

A COMPARATIVE STUDY OF UNITED STATES AND EUROPEAN UNION APPROACHES TO VERTICAL POLICY

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INTRODUCTION

In recent years, divergence between United States ("US") and European Union ("EU") competition policy has garnered a lot of attention. One particular area where these differences are evident is the treatment of vertical restraints.¹ In the USA, an antitrust plaintiff must show that a vertical agreement is likely to harm competition—that is, reduce economic welfare. EU competition law, on the other hand, places a lower burden on the European Commission ("EC").² The EC recently has promulgated a block exemption regulation ("BER") that defines circumstances under which vertical arrangements are automatically exempted under article ("Art.") 81(3).³ European competition law, however, still condemns many more vertical agreements than does US antitrust law. "Dominant" firms entering into

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¹ As one commentator recently put it:

Perhaps most egregious is the EU's pursuit of vertical non-price restraints. These agreements have practically no potential for impeding competition. And so, while such agreements (involving things like manufacturers setting exclusive territories in their distribution chains) are almost always permitted under American law, they have frequently been declared illegal in Europe. Indeed, the hostility with which European antitrust enforcers pursue companies thought to be using vertical non-price restraints is sometime remarkable.

See Fred S. McChesney, *Talking 'Bout My Antitrust Generation: Competition for and in the Field of Competition Law*, 52 EMORY L.J. 1401, 1435-36 (2003).

² See Treaty Establishing the European Community, Nov. 10, 1997, 1997 O.J. (C 340) 207 [hereinafter EC Treaty]. As of May 1, 2004, national competition authorities and courts of EU member countries can apply fully both Art. 81 and Art. 82. See Commission Regulation 773/2004, 2003 O.J. (L 1) 37, 39 (on implementations of the Rules on Competition laid down in Articles 81 and 82 of the Treaty), at http://europa.eu.int/comm/competition/publications/publications/modernisation_en.pdf. This article, however, is directed only at EC enforcement of Art. 81 and Art. 82.

³ EC Treaty, *supra* note 2.

vertical agreements receive even harsher treatment under EU competition law. Because the Guidelines to the BER explicitly exclude dominant firms from exemption under Art. 81(3), it appears that Art. 81 proscribes dominant firms from entering into vertical agreements that restrict the behavior of the contracting parties. Additionally, Art. 82 discourages dominant firms from entering into vertical agreements.

This paper uses a Bayesian framework to analyze the disparate treatment of vertical arrangements in the US and EU. With the practice of antitrust comes the problem of inferring the competitive consequences of various types of market conduct. We argue that an optimal enforcement estimator would minimize an expected social loss function, where the expectation is taken over the posterior probability that a given practice is anticompetitive, given evidence in a particular case. Empirical literature informs priors, whereas theory informs the likelihood. We show how differences in antitrust treatment of vertical practices can be explained by different loss functions, even when each jurisdiction shares the same beliefs regarding the theoretical and empirical effects of vertical restraints.

I. THE ECONOMICS OF VERTICAL RESTRICTIONS

A. *Increasing Incentives to Provide Demand-Enhancing Services*

Because a manufacturer and a retailer may have different incentives to provide sale-generating effort, a manufacturer may find it efficient to place restrictions on the distribution of its product. By placing limits on intrabrand competition, a manufacturer can enhance interbrand competition with its rivals.

Retail promotion and service is an important complement to many consumer goods. To reach an optimal level of output, a manufacturer often will find it efficient to provide those consumers who are indifferent between purchasing or not with extra services to make the purchase worth their while. For instance, relatively uninformed consumers of high-end electronic equipment may require expert assistance to determine the proper product for them; without such assistance they may choose not to purchase a product at all. A manufacturer also may desire a retailer to take steps to assure that a product maintains the level of quality that consumers expect from a given brand. For example, a brewer may insist that a retailer store its beer in a certain way to preserve its quality. Without proper storage, total demand for the beer (i.e., not merely demand at the one retail location) would be lower because consumers would likely associate the poor quality

not with the retailer's inadequate storage, but with the manufacturer's product.⁴

In many cases, however, retailers will have less of an incentive to engage in sale-generating effort than manufacturers. For instance, when the manufacturer's profit margin for additional sales is large in relation to the retailer's (as may be the case for branded products), the retailer rationally will provide a lower level of promotion than is optimal for the manufacturer.⁵ Further, because retailers do not reap all of the benefit from a manufacturer's reputation, they are likely to have an incentive to provide suboptimal effort to maintain a level of quality that is associated with a manufacturer's brand name.⁶ Thus, a manufacturer will need to compensate the retailer for expending the desired effort and would like to enter into a contract that spells out the services that a retailer must perform. Because retail service provisions can be complex and difficult to measure, often a manufacturer will find it impracticable to specify in a contract the exact type and level of promotional services it desires from retailers.

One solution to this problem is for a manufacturer to have distribution policies that insulate retailers from intrabrand (other sellers of that manufacturer's product) competition. In this way, a manufacturer can provide its retailers with sufficient compensation to create incentives to supply the desired retail service.⁷

Limited distribution policies also can prevent discounters from free-riding on a full-service retailer's efforts to increase demand.⁸ Under this "special services free-riding" argument, absent exclusive territories, a consumer may come to the full-service retailer to learn about the product from

⁴ See, e.g., *Adolph Coors Co. v. FTC*, 497 F.2d 1178 (10th Cir. 1974).

⁵ For example, one study reports that apparel manufacturers' average gross profit margin is 46 percent compared with only 9 percent for "multiple apparel retailers." The authors note that this disparity in compensation for marginal sales "will limit the incentive of retailers to invest in developing and promoting their Web sites unless there is some form of co-op funding or restructured pricing." Robert H. Gertner & Robert S. Stillman, *Vertical Integration and Internet Strategies in the Apparel Industry*, 49 J. INDUS. ECON. 417, 427 (2001).

⁶ This phenomenon may be likely to arise in a franchise context. For example, although a restaurant franchisee using low-quality ingredients would lose repeat sales at its outlet, it may also cause fewer patrons to visit other franchisees' outlets as well. The low-quality franchisee does not internalize the full costs of actions that depreciate the brand name capital of the franchisor. See Benjamin Klein, *The Economics of Franchise Contracts*, 2 J. CORP. FIN. 9 (1995); Paul H. Rubin, *The Theory of the Firm & the Structure of the Franchise Contract*, 21 J.L. & ECON. 223 (1978).

⁷ See Benjamin Klein & Kevin M. Murphy, *Vertical Restraints as Contract Enforcement Mechanisms*, 31 J.L. & ECON. 265 (1988).

