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ROUNDTABLE ON MARKET DEFINITION

-- Note by the Delegation of the United States --

This note is submitted by the delegation of the United States to the Competition Committee FOR DISCUSSION at its forthcoming meeting to be held on 13-14 June 2012.

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English - Or. English

ROUNDTABLE ON MARKET DEFINITION

-- Note by the United States --

1. Market Definition in U. S. Antitrust Law

1. For the U.S. federal antitrust agencies (the Federal Trade Commission ("FTC") and the Antitrust Division of the Department of Justice ("DOJ"), collectively the "Agencies") or private plaintiffs to prevail in a civil case under the antitrust laws, they must "prove harm . . . to the competitive process, *i.e.*, to competition itself."[1] In some cases, notably those involving obvious price fixing among competitors, that harm is presumed from the nature of the conduct. In most other cases, competitive harm must be shown through a fact-intensive analysis of the challenged conduct or merger and its context. Traditionally, courts have examined market power or monopoly power in such cases, and the defendant's share of a defined relevant market has played an important role in the analysis.[2]

2. Even when they are called for, however, market definition and shares are not in themselves dispositive. In those situations requiring a detailed analysis of competitive harm, the Agencies are often able to employ an increasingly sophisticated range of economic tools to assess competitive effects. For instance, the Agencies' 2010 Horizontal Merger Guidelines describe several economic analyses that the Agencies may undertake depending on the particular competitive dynamics at issue.[3] Market definition is thus appropriately viewed as one of many tools that the Agencies may flexibly employ to assess potential harm to consumers and competition.

3. This paper examines the use of market definition in U.S. antitrust law, addressing cases involving agreements in restraint of trade, single-firm exclusionary conduct and mergers between direct competitors. The concluding section examines certain market definition difficulties, focusing on the "*Cellophane* fallacy," two-sided markets, and innovation-intensive industries.

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1 *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128, 135 (1998).

2 *See, e.g.*, *City of New York v. Group Health Inc.*, 649 F.3d 151, 155 (2d Cir. 2011) ("To state a claim under [the antitrust laws], a plaintiff must allege a plausible relevant market in which competition will be impaired."); *Worldwide Basketball & Sport Tours, Inc. v. NCAA*, 388 F.3d 955, 962 (6th Cir. 2004) ("The burden is on the antitrust plaintiff to define the relevant market within which the alleged anticompetitive effects of the defendant's actions occur."); *United States v. Visa U.S.A., Inc.*, 344 F.3d 229, 238 (2d Cir. 2003) ("[T]he government must demonstrate that within the relevant market, the defendants' actions have had substantial adverse effects on competition . . . ."); *Thurman Industries, Inc. v. Pay 'N Pak Stores, Inc.*, 875 F.2d 1369, 1373 (9th Cir. 1989) ("Proving injury to competition ordinarily requires the claimant to prove the relevant geographic and product markets and to demonstrate the effects of the restraint within those markets.").

3 *See* U.S. Department of Justice and Fed. Trade Comm'n, Horizontal Merger Guidelines (2010), *available at* http://www.justice.gov/atr/public/guidelines/hmg-2010.html.

2. Cases Involving Agreements In Restraint of Trade

4. Section 1 of the Sherman Act prohibits concerted action that unreasonably restrains trade. Some agreements, especially those supporting cartel activity, are deemed unreasonable *per se* because they "always or almost always tend to restrict competition and decrease output."[4] For these types of agreements, procompetitive justifications will not be considered, and liability does not turn on defining a relevant market.

5. Even when concerted action is not condemned *per se*, courts do not necessarily engage in an extensive rule of reason analysis. In certain cases, courts have applied a "quick look" at the nature of the challenged restraint.[5] According to the Supreme Court, the key inquiry is the principal tendency of the challenged restraint to harm competition, with the possibility of gaining insight into the nature of a particular restraint over time:

> *[T]here is generally no categorical line to be drawn between restraints that give rise to an intuitively obvious inference of anticompetitive effect and those that call for more detailed treatment. What is required, rather, is an enquiry meet for the case, looking to the circumstances, details, and logic of a restraint. The object is to see whether the experience of the market has been so clear, or necessarily will be, that a confident conclusion about the principal tendency of a restriction will follow from a quick (or at least quicker) look, in place of a more sedulous one. And of course what we see may vary over time, if rule-of-reason analyses in case after case reach identical conclusions*.[6]

6. Using this approach, a presumption of illegality may obtain "from the close family resemblance between the suspect practice and another practice that already stands convicted in the court of consumer welfare,"[7] without the need to assess market definition or evidence of actual competitive harm.

