

**DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE**

DAF/COMP/WD(2013)15
For Official Use

ROUNDTABLE ON VERTICAL RESTRAINTS FOR ON-LINE SALES

-- Note by the United States --

This note is submitted by the United States to the Competition Committee FOR DISCUSSION under Item VII at its forthcoming meeting to be held on 26-27 February 2013.

JT03335174

Complete document available on OLIS in its original format

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

ROUNDTABLE ON VERTICAL RESTRAINTS FOR ON-LINE SALES

-- Note by the United States --

Vertical Restraints Policy in Markets With and Without Online Sales

1. This paper responds to the Chair's letter of December 18, 2012, calling for submissions for the roundtable on Vertical Restraints for Online Sales. The first antitrust question posed is "Does the development of e-commerce call for an overall revision of the indications contained in guidelines and other policy documents, or can they be easily applied to the new economic and technological setting?" This paper explains why the U.S. antitrust agencies do not see a need to develop specific rules for their analysis of vertical restraints in markets with online sales. It also explains why such rules could be counterproductive.

2. The treatment of vertical restraints in the United States has evolved over time and continues to develop. Currently non-price and price restraints are subject to rule of reason treatment under U.S. law.¹ The U.S. agencies' analysis of the competitive effects of vertical restraints turns on an evaluation of case-specific evidence under the rule of reason standard, consistent with existing case law, informed by insights from the economic literature on vertical restraints. The U.S. antitrust agencies and federal courts have had limited experience to date with rule of reason treatment of resale price maintenance, however, and look forward to analyses of the data on the competitive impact of resale price maintenance as these practices are implemented.²

¹ Treatment of vertical restraints under U.S. law has evolved over time, from a strict divide between per se illegal vertical price restraints and rule of reason treatment for non-price vertical restraints (*see Continental T.V., Inc., v. GTE Sylvania Inc.*, 433 U.S. 36 (1977); *Dr. Miles Medical Co. v. John D. Park & Sons*, 220 U.S. 373 (1911)), to rule of reason treatment for all vertical restraints except minimum resale price maintenance (*see State Oil v. Khan*, 522 U.S. 3 (1997)), to the current standard established by the U.S. Supreme Court in *Leegin* that all vertical restraints, price and non-price, should be evaluated under the rule of reason (*see Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877 (2007)). Despite the ruling in *Leegin*, state law in a number of U.S. states continues to treat RPM as per se illegal within their jurisdictions. See, e.g., Michael A. Lindsay, Overview of State RPM, Antitrust Source Aug. 2012, available at http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/aug12_lindsay_chart_7_31f.auth_checkdam.pdf, for chart identifying relevant authorities concerning the treatment of RPM in each state. For a more in-depth review of U.S. legal developments related to resale price maintenance, see "Note by the United States," OECD Roundtable on Resale Price Maintenance, June 25, 2008.

² See Christine Varney, Assistant Attorney General, Antitrust Division, U.S. Department of Justice, Antitrust Federalism: Enhancing Federal/State Cooperation, Remarks as Prepared for the National Association of Attorneys General Columbia Law School State Attorneys General Program, (Oct. 7, 2009), available at: <http://www.justice.gov/atr/public/speeches/250635.htm> ("I am not ruling out the possibility that *Leegin*'s dissenters were right in thinking the effort to develop a new analytical framework will not succeed or that evidence will show that the actual uses of RPM are almost always harmful. The Division looks forward to analyses of any data that becomes available as a result of RPM practices implemented in the wake of *Leegin* and appreciates that the states will serve as important laboratories for obtaining this data. With

3. The presence, absence, or extent of online sales in a market is a fact that is considered as part of any analysis, but in and of itself is not a fact that would require changing the analytic process, for two main reasons. First, the conditions under which vertical restraints may be procompetitive or anticompetitive can arise in markets irrespective of the degree of online sales.³ The analysis and conclusions depend on these conditions and related evidence, and the extent of online sales in a market does not, by itself, add probative value. The ability to make online sales may elevate the importance of certain factors in some cases. For example, the ability to make online purchases may exacerbate free riding off the service effort of brick and mortar retailers, or make network effects more likely to entrench market power. However, the importance of free riding, network effects, and other relevant factors will vary from case to case, and the extent of online sales would not be expected, in the abstract, to provide any guidance as to that effect. Second, even if future empirical research were to find a relationship between the extent of online sales in a market and conditions that increase or decrease the likelihood of harm from vertical restraints, this finding would not obviate the use of rule of reason analysis in each investigation consistent with current U.S. law.

