

## CHAPTER 15

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## VERTICAL RESTRAINTS ACROSS JURISDICTIONS

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### 15.1. INTRODUCTION

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In a very simple economy, sellers would set prices and buyers would choose quantities. A manufacturer would sell to any distributor or retailer wanting to purchase its product. No restrictions would be placed on distributor pricing, territories, the other products that could be offered by distributors, or on customers to whom the distributor could sell. The entire property rights to a product would be transferred with the exchange of units of a product and it would be up to the distributor of the product to decide on how and where to resell the product.

In reality, contracts struck by firms along a supply chain, from the providers of raw materials down to retailers selling to consumers, are more complex. Prices remain the principal means by which incentives are aligned along a supply chain, but we also observe more complex contract terms. The following types of payment terms are among those adopted in real-world contracts:

- **General nonlinear pricing schedules**, including quantity discounts, block pricing, two-part pricing, minimum quantity contracts, and take-or-pay contracts
- **Royalty contracts**, in which payment depends on quantity of a product resold by a downstream retailer, not the quantity purchased by the retailer
- **Loyalty contracts**, in which (in one form) the buyer's payment for an input depends on the proportion of the buyer's needs that are met by the input

- **Slotting allowances**, which are a fixed payment by a manufacturer for the right to be represented in a retail outlet and which may include the rights to a specified amount of shelf space or floor space
- **Buyback options** under which the retailer can return unsold inventory
- **Consignment selling arrangements**

We also see contracts that impose restraints on buyers' actions:

- **Price floors or ceilings** imposed on retailers of a product (resale price maintenance)
- **Territorial restrictions** on where a dealer may sell, where a dealer may *actively* sell, or where a dealer may locate. Territorial restrictions may also be placed on the upstream firm, such as a franchisor, in the location of future outlets
- **Exclusivity clauses**, either constraining the downstream buyer not to purchase from other suppliers or constraining the supplier not to deal with other outlets
- **Tying restrictions**, either in the form of **bundling** products for which separate markets could be or are established, or **requirements tying**, which stipulates that the buyer must purchase all of its requirements of an input B from the seller if the buyer is to purchase input A from the seller

In this chapter, we offer an overview of the law and economics of the most important restraints—resale price maintenance, territorial restrictions, exclusivity clauses, and tying—within a unified framework. Our approach is applicable more broadly to the entire range of contracts.

Vertical restraints are subject to considerably divergent antitrust policy across jurisdictions. Differences in antitrust policy toward vertical restraints have become even sharper recently, especially between the United States and the EU. These differences reflect in some measure a variation in the influence of economics on antitrust law. The US policy towards vertical restraints is now among the most liberal among developed nations, largely through the influence of the “Chicago school” of antitrust economics. Chicago scholars have emphasized that vertical restraints imposed by a manufacturer on prices, sales territories, and exclusivity and other decisions can often be explained as means of efficiently responding to the failure of simple price contracts alone to coordinate decisions along a supply chain. In other situations, vertical restraints, including restraints on final buyers, are means of price discrimination. Neither case yields a presumption of benefits from antitrust restrictions on the set of vertical contractual strategies available to a firm. Anticompetitive incentives cannot simply be assumed to explain vertical restraints even where, as is typical, these contracts suppress competition among dealers or distributors of a product or products sold by a manufacturer.

While US antitrust policy towards vertical restraints has been influenced most by economic thinking, it would be a mistake to regard economists as having one voice in this area. Some economists emphasize the efficiency theories of vertical restraints, others the possibility that vertical restraints can dampen price competition or deter entry. Even among US policymakers there is a divergence in views. In September

2008, the US Department of Justice released a 200-page report on single-firm conduct (U.S. Department of Justice 2008), largely dealing with vertical restraints. Three of the four sitting commissioners at the Federal Trade Commission objected to the report on the grounds that it offered insufficient protection to consumers against abuse of market dominance.<sup>1</sup> President Obama's new antitrust appointee then withdrew the report.

Our focus in analyzing competition policy towards vertical restraints is on US and European law, not just because these are the two most important jurisdictions in the size of economic activity affected but because the differences in the law between the two areas provide us with points of strongest contrast for analyzing the law against the foundation of the underlying economics.

In the next section of this chapter we provide a synthesis of the economic theories of vertical restraints, both efficiency theories and anticompetitive theories, and the types of evidence that have been brought to support the theories. Section 3 outlines the law on vertical restraints in the United States and the EU. In section 4 we discuss the gaps between the legal restrictions on vertical restraints and economics foundations underlying optimal policy.

## 15.2. THE ECONOMICS OF VERTICAL RESTRAINTS

As an empirical matter, vertical restraints are common, and arise in many settings where concerns about market power are minimal. Evidence on the frequency of vertical restraints is available primarily for resale price maintenance, the most popular restraint during the times when it has been legal. Vertical price floors have been imposed on retailers of a wide cross-section of products: clothing, skis, and other sports equipment, watches, jewelry, luxury goods of all kinds, candy, beer, bread, floor wax, furniture polish, milk, toilet paper, cereal, canned soup, books, shoes, mattresses, large appliances, and automobiles, to name a few (Overstreet 1983; Ippolito 1988; Ippolito and Overstreet 1996). Products in virtually every category have been subject to resale price maintenance at one time or another, and estimates of the proportion of retail sales that have been subject to resale price maintenance range as high as 25% in the UK and 4% to 10% in the United States (Scherer and Ross 1990, 549). In Canada, before the law prohibiting resale price maintenance was enacted in 1951, an estimated 20% of goods sold through grocery stores and 60% sold through drugstores were "fair-traded" (Overstreet 1983, 153, 155).

<sup>1</sup> Three of the four sitting Federal Trade commissioners called the report a "blueprint for radically weakened enforcement of section 2 of the Sherman Act" (FTC Press Release, September 8, 2008). Originally the report had been planned as a joint publication, and historically the Department of Justice and FTC have worked closely together in developing guidelines.

Information is also available on the extent of exclusivity. Of retail sales through independent retailers, more than one-third were found to be subject to some form of exclusive dealing in a recent study (Lafontaine and Slade 2005, citing a US Department of Commerce Study from 1988). Some exclusivity restraints are clearly efficient and would attract no attention from antitrust law. A McDonalds franchisee must sell exclusively McDonalds' hamburgers as opposed to Wendy's or Burger King's products. Any luxury jewelry retailer is restrained against placing cheap watches for sale in its store. Finally, tying, defined broadly, is ubiquitous. Shoelaces are sold with shoes. Gloves and shoes are sold in pairs. Cars are sold with tires. Tying presents potential anticompetitive concerns in only a very small percentage of cases where it is observed.

The task for competition policy in this area is to distinguish anticompetitive uses of vertical restraints from efficient or benign uses of vertical restraints. We offer below a general perspective on the economics of vertical restraints, then turn to specific theories of why the restraints are adopted.

### 15.2.1. General Perspective on the Economics of Vertical Restraints

The traditional theory of vertical restraints, or what could be termed the pre-economics theory, is that vertical restraints are *imposed* on downstream firms by a manufacturer with market power.<sup>2</sup> Contractual restraints are not a reflection of joint wealth maximization under this theory and are instead explained by the power of the party to impose the restrictions on innocent downstream distributors.<sup>3</sup>

From an economist's perspective, the traditional view is wrong. Aside from price discrimination motives, any contract is struck to align the incentives of individual parties to the contract with the collective interest of the parties to the contract. Under simple assumptions (symmetric information and transferable wealth), a contract must maximize the sum of wealth or expected wealth of the contract parties: if another contract were available with greater total profit, the parties could move to the new contract and share the gain in profits. A vertical restraint is not imposed in order to achieve an increase in profits for one party to the contract at the expense of the other party and total

<sup>2</sup> See the discussion of the market power requirement in *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2 (1984), for example.