7. Courts and the Agencies occasionally rely on evidence of direct harm in lieu of defining relevant markets to assess the lawfulness of collaboration among competitors.[8] For instance, in *FTC v. Indiana Federation of Dentists*,[9] the Supreme Court reviewed a Seventh Circuit judgment of an FTC decision that a dental association violated Section 1 of the Sherman Act (and thereby Section 5 of the Federal Trade Commission Act) by enforcing a rule requiring withholding x-rays requested by dental insurers to evaluate claims. The association claimed that the decision was wrong as a matter of law because the FTC had not specifically defined the relevant market.[10] The Supreme Court disagreed, holding that product market

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4 *Leegin Creative Leather Products v. PSKS, Inc.*, 551 U.S. 877, 886 (2007) (quoting *Business Electronics Corp. v. Sharp Electronics Corp.*, 485 U.S. 717, 723 (1988)).

5 See 11 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1911a, at 265-67 (1998).

6 *Cal. Dental Ass'n v. FTC,* 526 U.S. 756, 780-81 (1999).

7 *Polygram Holdings, Inc. v. FTC,* 416 F.3d 29, 37 (D.C.Cir. 2005).

8 For example, the Agencies may decide to challenge an agreement among competitors based on an assessment of the nature of an agreement among competitors or evidence of direct harm without defining the exact scope of the market affected: "[w]here the likelihood of anticompetitive harm is evident from the nature of the agreement, or anticompetitive harm has resulted from an agreement already in operation, then, absent overriding benefits that could offset the anticompetitive harm, the Agencies challenge such agreements without a detailed market analysis." FTC & U.S. DEP'T OF JUSTICE, ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS 10-11 (2000) (citations omitted).

9 476 U.S. 447 (1986).

10 *Id.* at 460.

analysis "is but a surrogate for detrimental effects."[11] In *Toys "R" Us v. FTC*,[12] an appellate court reviewed an FTC decision that invalidated unlawful agreements between a major toy retailer and a group of toy manufacturers in which each manufacturer promised to restrict distribution of its products to low-priced warehouse stores. The court found that the FTC need not establish that the company had a large share of a relevant market, and was entitled to rely on direct evidence of anticompetitive effects to establish an antitrust violation.[13]

8. Thus, in some circumstances, competitive harm can be shown without defining the boundaries of a market with precision or identifying a narrow set of products. Notably, the Supreme Court has held that:

> *Since the purpose of the inquiries into market definition and market power is to determine whether an arrangement has the potential for genuine adverse effects on competition, proof of actual detrimental effect, such as a reduction of output, can obviate the need for an inquiry into market power, which is but a surrogate for detrimental effect.*[14]

9. This led one appellate court to rule that direct proof of anticompetitive effects avoids "the usual showing of a precisely defined relevant market" but the plaintiff still must establish "the rough contours of a relevant market."[15]

10. In analyzing other types of agreements under the rule of reason, the court will examine "whether the action complained of has the potential for genuine adverse effects on competition, and this analysis usually involves an inquiry into market definition and market power."[16] The defendant's market power can be a pivotal issue in rule-of-reason cases.[17]

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11 *Id. See also infra*. at n. 4 and accompanying text.

12 *Toys "R" Us v. FTC*, 221 F.3d 928 (7th Cir. 2000).

13 "[Toys "R" Us] seems to think that anticompetitive effects in a market cannot be shown unless the plaintiff, or here the Commission, first proves that it has a large market share. This, however, has things backwards. As we have explained elsewhere, the share a firm has in a properly defined relevant market is only a way of estimating market power, which is the ultimate consideration. The Supreme Court has made it clear that there are two ways of proving market power. One is through direct evidence of anticompetitive effects. . . . The other, more conventional way, is by proving relevant product and geographic markets and by showing that the defendant's share exceeds whatever threshold is important for the practice in the case." *Id.* at 937. *See also Tops Markets, Inc. v. Quality Markets, Inc.*, 142 F.3d 90, 98 (2d Cir. 1998) (finding that market power "may be proven directly by evidence of the control of prices or the exclusion of competition, or it may be inferred from one firm's large percentage share of the relevant market"); *K.M.B. Warehouse Distributors, Inc. v. Walker Mfg. Co.*, 61 F.3d 123, 129 (2d Cir. 1995) ("If a plaintiff can show an actual adverse effect on competition, such as reduced output[,] . . . we do not require a further showing of market power.") (citation omitted); *Capital Imaging Assocs. v. Mohawk Valley Med. Assocs.*, 996 F.2d 537, 546 (2d Cir. 1993) (explaining that plaintiff may avoid a "'detailed market analysis' by offering 'proof of actual detrimental effects, such as a reduction of output'") (citations omitted).