4. Conditioning the treatment of vertical restraints on the extent of online sales could distort not only firms' vertical contracting practices, but also their choices over distribution channels. Since economic analysis and our experience examining cases currently provide no basis for adjusting the treatment of vertical restraints based on the extent of online sales, doing so would risk harming distributional efficiency and welfare by causing firms to adjust their distribution strategies in potentially inefficient ways.

5. This paper is organized as follows. Section 1 provides an overview of the economics of vertical restraints. Section 2 explains why online sales have no specific characteristics warranting a different analytical framework than brick and mortar sales. Section 3 addresses some specific questions raised by the Chair.

1. The Basic Economics of Vertical Restraints

6. Vertical restraints have been defined in the economic literature as contracts with two essential elements: (i) they arise between upstream and downstream producers—firms that play complementary

respect to the natural experiments in the years ahead, we urge courts, commentators, and enforcers to keep an open mind because, as has occurred both in the antitrust and other contexts, accumulated experience on the effects of RPM and the litigation of RPM cases will be instructive.” (citations omitted). See also *In the Matter of Nine West Group Inc.*, Order Granting In Part Petition to Reopen and Modify Order Issued Apr. 11, 2000, FTC Docket No. C-3937 (May 6, 2008), at 14 and 17, available at: <http://www.ftc.gov/os/caselist/9810386/080506order.pdf>, (“At this early stage of the application of the teaching of *Leegin* by the lower courts and the Commission, the *Leegin* factors can serve as helpful guides to begin an assessment of when RPM deserves closer scrutiny. Through the Commission’s own enforcement work, research, and external consultations such as workshops, we anticipate further refinements to this analysis, including the further specification of scenarios in which RPM poses potential hazards and those in which it does not.” The Commission further noted that, “[p]art of Nine West’s rationale, if not its only rationale, for its desire to engage in resale price maintenance is unproven competitive efficiencies. Therefore, to aid the Commission in monitoring Nine West’s use of resale price maintenance, we require Nine West to file a report with the Commission one, three, and five years after the Order has been modified that provides information describing Nine West’s use of RPM and its effect on its prices and output. . . The Commission may challenge its use of such a program should it appear illegal.”).

³ A large body of economic literature identifies conditions under which vertical restraints can have pro-competitive or anticompetitive effects. Surveys of this literature include Katz (1989), Rey and Tirole (2007), Cooper et al., (2005), Lafontaine & Slade (2005), and Rey and Verge (2008).

roles in facilitating the sale of products to customers—and (ii) they involve terms that are more complex than simple per-unit prices.⁴

7. For example, a manufacturer needs a means to distribute its products to consumers. If the manufacturer does not have its own distribution outlet in an area, it may contract with an independent retailer to purchase and stock its equipment and resell it to final consumers. In a simple contract with no vertical restraints, the upstream manufacturer would charge the downstream retailer a per-unit (“linear”) price for each product. Under a variety of conditions, however, linear pricing is inefficient.

1.1 *Inefficiencies from Simple Contracts*

8. The economic literature on vertical restraints identifies numerous reasons why simple contracts with linear pricing may be inefficient. We briefly describe three of the issues that feature most prominently in the literature.⁵

9. *Double Marginalization.* The wholesale price set by the manufacturer becomes a component of the retailer’s marginal cost. If the manufacturer has market power⁶ and is restricted to charging a linear price, it will raise the wholesale price above its marginal cost. If the retailer has market power,⁷ it will add an additional mark-up. The successive mark-ups of the manufacturer and retailer lead to “double marginalization,” which entails higher prices and lower output than would arise if the firms could choose prices as an integrated unit to maximize their joint profits.

10. It is useful to think about the double marginalization problem as arising from externalities present when producers of complements (in this case, upstream and downstream firms) choose linear prices independently. When the manufacturer and retailer set their own prices, each ignores the negative externality inflicted on the other from raising price.⁸ These *vertical pricing externalities* that arise under linear pricing generally cause firms to set higher prices than they would if they internalized these externalities and priced as an integrated unit.

11. *Under-provision of Effort.* If the demand for the manufacturer’s products depends on the investment or selling efforts put forth by the retailer, the manufacturer, or both, then contracts with linear pricing typically cause firms to exert less effort than the jointly optimal amount. This inefficiency also arises from vertical externalities, but in this case the externalities come from independent sales or investment decisions rather than independent pricing decisions. Specifically, when choosing its effort level independently, the retailer will account for the effect of its effort on its own profit, but it will ignore the

⁴ We follow Mathewson and Winter (1984) and Tirole (1988) in defining vertical restraints as vertical contracts that involve terms other than linear pricing. This is consistent with the definition in the EC’s “Guidelines on Vertical Restraints,” available at http://ec.europa.eu/competition/antitrust/legislation/guidelines_vertical_en.pdf.