<sup>3</sup> The traditional, or pre-economic, view of vertical restraints is that the restraints are often imposed by manufacturers on retailers against the retailers' interest. An expert witness in a Canadian antitrust case articulated the traditional view very clearly: "The dangers from contracting arise when one side of the market has the power to impose contract terms on the other. . . . If one contracting party is a monopolist . . . it can preserve its market power by insisting that its customers (or suppliers) sign long-term contracts," and "buyers gain nothing from the . . . provisions in the contract [at issue in the case]. Hence, the very fact that nearly all buyers sign such contracts is evidence that Laidlaw has and exercises market power" (Government Expert Report in *Director of Investigation and Research v. Laidlaw Waste Systems Ltd.* ((1992), 20 C.P.R. (3d) 289 (Comp. Trib.), paras. 21 and 42).

profits. Rather, it must maximize the combined profit of the contracting parties. In other words, contracts must be Pareto efficient across the contracting parties.

This does not mean that all contracts are socially efficient. Information may not be symmetric, and wealth transfers may not be possible. Moreover, parties outside the contract may be harmed. An agreement to establish a cartel or to adopt vertical restraints to facilitate cartel pricing, for example, is Pareto improving for the members of the agreement but not for consumers, who are outside the agreement. A firm that signs exclusive contracts with all upstream suppliers of an essential input can monopolize a market to the detriment of downstream buyers. Inefficiencies, including anticompetitive effects, are the result of externalities on parties outside the contract.

An assessment of the competitive impact of any vertical restraints contract must be based on the application of economic theory to the specific facts of the case at hand. As Cooper and coauthors (2005a, 2005b) have emphasized, however, decisions in a case must also be informed by one's *prior* probability that a restraint is likely to be anti-competitive, this prior being based on evidence and general principles regarding the impact of vertical restraints. The single most important economic principle underlying contracts, general agreements, and mergers in competition policy is the following. Agreements between producers of *substitute* products (competitors) tend to be detrimental to social welfare; contracts between producers of *complementary* products tend to be welfare-enhancing. O'Brien (2008) refers to this proposition, dating back to Cournot ([1838 [1971)], as "the fundamental theorem of antitrust."<sup>4</sup> The core example of an agreement between substitutes is a cartel agreement to raise prices. The most important example of complementary products is inputs in the same supply chain. Thus, at a broad level, economists' prior is that agreements among suppliers of *complementary* inputs or products are efficient. A merger between producers of complementary products, each with market power, results in lower prices, because the positive externality that each firm had imposed on the other in any decision to lower price is internalized. Buyers, who are parties outside the merger, benefit from the lower price. Given that there are complementarities between suppliers at different stages of the distribution chain, contracts incorporating vertical restraints we can think of a partial merger or coordination of actions, and the same principle should apply. Thus, a purely vertical agreement on prices, for example, lowers prices by eliminating the double-marginalization effect that Spengler (1950) discussed.<sup>5</sup>

Efficiencies arise from agreements among firms with complementary assets for a set of reasons beyond those identified by Cournot or Spengler. Vertical agreements allow

<sup>4</sup> O'Brien expresses the proposition as "*Combining substitutes is bad, and combining complements is good, unless demonstrated otherwise*" (emphasis in the original). William Baxter, the former assistant attorney general in charge of antitrust enforcement in the United States was a strong proponent of this principle.

<sup>5</sup> If an upstream firm has market power, it will sell at a markup to a downstream firm; if the downstream firm has market power, it too will sell at a markup to buyers. This "double marginalization" results in higher prices, and greater distortions, than would be the case if there were only a single firm in the vertical distribution chain.

closer coordination of investment and production plans, alignment of incentives, and so on. When a pure monopolist seeks to extend a monopoly market structure into other market levels, such an expansion is generally procompetitive, because there is typically no reason for a monopolist to expand into an upstream or downstream market unless it is more efficient than competitors. In summary, the economists' prior—although one that has exceptions and can therefore be defeated by evidence in a case—is that agreements among firms operating in a supply chain are not anticompetitive.

The exceptions to the principle that *vertical* restraints are likely to be benign arise where these restraints have *horizontal* impacts. Consider the following example. A dominant firm in a market faces a new threat of entry. Either product must be distributed through a limited set of distributors (e.g., prominent retailers in a city). In response to the new threat of entry the incumbent firm offers the main distributors a payment not to accept the entrant's product, that is, to sell the dominant firm's product exclusively. The firm can share some of its profits earned from its dominant position with the limited number of distribution outlets in order to sustain the position. The set of exclusive contracts profitably excludes the entrant. The contracts are all vertical, between producers of complementary products, yet the impact is anticompetitive.

The example motivates the following more specific principle for guiding competition policy in this area. The principle follows from the basic theorem of antitrust, which we suggest fits the mainstream economic thinking: *Antitrust scrutiny of vertical restraints should be limited to a focus on adverse effects on competition across supply chains*. A firm should have the right to extract as much surplus as it can from its own supply chain, in the absence of horizontal effects across supply chains. In the absence of strategies that diminish competition, a manufacturer's market power is determined by the extent to which its good is superior to other products, and the profit earned from this level of market power encourages innovation and development of new products.

We do not assume in stating this generally accepted normative principle that each and every vertical restraint with a role of coordinating incentives along a supply chain, or with a role of extracting surplus from downstream firms, necessarily raises total surplus. Vertical restraints can be used to adjust the mix of price and nonprice competition (competition in the dimensions of service quality, promotion, sales effort, and so on), as we shall discuss. It is entirely possible, as a matter of economic theory, that the use of vertical restraints to raise service quality or retail promotion at the expense of higher prices, for example, results in lower consumer surplus and total surplus in a market. The argument for *laissez-faire* is not based on an assertion that market allocations are always optimal. It is based on the recognition that it is impossible or impractical to identify empirically the full set of circumstances under which a decision by a firm to increase quality or promotion reduces total surplus. We do not as a matter of public policy constrain firms' mix of promotion and advertising decisions when these decisions are implemented directly; nor should we when the mix of price and nonprice decisions is implemented via vertical restraints.

This is an extension of a principle applied to price discrimination that is generally accepted by policy economists: price discrimination in and of itself is not a basis for

intervention. Economic theory does not provide a workable guide to determine when price discrimination does or does not harm total welfare. Firms' strategies for surplus extraction can be placed along a spectrum from uniform pricing (no discrimination at all) at one end to perfect price discrimination at the other end. Firms in reality attempt to find strategies to move along the spectrum. We know that on average total surplus increases along this spectrum, since under perfect price discrimination total surplus is maximized. Examples tell us that the increase in total surplus along this spectrum is not necessarily monotonic—and therefore it is possible that a particular strategy decreases welfare. But theory offers us little practical guidance as to when this might be the case. Similarly, contracts more complex than uniform pricing are intended, for a profit-maximizing firm in the absence of horizontal anticompetitive effects on prices or exclusion, to either increase total surplus along the supply chain, including final consumers, or to increase the share of the surplus captured by the firm. The former is directly welfare increasing; the latter tends to be surplus increasing “on average.” This simple perspective is not enough to prove that vertical restraints are efficient, but it does present us with a prior expectation in approaching any case. In the absence of clear evidence, contracts cannot be assumed to decrease welfare.

In summary, economics supports a *laissez-faire* policy towards vertical restraints unless there is evidence that the restraint is supporting horizontal anticompetitive effects in the form of higher prices between manufacturers or an exclusionary effect in the case of a dominant firm. The suppression of price competition may be at the retail level in the case of a vertical restraint with the sole purpose of supporting cartel pricing among retailers, to the detriment of the upstream manufacturer.

An immediate implication of the principle is the rejection of two common approaches to thinking about vertical restraints policy. First, it is common to suggest a policy that attempts to assess a vertical restraint on the basis of a *trade-off* between negative effects on intrabrand competition and positive effects on interbrand competition is misguided. Consider the adoption of vertical restraints by a pure monopolist, facing no competitors or even the threat of competitors. A monopolist benefits from greater price competition and lower prices at the retail level, all else equal, because lower prices mean greater demand if demand curves are downward sloping. The observation that a monopolist is adopting vertical restraints therefore means that the vertical restraint must be increasing some nonprice retail activity that enhances demand, helps the monopolist extract surplus, or simply encourages outlets to carry the monopolist's product. Retailers engage in many demand-enhancing activities, as we discuss below. The observation of a vertical restraint on competition means that the nonprice benefits to the monopolist of greater nonprice activity more than offset any negative impact on profits of higher prices on demand.