14 *FTC v. Indiana Federation of Dentists*, 476 U.S. 447, 460-1 (1986) (internal quotations omitted). *See also California Dental Ass'n v. FTC,* 526 U.S. at 770 (1999) ("an observer with even a rudimentary understanding of economics could conclude that the arrangements in question would have an anticompetitive effect on customers and markets.")

15 *Republic Tobacco Co. v. North Atlantic Trading Co., Inc.*, 381 F.3d 717, 737 (7th Cir. 2004).

16 *Lie v. St. Joseph Hospital of Mount Clemens*, 964 F.2d 567, 569 (6th Cir. 1992) (quoting *FTC v. Indiana Federation of Dentists*, 476 U.S. 447, 460 (1986)).

17 *See, e.g.*, *Behrend v. Comcast Corp.*, 655 F.3d 182, 192 (3d Cir. 2011) ("For antitrust claims analyzed through the rule of reason, plaintiffs must demonstrate that the defendant possessed market power in the

3. Cases Involving Single-Firm Exclusionary Conduct

11. Section 2 of the Sherman Act prohibits monopolization[18] and attempted monopolization.[19] In evaluating a claim of either offense, it is necessary to inquire into whether the defendant possesses monopoly power or is in a position to obtain monopoly power. The courts have traditionally examined the monopoly power issue in the context of a relevant market.[20]

12. Some modern decisions invite the use of direct evidence of monopoly power and suggest that such evidence could eliminate the need to define the relevant market.[21] Nevertheless, the courts have not relied on direct evidence of monopoly power to a significant extent, and analytical tools provided by economics are not extensively used in proving or disproving monopoly power. One reason may be that monopoly power is a legal concept, and economics does not offer a test for when the degree of market

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relevant . . . market."); *Eastern Food Services, Inc. v. Pontifical Catholic University Services Ass'n*, 357 F.3d 1, 5 (1st Cir. 2004). ("[T]he identification of market power is ordinarily the first step in any rule of reason claim under section 1."); *Menasha Corp. v. News America Marketing In-Store, Inc.*, 354 F.3d 661, 663 (7th Cir. 2004) ("The first requirement in every suit based on the Rule of Reason is market power, without which the practice cannot cause those injuries (lower output and the associated welfare losses) that matter under the federal antitrust laws.").

18 The elements of the monopolization offense are: "(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident." *United States v. Grinnell Corp.*, 384 U. S. 563, 570-71 (1966). Note that the mere possession of a monopoly is not a violation of antitrust law; it must be obtained or maintained through anticompetitive conduct. *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004) ("The mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system. The opportunity to charge monopoly prices – at least for a short period – is what attracts "business acumen" in the first place; it induces risk taking that produces innovation and economic growth.")

19 The elements of the attempt to monopolize offense are: "(1) that the defendant has engaged in predatory or anticompetitive conduct with (2) a specific intent to monopolize and (3) a dangerous probability of achieving monopoly power." *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993).

20 The Supreme Court found it essential to define a relevant market because "[w]ithout a definition of that market there is no way to measure [the defendant's] ability to lessen or destroy competition." *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172, 177 (1965).

21 *See, e.g.*, *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 307 n.3 (3d Cir. 2007) ("The existence of monopoly power may be proven through direct evidence of supracompetitive prices and restricted output."); *Harrison Aire, Inc. v. Aerostar International, Inc.*, 423 F.3d 374, 381 (3d 2005); ("Monopoly power can be demonstrated with either direct evidence of supracompetitive pricing and high barriers to entry, or with structural evidence of a monopolized market.") (citation omitted); *Geneva Pharmaceuticals Technology Corp. v. Barr Laboratories Inc.*, 386 F.3d 485, 500 (2d 2004) ("Monopoly power . . . can be proven directly through evidence of control over prices or the exclusion of competition, or it may be inferred from a firm's large percentage share of the relevant market."); *Re/Max International, Inc. v. Realty One, Inc.*, 173 F.3d 995, 1018 (6th Cir. 1999) ("[A]n antitrust plaintiff is not required to rely on indirect evidence of a defendant's monopoly power, such as high market share within a defined market, when there is direct evidence that the defendant has actually set prices or excluded competition."); *Rebel Oil Co. v. Atlantic Richfield*, 51 F.3d 1421, 1434 (9th Cir. 1995) ("If the plaintiff puts forth evidence of restricted output and supracompetitive prices, that is direct proof of the injury to competition which a competitor with market power may inflict, and thus, of the actual exercise of market power.")

power rises to the level of monopoly power. Instead, courts often have associated that level with a dominant market share.[22]