⁸ See Lester G. Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J.L. & ECON. 86 (1960); see also *Isaksen v. Vermont Castings, Inc.*, 825 F.2d 1158, 1161-62 (7th Cir. 1987) (Posner, J.) (describing how minimum resale price maintenance can also be used to assure that dealers provide the proper level of service by preventing discounters from free-riding).

a knowledgeable and attentive sales staff but purchase the product from a discounter that offers lower prices because it does not provide any service. Insulated from discounters, full-service retailers can capture the full return to their service efforts, thereby helping to assure that the optimal level of service is achieved.⁹

Exclusive dealing arrangements may be necessary to prevent retailers and rival manufacturers from free-riding off of a supplier's direct investments. For instance, a supplier that provides distributors subsidized rent, displays, or sales-force training may be concerned that these distributors will use this investment to promote rival manufacturers' products.¹⁰ Even when the investment cannot be used to promote rivals' products, exclusivity could be a way to prevent a distributor from holding-up a manufacturer that has made a relationship-specific investment.¹¹

Where there is no obvious investment made by the manufacturer, there still may be a need for imposing exclusivity on distributors. As noted above, given misaligned incentives, a manufacturer typically will have to compensate a distributor for promotion and obviously, a supplier will want to assure that it is getting the promotion that it paid for. A distributor may have an incentive to switch marginal consumers—who are likely to be indifferent between brands—to higher-profit margin brands, or not to expend promotional effort to switch a consumer to the supplier's brand when a consumer has a preference for a rival brand. Exclusivity may be a way to prevent this sort of distributor opportunism.¹²

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⁹ Empirical studies of online marketing strategies find that manufacturers have tended to pursue Internet retailing in a way that preserves incentives to provide retail service. For example, one study finds that high-end fragrance producers that have restrictive distribution practices in the physical world are more likely to practice similarly restrictive distribution strategies online, such as offering their product online only through their own website at an equal or higher price than is available elsewhere. See Dennis W. Carlton & Judith A. Chevalier, *Free Riding and Sales Strategies for the Internet*, 49 J. INDUS. ECON. 441 (2001); see also Robert H. Gertner & Robert S. Stillman, *Vertical Integration and Internet Strategies in the Apparel Industry*, 49 J. INDUS. ECON. 417 (2001). More generally, the empirical literature tends to show that vertical integration and restraints like resale price maintenance and exclusive dealing/exclusive territories typically tend to reduce price and/or induce demand-increasing investments. See James C. Cooper, Luke M. Froeb, Daniel P. O'Brien, & Michael G. Vita, *Vertical Antitrust Policy as a Problem of Inference*, INT'L J. OF INDUS. ORG. (forthcoming 2005) [hereinafter Cooper, et al]; see also Francine Lafontaine & Margaret Slade, *Exclusive Contracts and Vertical Restraints: Empirical Evidence and Public Policy* (Feb. 2005) (draft on file with authors).

¹⁰ See Howard P. Marvel, *Exclusive Dealing*, 25 J.L. & ECON. 1 (1982).

¹¹ See Benjamin Klein, *Exclusive Dealing as Competition for Distribution "on the Merits,"* 12 GEO. MASON L. REV. 119, 139-40 (2003).

¹² See *id.*

B. *Eliminating Double-Markup*

An upstream manufacturer may wish to impose restraints on downstream distributors when the latter have market power to mitigate the well-known “double-markup” problem. The double-markup problem causes a manufacturer’s sales to fall below the integrated profit-maximizing level. One vertical restraint that deals explicitly with this problem is maximum resale price maintenance, which allows a manufacturer directly to constrain the ability of a downstream retailer to exploit local market power.

C. *Anticompetitive Theories of Vertical Restrictions*

Several theories show how vertical restrictions may harm competition.¹³ Raising Rivals’ Costs (“RRC”) models show how a dominant firm may find it profitable to raise its own and its rivals’ input costs by, for example, over-purchasing the input, entering into exclusive dealing contracts, or by vertically integrating.¹⁴ Similar to the RRC models, some theories focus on exclusive dealing, tying, and bundling as ways to foreclose rivals from access to inputs, thereby preventing entry and inducing exit of competitors.¹⁵ Another class of models focuses on how vertical restraints can “soften” competition by raising the input costs of non-integrated rivals. The welfare effects in these models are virtually always ambiguous, depending on the net tradeoff between the softened competition and the reduction in the double-markup problem.¹⁶

The welfare effects of vertical restraints are inherently ambiguous in these models because the condition necessary for the restraint to reduce welfare-pre-existing market power-usually also creates a pre-restraint double-markup that is then attenuated by the restraint.¹⁷ The potential for anti-

¹³ See Cooper et al., *supra* note 9, for a discussion of the assumptions underlying the results of these models.

¹⁴ See, e.g., Steven C. Salop & David T. Scheffman, *Raising Rivals’ Costs*, 73 AM. ECON. REV. 267, 267-70 (1983); Steven C. Salop & David T. Scheffman, *Cost Raising Strategies*, 36 J. INDUS. ECON. 19, 19-33 (1987).

¹⁵ See, e.g., Ilya R. Segal & Michael D. Whinston, *Naked Exclusion: Comment*, 90 AM. ECON. REV. 296, 296-309 (2000); Michael D. Whinston, *Tying, Foreclosure, and Exclusion*, 80 AM. ECON. REV. 837, 837-54 (1990); Eric B. Rasmusen, J. Mark Ramseyer & John Shepherd Wiley, Jr., *Naked Exclusion*, 81 AM. ECON. REV. 1137, 1137-44 (1991).

¹⁶ See, e.g., Patrick Rey & Joseph Stiglitz, *The Role of Exclusive Territories in Producers Competition*, 26 RAND J. ECON. 431, 432 (1995).

¹⁷ It is sometimes argued that concerns about successive markups disappear if non-linear contracts are used in the pre-restraint environment. However, non-linear contracting eliminates successive markups only in very special cases (downstream monopoly, or situations in which retailers have passive beliefs about their rivals’ contracts). For further discussion, see Cooper et al., *supra* note 8. These cases

competitive outcomes in these models also depends upon factors such as the shape of demand and cost functions, the structure of competition (*e.g.*, Bertrand or Cournot), the observability and use of non-linear contracts, downstream firms' beliefs about their rivals' contracts, and the ability to exploit the collective action costs of distributors. The theory in this area implies that the effect of a particular set of restraints in a particular case is ultimately an empirical question.