No basis exists for presuming that the benefits to consumers of the encouraged activity do not offset any detrimental impact of higher prices. The vertical restraint should therefore be allowed in the case of a pure monopolist. Yet the approach of balancing increases in intrabrand competition against a decrease in interbrand competition would lead to the conclusion that the restraint should be prohibited in this case: there is no

interbrand competition to promote, so the test of balancing of the positive impact of restraints in promoting interbrand competition against the decrease in intrabrand competition would suggest prohibiting the restraint. This is a conclusion without an economic basis. For this reason, we would reject the approach of the EU Guidelines on Vertical Restraints, which describe the reduction of intrabrand competition as a generally harmful competitive effect that may result from vertical restraints.<sup>6</sup> This approach leads the Guidelines astray in a number of specific respects, perhaps most prominently in restricting resale price maintenance (RPM) because the direct impact of the practice is to raise price. This may be an impact of RPM in a particular case, but this says nothing about the effect of RPM on horizontal competition.

The EU Guidelines' principle that a reduction in intrabrand competition is harmful appears to be based on the idea that, other things held constant, an increase in price reduces welfare. This idea itself is well founded. The application of it is not. When a pure monopolist adopts a price floor, for example, other things are *not* held constant. If price were the only demand-influencing variable affected by the restraint, then profits would fall with the use of the vertical restraint. The monopolist would not adopt the restraint.

A second approach to thinking about vertical restraints policy can also be rejected at this point, even before we have discussed specific theories of vertical restraints. The approach reflected in the European Guidelines, and commonly argued even among economists, is that the key piece of evidence in understanding whether a vertical restraint is efficient or anticompetitive is the degree of market power of the manufacturer. In a market with a competitive structure upstream and downstream, it is (correctly) argued that vertical restraints are presumptively procompetitive. But sometimes policymakers go a step further in arguing that a competitive structure is not only *sufficient* for a presumption of benign or procompetitive use of restraints, it is *necessary* as well. In other words, the use of restraints by a dominant firm should be presumptively anticompetitive, or at a minimum the firm should have the burden of proof of demonstrating a procompetitive role for a restraint. The case of a pure, unthreatened monopolist shows this to be wrong; there is no presumption that the monopolist's choice of vertical restraints to enhance a nonprice activity at the cost of higher prices is against the social interest. (Policy generally does not restrict a firm from raising its prices and spending the additional revenue per unit on product promotion; nor should it regulate the same trade-off when the trade-off is implemented indirectly through restraints.) The extent to which vertical restraints (or business practices in general) should attract antitrust scrutiny is *nonmonotonic* as a function of the market power of the firm adopting the practices. With a competitive market structure, restraints are presumptively efficient, and at the other extreme the use of vertical restraints by a pure, unthreatened monopolist cannot be presumed anticompetitive. Only when market concentration is high but not at the monopoly level can there be a significant chance a vertical restraint will have potentially anticompetitive consequences.

<sup>6</sup> European Commission, Guidelines on Vertical Restraints, 2010/C 103/01 at para. 100.

Against the general background offered above, we turn next to analyzing the incentives for vertical restraint by a single firm.

### 15.2.2. Efficiency Theories: The Incentive for Vertical Restraints on the Part of a Single Firm, Including Price Restraints

Our overview of the economic theories of vertical restraints starts with a simple observation. Retailers do more than post prices. Retailers offer convenience, specifically a low time-cost of purchasing by providing staff, well-organized inventory, clear information, and even short cashier lines. Retailers invest in enthusiastic staff and sales effort in providing accurate and complete point-of-sale information. Retailers choose the level of postsales service of items that may need repair as well as the return policies, not just the specific written return policies but the general sense of either willingness or reluctance that they exhibit in accepting returns. Retail activity is multidimensional, with prices being only one component of the set of decisions. Consumers purchasing a specific product end up with the same physical product wherever they shop, but the surplus gained from purchasing depends upon their entire retail purchase experience. This is especially true for luxury or fashion items where the consumer value is particularly sensitive to product image. Expensive perfume purchased from Walmart or Carrefour is simply not the same *product* as an identical bottle of chemicals purchased from a luxurious perfume counter in an upmarket outlet with classical music playing in the background. Retailers add value to the final product purchased by consumers, whether by saving consumers' time on the purchase of a routine item or by investing in enhancement of their customers' shopping experience.

We add another observation. The additional dimensions of retailer input, beyond price, are costly or even impossible to monitor in a contractual relationship with a manufacturer. The enthusiasm with which a retailer sells a pair of skis, the effort that the retailer puts into learning the intricacies of new electronic products, the expense that a retailer puts into maintaining well-organized inventory and displays, and the general investment that the retailer undertakes in improving the purchasing experience cannot be contractually specified—at least not precisely. The manufacturer's contract with a retailer cannot dictate that the retailer express a level of enthusiasm of 8.43 on a scale of 10. Instead, retailers undertake their decisions with incentives provided by two sources: the contracts with manufacturers on dimensions that *can* be specified, and competition with other retailers.

The efficiency theory of vertical restraints rests on two propositions. First, a simple price contract may leave retailers with inadequate incentives to provide sales effort in its various dimensions. Second, contracts with vertical restraints can restore or at least enhance these incentives.

We begin by developing the first proposition, that is, explaining why the price system alone may fail to coordinate incentives along a supply chain by leaving retailers with inadequate incentives to exert the level of sales effort that would be specified in a hypothetical, ideal, *complete* contract that restricted all of the actions of the retailers. This

is the issue of market failure in the Williamsonian (1975) sense. The failure of the price system to coordinate incentives, that is, to maximize the combined wealth of firms along the supply chain, opens up the potential for more complex contracts.

We restrict the discussion for the moment to one dimension of sales effort, that is, demand-enhancing activity, and measure investment in this activity in dollars.<sup>7</sup> Consider a manufacturer selling through a set of retailers that, for simplicity, adopt the same price and effort decisions in a symmetric retail equilibrium whatever the wholesale price set by the manufacturer. We denote the price and sales effort by  $p$  and  $e$ , respectively, and the wholesale price by  $w$ . The demand in the market, at a symmetric retail market equilibrium is denoted by  $Q(p, e)$ . Finally, we denote the elasticity of demand with respect to price by  $\epsilon_p$  and the demand elasticity with respect to sales effort by  $\epsilon_e$ .

The price and sales effort that would be set in an ideal, complete contract are at the levels, denoted by  $(p^*, e^*)$ , that would maximize the combined profit of all parties to the contract, that is, the manufacturer and the retailers.<sup>8</sup> In the setting in which a manufacturer has a fixed fee to collect profits from retailers, the wholesale price is freed from its role in collecting profits and is available to use as an instrument to elicit optimal decisions on the part of retailers, as in Mathewson and Winter (1984). The question is whether the single instrument,  $w$ , is enough to elicit the decisions  $(p^*, e^*)$ . That is, as  $w$  is raised from marginal cost to the level  $w^*$  that elicits  $p^*$ , will the retailers offer the optimal sales effort,  $e^*$ , or some effort level below or above  $e^*$ ? And if the optimum is not achieved, that is, there is a Williamsonian market failure, what are the sources of this market failure? As  $w$  is raised,  $p$  goes up, but (under normal assumptions) the retail margin,  $(p - w)$  will fall. The retail margin represents the marginal benefit that a retailer obtains from attracting one more unit of demand through sales effort, so the incentive to provide effort drops as  $w$  is raised.

