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Ralph A. Winter

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Vertical Restraints and Antitrust Policy: A Reaction to Cooper, Froeb, O'Brien, and Vita

Ralph A. Winter

Cooper, Froeb, O'Brien, and Vita argue that **(1)** economic theory, especially post-Chicago theory, provides little in the way of unambiguous predictions of when vertical restraints are pro-competitive versus anticompetitive, forcing antitrust decisions to rely mainly on prior empirical evidence rather than case-specific facts; and **(2)** prior evidence indicates that vertical restraints are unlikely to harm consumers. Antitrust policy, therefore, should be lenient towards the restraints. The author takes an opposing view that each case must be assessed on its own merits, with only modest reliance on prior empirical evidence, and that existing economic theory is very useful for this assessment. In some actual cases, vertical restraints are clearly anticompetitive and in others the restraints are pro-competitive, whatever the prior evidence shows about the relative frequency of these effects across markets. The author develops the argument for two specific vertical restraints: exclusivity contracts and minimum resale price maintenance.

The author is Professor and Canada Research Chair in Business Economics and Public Policy at Sauder School of Business, University of British Columbia.

I. Introduction

The paper by James Cooper, Luke Froeb, Daniel O'Brien, and Michael Vita offers a high-level overview of the theoretical and empirical literature on vertical restraints and vertical integration with the aim of distilling implications for antitrust policy.[1] The authors reach two main conclusions.

Their first conclusion is that economic theory—post-Chicago theory in particular—is of little value to policymakers on its own as because it almost always predicts ambiguous welfare effects from vertical restraints. Nor does it offer clean tests of when these practices are likely to be anticompetitive and when they are not. As Cooper et al. state: "Economic theory actually provides policymakers with very little guidance as to whether vertical restraints are likely to be beneficial or harmful in any particular factual setting."[2]

In Cooper et al. and a companion paper, the authors set out a Bayesian framework for antitrust policy.[3] In the context of vertical restraints, the framework is one in which the view of the decision maker as to whether a particular practice (in a particular case) is anticompetitive depends on:

(a) prior beliefs from empirical evidence regarding the competitive effects of vertical restraints in general;

updated by:

(b) case-specific data interpreted in light of available theory.

From their first conclusion, that available theory provides very little guidance as to when a practice is anticompetitive, Cooper et al. are drawn to a second conclusion that antitrust policy must rely almost entirely on prior evidence to determine the competitive impact of vertical restraints in general. And their strongly held view is that vertical restraints are efficient since an empirical review finds "a paucity of support for the proposition that vertical restraints and vertical integration are likely to harm consumers."[4]

That the authors find vertical restraints to be efficient is not unusual. What is striking is the authors' position that this very general statement about vertical restraints is almost all that policymakers can rely on. Theory applied to case-specific data will hardly budge the prior because economic theory provides almost no correspondence between the data and whether a given vertical restraint is anticompetitive.

1 J. Cooper, L. Froeb, D. O'Brien, & M. Vita, *Vertical Restrictions and Antitrust Policy: What About the Evidence?*, 1(2) Competition Pol'y Int'l 45–63 (2005) [hereinafter Cooper et al.].

2 *Id.* at 47.

3 J. Cooper, L. Froeb, D. O'Brien, & M. Vita, *Vertical Antitrust Policy as a Problem of Inference*, Int'l J. Indus. Org. (forthcoming 2005).

4 Cooper et. al, *supra* note 1, at 55.

In this commentary, I take the opposite position. The correct assessment of an antitrust practice flows mainly from the case-specific facts. The economic theory available to interpret these facts, including post-Chicago theory, is, in fact, very useful. Some fact situations clearly support intervention; others clearly support a hands-off policy. Whether one's prior is that 85 percent of vertical practices are pro-competitive or that 99 percent are pro-competitive, is less important in antitrust decision making than the facts of the case at hand and the case-specific theory available or developed in light of the facts.

