the 1992 Merger Guidelines introduced the "*unilateral* effects" paradigm, the market definition paradigm from 10 years earlier remained largely intact. And the discussion of "coordinated effects" preceded the discussion of "unilateral effects".

The 2010 Horizontal Merger Guidelines (HMGs) – again co-authored by the DOJ and the FTC – moved "unilateral effects" to a more central position in merger analysis: The discussion of "unilateral effects" preceded the discussion of "coordinated effects". But preceding both was an extensive discussion of market definition.

What has been missing from the "unilateral effects" discussions is the following important insight: Suppose that there is convincing evidence – e.g., from econometric estimations and/or survey evidence – that the merger of the 2 firms would allow the merged firm *unilaterally* to increase (from pre-merger levels) the price or prices of the 2 competing products by a significant amount: a SSNIP.[5] *In that event, this evidence indicates that the 2 firms' products together constitute a relevant market for the purposes of merger analysis – and there is no need for any separate market definition determination.*[6] In essence, the evidence indicates that this is a "2-to-1" merger within the relevant market; equivalently, it is a "merger to monopoly" within the relevant market.

This version of a "merger to monopoly" may not have quite the resonance of, say, a merger of the 2 leading soft drink companies or of the 2 leading wireless service providers. Nevertheless, so long as the sales volume of one or both of the products surpass a "de minimis" standard, the logic of the preceding paragraph – that passing a SSNIP test means that a relevant market for merger analysis has been defined – holds.

Unfortunately, in too many "unilateral effects" cases – and in the discussions by some economists at the FTC and DOJ of such cases – there are separate efforts to define one or more relevant markets.[7] Such separate market definition efforts are – at best – a distraction or diversion of efforts; and they run the risk of confusing what should be a straightforward determination. Since the DOJ and the FTC bear the burden of proof in their litigation efforts to stop a merger, anything that has the potential to confuse a federal judge runs the risk of diluting the effectiveness of the Agencies to sustain that burden.

In sum: In merger cases where significant "unilateral effects" are convincingly demonstrated to be present, there is no need for a separate effort to define a relevant market: The 2 merging firms' products for which the "unilateral effects" have been demonstrated constitute the relevant market for the purposes of the analysis of that merger.

III. Market definition when the merging firms are not competitors.

The HMT and SNIPP are directly applicable when the merging firms are competitors – either for a "coordinated effects" analysis or (as was discussed in Sec. II) for a "unilateral effects" analysis. However, when the proposed merger involves 2 (or more) firms that are not competitors – e.g., they are in a vertical (buyer-seller) relationship[8] -- the HMT and SNIPP are not directly applicable, and a separate analysis is needed.

This important point can be seen as follows: The HMT paradigm generally searches for the minimum number of competitors (including the 2 merging firms) that can satisfy a SSNIP.

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[5] In the terms of the HMGs, the finding that the merged firm could potentially (post-merger) increase prices (based on the "diversion ratios" that are now captured within the merged firm and on the profit margins on the recaptured sales) would be described in terms of a "gross upward pricing pressure index" (GUPPI). The net result – after likely reductions in marginal costs, as well as pricing reactions by other firms that sell products to which the 2 firms' customers might switch – is termed the "upward pricing pressure" (UPP).
[6] This possibility is indirectly hinted at in "Example 5" in the 2010 HMGs.
[7] See, for example, Coate (2013) and Coate and Ulrick (2017).
[8] Although this discussion will focus on vertical relationships, the point is relevant to complementary relationships more generally. The justification for the similarity of treatment can be found, for example, in Linnemer (2022).

But, since the 2 merging firms are *vertically related*, these 2 firms are not competitors; there is thus no process for satisfying the HMT. And, of course, this is true regardless of whether the focus is on the upstream firm or on the downstream firm.

Accordingly, any specification of a "*market* share" for either firm has no measurement basis and thus makes no sense – because there is no coherent paradigm for defining the market at either level.

Instead, what is needed is the vertical equivalent of the "unilateral effects" analysis that was described above: Suppose that the potential antitrust concern is that the merged – vertically integrated – firm will be able to increase the prices that are charged by the downstream entity and by its downstream rivals. In that case, the analysis should proceed as follows:

First, determine the identities of the other downstream (rival) firms that buy inputs from the upstream entity. Next, identify the ways that the merged (vertically integrated) firm could profitably cause downstream prices to be higher than they were pre-merger. There are two well-understood mechanisms that would be possible:[9]

1) After the merger, the upstream entity increases the price of the inputs that it sells to the rivals of the downstream entity;[10] those downstream rivals will in turn raise their prices and sell less and reduce their input purchases (which is what inhibited the upstream entity from maintaining a higher price pre-merger). But, so long as some of the downstream rivals' lost customers switch their purchases to the downstream entity, the merged entity's profits can be higher than was true pre-merger. Further, this increased demand for the downstream entity's product allows the merged firm to increase the downstream entity's price, which increases the merged firm's profits yet further.

2) After the merger, the downstream entity increases its price. It will thereby lose some customers (which is what inhibited the downstream entity from maintaining a higher price pre-merger). But, so long as some of the downstream entity's customers switch to the downstream rivals, who consequently buy more inputs from the upstream entity, the merged entity's can be higher than was true pre-merger. And the increased demand for the rival's products allow them to increase their prices.