D. *Empirical Evidence*

Most empirical studies examining the effects of vertical restrictions find them to be welfare-enhancing. For example, studies have found support for the proposition that vertical restraints and vertical integration solve the double-markup problem and reduce costs in other ways in fast food, gasoline, beer, and cable television markets.¹⁸ Further, studies have found evidence consistent with vertical restraints being responsible for demand-enhancing activities.¹⁹

II. US AND EU TREATMENT OF VERTICAL RESTRICTIONS

A. *American Law*

In the US, a plaintiff can challenge vertical restraints under section 1 of the Sherman Antitrust Act as an unreasonable restraint of trade, or under section 2, as exclusionary conduct in furtherance of monopoly power.²⁰ Under either cause of action, a plaintiff must show that the agreement in question is likely to harm competition.

typically are not encountered in antitrust investigations.

¹⁸ See, *e.g.*, Tasneem Chipty, *Vertical Integration, Market Foreclosure, and Consumer Welfare in the Cable Television Industry*, 91 AM. ECON. REV. 428, 428-50 (2001); Margaret E. Slade, *Beer and the Tie: Did Divestiture of Brewer-Owned Public Houses Lead to Higher Beer Prices?*, 108 ECON. J. 565, 565-600 (1998); Michael G. Vita, *Regulatory Restrictions on Vertical Integration and Control: The Competitive Impact of Gasoline Divorcement Policies*, 18 J. REG. ECON. 217 (2000); Michael G. Vita, *Must Carry Regulations for Cable Television Systems: An Empirical Analysis*, 12 J. REG. ECON. 159, 159-72 (1997).

¹⁹ See, *e.g.*, Jan B. Heide, Shantanu Dutta & Mark Bergen, *Exclusive Dealing and Business Efficiency: Evidence from Industry Practice*, 41 J.L. & ECON. 387, 387-404 (1998).

²⁰ 15 U.S.C.S. §§ 1-2 (LexisNexis 2005).

In the seminal case *Continental T.V., Inc. v. GTE Sylvania, Inc.*,²¹ the Supreme Court overruled *United States v. Schwinn & Co.*²² and held that non-price vertical restrictions were to be judged under the rule of reason. Under the rule of reason, a plaintiff must show that the agreement is likely to have “genuine adverse effects on competition.”²³ In support of its abandonment of per se treatment, the Supreme Court observed in *Sylvania* how exclusive territories had the potential 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.”²⁴ A few years later, in *Monsanto Co. v. Spray-Rite Service Co.*, the Court again endorsed vertical restrictions that encourage retail service and supported a manufacturer’s right to terminate a discounting dealer to prevent free riding: “[I]ndependent action is not proscribed. [A supplier] has a right to deal, or refuse to deal, with whomever it likes as long as it does so independently.”²⁵

Absent some indication of concerted horizontal activity, a supplier’s decision to restrict the distribution channels in which its product is available will raise antitrust concerns only if a plaintiff can show that such a restraint is likely to harm interbrand competition and that this harm outweighs any procompetitive benefits.²⁶ Likewise, exclusive dealing requirements do not raise competitive concerns absent a plaintiff’s ability to show that they are likely to have a net deleterious effect on competition. Here, inquiry into the share of the downstream market covered by exclusive contracts serves a gatekeeper function; when the percentage of the market covered is small, this typically is the end of the matter.²⁷ If a plaintiff shows

²¹ 433 U.S. 36 (1977).

²² 388 U.S. 365 (1967).

²³ *FTC v. Ind. Fed’n of Dentists*, 476 U.S. 447, 460 (1986); see also *Virgin Atl. Airways, Ltd. v. British Airways PLC*, 257 F.3d 256, 264 (2d Cir. 2001) (plaintiff is required to show that the agreements in question “had an actual adverse effect on competition as a whole in the relevant market”); P. AREEDA & H. HOVENKAMP, 7 ANTITRUST LAW ¶ 1503a (2d ed. 2003) (“Every antitrust suit should begin by identifying the ways in which a challenged restraint might possibly impair competition.”).

²⁴ *GTE Sylvania, Inc.*, 433 U.S. at 55.

²⁵ 465 U.S. 752, 760-61 (1984).

²⁶ See *Bus. Elec. Corp. v. Sharp Elec. Corp.*, 485 U.S. 717, 727-28 (1988); see also *Ezzo’s Inv., Inc. v. Royal Beauty Supply, Inc.*, 243 F.3d 980, 988 (6th Cir. 2001) (affirming summary judgment for defendant where plaintiff failed to present evidence that defendant had “sufficient market power to affect competition within the relevant market,” or that defendant’s restrictive distribution policies “had an effect on interbrand competition.”); *Generac Corp. v. Caterpillar Inc.*, 172 F.3d 971, 977 (7th Cir. 1999) (to prevail in a rule of reason challenge to territorial restrictions on distribution, a plaintiff “must demonstrate, at a minimum, that its agreement with Caterpillar has an anticompetitive, welfare-reducing effect that is not overcome by any pro-competitive, welfare-enhancing consequences of the agreement.”).

²⁷ See *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 327-28 (1961) (a plaintiff challeng-

substantial foreclosure, this is only the beginning of the section 1 inquiry; a plaintiff must show in addition that the defendant's agreements are likely to result in prices above (and thus output below) the competitive level.²⁸

The requirement that a plaintiff show more than that exclusive dealing hindered competitors' access to downstream outlets exists because "[t]he exclusion of competitors is cause for antitrust concern only if it impairs the health of the competitive process itself."²⁹ To assess the likely competitive effects of market foreclosure, courts examine such factors as the defendant's market share and entry barriers, and the likelihood that rivals can find alternative means to reach the downstream market.³⁰

In *State Oil Co. v. Khan*, the Supreme Court reversed long-standing precedent and held that maximum resale price maintenance was to be judged under the rule of reason.³¹ The Court embraced the notion that maximum resale prices may be necessary to attenuate problems associated with market power at the retailer level:

ing an exclusive deal must show that it "foreclose[s] competition in a substantial share of the line of commerce affected," so that "the opportunities for other traders to enter into or remain in that market must be significantly limited.") Courts have suggested that a plaintiff must show that the defendant's exclusive deals have foreclosed rivals from at least 40-50 percent of the relevant market for there even to be the potential for anticompetitive effects. See *United States v. Microsoft Corp.*, 253 F.3d 34, 70 (D.C. Cir. 2001); *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30, 52 (D.D.C. 2000). Courts also look at the temporal dimension of foreclosure, analyzing duration and terminability. See *Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039, 1063 (8th Cir. 2000) (78 percent of downstream market covered by de facto exclusive deals are not anticompetitive when the boat builders "were free to walk away from the discounts at any time"); *Omega Environ., Inc., v. Gilbarco, Inc.*, 127 F.3d 1157, 1163-64 (9th Cir. 1997) (exclusive contracts covering 38 percent of market unlikely to foreclose competition when contracts were terminable with 60 days notice, and all were terminable within a year).