Let me make this position more concrete with an example of a fact situation, which is motivated by a case that I discuss later in this paper. A monopolist produces a good using, among other factors, an essential input produced by two (and only two) upstream suppliers. A potential entrant into the downstream market emerges with the threat of changing the market structure from a downstream monopoly to intense price competition at both stages of production. The entry thus carries the threat of elimination of monopoly profits. The incumbent monopolist responds with a naked exclusion strategy. That is, it secures the exclusive right to the output of each upstream firm in exchange for a fixed fee. Thus, monopoly rents are protected and shared. (The entrant may attempt to offer exclusive contracts as well and, to the extent that the entrant is nearly as efficient as the incumbent, the rents will flow upstream via the fixed fees to the owners of essential input production assets.) Consumers face monopoly prices for the final output instead of competitive prices that entry would yield, and the court or policymaker entering the scene must decide if the exclusivity contracts are anticompetitive.

CONTRARY TO COOPER ET AL.'S CONCLUSION, THERE ARE MANY, NOT FEW, FACT SITUATIONS IN WHICH ECONOMIC THEORY (BOTH CHICAGO AND POST-CHICAGO) GUIDES US TO THE RIGHT DECISION...A CONVINCING THEORY, TESTED AGAINST THE SPECIFIC FACTS OF A CASE, TRUMPS PRIOR EMPIRICAL EVIDENCE ON THE RELATIVE FREQUENCY OF PRO-COMPETITIVE VERSUS ANTICOMPETITIVE USES OF A PRACTICE.

How should the courts and policymakers respond to this fact situation? Should they throw up their hands, because there is no general theory that tells us when vertical restraints are pro- versus anti competitive? Must the decision rest on the established prior from empirical studies that vertical restraints are usually pro-competitive?

The answer is clearly "no." The decision must follow the facts of the case. Contrary to Cooper et al.'s conclusion, there are many, not few, fact situations in which economic theory (both Chicago and post-Chicago) guides us to the right decision. Antitrust cases almost invariably present us with a unique set of facts. In terms of its value to an antitrust decision, a convincing theory, tested against the specific facts of a case, trumps prior empirical evidence on the relative frequency of pro-competitive versus anticompetitive uses of a practice. We often know that the practice at issue in a case can be pro-competitive sometimes and

anticompetitive other times. The relative frequency of these uses in a (generally non-random) sample of examined historical cases can be important in adding to our existing knowledge of economic practices, but is generally not vital information for a particular antitrust case. And U.S. antitrust law is comprised almost entirely of case decisions (i.e. it is based on common law).

Debating this point in the abstract is unlikely to be of great value. I certainly agree with Cooper et al. that no completely general theory exists regarding the welfare effects of vertical restraints. No theory in this area can anticipate all fact situations, and the economic theory of competition policy is in large part a set of examples. But it is a set of examples that we can usefully draw from or add to when we encounter a particular case or fact situation.

I am also skeptical of the benefits of aggregating across such a variety of practices—exclusivity contracts, resale price maintenance, tying, vertical integration—in trying to reach a general conclusion or establish a prior about the welfare impact of vertical restraints. Prior information about the effects of exclusive dealing is of little value in a case involving resale price maintenance. Accordingly, in this paper I shall be selective. I discuss one practice, exclusivity contracts, in which the power of post-Chicago theories is much greater than Cooper et al. acknowledge and another practice, resale price maintenance, in which I believe the traditional Chicago approach is most helpful in understanding incentives. For both practices, I argue that case-specific evidence is the essential input into the right antitrust decision.

II. Exclusionary Contracts

Two main theories of the potential anticompetitive effect of exclusivity contracts have been offered. One theory pertains to exclusivity in contracts with suppliers upstream from the market at focus and one pertains to contracts with buyers in the downstream market. The upstream exclusivity theory, captured in the example discussed earlier in this paper, is, in a sense, the extreme form of the seminal Salop-Scheffman (1983) raising-rivals'-costs theory.[5] The welfare impact of some raising-rivals'-costs strategies is ambiguous, but in the naked-exclusion example discussed above, welfare is unambiguously harmed by monopolization of the market. Upstream exclusionary contracts are the simplest example of contracts as barriers to entry. Downstream buyers are unambiguously harmed. Since they are not parties to the contracts, the buyers are not compensated for the detrimental impact of exclusivity. The impact on buyers is an externality in the contract design.

5 S. Salop & D. Scheffman, *Raising Rivals' Costs*, 73 Am. Econ. Rev. 267–71 (1983). *See also* T. Krattenmaker & S. Salop, *Antitrust Analysis of Exclusionary Rights: Raising Rivals Costs to Gain Power Over Price*, 96 Yale L.J. 209 (1986).