4. Merger Cases

13. The role of market definition in an Agency merger investigation varies depending on the circumstances of the merger. At times, it may be possible to assess the competitive effects of an acquisition before defining a product market, or independent of the precise contours of the market. As stated in the Agencies' 2006 Commentary on the Horizontal Merger Guidelines, "[i]n some investigations, before having determined the relevant market boundaries, the Agencies may have evidence that more directly answers the 'ultimate inquiry in merger analysis,' i.e., 'whether the merger is likely to create or enhance market power or facilitate its exercise.'"[23] Moreover, the Agencies' 2010 Horizontal Merger Guidelines state that "[s]ome of the analytical tools used by the Agencies to assess competitive effects do not rely on market definition."[24]

14. A sizeable economic literature has developed over the last two decades that has helped the Agencies and the courts assess the likely competitive effects of mergers – particularly when those mergers involve differentiated products and the underlying anticompetitive theory is unilateral effects. This literature has introduced analytical tools related to diversion ratios, which are the fraction of unit sales lost by one product due to an increase in its price that would be diverted to another product. If one is able to assess the likely effects of a merger using such analytical tools, without defining markets, then the importance of defining those markets is diminished. Indeed, this is reflected in the 2010 Horizontal Merger Guidelines.[25] "The 2010 Guidelines modestly update the treatment of unilateral price effects to reflect the substantial change in economic learning and Agency practice since 1992. Two aspects of that updating are of special significance: (1) reduced emphasis on market shares, and (2) introduction of the 'value of diverted sales' as an indicator of upward pricing pressure."[26]

15. Several analytical tools for quantitative analysis of differentiated consumer products mergers have been developed and applied successfully.[27] These tools make use of diversion ratios between the products combined by the merger, and all of the tools make use of the same sources of information or methods of data analysis to identify these diversion ratios. The tools differ in the use to which the diversion ratios are put.

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22 *See, e.g.*, *United States v. Dentsply International, Inc.*, 399 F.3d 181, 187 (3d Cir. 2005) ("a share significantly larger than 55% has been required"); *Exxon Corp. v. Berwick Bay Real Estates Partners*, 748 F.2d 683, 694 n.18 (10th Cir. 1989) (per curiam) ("monopolization is rarely found when the defendant's share of the relevant market is below 70%"); *United States v. Aluminum Co. of America*, 148 F.2d 416, 424 (2d Cir. 1945) (A market share of ninety percent "is enough to constitute a monopoly; it is doubtful whether sixty or sixty-four percent would be enough; and certainly thirty-three percent is not.").

23 U.S. DEP'T OF JUSTICE & FEDERAL TRADE COMMISSION, COMMENTARY ON THE HORIZONTAL MERGER GUIDELINES 10 (2006), *available at* http://www.ftc.gov/os/2006/03/CommentaryontheHorizontalMergerGuidelinesMarch2006.pdf.

24 HORIZONTAL MERGER GUIDELINES § 4.

25 *See* Carl Shapiro, *2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 Antitrust Law Journal 712 (2010).

26 *Id.* at 717.

27 On these tools, see generally Gregory J. Werden & Luke M. Froeb, *Choosing among Tools for Assessing Unilateral Merger Effects*, 7 EUROPEAN COMPETITION JOURNAL 155 (2011).

16. In merger simulation, the diversion ratios are used to make quantitative predictions of post-merger price increases.[28] But to make such predictions, it is necessary to make assumptions about the functional form of demand, and the predictions are sensitive to the assumptions made. Other tools avoid making such assumptions, but consequently they do not yield predictions of post-merger price increases.[29]

17. All of these analytical tools account for all of the substitution away from each product combined by the merger, and not just substitution to the other merging firm. But one need not identify the products to which consumers substitute to a significant degree nor draw a market boundary around them. Nevertheless, an assessment of prospects for entry and product repositioning is necessary to supplement these tools, and that is apt to require market definition.

18. The Agencies normally use one or more of these analytical tools in assessing a differentiated consumer products merger.[30] But as § 2 of the *Horizontal Merger Guidelines* details, the Agencies make use of a variety of types and sources of relevant evidence. The weight placed on analytical tools varies according to many factors, including the precision with which diversion ratios are measured and the strength of the other evidence. When the Agencies have litigated differentiated products merger cases, they always have defined relevant markets and presented non-quantitative evidence, even when relying on these analytical tools. No U.S. court decision has yet indicated that a merger can be found to violate the antitrust laws without having defined a relevant market in which the required substantial lessening of competition would occur.[31]

19. In a recent case involving differentiated consumer products, a relevant market was defined, and the Agency also relied on analytical tools. The case involved digital do-it-yourself (DDIY) tax preparation products,[32] and DOJ successfully argued that the relevant market was limited to those products. The DDIY

28 *See generally* Oliver Budzinski & Isabel Ruhmer, *Merger Simulation in Competition Policy: A Survey*, 6 J. COMPETITION L. & ECON. 277 (2010); Gregory K. Leonard & J. Douglas Zona, *Simulation in Competitive Analysis*, *in* ABA SECTION OF ANTITRUST LAW, 2 ISSUES IN COMPETITION LAW AND POLICY 1405 (W. Dale Collins ed., 2008); Gregory J. Werden, *Merger Simulation: Potentials and Pitfalls*, *in* MODELLING EUROPEAN MERGERS: THEORY, COMPETITION POLICY AND CASES 37 (Peter A.G. van Bergeijk & Erik Kloosterhuis eds., 2005).