²⁸ See *Barr Labs., Inc. v. Abbott Labs.*, 978 F.2d 98, 111 (3d Cir. 1992) ("the degree of market foreclosure is only one of the factors involved in determining the legality of an exclusive dealing arrangement"); *Roland Mach. Co. v. Dresser Indus., Inc.*, 749 F.2d 380, 394 (7th Cir. 1984) (in addition to substantial foreclosure, a necessary condition for exclusive dealing to be unlawful is that "the probable (not certain) effect of the exclusion will be to raise prices above (and therefore reduce output below) the competitive level, or otherwise injure competition"); H. HOVENKAMP, 11 ANTITRUST LAW ¶ 1821c1 (1998). ("[A]ntitrust is not concerned with denial of access in the abstract, but only with denial of access that foreseeably results in an output reduction and attendant increase in price.") [hereinafter HOVENKAMP 11].

²⁹ *Roland Mach.*, 749 F.2d at 394 ("The exclusion of one or even several competitors, for a short time or even a long time, is not *ipso facto* unreasonable.")

³⁰ See *Concord Boat Corp.*, 207 F.3d at 1059; HOVENKAMP 11, *supra* note 26, ¶ 1821d, at 183-88.

³¹ 522 U.S. 3, 22 (1997). Minimum resale price maintenance is still considered per se illegal under *Dr. Miles Medical Co. v. John D. Park & Sons Co.*, 220 U.S. 373 (1911), on the grounds that it is likely to facilitate collusion. See *Bus. Elec.*, 485 U.S. at 725-26; *324 Liquor Corp. v. Duffy*, 479 U.S. 335, 342 (1987). For a reluctant following of the per se rule against minimum resale price maintenance, see *Isaksen v. Vermont Castings, Inc.*, 825 F.2d 1158, 1161-62 (7th Cir. 1987) (Posner, J.).

A supplier might . . . fix a maximum resale price in order to prevent his dealers from exploiting a monopoly position It would do this not out of disinterested malice, but in its commercial self-interest. The higher the price at which gasoline is resold, the smaller the volume sold, and so the lower the profit to the supplier if the higher profit per gallon at the higher price is being snared by the dealer.³²

For challenges to a dominant firm's vertical restraints under section 2 of the Sherman Act, a plaintiff must first show a causal link between the monopolist's actions and its market power. That is, the monopolist's conduct must "reasonably appear capable of making a significant contribution to creating or maintaining monopoly power."³³ However, even if conduct tends to promote the accretion of monopoly power by excluding rivals, it does not necessarily run afoul of section 2. As with all actions brought under the Sherman Act, "a monopolist's act must have an 'anticompetitive effect.' That is, it must harm the competitive *process* and thereby harm consumers."³⁴

Because "all successful competitive moves tend to exclude" rivals, the ability to neatly distinguish between pro and anticompetitive vertical restrictions is not easy in practice and continues to be a central focus of antitrust scholarship.³⁵ As the D.C. Circuit noted in *Microsoft*, "[t]he challenge for an antitrust court lies in stating a general rule for distinguishing between exclusionary acts, which reduce social welfare, and competitive acts, which increase it."³⁶ Accordingly, it concluded that given the ubiquity of exclusive dealing in our economy, a rule condemning this practice without a showing of likely harm to competition would be particularly damaging.³⁷

B. *EU Law*

In contrast to American law, EU competition law is far less forgiving of vertical agreements. The Commission can challenge vertical agreements

³² *State Oil*, 522 U.S. at 15-16 (quoting *State Oil Co. v. Khan*, 93 F.3d 1358, 1362 (7th Cir. 1996) (Posner, J.)).

³³ *Microsoft*, 253 F.3d 34, 79 (D.C. Cir. 2001) (quoting PHILLIP E. AREEDA & HERBERT HOVENKAMP, 3 ANTITRUST LAW ¶ 651c, at 69 (1996) [hereinafter AREEDA & HOVENKAMP]).

³⁴ *Microsoft*, 253 F.3d at 58; see also *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 605 (1985) (whether "conduct may properly be characterized as exclusionary cannot be answered by simply considering its effect on [the plaintiff]. In addition, it is relevant to consider the impact on consumers and whether it has impaired competition in an unnecessarily restrictive way.").

³⁵ AREEDA & HOVENKAMP, *supra* note 31, at ¶ 651c.

³⁶ *Microsoft*, 253 F.3d at 58; see also *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 414 (2004) ("Under the best of circumstances, applying the requirements of §2 can be difficult because the means of illicit exclusion, like the means of legitimate competition, are myriad.") (internal quotations and citations omitted).

³⁷ *Microsoft*, 253 F.3d. at 69.

entered into by both dominant and non-dominant firms under Art. 81, and can challenge those entered into by dominant firms under Art. 82. Under Art. 81(1), the burden rests on the Commission to prove that the agreement in question has as its “object or effect, the prevention, restriction or distortion of competition within the common market.”³⁸ Once the Commission makes its 81(1) showing, the defendant must show that the efficiencies generated by the agreement outweigh any anticompetitive effects under Art. 81(3).³⁹ This framework would approximate the US rule of reason if the Commission’s burden under 81(1) were to show likely adverse effects on consumer welfare. This, however, does not appear to be the case.⁴⁰ The Commission’s burden does not require an analysis of competitive effects of the sort undertaken in the US. Rather, EU case law suggests that it is enough for the Commission to show that the agreement in question restricted the “economic freedom” of either a party to the agreement or a third party, without regard to a likely effect on prices, output, or consumer welfare generally.⁴¹

In *Metropole Television (M6) & Co. v. Commission*, for example, the Court of First Instance (“CFI”), to which EC decisions are appealed, flatly rejected the argument that a rule of reason existed under Art. 81.⁴² The court stipulated that when determining whether an agreement runs afoul of Art. 81(1), “account should be taken of the actual conditions in which it functions”; however, the CFI concluded that “such an approach does not mean that it is necessary to weigh the pro and anti-competitive effects of an agreement when determining whether the prohibition laid down in [Art. 81(1)] applies.”⁴³ It is unclear what an accounting of actual market conditions entails, but it appears to place a lesser burden on the Commission than on a plaintiff in a US rule of reason inquiry, where a vertical agreement is

³⁸ EC Treaty, *supra* note 2, art. 81(1).