The post-Chicago theory on the impact of exclusivity in downstream contracts is described in the classic paper by Aghion and Bolton (1987).[6] Suppose that the potential entrant will emerge in the future and that successful entry requires that a substantial number of buyers are unencumbered by exclusivity contracts with the incumbent or are willing to leave such contracts. The incumbent has the incentive from the onset to offer buyers long-term exclusive contracts with very high liquidation damage clauses. The amount of the price concession that the incumbent must offer each buyer to accept the long-term contract will be very modest because the cost to each buyer of entering the contract individually is small. It is a Nash equilibrium for all buyers to enter the contract because if all other buyers accept the contract, then the cost to a single buyer of doing so is zero (or, if the event of entry is stochastic, very small). Buyers face a collective action problem or negative externality. All buyers are better off if they refuse the contract, but individually, all are easily induced to accept the contract. The incumbent monopolist exploits this collective-action problem among buyers to create a barrier to entry into the market. If this is the only incentive to enter into the long-term contracts, then the contracts are inefficient.[7] As Aghion and Bolton point out (and in fact emphasize) a long-term contract can emerge as an inefficient barrier to entry even when there is only one buyer, because the two parties to the contract ignore the impact of the contract on the potential entrant.

In this commentary on a paper about evidence, I sketch these two central ideas of post-Chicago economic theory to help make the point that evidence relevant for antitrust policy is not just aggregate statistical evidence on previous uses of a practice, but also—in fact, mainly—the facts in whatever case is at issue.

Consider, for example, *Canada (Director of Investigation and Research)* v. *The D&B Companies of Canada Ltd.* (*Nielsen*).[8] In *Nielsen*, the product was scanner-based information. Nielsen provides reader-friendly information on market shares, demand elasticities, the predicted impact of sales promotions, and so on to grocery product manufacturers such as Proctor & Gamble or General Mills as well as to grocery chains. In 1986, both Nielsen and Information Resources Incorporated (IRI) were established in this market in the United States, but Nielsen held a monopoly in Canada. Then IRI attempted to enter the Canadian market.

6 P. Aghion & P. Bolton, *Contracts as a Barrier to Entry*, 77 Am. Econ. Rev. 388–401 (1987). The Aghion-Bolton model is not explicitly about exclusive contracts, but is easily interpreted to include exclusivity restraints. (Each buyer in the Aghion-Bolton model purchases one unit of a product or none, which makes exclusivity implicit.)

7 This argument, based on multiple buyers, is sometimes attributed to subsequent literature, but is clear in Section 3 of the Aghion-Bolton paper (*id.*). Salop offers an earlier and very clear discussion of the exploitation of buyers' "negative free-riding problem" by sellers to establish barriers to entry. *See* S. Salop, *Practices that (Credibly) Facilitate Oligopoly Coordination*, *in* New Developments in the Analysis of Market Structure (J. Stiglitz & F. Mathewson, eds., 1986).

8 *See* Canada (Director of Investigation and Research) v. The D & B Companies of Canada Ltd., 64 C.P.R.3d 216 (Comp.Trib. 1995) [hereinafter *Nielsen*].

The essential inputs into production of the information products are the raw scanner data produced as a by-product of sales at grocery stores across Canada. Each day these data are sent electronically from grocery stores to Nielsen. Nielsen successfully deterred the entry of IRI by inducing the ten significant grocery store chains across Canada to enter into exclusivity contracts for provision of their raw scanner data. (In fact, both IRI and Nielsen attempted to sign up grocery suppliers of this data in a bidding war that Nielsen eventually won.) Once the five-year exclusive contracts were in place, entry was essentially impossible for IRI—the loser in the bidding war.

Thus, the result of the contracts was to ensure monopoly in the market instead of a competitive duopoly. Since the opportunity costs to each grocery chain were essentially zero to supply the scanner data to a second firm, the potential welfare gains from removing the contractual restrictions on sharing inputs were particularly strong. The Canadian Competition Tribunal considered the anticompetitive and pro-competitive arguments for the practice. The Tribunal, correctly in my non-objective opinion,[9] tested the theories of the case against the facts and found the anticompetitive theory persuasive, striking down the exclusivity contracts. The case illustrates the simplest form of naked exclusionary contracts.