29 *See* Gregory J. Werden, *A Robust Test for Consumer Welfare Enhancing Mergers Among Sellers of Differentiated Products*, 44 JOURNAL OF INDUSTRIAL ECONOMICS 409 (1996); Joseph Farrell & Carl Shapiro, *Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition*, B.E. JOURNAL OF THEORETICAL ECONOMICS, Jan. 2010, art. 9; Gregory J. Werden & Luke M. Froeb, *Choosing among Tools for Assessing Unilateral Merger Effects*, 7 EUROPEAN COMPETITION JOURNAL 155, 165 (2011).

30 In discussing the analysis of differentiated products mergers, § 6.1 of the Agencies' *Horizontal Merger Guidelines* states: "In some cases, where sufficient information is available, the Agencies assess the value of diverted sales, which can serve as an indicator of the upward pricing pressure of the first product resulting from the merger. Diagnosing unilateral price effects based on the value of diverted sales need not rely on market definition or the calculation of market shares and concentration."

31 *See, e.g.*, *United States v. H & R Block, Inc.*, 2011-2 Trade Cas. (CCH) ¶ 77,678, Memorandum Opinion 15 (D.D.C. 2011) ("Merger analysis begins with defining a relevant market."); *FTC v. Swedish Match*, 131 F. Supp. 2d 151, 156, (D.D.C. 2000) (citing *United States v. Brown Shoe*, 370 U.S. 294, 324 (1962)). "Defining the relevant market is critical in an antitrust case because the legality of the proposed merger[] in question almost always depends upon the market power of the parties involved." *Id.* (quoting *FTC v. Cardinal Health, Inc.*, 12 F. Supp. 2d 34, 45 (D.D.C. 1998)). Indeed, the relevant market definition is often "the key to the ultimate resolution of this type of case because of the relevant implication of market power." *Id.* (Footnote omitted)).

32 *United States v. H&R Block, Inc.*, 2011-2 Trade Cas. (CCH) ¶ 77,678 (D.D.C. 2011).

market alleged by the DOJ and found by the court was the obvious relevant market. It included all the similar products, and it excluded dissimilar products even though they perform the same function. The court held that both the application of the hypothetical monopolist test and other evidence supported the DDIY market.

20. In an FTC case involving differentiated supermarkets, the judge looked to traditional types of evidence to determine the nature of competition between two merging premium natural and organic supermarkets: "such practical indicia as industry or public recognition of the [relevant market] as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors."[33] But the judge also relied on other types of evidence including estimates of critical loss, price discrimination, price effects due to entry of a new competitor, and consumer behavior, [34] to hold that Whole Foods and Wild Oats compete for core consumers within a narrow market, even if they also compete on individual products for marginal consumers in the broader market.[35]

21. In some markets, evidence relating to likely adverse competitive effects can inform the definition of a relevant market in which those effects are likely to occur. In such cases, the analysis may not necessarily begin with defining a relevant market. For instance, in December 2011, the FTC filed an administrative complaint charging that Graco, Inc.'s proposed acquisition of the assets of ITW Finishing LLC from Illinois Tools Works violated Section 7 of the Clayton Act by threatening to substantially lessen competition in various North American markets for industrial finishing equipment.[36] The FTC's administrative complaint contained allegations that the proposed acquisition was likely to result in a variety of anticompetitive effects, given the nature of the industry and the history of the parties' interaction in the marketplace.[37] Paragraph 25 of the Complaint alleges that "[f]rom this evidence of anticompetitive effects, it can be inferred that certain of the products discussed below satisfy the hypothetical monopolist test used to identify relevant markets."[38]

22. In the case of consummated mergers, evidence of post-merger effects can be dispositive on the issue of market definition. For instance, in 2004, the FTC issued an administrative complaint challenging

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33 *FTC v. Whole Foods Market, Inc.* 548 F.3d 1028, 1037-38 (D.C. Cir. 2008 (Brown, J.)) (quoting *Brown Shoe*, 370 U.S. at 325).

34 548 F.2d at 1038-39.