⁵ Among the motivations for vertical restraints not addressed here are risk sharing and price discrimination, including screening and bundling.

⁶ “Market power” in this context simply means that the manufacturer has a downward sloping demand curve.

⁷ The retailer has “market power” in the sense used throughout this paper if the demand it faces for the manufacturer’s product slopes downward. This does not imply that the retailer earns supra-normal profits.

⁸ The externalities are as follows: an increase in the wholesale price by the manufacturer inflicts an externality on the retailer by raising the retailer’s marginal cost; an increase in the retail price by the retailer inflicts an externality on the manufacturer by reducing the quantity demanded for the manufacturer’s product and lowering its profit.

effect on the manufacturer's profit, and vice versa. If the manufacturer and retailer both have positive mark-ups, these *vertical service externalities* may lead to less effort by the manufacturer and retailer than they would exert if they internalized the externalities by making decisions as an integrated unit.

12. *Retailer Free Riding.* If the manufacturer sells its products through multiple retailers, and if the selling efforts of one retailer affect the sales of another, then the retailers typically choose inefficient effort levels. The classic example is retailer free riding, which occurs when customers visit a retailer that offers high pre-sale services to learn about the product, and then visit another retailer with lower services and lower costs to purchase the product at a lower price. For example, a customer wishing to purchase golf clubs may visit a retailer that offers a practice area and fitting services to test and be fitted for golf clubs, but then purchase identical clubs from an online retailer or a store that does not offer a practice area and fitting services. The ability of low-price retailers to free ride on the efforts of the high-service retailer may lower the high-service retailer's incentives to offer such services. The result may be lower service and output than would occur if the manufacturer and retailers internalized the service externalities by making decisions as an integrated unit.⁹

1.2 *Potentially Procompetitive Vertical Restraints*

13. The economic literature identifies a range of vertical restraints that firms may use to address the inefficiencies just described, three of which we mention here. The purpose of the restraints in these circumstances is to internalize the vertical externalities so that the manufacturer and its retailers effectively choose prices and investment or service efforts as an integrated unit. This effect of internalizing the externalities typically increases output.

14. Perhaps the simplest vertical restraint is nonlinear (i.e., not per unit) contracting, which involves conditioning the payment from the retailer to the manufacturer on the quantity purchased in a nonlinear (i.e., not per unit) way. Examples include two-part tariffs, quantity forcing, and all-units discounts (sometimes called "retroactive rebates"). All of these contracts can reduce or eliminate double marginalization, increasing output and welfare.

15. Inefficiencies associated with the under-provision of effort and free riding by retailers can potentially be addressed by resale price maintenance (RPM), exclusive territories (ET), and nonlinear pricing in various combinations, depending on the details of the economic environment.¹⁰ While a

⁹ The service externality that arises under free riding has both vertical and horizontal elements. The provision of service by one retailer has a positive external benefit on both the manufacturer and rival retailers.

¹⁰ See, for example, Mathewson and Winter (1984). The potential benefits of RPM and ET identified in the economic literature are recognized in U.S. case law. *See Leegin*, 551 U.S. 877 ("Absent vertical price restraints, the retail services that enhance interbrand competition might be underprovided. This is because discounting retailers can free ride on retailers who furnish services and then capture some of the increased demand those services generate. Retail price maintenance can also increase interbrand competition by facilitating market entry for new firms and brands and by encouraging retailer services that would not be provided even absent free riding.") (citation omitted); and *GTE Sylvania*, 433 U.S. at 56 ("[N]ew manufacturers and manufacturers entering new markets can use the [exclusive territory] restrictions in order to induce competent and aggressive retailers to make the kind of investment of capital and labor that is often required in the distribution of products unknown to the consumer. Established manufacturers can use them to induce retailers to engage in promotional activities or to provide service and repair facilities necessary to the efficient marketing of their products.") . U.S. case law also recognizes potential anticompetitive effects of these practices. *See* § 1.3 below.

complete delineation of the cases is beyond the scope of this paper, we describe an example that illustrates some key points.¹¹

16. Consider a retail golf shop that sells a manufacturer's golf clubs and golf shirts in competition with other retailers. Customers are more likely to purchase golf shirts at the shop after seeing an attractive display in the store. The effort putting together an attractive display might not be susceptible to free riding (i.e. it might not cause customers to purchase more of the manufacturer's shirts at rival stores), but it likely increases the sales of the manufacturer's golf shirts at the store that develops the display. In addition, the retailer may offer a practice area and fitting services to help customers select the proper clubs. These services clearly are susceptible to free riding, since customers can obtain an important service at one store and purchase the clubs at another store that does not offer the service. Since the golf shop faces competition from rival retailers, the margins it earns on both golf shirts and golf clubs under simple contracts with linear pricing will be lower than the margins an integrated manufacturer would earn. This means that in the absence of more complex vertical contracts, the golf shop owner is likely to exert less effort to provide these services than the manufacturer would if it were integrated.