A different set of contracts in *Nielsen* illustrates very nicely the second theory of post-Chicago economics, which concerns the impact of exclusivity contracts with downstream buyers. It was almost as if the managers of Nielsen had read the paper by Aghion and Bolton. The buyers that IRI was most likely to attract in its attempt at entry were the thirty or so Canadian subsidiaries of IRI customers in the United States. (There are clear economies achieved by a parent corporation and a subsidiary that rely on the same software and information supplier.) Nielsen tripled the length of the contracts offered to these buyers, with substantial liquidation penalties. The buyers accepted the contracts individually (even with only small price concessions), since the impact of each individual acceptance on the likelihood of IRI's entry into the market was small. Collectively, however, the buyers' decisions to accept the contracts significantly decreased IRI's chance of entry. Again, the Tribunal struck down the contracts as anticompetitive. The correct antitrust policy in this instance was not, I surmise, much affected by prior evidence regarding how frequently exclusive dealing was efficient in the economy.

Nielsen is but one example of the applicability of economic theories of exclusivity as anticompetitive. Many such case studies are available in the literature but are not addressed by Cooper et al. Gravitz and Klein (1996) and Higgins and Scheffman (2003), for example, offer particularly convincing case analyses.[10]

The lessons of *Nielsen* extend further. Among the many other strategies that were employed in the case was the strategy of staggered contracts. After signing

9 The author was the expert for the Commissioner for Competition in this case.

10 E. Gravitz & B. Klein, *Monopolization by Raising Rivals' Costs*, 39 J. L. & Econ. 1 (1996); R. Higgins & D. Scheffman, *20 years of Raising Rivals' Costs*, 12 Geo. Mason L. Rev. 371 (2003).

contracts with identical (five-year) terms with all of the data suppliers, Nielsen recognized that five years hence (the summer of 1991), it could potentially face the identical bidding war with IRI for the rights to the essential inputs. The prospect was that, again, the battle for the right to be the monopolist would shift all monopoly rents upstream to the suppliers of the essential inputs—raw scanner data. Nielsen responded by renegotiating the contract of one of its largest suppliers (including the contract termination date). The result was that IRI could no longer look forward to the end of a common term and a date at which its power would again be nearly symmetric with that of Nielsen's in order to establish itself in the market. The outcome was a barrier to entry to the position of sole supplier to the market. The social cost of this staggered contract strategy was, at a minimum, that the most efficient monopolist would not necessarily be the one to occupy the market. In addition, the strategy strengthened Nielsen's monopoly position against possible entry by IRI as a differentiated duopolist.

The strategy of staggered contracts was not challenged by the government in the case, for an obvious reason: The prohibition of staggered contracts would have been an unworkable remedy. Requiring a firm to coordinate the beginning and ending dates of its contracts with suppliers would have been too intrusive and left the firm with a rigid policy that it could not have adapted to the inevitable uncertainties in contracting. Moreover, continual monitoring and perhaps adjustment of the remedy would have been simply too costly and too intrusive. Even if the conduct had been anticompetitive, staggered contracts could not have been prohibited practically.[11]

THE DESIGN OF REMEDIES MUST INCLUDE A THEORETICAL PREDICTION OF HOW THE MARKET WILL REACT TO PROPOSED REMEDIES AND AN EVALUATION OF WELFARE AT THE MARKET EQUILIBRIA WITH AND WITHOUT THE PROPOSED REMEDIES.

The staggered contract example illustrates the need for a broader conception of the antitrust problem than that offered by Cooper et al. The antitrust problem is not merely to distinguish, with an optimal decision rule, those strategies that are anticompetitive from those that are pro-competitive based on prior evidence and case-specific evidence. Effective antitrust policy includes the design of remedies that increase social welfare in circumstances where an anticompetitive strategy is taken. This design must include a theoretical prediction of how the market will react to proposed remedies and an evaluation of welfare at the market equilibria with and without the proposed remedies.

11 The Competition Tribunal, with substantial foresight, recognized that even the basic remedy in its decision (striking down the exclusivity contracts) might not resolve the lack of competition because exclusivity could continue to be maintained with (in economists' terminology) implicit contracts. Each major supplier of the essential input rationally recognizes that if it sells to a second downstream supplier, then the medium-term consequence is a breakdown of the monopoly in the market and termination of the flow of monopoly profits to the upstream suppliers. While the monopoly has indeed been sustained in the ten years since the case, as the Tribunal recognized might happen, no more powerful remedy was available.