In addressing the market failure question, a very useful result is the Dorfman-Steiner theorem (Dorfman and Steiner 1954). Dorfman and Steiner considered a firm, facing demand  $Q(p, e)$  that depends on price and sales effort (effort being advertising or product quality, in their discussion). They showed that the firm will optimally devote a proportion of revenue to sales effort that is given by the ratio of the two elasticities of demand:

$$\text{(Dorfman-Steiner)} \quad e/pQ = \epsilon_e / \epsilon_p \quad (15.1)$$

<sup>7</sup> The discussion in this section is based on Mathewson and Winter (1984) and Winter (1993).

<sup>8</sup> In stating that a wholesale contract will maximize combined profits of the parties to the contract, we are assuming that the manufacturer has the ability to set a fixed fee in contracts with retailers. More generally, even if a simple fixed fee is impossible (e.g., because of limited wealth on the part of retail agents), manufacturers benefit from profits at the retail level in a number of ways. Higher retail profits encourage more outlets to carry a product, to the manufacturer's benefit, and also provide incentives to encourage higher retail quality if this quality is being monitored by the manufacturer (Klein and Murphy 1988). The assumption that a wholesale contract maximizes the combined profit of the contract parties is surely a reasonable approximation.

In our context, the theorem describes the efficient (collective profit-maximizing) effort decision as determined in the hypothetical complete contract. But we can also use (15.1) to characterize the choice of effort and price by a single retailer, within a simple wholesale price contract, in exactly the same way—substituting the retailer’s elasticities for the market elasticities in the right-hand side of (15.1). Thus the market-failure question reduces to the following: why would the ratio of advertising to price elasticity differ for an individual retailer than for the market as a whole?<sup>9</sup> The right-hand side of (15.1) is equal to the marginal rate of substitution between effort and price for the firm making the decision; the market failure question is, then, why the marginal rate of substitution between prices and sales effort differs between an individual retailer and the market as a whole.

Our second proposition is that vertical restraint contracts can resolve the market failure or incentive distortions in retailers’ decisions on prices and other demand-enhancing activities. This proposition can also be posed within the Dorfman-Steiner framework before we proceed to addressing the questions. When the ratio  $\epsilon_e / \epsilon_p$  is smaller for the individual retailer than it is for the market as a whole (evaluated at the first-best  $p$  and  $e$ ), then retailers are “biased” at the margin towards prices that are too low and effort levels that are too low. Retailers rely excessively (from the perspective of private efficiency) on attracting customers through low prices rather than high sales effort. In this case, to start with the most important vertical restraint, two different roles for vertical price floors arise. If the manufacturer maintains a price floor at  $p^*$  and lowers the wholesale price  $w$ , it is increasing the incentive to provide effort (since the marginal benefit of attracting demand, the retail margin, is expanding). It can do so until  $e^*$  is achieved. The price floor influences directly the incentives to exert sales effort under this mechanism. A second role for price floors arises when the manufacturer can implicitly contract for effort (e.g., maintaining a sufficiently high level of freshness of the product, or adequate servicing) but only at the cost of periodic monitoring of the level of effort. A price floor can act to protect retail profits against erosion from intensive price competition. Under this indirect mechanism, incentives for providing effort are improved because a retailer has more to lose in the event that it is caught shirking on effort (Klein and Murphy 1988).<sup>10</sup>

<sup>9</sup> In a simple model of a symmetric retailer duopoly downstream, one can show that the individual firm elasticity of demand is equal to the sum of the market elasticity of demand and the cross-elasticity of demand. One can therefore pose the question as the following: why would the ratio of cross-elasticities between retailers differ from the ratio of own-elasticities?

<sup>10</sup> Both the direct and the indirect mechanism work in the same direction: increasing sales effort at the expense of higher prices. If we extend the setting to one in which effort takes on multiple important dimensions, the single instrument of a price floor will not achieve first-best profits (unless the key elasticity ratio condition holds for all effort dimensions simultaneously). If one effort dimension is perfectly substitutable for price, in buyer preferences, then the price floor may be limited in its usefulness altogether. For example, when American Airlines tried to constrain travel agents against undercutting their price schedule, agents simply offered exceptionally low prices on hotel and car rental packages with the tickets (see discussion by Judge Frank Easterbrook in *Illinois Corporate Travel v. American Airlines Inc.* (CCH Trade Regulation Reports, P. 61,921)). Both the direct and indirect mechanisms break down when an increase in a noncontractable dimension of effort is a perfect substitute for a lower price. There is also the question of whether price floors, as opposed to some other reward, are necessary to protect downstream incentives to provide effort.

The economic explanation of why a manufacturer would benefit from imposing resale price maintenance in the form of a vertical price *floor* thus reduces to asking why retailer demand is relatively more sensitive to price, relative to sales effort, than market demand as a whole. We express this condition for the profitability of resale price maintenance below:

$$\varepsilon_e / \varepsilon_p \text{ (for retailer)} < \varepsilon_e / \varepsilon_p \text{ (for market)} \quad (15.2)$$

We can now return to the question of why retailer incentives deviate from market incentives, and apply the framework to explaining observed contracts. We offer within the framework five theories of the incentive for resale price maintenance, although many other theories are available. The first is a *correlation argument*. Suppose that consumers most willing to shop among retail outlets for their preferred combination of price and sales effort are also those consumers for whom price matters relatively more than sales effort. This is a natural assumption because sales effort often reduces the time cost of purchasing; consumers end up with the same physical product wherever they purchase but at lower time cost when greater sales effort takes the form of shorter cashier lines and more highly trained sales staff and so on. Consumers willing to travel to shop at different stores are those with low costs of time, and these consumers are also willing to tolerate long cashier lines in favor of lower prices. This structure yields individual retailer demand that is relatively price elastic, with the inequality (15.2) being met. In other words, the consumers whom a retailer attracts away from other retailers are relatively more influenced by low prices than by high sales effort. Retailers set their sale strategy to attract consumers not just into the market, but also away from other retailers. Attracting consumers away from other retailers involves setting low prices, since this is what attracts shoppers, but is a pure waste from the prospective of total market demand. The demand attracted away from other retailers does not increase demand for the product at all. Retailers are therefore biased in their strategies towards low prices and inadequate service. Resale price maintenance counters this inefficiency, altering incentives towards higher sales effort and constraining prices against falling (Winter 1993).

A second theory is that retailer effort towards product promotion and greater product awareness may influence demand upwards in other outlets. Even prominent displays of a product on the store floor or in shop windows raises consumers awareness of the product and makes them more likely to purchase the product not just from the outlet undertaking the sales effort but from other outlets as well (if the consumer happens to find another outlet most convenient when the need for the product arises). This is particularly true if a retailer's decision to display (or simply carry) a product conveys information about the quality of the product (Marvel and McCafferty 1984). If even only some potential consumers of other outlets are affected this way, the market demand for the product is relatively more sensitive to sales effort as opposed to price than the individual retailer demand, that is (15.2) is met. Resale price maintenance again counters the distortion in incentives.

The third theory is similar. The quality of a product such as a photocopier machine, an appliance, or an automobile may depend not only on the quality decisions of the manufacturer but also on the quality of postsales service or installation by the dealer. If the consumer cannot perfectly distinguish between a failure of quality as between the dealer and the product itself, then greater efforts by the dealer towards quality enhance the reputation not just of the dealer but of the product itself. Again, the market demand will be relatively more sensitive to the effort expended by the dealer (relative to price) than the dealer's own demand is. The condition (15.2) for the profitability of resale price maintenance is met.