³⁹ See Vincent Verouden, *Vertical Agreements and Article 81(1) EC: The Evolving Role of Economic Analysis*, 71 ANTITRUST L.J. 525, 573 (2003).

⁴⁰ The doctrines of “appreciably” and “cumulative effects” move in this direction, but fall far short. As Verouden argues, however, these doctrines could be—and have been on occasion—used to move Art. 81(1) towards a more full-fledged competitive framework. See *id.* at 548-52.

⁴¹ See Verouden, *supra* note 39, at 574-75 (the *Metropole* decisions “appears to have returned the European rule of reason to its original role, focusing on the impact of the restrictions on the producer’s distribution system, rather than on the wider market context.”); see also *id.* at 573-74; Simon Bishop, *Pro-Competitive Exclusive Supply Agreements: How Refreshing!*, 24 EUR. COMP. L. REV. 229, 231 (2003).

⁴² Case T-112/99, *Metropole Television (M6) & Co. v. Comm’n*, 2001 E.C.R. II-2459, ¶ 72 (“in various judgments the Court of Justice and the Court of First Instance have been at pains to indicate that the existence of a rule of reason in Community competition law is doubtful.”).

⁴³ *Id.* at ¶¶ 76-77.

presumed legal unless the plaintiff can show it is likely to harm market-wide competition.⁴⁴

The EC recently has promulgated a block exemption regulation (“BER”) that sets out circumstances under which vertical arrangements are automatically exempted under Art. 81(3). The BER makes great strides in applying economic rather than formalistic analysis to the antitrust treatment of vertical restraints, and explicitly recognizes many of the efficiency-enhancing reasons for vertical restraints.⁴⁵ Nevertheless, Art. 81 is still likely to subject a greater number of agreements to condemnation than would US antitrust law. For example, the exemption applies only to firms with less than thirty percent market share; US courts typically use a higher market power threshold as a screen for rule of reason analysis.⁴⁶ Further, the BER explicitly spells out several categories of so-called “hard core” distribution restrictions that essentially are per se illegal, including indirect minimum resale price maintenance, some territorial and customer restrictions, restrictions to sell only to end-users imposed on retailers in a selective distribution system, restrictions on cross supplies within a selective distribution system, and restrictions on component suppliers to sell the components they produce to independent repairers or service providers.⁴⁷ Art. 81 subjects more vertical agreements to summary condemnation than

⁴⁴ The CFI listed the “economic context in which the undertakings operate, the products or services covered by the agreement and the actual structure of the market concerned,” as elements of “the actual conditions.” *Id.* at ¶ 76. Importantly, the CFI held that pro-competitive aspects of an agreement are weighed only in the Art. 81(3) inquiry. *Id.* at ¶ 74. If the Commission’s burden to show a “restriction on competition” under Art. 81(1) does not require proof of a likely anticompetitive effect, then the burden in an Art. 81 case effectively rests on the defendant to show an agreement deserves exemption under Art. 81(3). See Verouden, *supra* note 39, at 573.

⁴⁵ See, e.g., Commission Notice-Guidelines on Vertical Restraints, 2000 O.J. (C 291) 01, ¶ 115.

⁴⁶ See *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 26-27 (1984) (observing that 30 percent market share was insufficient for market power in a tying case). Some courts hold that when showing likely adverse effects on competition through high market shares, there must be in addition “other grounds to believe that the defendant’s behavior will harm competition market-wide, such as the inherent anticompetitive nature of defendant’s behavior or the structure of the interbrand market.” *K.M.B. Warehouse Distrib., Inc. v. Walker Mfg. Co.*, 61 F.3d 123, 129 (2d Cir. 1995). The Guidelines suggest that a firm with 40 percent market share, that forecloses 36 percent of the downstream market with exclusive dealing requirements would not qualify for an exemption under the BER. See Commission Notice-Guidelines on Vertical Restraints, *supra* note 43, at ¶ 159. Such levels of primary market share and downstream foreclosure are unlikely to give rise to liability under Sherman § 1. See *supra* notes 27 and 26.

⁴⁷ See Commission Regulation 2790/1999, art. 4(a)-(e), 1999 O.J. (L 336) 21 (application of Article 81(3) of the Treaty to categories of vertical agreements and concerned practices; the BER); see also Romano Subiotta & Filippo Amato, *The Reform of the European Competition Policy Concerning Vertical Restraints*, 69 ANTITRUST L.J. 147, 167 (2001) (“the hardcore restraints listed in Article 4 of Regulation 2790/99 are what would be known as per se violations in the United States.”). The BER and Guidelines spell out several exceptions to these “hard core” agreements.

Sherman § 1, which analyzes all vertical agreements (with the exception of explicit minimum resale price maintenance) under the rule of reason.

Dominant firms entering into vertical agreements receive even harsher treatment under EU competition law.⁴⁸ The Guidelines to the BER explicitly exclude dominant firms from exemption under Art. 81(3).⁴⁹ Thus, it appears that Art. 81 prohibits dominant firms from entering into most vertical agreements that impose a restriction on a party.⁵⁰ Further, the recent *Michelin II* and *British Airways* cases seem to hold that Art. 82 prohibits rebate programs that induce customers to increase the proportion of their purchases made from a dominant firm.⁵¹ More generally, as the European Court of Justice put it in *Michelin I*, a dominant firm “has a special responsibility not to allow its conduct to impair genuine undistorted competition in the common market . . . irrespective of the reasons for which it has a dominant position.”⁵² To the extent that “undistorted competition” encompasses notions of freedom of downstream distributors or upstream suppliers to enter into contracts with whomever they please, Art. 82 is likely to continue to place serious constraints on the vertical restraints at a dominant firm’s disposal.⁵³

⁴⁸ Dominance is established under EC law when a firm’s market share is above 50 percent. See Case C-62/86, *AKZO Chemie BV v. Comm’n*, 1991 E.C.R. I-3359, ¶ 60 (1989).

⁴⁹ See Commission Notice-Guidelines on Vertical Restraints, *supra* note 43, at ¶ 135; see also Simon Bishop & Derek Ridyard, *E.C. Vertical Restraints Guidelines: Effects Based or Per Se Policy*, 23 EUROPEAN COMP. L. REV. 35, 36 (2002) (“It is clear that dominant firms will not benefit from the BER.”).