The broad conception of the antitrust problem is perhaps most important in tacit collusion, which is anticompetitive, but effectively legal, because of the impossibility of preventing firms from taking into account rivals' reactions to their pricing or output decisions. Within the area of vertical restraints, the various *Microsoft* cases come to mind as illustrating the importance of framing antitrust policy design as broader than the issue of identifying anticompetitive behavior.[12] With respect to the most recent case before the European Commission, which involves the tying or embedding of Microsoft's media player within its operating system, the set of economists and antitrust experts convinced of a workable remedy is smaller than the set who believe that Microsoft's strategy is anticompetitive.[13]

III. Resale Price Maintenance

The second vertical restraint on which I focus my comments is minimum resale price maintenance. Minimum resale price maintenance has been much more popular than maximum price restrictions during periods when both practices are legal, and has also been the more contentious policy issue. Maximum price restraints are not per se illegal, consistent with the economic theory that they can be explained as resolving double mark-up problems, but minimum resale price maintenance is per se illegal.[14]

I elaborate on Cooper et al's discussion of resale price maintenance to clarify the economic theory explaining the practice (correcting an analytical error on their part) and to sharpen conclusions as to the optimal policy that economic theory supports. The theoretical framework allows us to identify the kind of evidence necessary for optimal antitrust policy with respect to this practice.

The first issue that must be addressed in a specific resale price maintenance case is the positive economic question: Why has a firm imposed minimum retail prices on its retailers or distributors? Minimum retail prices may facilitate the establishment of a cartel at the manufacturers' level when wholesale prices are difficult to observe or otherwise difficult with which to coordinate. This expla-

12 *See* United States v. Microsoft Corp., 56 F.3d 1448, 1458 (D.C. Cir. 1995); United States v. Microsoft, 147 F.3d 935 (D.C. Cir. 1998); and, United States v. Microsoft Corp., 253 F.3d 34, 55–56 (D.C. Cir. 2001).

13 European Commission COMP/C-3/37.792, Microsoft (Mar. 24, 2004, not yet reported). To be fair to Cooper et al., however, if one accepts their conclusion that vertical restraints and integration are rarely anticompetitive, then the issue of designing a remedy rarely arises so that, under their view of the world, a relatively narrow conception of the antitrust policy problem is sufficient.

14 A manufacturer can, however, unilaterally adopt a plan (known as a Colgate plan) to establish suggested resale prices in advance and lawfully terminate retailers who fail to adhere to those prices (United States v. Colgate & Co., 250 U.S. 300 , 39 Sup. Ct. 465, 7 A.L.R. 443). *See* Speech by C. Varney, *Vertical Restraints Enforcement at the Federal Trade Commission*, FTC Speech, Jan. 16, 1996, *available at* http://www.ftc.gov/speeches/varney/varnmg.htm.

nation is emphasized by Telser (1960) in his classic paper on the practice.[15] A minimum price floor may support a retailer cartel. For example, if retail competitors in a market jointly establish an upstream distributor which enforces minimum price floors, then the distributor is enforcing cartel pricing.[16] An historically important explanation for resale price maintenance is that traditional, high-priced retail associations coerced manufacturers to impose resale price maintenance to defer or delay the entry of discount stores (e.g. drugstore markets in North America). The price coordination was across products and across retailers.

The more contentious and interesting case, however, is the adoption of a resale price floor by a manufacturer independent of any cartel structure. This is a puzzle because once the manufacture sets a wholesale price, a lower retail price would seem to be in the manufacturer's interest since it should lead to a higher quantity demanded and, therefore, to higher profits. The price floor may be adopted, as Cooper et al. explain, to alter the retail mix of price and service (or advertising, effort, enthusiasm, shorter cashier lines—any decision that affects demand).