A fourth theory is the classic “free-riding” story (Telser 1960). Suppose that stereo equipment requires detailed information and a listening room experience in order for a consumer to decide which model of amplifier or speakers best fits her needs. Outlets provide this information. A new stereo store could open up selling equipment in boxes, with very low prices but no information provided at the point of sale. Consumers could avail themselves of the information provided by the informing stores, which charge higher prices to cover the cost of the information provided, then make their purchases at the low-priced store. Demand for the product as a whole will suffer from this type of free-riding. Resale price maintenance restores demand by preventing this kind of free-riding. Without the ability to attract consumers on the basis of low prices alone, outlets must provide the entire package of information and competitive prices.<sup>11</sup>

The free-riding story is far stronger than is necessary to explain resale price maintenance, as Klein (2009), Winter (2004), and a number of other authors have argued. Our framework makes this very clear. The free-riding story involves a positive impact of service by one retailer (the informing retailer) on the demand faced by another (the free-riding retailer). This is a positive cross-elasticity. This is sufficient for (15.2), but all that is necessary for the condition for resale price maintenance to be profitable is that demand cross-elasticity be relatively less sensitive for sales than it is for price. To generate an incentive for resale price maintenance by an individual manufacturer, it is not necessary that the sales cross-elasticity be positive (as it is in the classic free-riding story: greater information by the informing store increases demand at the free-riding store). That is, it is not necessary that some stores (noninforming stores) benefit from the sales effort supplied by other stores. If the sales cross-elasticity is negative but relatively low, resale price maintenance is profitable.

<sup>11</sup> As an example, in *Applewood Stoves v. Vermont Castings, Inc.* USC.A 7th CC No. 86-2818, Judge Richard Posner writes:

As a new company, selling a somewhat complex product [wood-burning stoves], Vermont Castings . . . needs dealers who understand the product, can explain it to consumers and can persuade them to buy it in preference to substitute products. . . . These selling efforts, which benefit consumers as well as the supplier, cost money—money that a dealer can't recoup if another dealer “free-rides” on the first dealer's efforts by offering a discount to consumers who have shopped at the first dealer. . . . As one of Vermont Casting's dealers explained in a letter to it, “The worst disappointment is spending a great deal of time with a customer only to lose him to Applewood because of price. This letter was precipitated by the loss of 3 sales of V.C. stoves today [to] people whom we educated and spent long hours with.” (CCH, Trade Regulation Reports, 1158,344, p. 12)

In addition to the set of theories under which a manufacturer may want to alter the mix of price and nonprice competition among its distributors, we would mention an additional explanation of resale price maintenance. The restraint may be necessary to encourage adequate inventory holdings by downstream distributors. As Deneckere, Marvel, and Peck (1996, 1997) have shown, the price system alone fails to convey adequate incentives for inventory investment by competitive retailers. Krishnan and Winter (2007) reach the same conclusion for retailers with market power, based on a framework similar to the one that we have adopted above. The evidence for the role of resale price maintenance in enhancing inventory incentives is strong. When resale price maintenance contracts were struck down as illegal in the early 1970s, manufacturers were suddenly constrained in their design of distribution systems. Retailer inventories collapsed for some products and the distribution of the products suffered.<sup>12</sup>

### 15.2.3. Territorial Restraints

The general framework that we have offered for the efficiency of price restraints is immediately applicable to territorial restrictions. Let us revisit the market failure question: why would a manufacturer not adopt a simple wholesale contract with only prices? When distributors are geographically differentiated, for example, they sell in different countries, the failures of the simple, nonexclusive price contract to align distributor incentives with supply chain efficiency are clear. Suppose that a manufacturer assigns each country to a particular national distributor, but that there are parallel imports into each country. The sales effort that a distributor in one country undertakes to establish a valuable brand name for the product in its home country benefits any foreign distributor that exports into that country. Higher quality of retail service, product promotion or any activity that adds to brand name capital or simply to demand will have spillover benefits to the foreign distributor. These positive spillovers lead to a positive cross-elasticity with respect to sales effort across national distributors; an increase in promotion in one country adds to the total sales of the foreign distributor.<sup>13</sup> It is easy to show that a positive cross-elasticity is sufficient for condition (15.2) on the market failure of the simple price contract. Furthermore, in the context of geographical differentiated distributors, any efforts that a distributor undertakes specifically to attract demand away from a rival distributor, such as investing in a network to export to the rival's territory, are a pure waste. Investments that merely transfer demand

<sup>12</sup> Corning Glass Works used this restraint from 1937 until it was prevented from doing so in a case brought by the Federal Trade Commission in 1975. In interviews ten years after the case, Corning executives indicated that one of the most important effects of the case was the loss of many of its smaller outlets. In another example, after legislation had ended an earlier era of resale price maintenance, the number of dealers selling Schick shavers fell from 35,000 to 7,000 in one year (Andrews and Friday 1960).

<sup>13</sup> The one potential theoretical source of negative cross-elasticity is the attraction of foreign buyers by the increase in domestic promotion. But it is unlikely that many customers will travel to another country to take advantage of better service or promotion.

from one distributor to another add nothing to total product demand.<sup>14</sup> The price system alone fails to coordinate incentives. It is natural for a manufacturer to impose territorial restraints in order to eliminate the wasteful activity.

Territorial restraints, in short, eliminate the wasteful effort to divert demand away from rival distributors. In fact, territorial restraints are a more powerful resolution of incentive distortions than vertical price restraints in two respects. When effort (any nonprice determinant of demand) is multidimensional, “first-best” resolution of incentive distortions with price restraints requires that the demand elasticity with respect to effort be identical across all dimensions. (Recall our discussion that if one dimension of sales effort is perfectly substitutable with price decreases, resale price maintenance is useless.) This is not true of territorial restraints. Under the simplest set of assumptions, for example, territorial restraints are accompanied by variable prices equal to marginal cost so that the downstream distributor becomes a residual claimant on profits earned from its territory. As such, it takes privately efficient decisions in all dimensions. In addition, resale price maintenance involves an upstream manufacturer imposing the same price floor across all retailers, instead of allowing the price to vary across retailer locations (and over time) in response to information about demand that may be available only at the retail level. Territorial restraints, by supporting residual claimancy contracts, avoid distortions that result from this rigidity of prices.

#### 15.2.4. Exclusivity Restraints and Tying

Exclusivity contracts extend beyond territorial exclusivity. Exclusivity restraints may be imposed on buyers or retail intermediaries (“exclusive dealing”), prohibiting them from purchasing from other sellers. Or these restraints may be imposed on sellers. The economics of exclusivity are reviewed in the chapter by Douglas Bernheim and Randall Heeb and the chapter by Howard Marvel in this volume. Here we outline two of the most important efficiency explanations of the contracts. Marvel (1982) has explained exclusive dealing as a remedy to potential free-riding not on retailer investments (like the free-riding explanation of resale price maintenance) but on manufacturer investments. Manufacturers generate customers for their products through advertising and investment in their brands. A manufacturer is essentially providing to a retailer a tied product—the physical product itself plus investment in generating demand for the product. If the dealer carries a low-priced, nonadvertised product, then the dealer can sell the lower priced product to customers attracted to the dealer by the promotion expenditure on the part of the manufacturer. The dealer can gain a reputation for offering similar products at lower prices. The problem with this situation is that the manufacturer then

<sup>14</sup> This argument assumes that the impact of investment in exporting channels is mainly diversion of demand away from the distributor located in the destination country, rather than bringing more demand to the market.

has the incentive to cut back on productive, brand-enhancing investment. Exclusive dealing is efficient when used to prevent free-riding.

Exclusivity in contracts can be used to prevent holdup. Suppose that a franchisor sells to a franchisee the right to open an outlet in a small town. Once the franchisee has built up the market for the product by maintaining a high level of quality and through promotion, the franchisor can sell a share of the market to a new franchisee—unless the first franchisee has territorial exclusivity rights. In any contract, exclusivity can serve to protect against inefficient investment. Contracts are inevitably incomplete in that they do not specify the rights and obligations to parties for all time; some negotiations are necessary even after a contract has been signed. In a contract without exclusivity, a party may have the incentive to invest in options to leave the contract and transact with other parties—not with the intention necessarily of exercising the option but rather for the purpose of enhancing its threat point in bargaining with the contractual partner. The investment in these options would be inefficient, since it has the impact of simply implementing a transfer between contractual parties (Segal and Whinston 2000). Exclusivity may be reciprocal, with the buyer and seller each constrained to deal with the other, in an arrangement that is sometimes referred to as quasi-vertical integration.