⁵⁰ See, e.g., EUROPEAN COMMISSION, COMPETITION POLICY IN EUROPE: THE COMPETITION RULES FOR SUPPLY AND DISTRIBUTION AGREEMENTS 20 (2002) (“Dominant companies may not impose non-compete obligations or otherwise tie their buyers unless they can objectively justify such commercial practice within the context of Art. 82); see also Commission Notice-Guidelines on Vertical Restraints, *supra* note 43, at ¶ 141. But see Case 2036/Heineken-Horecaovereenkomsten (May 28, 2002), cited in Simon Bishop, *Pro-Competitive Exclusion Supply Agreements: How Refreshing!*, 24 EUR. COMP. L. REV. 229 (2003). (the Dutch competition authority (NMa) held that exclusive dealing requirement to prevent free riding did not “distort or restrict” competition under 81(1); the court did not have to reach the exemption issue under Art. 81(3)).

⁵¹ Case T-219/99, *British Airways Plc. v. Comm’n*, 2003 ECJ CELEX LEXIS 659 (Dec. 17, 2003); Case T-203/01, *Manufacture française des pneumatiques Michelin v. Comm’n*, 2003 E.C.R. II-4071 [hereinafter *Michelin II*]. Loyalty rebates can be distinguished from quantity rebates in that loyalty rebates are not based on the total quantity purchased, but rather on the share of total purchases that are from the seller employing the rebate.

⁵² Case 322/81, *NV Nederlandsche Banden Industrie Michelin v. Comm’n*, 1983 E.C.R. 3461, ¶ 57, *aff’g Michelin II* [hereinafter *Michelin I*].

⁵³ Bishop and Ridyard note that the higher level of scrutiny the Commission accords for dominant firms’ vertical restrictions is likely to distort competition by prohibiting one firm from realizing efficiencies from vertical arrangements that smaller firms are able to enjoy. In the limiting case, this may cause some dominant firms to vertically integrate their distribution system. See Bishop & Ridyard, *supra* note 49, at 36-37.

The recent settlement between Coca-Cola and the EC that ended a five-year investigation of Coca-Cola's marketing practices in the EU illustrates EU hostility to restrictions on downstream distributors, regardless of competitive effect.⁵⁴ In return for an end to the investigation, Coca-Cola agreed not to enter into vertical relationships that would limit the ability of its downstream customers (i.e., stores, restaurants, bars, and cafes) to carry competing brands. Specifically, Coca-Cola agreed to no longer (1) require its customers to sell exclusively Coca-Cola products; (2) provide rebates "that reward its customers purely for purchasing the same amount or more of Coca-Cola's products than in the past"; and (3) tie the purchase of "less popular products" to purchasing Coca-Cola's "best-selling brands."⁵⁵ Additionally, the settlement provides that when Coca-Cola supplies a store owner with a free cooler "and there is no other chilled beverage capacity in the outlet to which the consumer has a direct access," the store owner may use up to twenty percent of the cooler's capacity for competing brands.⁵⁶

Although it is impossible to know what evidence the Commission had regarding the effects of Coca-Cola's agreements on consumer welfare, the Commission's press release strongly suggested that the competition issue involved was consumer ability to choose from competing brands rather than supra-competitive pricing of Coca-Cola's offerings.⁵⁷ Then-Competition Commissioner, Mario Monti, remarked that the agreement will allow consumers to "have more choice at cafés, pubs and shops," and consequently, consumers will "be in a position to choose on the basis of price and personal preferences rather than pick up a Coca-Cola product because it's the only one on offer."⁵⁸ American courts, by contrast, typically have found such agreements pose no threat to competition.⁵⁹

⁵⁴ The recent settlement between Coca-Cola and the EC seems to exemplify a stance against dominant firms employing vertical restrictions.

⁵⁵ See European Commission, press release, *Commission close to settle antitrust probe into Coca Cola practices in Europe* (Oct. 19, 2004), available at <http://europa.eu.int/rapid/> (reference number IP/04/1247).

⁵⁶ *Id.*

⁵⁷ See *id.*

⁵⁸ *Id.* This position seems to suggest loss of variety as a touchstone for antitrust enforcement. Such an approach, however, is likely to be inconsistent with a consumer welfare standard. First, a policy that challenges a vertical practice solely on the basis that a competitor has been harmed-and therefore there is less variety in a market-cannot distinguish between instances where competitor harm coincides with consumer harm and those instances in which competitor harm represents merely the demise of an inefficient firm in the face of stiff competition. An antitrust policy based on demonstrable price and output effects, on the other hand, assures that only the former case will be challenged. Second, as a theoretical matter, it is possible that differentiated products markets produce more variety than is optimal based on a total welfare standard. See JEAN TIROLE, *THE THEORY OF INDUSTRIAL ORGANIZATION* 277-95 (1988).

⁵⁹ See *Bayou Bottling, Inc. v. Dr. Pepper Co.*, 725 F.2d 300 (5th Cir. 1984); *Louisa Coca-Cola*

Legal action brought by Virgin against British Airways (“BA”) on both sides of the Atlantic for its use of promotional incentives to travel agents also highlights the different approaches to vertical restraints found in US and EU competition law. In the 1990s, BA had developed an incentive program where it offered travel agents increased commissions on all sales if they surpassed their previous year’s sales of BA’s tickets. The EC found that BA had abused its dominance in contravention of Art. 82, and the CFI affirmed. Despite there being no evidence of harm to market-wide competition as defined by US courts, the CFI noted that it was enough that by incentivizing agents to book BA flights, BA had foreclosed competitors from access to these agents.⁶⁰ Further, the incentives “restricted the freedom” of travel agents from “supplying their services to the airline of their choice,” and restricted “the access of those airlines to the United Kingdom market for air travel agency services.”⁶¹ Moreover, the CFI followed long-established EC precedent in noting that a dominant firm has “a special responsibility . . . not to allow its conduct to impair genuine undistorted competition on the common market,” and that irrespective of whether there are any effects on competition or consumer welfare, a dominant firm cannot “strengthen its dominant position and thereby abuse it.”⁶²

In the US, by contrast, Virgin’s claims met with no success. Virgin challenged BA’s rebates under sections 1 and 2 of the Sherman Act, claiming that BA predatorily increased its capacity in response to the increased demand created by the incentive schemes, and bundled flights on BA’s monopoly routes with flights on routes where BA faced competition.⁶³ The district court granted summary judgment to BA, holding that Virgin had not shown that BA’s incentive agreements “have had an actual adverse effect on competition as a whole in the relevant market.”⁶⁴ On appeal, the Second Circuit affirmed on the same grounds—that Virgin could not show BA’s agreements with travel agents were likely to harm competition.⁶⁵ Moreover, in stark contrast to the EC’s approach toward dominant firm conduct, the appeals court noted that “even with monopoly power, a business entity is not guilty of predatory conduct through excluding its competitors from the

Bottling Co. v. Pepsi-Cola Metro. Bottling Co., 94 F. Supp. 2d 804 (E.D. Ky. 1999); *see also* El Aguila Food Prods. v. Gruma Corp., 301 F. Supp. 2d 612, 615 (S.D. Tex. 2003).