35 *Id.* at 1037-38. The FTC's brief on review noted the close nexus between evidence bearing on market definition and evidence bearing on competitive effects in mergers between close competitors: "Particularly where, as in this case, the antitrust concern is based on the unilateral loss of competition between two uniquely close competitors, there are substantial factual and analytical overlaps between the market definition exercise and the competitive effects analysis. Market definition and competitive effects can thus be thought of as 'two sides of the same coin,' and direct evidence of competitive effects is itself highly relevant to the proper definition of the product market." Brief of Appellant at 38, *FTC v. Whole Foods Market, Inc.*, No. 07-5276 (D.C. Cir. Jan. 14, 2008), *available at* http://www.ftc.gov/os/caselist/0710114/080114ftcwholefoodsproofbrief.pdf.

36 *In the Matter of Graco, Inc.*, Dkt. No. 9350 (Complaint Dec. 15, 2011). The Commission subsequently filed a motion to obtain a federal court injunction to prevent the acquisition and preserve the status quo while the Commission adjudicated its administrative complaint. *Federal Trade Comm'n v. Graco, Inc.*, Case No. 1:11-cv-02239-RLW (D.C.D.C. Dec. 23, 2011).

37 *See In the Matter of Graco, Inc.*, Dkt. No. 9350 (Complaint Dec. 15, 2011) ¶¶ 13-24.

38 *See In the Matter of Graco, Inc.,* Dkt. 9350 (Statement of the Commission March 27, 2012). The matter was withdrawn from adjudication to consider a proposed settlement.

Evanston Northwestern Healthcare Corporation's 2000 acquisition of Highland Park Hospital.[39] The FTC alleged that the consummated acquisition eliminated significant competition between the hospitals and allowed Evanston to exercise market power against health care insurance companies and raise prices at least 9 to 10 percent, to the detriment of consumers.[40] Given that the merger was consummated four years before the FTC brought its complaint, agency staff and its experts were able to gather significant evidence about what happened after the merger.[41] After a trial before an agency administrative law judge, the FTC found that the merger violated the Clayton Act and "enabled the merged firm to exercise market power"[42] and raise prices. In determining the relevant geographic market, the FTC cited evidence of higher-than-expected post-merger price increases (in the range of 9-11 percent) to support a geographic market comprising a triangle formed by the three merged hospitals, the same evidence it used to determine that the merged entity had exercised market power after the merger.[43]

23. Even if market definition were unnecessary in principle, it would often be necessary in practice. The analytical tools used in merger cases involving differentiated consumer products are of limited value when diversion ratios cannot be measured reliably. Moreover, these tools are premised on a particular model of competition and cannot be considered reliable when that model does not fit the industry reasonably well.

24. In addition, the available analytical tools normally cannot replace market definition in assessing mergers other than those involving differentiated consumer products. In other unilateral effects settings, and when using merger simulation, some choices about potential substitutes upon which to focus most likely are required in constructing the model or parsing the data. For example, auction models are often used to predict the likely effects of mergers in industries in which competition to buy or sell resembles an auction, but such models are calibrated with data, and determining which data to use entails drawing lines on the basis of product characteristics and locations. The main consideration in drawing these lines is the practical limit on gathering and using data on large numbers of products, however, rather than the boundaries of properly defined relevant markets. The predictions of these models are not improved, and may be worsened, by ignoring or discarding data on products that lie outside these markets.

25. Analytical tools for assessing coordinated effects currently are of limited value, and they have not been used often. It is difficult for such tools to eliminate the need to identify the scope of likely coordination in geographic and product terms, just as in traditional market definition.

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39 *In the Matter of Evanston Northwestern Healthcare Corp*., Dkt. No. 9315 (Complaint Feb. 10, 2004).

40 *In the Matter of Evanston Northwestern Healthcare Corp*., Dkt. No. 9315 (Opinion of the Commission Aug. 2007) at 78.

41 *See* Deborah Haas-Wilson & Christopher Garmon, *Hospital Mergers and Competitive Effects: Two Retrospective Analyses*, 18 INTERNATIONAL JOURNAL OF THE ECONOMICS OF BUSINESS 17 (2011).

42 Evanston Opinion, *supra* note 40, at 5.

43 Evanston Opinion, *supra* note 40, at 78. The complaint in Evanston contained two separate counts alleging a violation of Section 7 of the Clayton Act. Count One contained all the traditional elements of a Section 7, pleading product market, geographic market, concentration, entry conditions, and lack of merger efficiencies. Count Two omitted allegations regarding product market, geographic market, and concentration, but alleged that the merger had resulted in direct competitive harm proscribed by U.S. merger law: "The merger of ENH and Highland Park enabled EHN to raise its prices to private payers above the prices that the hospitals would have charged absent the merger. Consequently, the merger has substantially lessened competition in a line of commerce in a section of the country, in violation of Section 7 of the Clayton Act." In its decision, the Commission found sufficient evidence to support the allegations in Count One, including a relevant product market for acute inpatient hospital services.