Tying, another kind of exclusivity, may also have an efficiency explanation. The most common efficiency explanation of tying is that there are economies in jointly providing two “products.” For example, the vast majority of consumers prefer to buy a pair of shoes and not just one. Selling shoes in pairs reduces the cost of provision. The law in the EU and the United States appropriately accounts for this efficiency explanation providing that a tying restriction must involve two separate products, which is not true unless there is significant independent demand for each possible product.

But even if there are two clearly independent products, tying may be efficient. For example, when a consumer cannot distinguish failures in service quality from failure of the product itself, then increased efforts by service providers exert a positive externality between the service providers and the product manufacturer. Because of this externality, an independent supplier of service may have weak incentives to provide quality service: the service provider does not internalize the reputational benefits of high quality. A tying arrangement may require buyers to buy high-quality service from the manufacturer and thus efficiently protect the manufacturer’s reputation for quality.<sup>15</sup>

Tying may also be imposed as a price discrimination mechanism, which, as we discussed above, may increase surplus. For example, tying aftermarket products to original equipment may allow the manufacturer to meter demand for its product. Buyers with relatively high demand for original equipment, such as a printer, may have relatively high demand for aftermarket products, such as ink. Tying the aftermarket product to

<sup>15</sup> Iacobucci (2004) shows that, if buyers anticipate the externality between independent service providers and manufacturers, there may or may not be a need to tie to protect a reputation for quality. The incentives for tying depend on the technological relationship between service and product quality.

the original equipment, and imposing a price-cost markup on the tied good, allows the seller to extract more surplus from high-demand buyers than it would otherwise.

### 15.2.5. Restrictions on Internet Distribution

Because the European Guidelines adopt a number of restrictions against limiting online sales, it is useful to consider the possible efficiency roles of vertical restraints on online sales. The Guidelines' rules are complex, but include the limits on the proportion of overall sales made by a distributor on the Internet. Why would a manufacturer want to limit the proportion of sales done over the Internet?

Consider the case of luxury good sales, which is one of the most important sectors affected by the European Commission's restrictions on Internet sales (Buettner et al. 2009a and 2009b). Image is a vital component of luxury products, in the sense that many consumers reveal a preference for products on which suppliers have invested substantially in image. Suppliers of perfume, for example, spend much more on creating the image of the product than on the chemicals in the physical product itself. A supplier of perfume that simply sold its product in bulk, with no advertisement or other investment in image (perhaps at a discount to a consumer who provided her own container) would not succeed in this market. The product itself is not just the liquid perfume. Consumers value not just the scent but the image of the product. Manufacturers of perfume are not restricted—nor should they be—in their expenditures on image.

Investment in image is undertaken not just by manufacturers but by bricks-and-mortar retailers. Consumers are attracted to expensive luxury goods by the retail environment, the retail store prestige and by promotion at the retail outlet. Outlets like Tiffany or Saks Fifth Avenue come to mind, but any upmarket retailer can both add directly to the demand for a product as well as to its image through investment in prestige and an attractive shopping experience. This experience can include point-of-sale information such as product sampling in the case of perfume, but retail investment in these dimensions is much more general. When outlets are allowed to sell unlimited amounts through the Internet, however, then these outlets benefit from the investment in images by bricks-and-mortar outlets without contributing anything to the investment themselves. This free-riding reduces the incentives for outlets to invest in the product image or to carry the product at all, and this reduces demand for the product. A manufacturer limits sales through the Internet to protect the incentives of bricks-and-mortar retailers to offer investment in image. Manufacturers may benefit to some degree from Internet sales through expansion of its market or from the low prices that result. A manufacturer that constrains the percentage of sales through the Internet is simply adjusting the mix of its price and nonprice demand variables (image investment, for example) just as if it were adjusting these variables directly. Restrictions to limit sales through the Internet are not part of a scheme to limit competition among manufacturers and should not be regulated.

## 15.3. ANTICOMPETITIVE USES OF VERTICAL RESTRAINTS

Vertical restraints have a host of efficiency explanations. There are, however, anticompetitive explanations as well. We next turn to these anticompetitive explanations.

### 15.3.1. Resale Price Maintenance

Resale price maintenance can serve to facilitate an upstream cartel among manufacturers. Coordinating wholesale prices would be difficult for members of an upstream cartel because these prices are not posted and may be part of more complicated contracts. Coordinating an upstream cartel via the monitoring of retail prices without vertical restraints would also be difficult because of the variation or “noise” that enters the relationship between a wholesale price and the set of retail prices charged in different locations. Retail price floors allow upstream cartel members to agree on prices and to monitor prices. Telser (1960) used this theory to explain the adoption of resale price maintenance by GE and Westinghouse in the market for large lamps. Jullien and Rey (2007) formalize this argument.

RPM can also be used to support a downstream retail cartel. When retailers sell multiple products and require collectively that all manufacturers in a product market engage in RPM, then the retailer cartel can effectively implement cartel pricing across products. This explanation is of some historical importance in explaining, for example, the success of traditional drugstores in delaying the development of discount drugstores in North America (Overstreet 1983, 143).

The US Supreme Court in *Leegin* discussed a third potential anticompetitive theory of resale price maintenance: that the practice results in exclusion at the retail level. A manufacturer can use resale price maintenance to protect rents at the retail level, as in the Klein-Murphy theory, but the retailer “performance” that is contingent upon continued receipt of the rents is not provision of adequate service but rather agreeing to refrain from carrying the products of a new entrant. A dominant firm or small set of collectively dominant firms can thus protect their dominant position against entry by sharing the rents from the dominance with retailers. Retailers know that once entry is allowed, rents will be much reduced in the market and, as agents who share in these rents, retailers will suffer. John Asker and Heski Bar-Isaac (2011) offer a thorough analysis of this theory (see also Paldor 2008). The theory of resale price maintenance as exclusionary requires that there be a small number of distributors, as in the case of the American Sugar Refining Company, discussed by Asker and Bar-Isaac (see also Zerbe 1969 and Marvel and McCafferty 1985). With many retailers, it is unlikely that a new entrant could not gain toehold entry by sharing profits from entry with one or a small number of retailers.

### 15.3.2. Territorial Restraints

It is possible as a matter of theory that territorial restraints dampen interbrand competition. Rey and Stiglitz (1988) show that territorial restraints can have the impact of dampening competition between manufacturers. Recall that in the simplest theory of territorial restraints, a manufacturer sets variable price equal to marginal cost and charges downstream retailers a fixed fee in exchange for their right to sell exclusively in an area. Under a territorial restraint, with variable wholesale prices set above marginal cost, a manufacturer acts as a less aggressive competitor.<sup>16</sup> The Rey-Stiglitz theory has, however, not been applied to specific cases of which we are aware and would be difficult to distinguish from industry-wide use of the restraints for efficiency purposes.<sup>17</sup>

Exclusive territories may support price discrimination by allowing the upstream seller to partition buyers downstream into different classes, each facing different prices. Such a scheme might arise where buyers in different territories have different elasticities of demand for a product. While it is conceivable that price discrimination would lower welfare, price discrimination may also increase welfare. Indeed, as noted above, moving from a single price set by a monopolist along the spectrum of increasing surplus extraction to the limit of perfect price discrimination will, on average, increase total welfare. Given that there are no practical means for determining whether price discrimination in any given case would lower welfare, we join the consensus of economists that would not legally forbid price discrimination. We therefore also would reject the establishment of limits on exclusive territories out of concerns about price discrimination.

### 15.3.3. Exclusivity Restraints and Tied Sales

It had, until recently, been argued that an exclusivity restriction would not be accepted by a distributor unless the distributor were offered some offsetting benefit to the restriction distributor under the restraint (Bork 1978). Contracts maximize the sum of benefits to the contractual parties, and if an exclusivity restriction is added it must be surplus-increasing. Aghion-Bolton (1987) showed this to be false. If a contract imposes externalities on parties outside the contract, then the contract may be anticompetitive as it benefits parties to the contract. The most important formulation of this theory

<sup>16</sup> More precisely, when manufacturers compete in prices, vertical restraints combined with above-marginal-cost wholesale prices have the effect of shifting reaction curves upwards.