⁶⁰ Case T-219/99, British Airways Plc. v. Comm’n, 2003 E.C.R. 00000, ¶ 288.

⁶¹ *Id.* at ¶ 292.

⁶² *Id.* at ¶¶ 242-43.

⁶³ *See* Virgin Atl. Airways Ltd. v. British Airways PLC, 69 F. Supp. 2d 571, 576-78 (S.D.N.Y. 1999). Significantly, the opinion indicates that Virgin dropped its exclusive dealing claim, which had been successful in the EU. *Id.* at 581.

⁶⁴ *Id.* at 582.

⁶⁵ Virgin Atl. Airways Ltd. v. British Airways PLC, 257 F.3d 256 (2d Cir. 2001).

market when it is simply exploiting competitive advantages legitimately available to it.”⁶⁶

III. BAYESIAN FRAMEWORK

In an effects-based analysis of a vertical restraint, one must compare the world with the restraint, which is observed, to the world without the restraint, which typically is not. In general, it is possible to draw inferences about the unobserved state of the world in either of two ways. If we have a “natural experiment” that mimics the effect of the restraint, one can compare a control group (without the restraint) to an experimental group (with the restraint) to determine the effect of the practice. As long as one can hold constant other factors that might affect price, output, or other relevant dependent variables, one can, in principle, estimate the competitive effects of the restraint.

Without good natural experiments, one must instead use an approach based on an economic model of the restraint. This means the analyst must posit a theory under which the restraint in question can harm competition against alternatives where the restraint is benign or procompetitive, and then determine which theory best explains the available evidence. In this paper we discuss this approach with reference to the theoretical and empirical literature on the economics of vertical control.⁶⁷

We view antitrust policy as a problem of drawing inferences from available evidence and making enforcement decisions based on these inferences. Suppose that a given vertical practice can be either procompetitive (denoted “C”) or anticompetitive (denoted “A”), and let x be evidence observed by the decision-maker and correlated with the competitive effects of the practice (e.g., primary market power, foreclosure levels, the nature of contracting between upstream and downstream parties, and the shape of cost and demand functions). Given the evidence x , assume that the decision-maker can either stop the practice or allow it to continue. Using Bayes rule, we can write the policy maker’s belief about the relative odds that a given practice is anticompetitive ($\frac{P(A|x)}{P(C|x)}$) as a function of his prior beliefs about the practice in question ($\frac{P(A)}{P(C)}$), and the relative likelihood that

⁶⁶ *Id.* at 266.

⁶⁷ See also Key Heyer, *A World of Uncertainty: Economics and the Globalization of Antitrust*, 72 ANTITRUST L.J. 375 (2005).

the evidence observed would be produced by anticompetitive conduct

$$\left(\frac{P(x|A)}{P(x|C)}\right):$$

$$(1) \quad \frac{P(A|x)}{P(C|x)} = \frac{P(x|A)}{P(x|C)} \cdot \frac{P(A)}{P(C)}.$$

In this framework, likelihoods and priors will vary according to the type of restraint at issue and the pro- and anticompetitive theories posited. For example, given the empirical evidence, our priors that resale price maintenance ("RPM") or exclusive dealing or exclusive distribution is pro-competitive may be stronger than our priors for other forms of vertical control on which there has been little empirical work. And evidence of downstream foreclosure and economies of scale will affect the likelihood differently depending on the restraint at issue.⁶⁸

Two types of errors and concomitant losses will attend any decision rule: the loss from prosecuting a pro-competitive practice (type-I error), and the loss from failing to prosecute an anticompetitive practice (type-II error). A Bayesian classification rule leads the enforcer to challenge a vertical practice based on the available evidence only if the expected type-II loss from allowing the practice is greater than the expected type-I loss from challenging it, or

$$(2) \quad \frac{P(x|C)}{P(x|A)} < \left(\frac{L_{II}}{L_I}\right) \left(\frac{P(A)}{P(C)}\right).⁶⁹$$

It is easy to see from expression (2) that the optimal enforcement rule depends on the likelihoods, loss functions, and the prior beliefs. A decision to challenge a given restraint is more likely if (1) the cost of type-II errors is high relative to the cost of type-I errors; (2) there are strong priors that a practice is anticompetitive; and (3) theory suggests a strong likelihood that the evidence was generated by an anticompetitive practice, rather than a procompetitive or benign practice.

As a threshold matter, implementation of this classification scheme assumes that a decision maker is able to measure x accurately. That is, available evidence will allow policy makers to determine the value of relevant parameters. Assuming that the evidence is useful, it will fall into one of three categories. First, some evidence may contradict the necessary condi-

⁶⁸ For maximum RPM, where the primary anticompetitive theory is one of either upstream or downstream horizontal collusion, such evidence is not likely to shed light on the viability of the posited theory of harm, whereas downstream foreclosure in the presence of scale economies is the crux of dynamic theories of harm from exclusive dealing.

⁶⁹ See MORRIS H. DEGROOT, OPTIMAL STATISTICAL DECISIONS 121-41 (1970), for a detailed exposition of Bayesian classification.

tions for anticompetitive effects to obtain under the relevant theory (i.e., $P(x|A) = 0$). For instance, upstream market power is a necessary condition for all models to produce anticompetitive effects. Identification of evidence contradicting necessary conditions for anticompetitive harm can be used to design safe harbors.⁷⁰

The second type of evidence a decision maker may observe is that which is consistent with the necessary conditions for anticompetitive harm, but is *at least* equally consistent with procompetitive theories, or $P(x|A) = P(x|C)$. For example, upstream market power is necessary for theories of harm as well as efficiencies from elimination of double-markups, and does not rule out other efficiencies from vertical practices, like enhanced promotional incentives or the attenuation of hold-up problems.⁷¹

Finally, a policy maker may observe evidence that is associated only, or predominantly, with anticompetitive outcomes. In this case, $P(x|A) > P(x|C)$. Theory, however, may not be able to identify sufficient conditions for harm. For example, in the case of tying or exclusive dealing, even evidence of large levels of downstream foreclosure and scale economies may not suggest a net anticompetitive effect because such evidence does not rule out an inference that plausible efficiencies from these practices outweigh any competitive loss.⁷² If theory cannot provide us with examples of evidence that are more likely than not to be associated with

anticompetitive effects, then $0 \leq \frac{P(x|A)}{P(x|C)} \leq 1$.