5. Challenging Market Definition Issues

5.1 The Cellophane Fallacy

26. One persistent market definition challenge is the "*Cellophane* fallacy," named for the 1956 case in which the Supreme Court addressed whether duPont's control over the transparent wrapping material, Cellophane, was sufficient to confer monopoly power.[44] The Court addressed the issue by defining a relevant market "composed of products that have reasonable interchangeability for the purposes for which they are produced."[45] The Court found other flexible wrapping materials reasonably interchangeable with Cellophane and included them in the relevant market. But as two economists had pointed out, monopoly pricing by duPont necessarily raised the price of Cellophane to a point at which substitutes became significantly substitutable at the margin.[46] The Cellophane fallacy, as it has come to be known, generally refers to the challenges inherent in defining a market where market power may already exist.

27. The hypothetical monopolist test is the standard market definition test in the United States. It was designed for use in merger cases, in which the prevailing price level normally is the benchmark for evaluating power over price. The hypothetical monopolist test is susceptible to the *Cellophane* fallacy because it posits increases in price above prevailing levels.[47] Proposed modifications to the test for addressing the problem have proved unsatisfactory.[48]

28. Nevertheless, the *Cellophane* fallacy does not create substantial difficulty in defining markets in many cases. The *Cellophane* fallacy does not arise in U.S. monopoly cases in which the allegation is not that the challenged conduct has created, or is maintaining, monopoly power, but rather that it threatens to create monopoly power. In many other cases, the scope of the relevant market is clear from the outset.[49] And in some cases, the basic insight of the hypothetical monopolist test can itself be decisive without going through a detailed application of the test in which the benchmark price level could matter.[50]

5.2 Two-Sided Markets[51]

29. A situation arising with increased frequency is two-sided markets, which in general concern the issue of platforms with two different sets of users. Courts have not yet analyzed market definition closely

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44 *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377 (1956).

45 *Id.* at 404.

46 *See* George W. Stocking & Willard F. Mueller, *The Cellophane Case and the New Competition*, 45 AMERICAN ECONOMIC REVIEW 29, 53-54 (1955).

47 *See* Lawrence J. White, *Market Power and Market Definition in Monopolization Cases*, *in* 2 ABA SECTION OF ANTITRUST LAW, ISSUES IN COMPETITION LAW AND POLICY 913 (W. Dale Collins ed., 2008).

48 *See* Gregory J. Werden, *Market Delineation under the Merger Guidelines: Monopoly Cases and Alternative Approaches*, 16 REVIEW OF INDUSTRIAL ORGANIZATION 211 (2000).

49 In the relatively few monopoly cases DOJhas litigated to judgment over the past two decades, the *Cellophane* fallacy posed no difficulty: *United States v. Dentsply International, Inc.*, 399 F.3d 181 (3d Cir. 2005); *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001).

50 *See Coastal Fuels of Puerto Rico, Inc. v. Caribbean Petroleum Corp.*, 79 F.3d 182, 198 (1st Cir. 1996) (relying on the proposition that "[t]he touchstone of market definition is whether a hypothetical monopolist could raise prices" in rejecting a proposed market).

51 Please refer to the U.S. submission to the 2009 Roundtable on Two-Sided Markets, DAF/COMP/WD(2009)68, *available at* http://www.ftc.gov/bc/international/docs/roundtabletwosided.pdf, for a fuller discussion of the topic, including as concerns market definition.

in this context. In the *Microsoft* case, the two-sidedness of the market was important to the competitive analysis but not to market definition.[52] Two-sidedness of markets can present an issue for market definition when separate prices are charged on the two sides of the market and both prices must be considered in a market power analysis. In such cases, however, the hypothetical monopolist test can be applied in a straightforward way.[53]

30. The DOJ applied the hypothetical monopolist test to a two-sided market in *United States v. First Data Corp*.[54] The case was settled on the eve of trial, so the court never addressed the market definition issue. The case was a challenge to a merger combining PIN debit networks. PIN debit is an electronic payment method in which a cardholder enters a personal identification number (PIN) to authorize the debiting of funds from the cardholder's bank account.

31. In PIN debit networks, the acquiring bank, which processes the transaction, and the issuing bank, which has the cardholder's account, each pay a switch fee to the network. The acquiring bank also pays an interchange fee that goes to the issuing bank. The DOJ concluded that a hypothetical monopolist would raise fees to acquiring banks (and hence to merchants), and judged the significance of the increase against the sum of the acquiring bank's switch fee and the interchange fee. Because the interchange fee is much larger than the switch fee, this meant that a much larger price increase was necessary to reach the significance threshold in the hypothetical monopolist test than would have been the case had the two-sidedness of the market been ignored.