But why would retailers choose the wrong mix if the manufacturer simply sets a uniform wholesale price and then sells to retailers without restrictions? One approach to this question is suggested by the Dorfman-Steiner (1954) theorem.[17] The collectively optimal mix of service and pricing maximizes profits for the distribution system as a whole. By the Dorfman-Steiner theorem, the optimal ratio of expenditure on service to revenue equals the ratio of the service-elasticity of demand to the price-elasticity of demand for the entire product or market: $\varepsilon^{m}_{s}/\varepsilon^{m}_{p}$.[18] By the same theorem, an individual retailer, unconstrained by any vertical restrictions, sets its own optimal service and price so that the ratio of its service expenditure to revenue equals the ratio of its own elasticities: $\varepsilon^{r}_{s}/\varepsilon^{r}_{p}$. Only when these ratios are identical at the retail level and the product level (i.e. the market level if we have in mind a monopolist) will the unconstrained retailer choose the optimal level. Under the following condition, the individual retailer will decide on a mix of service and pricing that is excessively oriented towards low pricing rather than high-service levels:

(1) $$\varepsilon^{r}_{s}/\varepsilon^{r}_{p} < \varepsilon^{m}_{s}/\varepsilon^{m}_{p}$$

Under condition **(1)**, it is easy to show that if a manufacturer raises its wholesale price to the point where the resulting retail price maximizes collective prof-

15 L. Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J.L & Econ. 86–105 (1960).

16 In U.S. v. Sealy, Inc., 388 U.S. 350 (1967), the upstream distributor, imposing resale price maintenance (and territorial restrictions) on downstream retailers, was owned by eight of the downstream retailers.

17 R. Dorfman & P. Steiner, *Optimal Advertising and Optimal Quality*, 44 Am. Econ. Rev. 826–36 (1954).

18 Elasticities are in absolute values.

it, then retailer service will be too low. The manufacturer can respond by lowering its wholesale price, preventing the retail price from falling by imposing a retail price floor. Expanding the retail margin in this way adds to the marginal benefit of service provisioned by each retailer, thus eliciting greater service, until the optimum is reached. Profits are maximized for the system as a whole and can be redistributed (e.g. to the manufacturer via fixed fees or other instruments). In short, minimum resale price maintenance is profitable whenever retailers are biased towards excessive price competition.

This reduces the question of why resale price maintenance might be profitable to the following: Why might the inequality **(1)** be satisfied (i.e., why might a retailer be biased towards excessive price competition)? Cooper et al. offer a clear discussion of the sources of incentive distortions—for example, in reputational spillovers to the entire product or distribution system from the failure of an individual retailer to deliver adequate quality.

The authors err, however, in stating that inadequate retailer incentives can be traced to differences between the wholesale margin and the retail margin. ("[W]hen the manufacturer's profit margin for additional sales is large in relation to the retailer's...the retail rationally will provide a lower level of promotion than is optimal for the manufacturer.")[19] The upstream manufacturer's profit margin determines a portion of profits flowing to the entire production and distribution system from a retailer's effort to attract a marginal sale, and that is not appropriated by the retailer. It is sometimes termed the vertical externality. The vertical externality, however, distorts the retailer's decisions on sales effort whether it is smaller than, equal to, or larger than the retailer's own marginal gain. Incentive distortions arise not because of the size of externalities relative to appropriated benefits, but simply because of the existence of externalities or non-appropriabilities.[20]

A key to understanding retailers' incentives is the fact that retailers compete. Therefore, a retailer's effort and pricing decisions affect other retailers in the distribution system by attracting consumers away from them. This horizontal, or competitive, externality acts in the opposite direction as the vertical externality for both pricing and service decisions. The manufacturer has an incentive to use

19 Cooper et al., *supra* note 1, at 49.

20 Cooper et al. follow Gertner and Stillman (2001), who report apparel manufacturers' average gross profit margins of 46 percent compared with only 9 percent for multiple apparel retailers. *See* R. Gertner & R. Stillman, *Vertical Integration and Internet Strategies in the Apparel Industry*, 49 J. Indus. Econ. 417–27 (2001). Cooper et al. cite Gertner and Stillman as stating 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" (at ftnt. 6). The fact that retailers appropriate only one-sixth of the marginal gain (combined profit margin) from additional effort certainly dampens their incentives for sales, as Gertner and Stillman state. But, contrary to Cooper et al.'s interpretation, any upstream profit margin will compromise retailers' incentives to provide effort—the margin need not be large.

price floors whenever the horizontal externality in pricing dominates the horizontal externality in service decisions—measured relative to the vertical externalities. In an earlier paper, I showed this logic leads precisely to condition **(1)** as the necessary and sufficient condition for resale price maintenance.[21]