17. In this example, minimum RPM accompanied by nonlinear pricing (two-part tariffs are sufficient) may induce the retailer to exert the same effort level an integrated firm would choose by giving retailers margins sufficient to encourage them to provide the integrated level of effort. RPM may do this for services related to the sale of golf clubs, which are subject to free riding, and for services that enhance the demand for golf shirts, which may not be subject to free riding.¹² A strong form of an exclusive territory restraint (assigning each customer to a specific retailer¹³) along with nonlinear pricing may also induce the integrated outcome, although in many cases it is not feasible to assign customers to retailers. Weaker forms of exclusive territory restraints, such as separating retailers geographically while allowing customers to shop where they like, may lead to retail margins that are too low to align completely manufacturer and retailer incentives if customers can economically shop multiple retailers. Vertical restraints that effectively mitigate retailer service externalities can increase retailer effort and total output.

18. The potential benefits of the vertical restraints in the example that we have just described are a result of internalizing vertical externalities, not a separate cost savings effects. If vertical externalities are present, these benefits likely will exist to some degree, and will be weighed against potential anticompetitive effects in the competitive effects analysis.¹⁴

¹¹ The example that follows is loosely based on the analysis in Mathewson and Winter (1984).

¹² A number of commentators have questioned the frequency with which free-riding occurs in RPM arrangements. See *Leegin* 551 U.S. at 915-16 (dissent) (“[T]he ultimate question is not whether, but *how much*, “free riding” . . . takes place. And, after reading the briefs, I must answer that question with an uncertain “sometimes.” See, e.g., Brief for William S. Comanor and Frederic M. Scherer as *Amici Curiae* 6 – 7 (noting “skepticism in the economic literature about how often [free riding] actually occurs”); Scherer & Ross 551-555 (explaining the “severe limitations” of the free-rider justification for resale price maintenance); Pitofsky, *Why Dr. Miles Was Right*, 8 Regulation, N. 1, pp 27, 29-30 (Jan/Feb 1948 (similar analysis))” (emphasis in original). The Scherer & Ross article cited in the dissent is F.M. Scherer & D. Ross, *Industrial Market Structure and Economic Performance* 335-339 (3d. ed. 1990).

¹³ Mathewson and Winter (1984) call this strong form of exclusive territory “closed territory distribution.”

¹⁴ The benefits of internalizing vertical externalities provide the economic motivation in the theoretical literature for treating vertical contracts under a different legal standard than horizontal contracts. An analogy with horizontal restraints helps explain this point. When two horizontal competitors with market power make independent output decisions, an increase in output by one firm typically reduces the profit of its competitor—a negative externality. The externalities cause competing firms to produce more than they would if they chose output jointly and shared the profit, i.e., more than they would if they colluded. A

19. Empirical evidence supports the predictions from economic theory that vertical restraints frequently have intrinsic benefits, although these benefits may not always outweigh the restraint's anticompetitive effects.¹⁵

1.3 Potentially Anticompetitive Vertical Restraints

20. Although vertical restraints may have procompetitive justifications, they also may cause anticompetitive harm, and for this reason they are not per se legal under U.S. law.¹⁶ (Indeed, in some states RPM remains per se illegal.¹⁷) Factors relevant to the rule-of-reason analysis include the market power of the entities involved, the scope of the restraint, the number of entities within the market adopting the restraint, and the restraint's source.¹⁸ The potential anticompetitive effects of vertical restraints can be grouped in three general classes: (i) collusion, (ii) competition softening, and (iii) entry deterrence. The likelihood of any of these effects occurring depends upon the specific market attributes surrounding the arrangements. We provide a truncated discussion here that is sufficient to reach the conclusions drawn in this paper.

21. RPM can facilitate collusion among manufacturers by making it easier for manufacturers to detect cheating from a collusive arrangement. This can occur if retail prices are easier to observe than wholesale prices. In one variant of this concern,¹⁹ defections from a collusive agreement over retail prices

contract between firms that internalizes the externalities (e.g., explicit collusion) typically causes firms to compete less aggressively and reduce their outputs. This is what motivates the per se rule against naked horizontal collusion. By contrast, when two vertically related firms make independent decisions, an output-enhancing decision by one firm typically increases the profit of the other firm—a positive externality. When acting independently, firms will not account for these externalities and will choose less output (via higher prices or less effort) than they would if they could make decisions jointly and share the profit. A vertical restraint contract between the firms that internalizes the externalities can lead to actions that increase their joint output.