32. Similarly, the FTC found that multi-listing services (MLS) used by realtors to list homes for sale exhibit network effects on both sides of the market.[55] Using a standard economic framework, the administrative law judge found that a hypothetical monopolist of MLS listing services could profitably raise prices without causing brokers to withdraw from the MLS. As a result, brokers who were denied

52 *See United States v. Microsoft Corp.*, 253 F.3d 34, 50-56 (D.C. Cir. 2001) (defining the relevant market as Intel-compatible PC operating systems and holding that Microsoft monopoly power is protected by the applications barrier to entry).

53 *See* Alexei Alexandrov, George Deltas & Daniel F. Spulber, *Antitrust and Competition in Two-Sided Markets*, 7 JOURNAL OF COMPETITION LAW & ECONOMICS 775 (2011); Eric Emch & T. Scott Thompson, *Market Definition and Market Power in Payment Card Networks*, 5 REVIEW OF NETWORK ECONOMICS 45 (2006).

54 Materials related to the case can be found at http://www.justice.gov/atr/cases/first0.htm. On market definition in the case and in electronic payments networks generally, see Renata B. Hesse & Joshua H. Soven, *Defining Relevant Product Markets in Electronic Payment Network Antitrust Cases*, 73 ANTITRUST LAW JOURNAL 709 (2006).

55 *In the Matter of Realcomp,* Dkt. No. 9320, Initial Decision 38-41 (Dec. 10, 2007) ("From a home seller's (or listing broker's) point of view, the MLS is more valuable the more home buyers (or cooperating broker's) are viewing the MLS. The value of the MLS to listing brokers increases as the number of cooperating brokers increases because (a) the expected selling price increases with the number of home sellers that demand the house and/or (b) the time required to sell the house at a given asking price decreases. From the home buyer's (or cooperating broker's) perspective, the MLS becomes more valuable as more home sellers (or listing brokers) have listed their properties on the MLS. The value of the MLS to cooperating brokers searching for homes increases as the number of listings increases because (a) the closeness of the match between home characteristics will be greater for a given amount of time devoted to search and/or (b) the expected amount of time required to achieve a given match will decrease. These forces reinforce one another such that both listing brokers and cooperating brokers will achieve greater efficiencies in the provision of brokerage services if they use an MLS. (citations omitted). The FTC affirmed the ALJ decision on November 2, 2009; the Court of Appeals for the Sixth Circuit affirmed, *Realcomp II v. FTC,* 635 F.3d 815 (6th Cir. 2011). Materials related to the case can be found at http://www.ftc.gov/os/adjpro/d9320/index.shtm.

access to the MLS were at a disadvantage relative to brokers with MLS listings, and MLS rules excluding certain types of limited service listing illegally harmed competition.

6. Innovation-Intensive Industries

33. The Agencies often assess competition issues in industries in which R&D is important and firms compete on the basis of new product development at least as much as on the basis of price. Merger challenges in such industries often focus on the reduction of competition in innovation.[56] Such industries present some difficulties -- for example, market definition can be more challenging when it must cope with future products. Nevertheless, such cases have not presented the Agencies with any major market definition difficulties. Nor has the limited amount of litigation in such cases revealed any difficulties arising from the way courts approach market definition in such industries.[57]

56 Merger challenges in biotechnology, defense, and pharmaceutical industries often have been based largely on the elimination of innovation competition. *See, e.g.*, Amgen Inc. & Immunex Corp., FTC Docket No. C-4043, 134 F.T.C. 333 (July 12, 2002), http://www.ftc.gov/os/2002/07/amgencomplaint.pdf; Ciba-Geigy Ltd., FTC Docket No. C-3725, 123 F.T.C. 842 (Mar. 24, 1997), available at http://www.ftc.gov/os/1997/04/c3725cmp.pdf; *United States v. Lockheed Martin Corp.*, No. 98cv00731 (D.D.C. filed Mar. 23, 1998), *available at* http://www.justice.gov/atr/cases/f212600/212680.pdf; *United States v. Syngenta AG*, No. 04cv01442 (D.D.C. filed Aug. 25, 2004), *available at* http://www.justice.gov/atr/cases/f205100/205199.pdf.

57 *See FTC v. PPG Industries, Inc.*, 798 F.2d 1500, 1504-06 (D.C. Cir. 1986) (defining the relevant market as "aircraft transparencies" (*i.e.,* windows) requiring high technology and explaining that the competition takes place at the design stage of aircraft).