IV. EXPLAINING DIVERGENT ENFORCEMENT POSTURES WITH REGARD TO VERTICAL RESTRAINTS

According to expression (2), assuming that antitrust enforcers have similar priors, differences in likelihoods and loss functions can explain divergent antitrust policies. For example, if an enforcement agency believes

⁷⁰ It is important for policy makers to avoid the pitfall of creating safe harbors that allow necessary conditions for harm to evolve into de facto sufficient conditions.

⁷¹ See *supra* Part I.A.

⁷² See Dennis Carlton & Michael Waldman, *The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries* 37-39 (Nat'l Bureau of Econ. Research, Working Paper No. 6831, 1998) (noting how plausible claims of efficiencies should defeat an "antitrust attack" on physical tying, and urging courts to "demand much more than mere theoretical possibility" when balancing competitive harms versus benefits for contractual and virtual ties).

that the ratio of the likelihoods is bounded from above by one, the posterior odds of a practice being anticompetitive are at most equal to the prior odds. Given strong priors that vertical restraints are efficient, enforcement against vertical restraints should be rare absent direct evidence of harm to welfare or the existence of natural experiments that mimic the restraint. On the other hand, an enforcer may find evidence such as market power or the exclusion of rivals much more consistent with anticompetitive conduct than procompetitive conduct. In this case, as long as $P(x|A)$ is sufficiently greater than $P(x|C)$, expression (2) holds, and enforcement in vertical cases may be much more likely.

Second, even assuming that both agencies agree that $\frac{P(x|A)}{P(x|C)} = 1$ and

$P(C) > P(A)$, expression (2) can hold if L_{II} is sufficiently larger than L_I . This means that different jurisdictions can share the same beliefs regarding the theoretical and empirical effects of vertical restraints, but quite legitimately can arrive at different enforcement postures. Loss functions can vary according to conditions in different markets. It is possible, for example, that the US and EU enforcement regimes agree on the likely effects of vertical agreements on welfare, as conventionally defined, but because other considerations are an important determinant of EU competition policy, the cost of type-II errors from vertical agreements may be perceived as higher in Europe.

For example, certain vertical restraints, like exclusive territories based on national boundaries, can impair integration, which is the EU's paramount goal.⁷³ Further, the Ordoliberalism (or Freiburg) School sees economic power to be self-perpetuating; economic power inevitably leads to political power, which then is used to cement economic power through rent seeking. As Budzinski notes, "[t]he general goal of antitrust is that ordoliberal competition policy should protect individuals from restraints to their freedom to compete."⁷⁴ Thus, competition policy based on Ordoliberal pre-

⁷³ See Verouden, *supra* note 39, at 570 ("[T]he EC rules on competition are to be seen in the overall context of the Treaty, which has a historic emphasis on eliminating conventional impediments to trade between Member States."); Daniel J. Gifford & Robert T. Kudrle, *European Union Competition Law & Policy: How Much Latitude for Convergence with the United States?*, 48 ANTITRUST BULL. 727, 752 (2003) (Commission and Court decisions in the EU "have been widely interpreted to reflect a determination . . . to crush the legacy of national boundaries in distribution that could keep Europe economically divided.").

⁷⁴ Oliver Budzinski, *Pluralism of Competition Policy Paradigms and the Call for Regulatory Diversity* 18 (October 1, 2003) (Philipps-Univ. of Marburg Volkswirtschaftliche Beitrage No. 14/2003), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=452900. Budzinski also

cepts is skeptical of vertical restrictions like exclusive dealing and exclusive supply contracts because they necessarily foreclose competitors from contracting opportunities, and thus may be seen as perpetuating dominance. In this way, Ordoliberalism tends to focus on the form, rather than the competitive effect, of business relationships. As Verouden observes:

[T]he Freiburg School tended to equate restrictions on the freedom of economic action (of the contracting parties and/or third parties) with 'restrictions of competition.' As such, the Freiburg School focused on the need to protect the *conditions* of competition, rather than on competition's direct *results*.⁷⁵

In the US, on the other hand, monopoly is viewed more as self-correcting than self-perpetuating. At the same time, courts' reluctance to overrule precedent, and the collective action problem associated with private incentives to challenge bad precedent, conspire to insulate the competition-reducing effects of decisions that condemn welfare-enhancing relationships. As Easterbrook observes:

If the court errs by condemning a beneficial practice, the benefits may be lost for good. Any other firm that uses the condemned practices faces sanctions in the name of *stare decisis*, no matter the benefits. If the court errs by permitting a deleterious practice, though, the welfare loss decreases over time. Monopoly is self-destructive. Monopoly prices eventually attract entry.⁷⁶

Given this bias, and the legal doctrine of *stare decisis* (which counsels against the overturning of legal precedents except in extraordinary circumstances) rationally may lead US policy makers to be biased against type-I errors.

To the extent that these additional considerations weigh heavily in the goals of EU competition law, it is possible that although both US and EU enforcement regimes agree that there is a small likelihood that vertical agreements will harm competition, the costs of type-II errors with regard to vertical agreements are perceived as higher in Europe than in the US. This may rationally lead European competition officials to be biased against committing them.

notes that that "freedom of contract, but only in competitive markets and with the exception of contracts that restrict economic freedom" is among one of the constitutional principals of "ordoliberal competition order." *Id.* (emphasis added).

⁷⁵ See Verouden, *supra* note 39, at 536 (emphasis in original).

⁷⁶ Frank Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1, 2-3 (1984); see also McChesney, *supra* note 1, at 1412 ("The cost of Type II errors . . . will be low, as long as barriers to entering markets plagued by suspected anticompetition are also low. As prices rise because of anticompetitive contracts or practices, new entrants emerge to alleviate or even eradicate the problem.").

CONCLUSION

Antitrust policy is a problem of inference; absent direct evidence of reduced output or some other indicia of competitive harm, a policy maker must infer whether a given practice reduced consumer welfare from indirect evidence. One approach to this problem of inference is to posit a theory under which the restraint in question can harm competition against alternatives in which the restraint is benign or procompetitive, and then determine which theory best explains the available evidence. Theory, however, can tell us only that anticompetitive effects are possible, not how likely it is that a restraint will lead to an anticompetitive outcome. Thus, theory does not give us a way to interpret evidence in most cases.

In our Bayesian approach to this inference problem, we show that enforcement decisions should be guided by prior beliefs and loss functions. Empirical evidence, which informs our priors, suggests that vertical restraints are likely to be benign or welfare enhancing. An aggressive enforcement policy, therefore, would have to be justified by relatively large type II error costs, which may explain differences between EU and US enforcement postures toward vertical restraints.