¹⁵ See Cooper et al. (2005) and Lafontaine and Slade (2005) for surveys of the empirical literature. *But see* F.M. Scherer, *Comment on Cooper et al.'s "Vertical Restrictions and Antitrust Policy"*, Comp. Policy Int'l, Autumn 2005, at 65, 71-74 (reviewing studies showing potential consumer savings from termination of resale price maintenance in light bulb, retail drug, blue jeans, and other sectors); and Cooper et al.'s response to Scherer, <http://www.antitrustinstitute.org/files/413b.pdf>.

¹⁶ See *Leegin*, 577 U.S. at 892 (“While vertical agreements setting minimum resale prices can have procompetitive justifications, they may have anticompetitive effects in other cases. . . .”); *id.* at 894 (“the potential anticompetitive consequences of vertical price restraints must not be ignored or underestimated”); *Nine West*, *supra* n.2 at 11 (“Our obligation is to ask whether a modification is appropriate in light of *Leegin's* cautions about the circumstances in which the establishment of an RPM program could be anticompetitive and subject to prohibition under the rule of reason”). See also *In the Matter of IDEXX Laboratories, Inc.* Decision and Order, Docket C-4383 (Feb. 12, 2013), available at: <http://www.ftc.gov/os/caselist/1010023/130212idexxd.pdf>, (*prohibiting* IDEXX from enforcing exclusive territorial agreements in light of IDEXX's alleged 70% market share).

¹⁷ See, e.g., Michael A. Lindsay, Overview of State RPM, Antitrust Source Aug. 2012, available at http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/aug12_lindsay_chart_7_31f.auth_checkdam.pdf, for chart identifying relevant authorities concerning the treatment of RPM in each state.

¹⁸ *Leegin*, 577 U.S. at 897-98; *Business Elecs. Corp. v. Sharp Elecs. Corp.*, 488 U.S. 717, 725 (1988).

¹⁹ See Julien and Rey (2007). Telser (1960) also argued that RPM may facilitate coordination by manufacturers. Scherer and Ross note (1990, p. 550) “although the logic is persuasive, there are few documented cases of the use of RPM to strengthen manufacturer cartels”. RPM can also facilitate tacit collusion, for example, by “prevent[ing] price competition from ‘breaking out.’” *Leegin*, 577 U.S. at 911 (Breyer, J., dissenting); *In re Sony Music Entertainment Inc.*, FTC Dkt. No. C-3971 (August 2000)

set through RPM are obvious because retail prices are observable, while defections from a wholesale price agreement are less obvious because wholesale prices are private information. Under a wholesale price agreement, firms may use information on retail price changes to draw inferences about whether firms have defected from the agreement, but the inferences are imperfect because retail price changes may reflect factors other than cheating on the agreement.

22. RPM may also facilitate collusion among retailers.²⁰ It may be easier for retailers to sustain a collusive agreement on price if they can convince manufacturers to help enforce the agreement through RPM.²¹ RPM can also be used by a powerful dealer (or dealers acting with or without collusion) to prevent lower-cost or more-innovative retailers from expanding, thereby inhibiting innovation in retailing.²²

23. RPM can provide a strategic commitment that softens competition between the products of two manufacturers. The way this works is that a commitment to RPM by one manufacturer is observed by retailers selling rival products before they set the retail prices for the rival products. If the commitment to RPM is expected to raise the retail price of the product sold under RPM, then retailers may react by raising the prices of rival products.²³

24. Exclusive territories can also soften competition between the products of different manufacturers. If a manufacturer imposes exclusive territories and charges a higher wholesale price, retailers may raise the prices of rival products in response. This softens competition and may increase the profit of the manufacturer imposing the exclusive territory.

25. Exclusive dealing²⁴ can deter entry or investment in markets by denying entrants the scale required for entry or investment to be profitable. Although retailers typically require compensation for

(minimum advertised price policy independently adopted by five largest distributors of prerecorded music alleged to stabilize prices in violation of Section 5 of FTC Act) (Analysis to Aid Public Comment available at <http://www.ftc.gov/os/2000/05/mapanalysis.htm>).

20 Leegin, 551 U.S. at 893 (“A group of retailers might collude to fix prices to consumers and then compel a manufacturer to aid the unlawful arrangement with resale price maintenance. In that instance the manufacturer does not establish the practice to stimulate services or to promote its brand but to give inefficient retailers higher profits. Retailers with better distribution systems and lower cost structures would be prevented from charging lower prices by the agreement.”).