This condition is met under the spillover circumstances described by Cooper et al. But condition **(1)** shows that it is met more generally, that is whenever retailers face relatively price-sensitive consumer demand. Equivalently, if consumers that are likely to switch retailers are relatively more price sensitive than other consumers, then resale price maintenance will be profitable. This ties into the Klein-Murphy (1984) argument that simple consumer heterogeneity can lead to distortions in retailer sales effort and that there is a need for corrective action such as resale price maintenance.[22] Suppose, for example, that consumers vary in their opportunity costs of time and that retailer "services" represent activities that save consumers time (e.g. activities such as adequate sales staff and well-stocked inventory). Then a retailer, focused on attracting consumers away from other retailers and not just into the market, will be biased towards low prices and away from high service because retailer-switching consumers tend to have low time costs. These are the consumers willing to search.[23]

Klein and Murphy develop another important role for resale price maintenance and other vertical restraints. The protection of retailer profits from erosion by horizontal competition enhances retailer incentives for maintaining high-service quality when retailers are monitored (imperfectly) by the manufacturer, because the retailer has something to lose from the threat of being terminated.[24]

How does this positive economic analysis relate to the design of antitrust policy for minimum resale price maintenance? A critical set of evidence relates to whether the practice is facilitating a cartel. If the market structure and conduct are consistent with a cartel and point clearly to the use of resale price maintenance as a facilitating device, then the practice should be prohibited. (As Richard Posner (1981) has pointed out, however, since cartels are illegal, a law against resale price maintenance is not necessary for this prohibition.[25]) If the cartel explanation is implausible, then the simplest explanation for the practice is as an

21 R. Winter, *Vertical Control and Price versus Non-price Competition*, 63 Q. J. Econ. 61–78 (1993).

22 B. Klein & K. Murphy, *Vertical Restraints as Contract Enforcement Mechanisms*, 31 J.L & Econ. 265–97.(1988)

23 For further development of the Klein-Murphy theory, *see also* Winter, *supra* note 21.

24 This is as analogous to the "efficiency-wage" theory of economics.

25 R. Posner, *The Next Step in the Antitrust Treatment of Restricted Distribution: Per Se Legality*, 48 U. Chi. L. Rev. 6 (1981).

attempt by the manufacturer to alter the mix of price and service offered at the retail level.[26] Must the use of resale price maintenance for this purpose always raise welfare as a matter of theory? That is, does the manufacturer's willingness to trade off higher prices for greater service signal that the same tradeoff is in the public interest? The answer is "no." It is not hard to come up with numerical examples where the manufacturer's strategy decreases consumer welfare or total welfare. As a matter of theory, a monopolist does not always select the right mix of price and service. But it is at least as easy to come up with theoretical examples—and easier to come up with case examples—where the manufacturer's decision to trade off higher prices for greater service or product availability is consistent with higher welfare.[27]

MARKETS DO A BETTER JOB OF ALLOCATING RESOURCES THAN GOVERNMENT INTERVENTION WHEN THERE IS NOT A CLEAR AND CONVINCING BASIS FOR INTERVENTION. GOVERNMENT POLICY DOES NOT ATTEMPT TO SHIFT THE MIX OF PRICES AND SERVICE OR PRODUCT QUALITY FOR VERTICALLY INTEGRATED MANUFACTURERS. NOR SHOULD IT ATTEMPT TO ALTER A MONOPOLIST'S CHOICE OF PRICE AND SERVICE COMPETITION WHEN THIS CHOICE IS IMPLEMENTED THROUGH RESALE PRICE MAINTENANCE.