<sup>17</sup> An additional theory of territorial restraints as anticompetitive would build on the Asker and Bar Isaac (2011) theory of resale price maintenance as facilitating an exclusionary equilibrium. Suppose that the only feasible means of entry into an industry by an entrant is to choose a particular location, then build up gradually from there. If territorial exclusivity is used by the incumbent, then a distributor that is the first to accommodate the entrant would quickly find its profit eroded by the competition upstream. The condition for profitably refusing an entrant would be weaker (more general) than in the Asker-Bar Isaac model.

involves an entrant with fixed costs that can be covered only if the entrant secures enough buyers (Rasmusen, Ramseyer, and Wiley 1991, Segal and Whinston 2000). If the incumbent offers each buyer a small price reduction in exchange for an exclusive contract, then acceptance by all buyers is a Nash equilibrium because each buyer knows that refusing the offer of an exclusivity contract (given that other buyers are accepting the contract) will not be enough to induce entry.<sup>18</sup> Even a more efficient entrant can be inefficiently deterred from the market by exclusive contracts.

A parallel theory applies to the possibility that tied sales can be anticompetitive (Whinston 1990). The following example of Whinston's theory is offered by Carlton and Heyer (2008, p. 14) (and attributed to Rob Gertner):

Consider the case of a hypothetical island on which there is a monopoly hotel serving many tourists. Natives live on the island. The hotel operates a restaurant, which competes for diners, both tourists and natives, in competition with local restaurants. By tying meals to lodging, the hotel can so diminish the number of tourists dining at local restaurants that, in the extreme, lack of scale prevents any local restaurants from surviving. The hotel thus acquires a monopoly over natives in the provision of restaurant services.

Whinston's theory shows that market power in one market can be profitably extended to market power in two markets provided that (1) not all consumers in the second market use the product in the two markets jointly; (2) in the absence of tying, there is some market power, for example a duopoly, in the second market; and (3) a rival or rivals incur some fixed costs, such as costs of product development or continual product updating, in the second market. Whinston notes, however, that even in the simple models that he develops, which set aside various efficiency explanations of tying in order to focus on exclusion, the welfare implications are unclear.

In summary, contracts with exclusivity constraints or tying restrictions can be anti-competitive but there are many theories available under which these restrictions serve efficiency or price discrimination roles. The application of theories to a particular case, to understand whether the evidence in the case supports an efficiency explanation or suppression of competition either in the form of higher prices or exclusion, is a challenging exercise because even theories supporting exclusion can yield ambiguous welfare implications of a practice. It would appear that the vast majority of contracts with these restrictions are efficient, since such restrictions are seen across such a wide variety of markets, including markets with competitive structures. We turn next to a systematic review of empirical evidence on vertical restraints.

<sup>18</sup> Note that with small bribes, buyers would be each be better off in another Nash equilibrium: only  $(n - 1)$  accept, where  $n$  is the minimum number of free buyers that will induce entry. Segal and Whinston adopt a refinement of Nash equilibrium that rules out the dominated equilibrium and find that the essential argument remains valid.

### 15.3.4. Empirical Evidence on Vertical Restraints

Our review of empirical evidence on vertical restraints is in the form of a summary of summaries. Cooper and coauthors (2005a and 2005b) reviewed 24 empirical papers published between 1984 and 2004 on the effects of vertical integration, RPM, and exclusive territories. LaFontaine and Slade (2005) reviewed 23 empirical papers on vertical restraints and vertical integration. The samples of papers reviewed in the two studies overlapped.

The Lafontaine and Slade sample include 15 papers on RPM, exclusive territories, and vertical integration. Of these papers, 13 conclude that the restraints under study either benefitted consumers or did not harm them. Two papers found evidence of higher prices under exclusive territories, but the higher prices may simply be a trade-off accepted for higher sales effort, as Lafontaine and Slade point out. Lafontaine and Slade conclude in summarizing their evidence that when manufacturers' choose contracts with vertical restraints "not only do they make themselves better off, but they also typically allow consumers to benefit from higher quality products and better service provision." Similarly, Cooper and coauthors reach the conclusion that the literature offers little support for the proposition that vertical restraints or integration are likely to harm consumers. Some papers reviewed find evidence consistent with both anticompetitive and procompetitive incentives, but none finds that the hypothesis of procompetitive incentives can be rejected in favor of the alternative. O'Brien (2011) reviews an additional set of recent papers in the area that are again consistent with the overall conclusion.

The empirical evidence reviewed is not, of course, a random sample of contracts from markets across the economy. Some industries such as beer distribution and gasoline distribution are overrepresented. And the overall thrust of the evidence, that vertical restraints tend to be procompetitive, does not rule out the possibility of valid cases against particular uses of vertical restraints. By analogy, less than 2% of mergers raise competitive concerns, yet merger policy is an active and well-founded area of competition policy. But the evidence supports our conclusion that competition policy towards vertical restraints in any case must be approached with a prior expectation that the restraints are very likely to be efficient. There is no place in competition policy for placing the burden of proof on defendants to show that restraints are efficient. With this perspective in mind, we review the law of vertical restraints in the EU and United States in the next section, and offer a critique in the final section.

## 15.4. THE LAW OF VERTICAL RESTRAINTS IN THE UNITED STATES AND THE EU

The differences between the US and EU approaches to competition law on vertical restraints are interesting as a purely academic matter, and critical as a practical matter in light of the

potentially severe financial consequences that follow from a finding of a legal violation in either jurisdiction. Significant financial penalties can follow violations of vertical restraints law in either jurisdiction. In the United States, those adjudged to have improperly lessened competition through the use of vertical restraints face the threat of publicly imposed fines, or treble damages as a consequence of private actions. The EU does not, at present, allow private actions against anticompetitive behavior of any kind, including improper vertical restraints, but has imposed very large public fines for anticompetitive conduct. In 2007, for example, the European Commission imposed a fine of 497 million euros on Microsoft for tying Windows Media Player to Windows Operating System.<sup>19</sup>

In what follows, we review the key principles of law in each jurisdiction on RPM, exclusive territories, tying, and exclusive dealing. We focus in each case only on the “federal” law, examining EU and US law and setting to the side potentially important deviations from the pan-jurisdictional approach at the state, or member state, level.

As an introductory matter, note that the central sources of law in both jurisdictions are statutes that are phrased in broad, general terms. The US Sherman Act has a provision on anticompetitive agreements, Section 1, as well as Section 2 on monopolization. Other relevant statutes include the Clayton Act, Section 3 of which prohibits anticompetitive tying and exclusive dealing. In Europe, the Treaty on the Functioning of the European Union (“TFEU”) also has a provision on anticompetitive agreements and concerted practices, Article 101, and one on abuse of dominance, Article 102. These provisions set out standards, not rules, and judicial and administrative interpretations are consequentially very important in the application of the law. Such an approach contrasts with other jurisdictions, such as Canada, where the relevant competition statute is codified to a much greater extent, with, for example, practices such as RPM dealt with in specific sections.<sup>20</sup> One cannot examine the statutes in order to understand the prevailing approach to a particular vertical restraint, but rather must go to the case law and administrative pronouncements, the latter being particularly important in this area in the EU.

### 15.4.1. Resale Price Maintenance

US antitrust law historically banned minimum RPM. The leading case for decades was *Dr. Miles Medical Co. v. John D. Park & Sons Co.*<sup>21</sup> In this case, the Supreme Court held that a manufacturer of medicines could not impose minimum price restrictions on downstream resellers. Just as horizontal agreements between sellers of a product are per se illegal, which is to say that they violate antitrust law regardless of their competitive effects in any given case, so too were agreements between sellers and buyers of a product. Equating horizontal and vertical agreements for antitrust analysis makes little economic sense, but such thinking has been influential in the United States.