21 There are reasons to believe that retailer cartels are unlikely to be common, *see* “Note by the United States,” *OECD Roundtable on Resale Price Maintenance*, June 25, 2008, p. 7, but such cartels are not unheard of, *see In the Matter of National Association of Music Merchants, Inc.*, FTC File No. 001-0203 (Apr. 10, 2009) (Order), available at: <http://www.ftc.gov/os/caselist/0010203/090410nammdo.pdf> (settling allegation that National Association of Music Merchants retailer members discussed the adoption, implementation, and enforcement of minimum advertised price policies). Ippolito (1991) surveyed empirical evidence from cases and concludes that collusion theories were potentially applicable to at most 15% of the cases in her sample. Scherer and Ross state (1990, p. 550) “studies of numerous RPM cases suggest that only a minority, and perhaps a small minority, of the adoptions for particular products came as a primary consequence of organized dealer pressure.”

22 *Leegin*, 551 U.S. at 893-94 (“dominant retailer . . . might request resale price maintenance to forestall innovation in distribution that decreases costs,” and the “manufacturer . . . accommodate[s] the retailer’s demands [because] it believes it needs access to the retailer’s distribution network.”).

23 For examples of this type of argument in somewhat different environments, *see* Shaffer (1992) and Innes and Hamilton (2009), and Rey and Verge (2010). The FTC’s workshop on RPM provides further examples. *See* <http://www.ftc.gov/opp/workshops/rpm/>.

24 By “exclusive dealing” we mean an agreement between an upstream and downstream firm that the downstream firm will not deal with rival upstream firms. The term “exclusive dealing” is sometimes used

agreeing to carry only a single manufacturer's product, this compensation may be small enough to make exclusive dealing a profitable exclusion strategy if production is subject to economies of scale or if retail competition is sufficiently intense.²⁵

1.4 *The Sensitivity of the Effects of Vertical Restraints to Details of the Economic Environment*

26. The effects from vertical restraints described above (procompetitive and anticompetitive) are all clear possibilities. However, the literature on this point is not designed to provide the kind of general principles useful for broad policy rules. The models of vertical control are highly sensitive to several key assumptions that will tend to vary from case to case. While each prediction is internally consistent and would be a valid prediction when the facts align with assumptions in the model, the U.S. agencies have a limited basis (particularly with respect to enforcement experience of RPM) to assess whether those facts are typical enough to form the basis of policy. Consider:

- The theoretical analysis showing that RPM sometimes makes collusion easier also shows that RPM sometimes makes collusion harder.²⁶ The likelihood that RPM will make collusion easier rather than harder depends on the degree of market power, and experience has not yet established a basis to say what range of market power is likely to generate one result or the other in general practice.
- The commitment value of RPM and ET in competition softening models may vanish if firms can write nonlinear contracts that are unobservable to rivals.²⁷ For example, if a manufacturer that employs an exclusive territory can offer private nonlinear price schedules, then the exclusive territory contract may not soften competition.²⁸ How likely such contracts are or whether this effect typically happens with exclusive territories in practice is not well-established.
- The ability to profitably exclude rivals via exclusive dealing can disappear if rivals can bid for the exclusive or if firms will breach their exclusive contracts when it is efficient for them to do so in the face of better offers. This can occur when the gains from breaching are high enough both to fully compensate the injured party and still increase the gains to the breaching party.²⁹ Again, the likelihood of this happening in practice is not well-established.

to mean restrictions on manufacturers dealing with rival retailers, which we have been discussing as "exclusive territories."

²⁵ See, for example, Rasmusen et al (1991), Segal and Whinston (2000), and Simpson and Wickelgren (2007).

²⁶ In Julien and Rey (2007), the short run gain from defection (stealing profit from rivals) is higher and the long run cost of defection (a breakdown in collusion) is lower when RPM is enforced than when it is not. The reason for this is that retailers respond more efficiently to demand shocks in the absence of RPM (*see* Julien and Rey for the details). This factor, by itself, makes collusion harder under RPM. However, another effect of RPM is to make it easier to detect cheating, and this effect dominates if firms have sufficient market power.

²⁷ For example, if the manufacturers offering exclusive territories in Rey and Stiglitz (1995) can offer private nonlinear price schedules, exclusive territories will not soften competition. The reason is that an adjustment in one retailer's wholesale price that is unobservable to rival retailers does not affect the rivals' behavior.

²⁸ The reason is that an adjustment in one retailer's wholesale price that is unobservable to rival retailers does not affect their behavior.

²⁹ See Simpson & Wickelgren (2007).