Without a completely unambiguous rule provided by economic theory as to the welfare effects of allowing firms to enhance service (or sales effort, or advertising, or simply distribution of their products) via resale price maintenance, it is possible to turn to various historical cases where the practice appears to be efficient in order to at least shift the burden of proof onto the side of intervention. However, a more fundamental basis for a prior position on the welfare impact of resale price maintenance in the case of a single manufacturer follows simply from the empirical judgment that markets do a better job of allocating resources than government intervention when there is not a clear and convincing basis for intervention. Government policy does not attempt to shift the mix of prices and service or product quality for vertically integrated manufacturers. Nor should it attempt to alter a monopolist's choice of

26 I do not mean to suggest that other explanations have not been offered for the practice. Daniel O'Brien and Greg Shaffer, for example, suggest that resale price maintenance may be explained by the inability of a manufacturer to commit to a public contract with each retailer, i.e. to commit against renegotiation with each retailer towards a lower retail price (D. O'Brien & G. Shaffer, *Vertical Control with Bilateral Contracts*, 23 RAND J. ECON. 299–308 (1992). The effect of resale price maintenance in this theory is to raise retail prices to the detriment of consumers. I cannot, of course, prove that a case will never arise in which this explanation is convincing, but have not seen such a case to date.

27 A number of examples are discussed in G.F. MATHEWSON & R. WINTER, COMPETITION POLICY AND VERTICAL EXCHANGE (1985), at 95 and in T. Overstreet, *Resale Price Maintenance: Economic Theories and Empirical Evidence*, (1983) (mimeo, U.S. Federal Trade Commission). When resale price maintenance was terminated for Schick shavers in the United States in 1958, to take one example, the number of dealers willing to carry the product fell from 35,000 to 7,000 apparently because of price cutting. It would be hard to argue that this was in the public interest. Klein & Murphy, *supra* note 22, provide convincing examples in which resale price maintenance is efficient.

price and service competition when this choice is implemented through resale price maintenance. In the case of resale price maintenance, this empirical judgment is at least as important in developing antitrust policy as existing cross-sectional empirical evidence on the impact of resale price maintenance.

IV. Concluding Thoughts

Cooper et al. argue that economic theory provides little in the way of unambiguous predictions about when vertical restraints are pro- versus anticompetitive, forcing appropriate antitrust decisions to rely on prior empirical evidence rather than case-specific facts. In taking the opposite position—that each case must be assessed on its own merits and that there is much useful economic theory available for this assessment—I do not mean to diminish the general importance of empirical evidence on the impact of vertical restraints. Empirical evidence is vital for understanding the role of these practices in the economy and more empirical analysis is needed. In developing appropriate antitrust policy, however, prior information is simply not comprehensive enough to anticipate the facts of every case. And every case is different.

In developing appropriate antitrust policy, prior information is simply not comprehensive enough to anticipate the facts of every case. And every case is different.

Resale price maintenance is a useful restraint with which to illustrate this point. When resale price maintenance was permitted, it was used in a wide variety of retail markets, including many lines of clothing (jeans, shoes, socks, underwear, shirts), jewelry, sports equipment, candy, biscuits, automobiles, gasoline, and small and large appliances (stereos, shavers, washing machines).[28] Estimates of the proportion of retail sales subject to resale price maintenance in the United States during the 1950s run from 4 to 10 percent.[29] In both the United Kingdom and Canada, the practice was even more popular than in the United States. In 1960, some 25 percent of goods and services were subject to resale price maintenance in the United Kingdom and, in Canada, before the law prohibiting resale price maintenance was enacted in 1951, an estimated 20 percent of goods sold through grocery stores and 60 percent sold through drugstores were fair-traded.[30] The range of products for which the practice was used is enough to cast doubt on the importance of cartel explanations of resale price maintenance (the only

28 *See* G. Mathewson & R. Winter, *The Law and Economics of Resale Price Maintenance*, 13 Rev. Indus. Org. 57–84 (1998).

29 *See* F.M. Scherer & D. Ross, Industrial Market Structure and Economic Performance (3rd ed. 1990), at 549 and T. Overstreet, *supra* note 27, at 6.

30 Overstreet, *supra* note 27, at 153, 155.

explanation that, I have argued, can form a legitimate basis for prohibiting the practice in a particular case). Furthermore, Ippolito (1991) found in an extensive study of resale price maintenance cases that evidence in fewer than 15 percent of the cases revealed cartel hypotheses as even a possibility.[31] Whether the percentage of resale price maintenance cases explained as cartel facilitation is 5 percent or 15 percent or 30 percent, this hypothesis must be considered in any particular case. It is a plausible hypothesis under some fact situations and not under others. It is ultimately the facts of the particular case that must guide the right antitrust decision.

31 P. Ippolito, *Resale Price Maintenance: Empirical Evidence from Litigation*, 34 J.L & Econ. 263–94 (1991).