If there is convincing evidence – e.g., from econometric estimations and/or survey evidence – that the merger of the 2 firms would cause significant downstream price increases – a SSNIP – through either (or both) of the mechanisms that were just described, then the

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[9] See, for example, Chen (2001); Moresi and Salop (2013, 2021); Rogerson (2020, 2021); and Salinger (2021).

[10] This is generally termed "raising rivals' costs". See Salop and Scheffman (1983, 1097) . The merged firm could more generally "make life difficult" for its downstream (or upstream) rivals through direct foreclosure actions, such as: refusals to deal; tying; or bundling. As an offset, the merger may allow the merged firm to eliminate "double marginalization", which would encourage the firm to reduce its downstream price. See, for example, Linnemer (2022).

downstream entity and its rivals constitute the relevant downstream market. There is no need for any further effort to define a downstream market (which could be potentially confusing, etc.).[11]

Further, although it is the merged firm's combined actions – an increase in the input price that is charged to the downstream entity's rivals, and an increase in the downstream entity's own price – that cause the downstream SSNIP and thus provide the identification of the downstream relevant market, for the sake of completeness one can also identify the upstream entity as (post-merger) exercising market power (by increasing the price that it charges for the input that it sells to the merged firm's downstream rivals) and thus constituting a relevant market as well.

IV. Recommendations.

There are a number of important recommendations that flow from the discussion above:

1) Market definition should have a much more prominent position in the Merger Guidelines. In the draft Merger Guidelines, market definition is relegated to Section III, on p. 29 – *after* the extensive discussion of the 13 Guidelines and multiple references to market shares and HHIs (which are computed from *market* shares) – and only 2 typed pages (pp. 29-30) in the main text are devoted to market definition.[12]

As was stated at the beginning of these comments, *market* definition is central to any discussion of *market* shares and *market* power. Market definition should not be treated as an afterthought.

2) The HMT and the SSNIP should be the primary basis for market definition in the Merger Guidelines. The draft Merger Guidelines offer 4 potential "tools" (p. 30) "to demonstrate the validity of a candidate relevant antitrust market":

A) "Direct evidence of substantial competition between the merging parties…";

B) "Direct evidence of the exercise of market power…";

C) "…evidence on observed market characteristics ('practical indicia')…"; and

D) "Another common method… is the hypothetical monopolist test."

It is troubling that the draft Merger Guidelines treat the HMT as the 4th and just "another" tool – instead of the primary tool that it has become over the past 40 years.[13] Further, tools A

[11] Of course, with the relevant market defined, the firms' market shares could be calculated, along with this market's HHI. But these calculations would be wholly uninteresting, since the outcome that matters – the increase in downstream prices – has already been determined.
[12] Appendix 3 (pp. 8-15) does add some additional detail.
[13] Again, Appendix 3 does add some additional detail.

and B are basically inputs into the empirical determination of the HMT and the SSNIP; it is unclear how these tools otherwise establish a relevant market. Further, tool C is essentially a throwback to the DOJ's 1968 Merger Guidelines, where there was no market definition paradigm, and thus those Guidelines relied on "practical indicia", such as "the product's peculiar characteristics and uses, unique production facilities…" etc. Again, it is unclear how this tool establishes a relevant market.

The HMT and the SSNIP provide a coherent and well-accepted basis for establishing the relevant market for merger analysis. The Merger Guidelines should jettison the other tools or indicate that – at most – the other tools provide contributory evidence for the empirical demonstration of the HMT.

3) The Merger Guidelines should clarify that the empirical finding of significant upward pricing pressure in a unilateral effects context logically satisfies the requirement for the definition of a relevant market. The discussion in Section II above demonstrates why the finding of significant upward pricing pressure in a unilateral effects context also establishes the relevant market. The discussion of unilateral effects in the Merger Guidelines should include this clarification, so as to avoid confusion and unnecessary effort.

4) The Merger Guidelines should eliminate any references to market shares in any discussions of mergers between firms that are not competitors. As the discussion in Section III demonstrated, the HMT and SSNIP cannot be used for the analysis of mergers that do not involve competitors, such as vertical mergers; hence, the relevant market cannot be determined (except through the after-the-fact process that was described in Section III), and as a consequence any references to market shares are meaningless.

Guidelines 5, 6, and 7 are devoted to discussions of mergers between firms that are not competitors. Specific market shares are mentioned in Guidelines 6 and 7. Those references should be eliminated from the Merger Guidelines.[14]

5) Instead of references to market shares for firms that are not competitors, the Merger Guidelines should provide guidance as to how specific anti-competitive effects could be ascertained. The discussion in Sec. III above shows the logic of this approach.

References

[14] Guideline 7 refers to "…an already dominant firm" and specifically identifies a dominant firm as one that "…possesses at least 30 percent market share." If that firm is merging with firm that is a competitor, then the HMT and the SSNIP can be used for the analysis. But if the two firms are not competitors, then there can be no basis for a determination of either firm's position as "dominant", since there will be no coherent measurement basis for a determination of a relevant market for either firm.

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