27. These examples are representative of the sensitivity of theoretical models of vertical restraints to the facts of particular cases.³⁰ This sensitivity prevents the theoretical literature from providing general policy prescriptions without more empirical foundation to generalize assumptions.

2. The Effects of Vertical Restraints in Markets With and Without Online Sales

28. Summarizing the preceding section, economic theory makes three broad predictions about the effects of vertical restraints. First, vertical restraints internalize vertical externalities and frequently have intrinsic benefits. Second, a pre-condition for vertical restraints to have anticompetitive effects is the presence of (or the potential to create) significant market power.³¹ Third, the effects of vertical restraints are highly sensitive to myriad details of the economic environment. These predictions do not provide a basis for treating vertical restraints differently depending on the presence or extent of online sales in the market.

29. As we have noted, the potential benefits of vertical restraints described in the economic literature are a result of internalizing vertical externalities, not a separate cost savings. These potential benefits are likely to exist whenever vertical externalities are present. Externalities associated with double marginalization are present whenever the upstream and downstream firms in a vertical channel both have market power. This occurs whenever the downstream firm faces downward sloping demand, a weak condition that surely exists in many markets with and without online sales. Vertical service externalities exist if firms earn positive margins and make non-price effort decisions that enhance demand, conditions that also arise in markets with and without online sales. An example in a market with online sales is an investment to create or enhance a website. Service externalities associated with free riding can also be a problem for products distributed online. This may involve services provided in brick and mortar stores. For example, an online retailer offering elaborate education resources that allow customers to research a product may be susceptible to free riding by other online retailers or brick and mortar retailers that do not offer these services.

30. Unfortunately, the primary economic screen for potentially anticompetitive vertical restraints—market power at one or both levels in the vertical chain—has limits. Market power is a necessary, but not sufficient, condition for harm because it does not take into account potential procompetitive benefits. In addition, according to economic theory, the benefits of internalizing vertical externalities often arise when firms have market power, and some of these benefits increase as the degree of market power rises. For example, the benefits from eliminating double marginalization are typically higher the greater the degree of market power in the upstream and downstream markets. The benefits from eliminating free riding tend to decrease with the degree of downstream market power, but they tend to increase with the degree of upstream market power. Therefore, while market power is a necessary condition for vertical restraints to be harmful, the degree of market power may not necessarily be a good indicator of the likely competitive effects of vertical restraints. U.S. law relies on case-specific evidence to make this determination.

31. Relevant case-specific evidence includes business documents and case-specific empirical analysis. This evidence can be helpful for distinguishing potential theories of harm and benefit. It can also

³⁰ In general, the predictions depend on the degree of market power in the upstream and downstream markets, the nature of competition (e.g., Cournot v. Bertrand, upward v. downward sloping reaction functions), the nature of the financial terms of the supply contract (e.g., linear v. nonlinear), whether a retailer's contracts are public or private information, how retailers form out-of-equilibrium beliefs about their rivals' contracts, etc.

³¹ Of course, “in a case of RPM imposed by a powerful dealer, the relevant power is that of the dealer in the market in which it purchases.” 8 Philip E. Areeda & Hebert Hovenkamp, *Antitrust Law* para 1620e (3d ed. 2010).

be useful for identifying “experiments” that allow inferences about the effects of vertical restraints. For example, firms may use vertical restraints in some areas but not others, in some channels but not others, or in some time periods but not others. They may also change their practices over time. Evidence on how certain informative indicators relate to firms’ vertical restraints practices across areas and channels or over time can help determine the likelihood for vertical restraints to be harmful. This type of evidence ranges from documents or testimony describing the effects of specific practices to data that permits statistical analysis. Again, the nature of this inquiry is the same irrespective of the extent of online sales in the market.

3. Answers to Some Specific Questions about Vertical Restraints for Online Sales

3.1 *Does the development of e-commerce call for an overall revision of policy indications presented in guidelines and other policy documents, or can they be properly applied as they are to the new economic and technological setting?*

32. Much of the economic literature on vertical restraints does not suggest the need for a different U.S. vertical restraints policy for markets with online sales. This is true both because: (i) the conditions under which restraints may be beneficial or harmful arise in markets irrespective of the degree of online sales; and (ii) economic literature does not provide a basis to believe that tailoring the policy to the extent of online sales in a market would be appropriate.

33. It certainly is true that online sales may have particular characteristics that affect the analysis of vertical restraints. For example, certain kinds of online distribution may exhibit network effects, which are often associated with market power.³² As we have noted, the presence of market power is a necessary condition for vertical restraints to have anticompetitive effects. On the other hand, market power also can make the efficiency benefits of vertical restraints larger. In addition, the ability to make online sales might reduce the costs of entering some markets and tend to eliminate market power. Because these factors are similar to those seen in brick and mortar sales, U.S. law treats online and off-line sales similarly and requires a case-specific analysis in determining competitive effects.

34. It may be easier for firms to observe their rivals’ prices for online sales than for sales in brick and mortar outlets.³³ Other factors equal, this might make coordination easier in markets with online sales, with or without the use of vertical restraints. However, price transparency in online markets may also intensify competition between retailers in some markets by reducing customer shopping costs, increasing the number of competitors in the market, or both. Again, U.S. law requires the agencies to consider the net effect of these factors on a case-specific basis.

3.2 *Two broad categories of vertical restraints are generally defined, price and non-price restraints. Is this classification really useful? Is it still valid for online sales?*

35. Since the *Leegin* decision in the U.S., both price and non-price restraints have been treated under the rule of reason by federal courts. This treatment allows for the recognition of the potential procompetitive benefits of vertical restraints while acknowledging that, in some circumstances, a vertical restraint may harm competition. *Leegin* also suggested that the rule of reason approach for resale price maintenance may employ presumptions.³⁴

³² Of course, network effects can also arise in markets that emphasize other distribution channels.

³³ Online sales do not automatically make it easier for firms to observe their rivals’ prices. For example, the use of discount or coupon codes can make it hard to observe the prices at which sales actually occur.

³⁴ *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877 (2007).

3.3 *Is the distinction between “active” and “passive” sales valid/applicable for online sales?*

36. U.S. law does not distinguish between active and passive sales in the treatment of vertical restraints. The economic literature does not provide a strong basis for such a distinction. Vertical externalities may exist for both active and passive sales. This means that vertical restraints can have procompetitive benefits in either case. The use of vertical restraints in markets in which retailers play a more active role in marketing or selling may offer greater scope for efficiency benefits from vertical restraints than in markets where retailers are more passive. This factor is relevant and is accounted for in case-specific analysis.

REFERENCES

- Cooper, J., Froeb, L., O’Brien, D., and Vita, M. (2005), “Vertical Restraints as a Problem of Inference,” *International Journal of Industrial Organization* 23, 639-664.
- Ippolito, P. (1991), “Resale Price Maintenance: Empirical Evidence from Litigation,” *Journal of Law & Economics* 34, 263-294.
- Innes, R. and Hamilton, S. (2009), “Vertical Restraints and Horizontal Control,” *Rand Journal of Economics*, 40, 120-143.
- Jullien, B. and Rey, P. (2007), “Resale Price Maintenance and Collusion,” *Rand Journal of Economics* 38, 983-1001.
- Katz, M. (1989), “Vertical Contractual Relations,” In Willig, R., and Schmalensee, R., eds., *Handbook of Industrial Organization*, Vol. 1, Elsevier, Amsterdam, pp. 655-721.
- Lafontaine, F., and Slade, M. (2005), “Empirical Assessment of Exclusive Contracts,” In *Handbook of Antitrust Economics*, MIT Press, Cambridge.
- Mathewson, G. and Winter, R., (1984), “An Economic Theory of Vertical Restraints,” *Rand Journal of Economics*, 15, 27-38.
- Rasmusen, E., Ramseyer, J., and Wiley, Jr., J. (1991), “Naked Exclusion,” *The American Economic Review*, 81, 1137-1145.
- Rey, P. and Stiglitz, J. (1995), “The Role of Exclusive Territories in Producers Competition,” *Rand Journal of Economics* 26, 431-451.
- Rey, P. and Tirole, J. (2007), “A Primer on Foreclosure,” In *Handbook of Industrial Organization*, vol. 3. Elsevier, Amsterdam, pp. 2145-2220.
- Rey, P. and Verge, T. (2010) “Resale Price Maintenance and Interlocking Relationships,” *Journal of Industrial Economics*, 58, 928-961.

Scherer, F. and Ross, D. (1990), *Industrial Market Structure and Economic Performance*, 3rd ed., Houghton Mifflin, Boston.

Shaffer, G. (1991), "Slotting Allowances and Resale Price Maintenance: A Comparison of Facilitating Practices," *Rand Journal of Economics* 22, 120-135.

Segal, I., and Whinston, M. (2000), "Naked Exclusion: Comment," *American Economic Review*, 90, 296-309.

Simpson, J. and Wickelgren, A., (2007), "Naked Exclusion, Efficient Breach, and Downstream Competition," *The American Economic Review*, 97, 1305-1320.

Telser, L., (1960), "Why Should Manufacturers Want Fair Trade?" *Journal of Law and Economics*, 3, 86-105.

Tirole, J. (1988), *The Theory of Industrial Organization*, MIT Press, Cambridge.