<sup>19</sup> *Microsoft Corp. v. Commission of the European Communities* (2007) CFI.

<sup>20</sup> See e.g., Canadian Competition Act, Section 76.

<sup>21</sup> 220 U.S. 373 (1911).

Judicial decisions retreated somewhat from the harshness of the *per se* illegality standard by creating exceptions, such as an exception for a seller that stipulates resale prices and unilaterally refuses to deal with downstream firms that do not adhere to these prices; in such case, there is no agreement, and hence no *per se* illegal agreement.<sup>22</sup> Moreover, statutory exemptions to federal antitrust laws were passed, such as the Miller-Tydings Act in 1937 and the McGuire Act in 1952, that allowed state fair trading laws, which permitted RPM, to apply in states that had adopted such statutes. The McGuire Act and the Miller-Tydings Act were repealed by the Consumer Goods Pricing Act of 1975.

Two recent cases altered the RPM legal landscape significantly. First, *State Oil v. Khan*<sup>23</sup> changed the law with respect to maximum resale prices. Recognizing that there is little reason to conclude that a price cap would hurt competition or consumers, the Supreme Court rejected *per se* illegality for maximum RPM and instead adopted a rule of reason approach: a plaintiff would be required to show a harm to competition from RPM to succeed.

Despite the venerable status of the *Dr. Miles* precedent, the Supreme Court abandoned *per se* illegality in *Leegin Creative Leather Products, Inc. v. PSKS Inc.*<sup>24</sup> In a decision replete with reference to economic thinking on the matter, the Supreme Court rejected *per se* illegality for RPM, holding that it should be considered under the rule of reason instead. The Court suggested that RPM may be more suspect where there is evident market power on the part of sellers or buyers, and where RPM may be used in a manner that is harmful to horizontal competition, by supporting a cartel, or by inducing downstream firms to exclude the upstream firm's rivals. The notion that an upstream firm and downstream firm are fixing prices with necessarily harmful effects when agreeing to RPM is no longer accepted in US federal antitrust law.<sup>25</sup> But it would be wrong to say that the law on RPM is approaching *per se* legality. The onus of proof to demonstrate various factors that support the legality of RPM rests with the defendant.<sup>26</sup> In practice, as of mid-2012 lawyers were still designing "Colgate programs" for their clients to ensure that the clients' distribution practices fall within the Colgate exception to *Dr. Miles*.<sup>27</sup>

<sup>22</sup> *U.S. v. Colgate & Co.* 250 U.S. 300 (1919).

<sup>23</sup> 522 U.S. 3 (1997).

<sup>24</sup> 551 U.S. 877 (2007).

<sup>25</sup> State laws on RPM vary, with some states effectively banning RPM under their own antitrust laws.

<sup>26</sup> Following *Leegin*, the law on RPM, as interpreted by the FTC in granting a petition to Nine-West in 2008 to modify an earlier FTC order, is that a manufacturer bears the burden of proving that the use of RPM is procompetitive unless it can prove the absence of all of the so-called *Leegin* factors: (1) that dealers, not the manufacturer, were the impetus for RPM; (2) that the use of RPM was ubiquitous in the industry; (3) that there is a dominant manufacturer or dealer.

<sup>27</sup> Several attempts have been made in Congress to reimpose the *per se* ban on RPM after *Leegin* by drafting statutes to repeal *Leegin*. Senators Herb Kohl, Joseph Biden, and Hillary Clinton introduced the Discount Pricing Consumer Protection Act immediately following the decision. This bill proposed to revise Section 1 of the Sherman Act to make RPM *per se* illegal. Although this bill never made it out of committee, similar bills in the House and the Senate are in process as of the writing of this chapter but have not been passed.

The EU, on the other hand, continues to disapprove of minimum or fixed RPM. In 2010, the EU adopted Regulation 330/2010, which exempts a range of vertical agreements from the TFEU Article 101 ban on anticompetitive arrangements, and offers guidance on its approach to remaining restraints. The Regulation will be in place until 2022. The Regulation creates safe harbors that automatically protect certain “non-hardcore” vertical agreements from antitrust sanctions (though failing to fall within a safe harbor does not create a presumption of illegality for non-hard-core restrictions). The general structure is to exempt all vertical non-hard-core restrictions where the market share of seller *and* buyer<sup>28</sup> in each of their respective markets is below 30%. Hard core restrictions, on the other hand, are subject to a presumption of illegality. Minimum or fixed RPM is a hard core restriction under the Regulation. Maximum RPM, on the other hand, is not a hard core restriction under the Regulation, and thus can qualify under the safe harbor.

The Regulation cites a number of reasons for the treatment of RPM as a hard core restriction.<sup>29</sup> Some are similar to the concerns about horizontal competition that the US Supreme Court pointed out in *Leegin*: RPM may facilitate collusion at the upstream or downstream distributor levels; or may be used to induce retailers not to carry a rival’s brand. Other reasons are more cryptic. For example, the Regulation suggests that even absent collusion, RPM may “soften” competition between manufacturers and/or retailers. Others parts seem to stress the importance of protecting intrabrand competition. For example, the Regulation notes that minimum or fixed RPM prohibits price-cutting, and thus the direct effect of RPM is a price increase.

The classification of a practice as a hard core restriction means that there is a presumption that the practice is contrary to Article 101 of the TFEU, and that safe harbors are unavailable. Minimum or fixed RPM is not illegal *per se*, however, as firms may be able to invoke the efficiencies defense under Article 101(3), which allows practices even if they are anticompetitive as long as they generate efficiencies and these efficiencies are passed on to the consumer. The Regulation acknowledges that RPM may be efficient, as where, for example, a seller introduces a new product and seeks to expand its distribution network. But with a presumption of illegality, the onus will be on the firms to prove the efficiency effects to justify RPM.

### 15.4.2. Exclusive Territories

Just as the law on RPM has changed considerably over time in the United States, so too has the approach to exclusive territories. But while change in the law on RPM took many decades, the Supreme Court’s precedent on exclusive territories oscillated dramatically in a period of only fifteen years. The first Supreme Court case on the matter was *White Motor Co. v. U.S.*<sup>30</sup> In this case, a truck manufacturer sought to impose territorial

<sup>28</sup> Previously, only the seller’s market share was relevant.

<sup>29</sup> See discussion in Regulation 330/2010 at 63.

<sup>30</sup> 373 U.S. 253 (1963).

restrictions on its distributors. The district court accepted the government's argument that such restrictions were analogous to horizontal market division, and to RPM, and thus should be treated as illegal per se. The district court granted summary judgment to the government. The Supreme Court, however, overturned, holding that summary judgment was inappropriate. The majority of the Court did not reach a conclusion on the proper treatment of territorial restrictions, holding that a full trial, with consideration of all the economic evidence, was warranted.

Four years later, the question of the appropriate treatment of exclusive territories was before the Court again in two cases, *U.S. v. Sealy Inc.*,<sup>31</sup> and *U.S. v. Arnold, Schwinn & Co.*<sup>32</sup> The Court was decisively against the practice in these cases. *Sealy* involved a number of licensees of the Sealy brand that manufactured mattresses. Conditions to license the brand included a number of vertical restraints, including RPM and territorial exclusivity. The Court held that the exclusive territorial restraints were tainted by the aggregate nature of the nature of the restraints in the case, which involved other legally suspect practices including RPM, and illegal. *Schwinn* did not involve such an aggregation of restraints, but again the Court expressed disapproval. In particular, making reference to doctrines against restraints on alienation, a majority of the Court condemned as unreasonable the imposition by a manufacturer of restrictions on the downstream sales of products after title to the products had passed to a downstream distributor.

*Schwinn* met with considerable hostility and did not survive long. *Continental TV Inc. v. GTE Sylvania Inc.*<sup>33</sup> involved a manufacturer of televisions agreeing with its franchised dealers that they would not be permitted to sell Sylvania products if they were to relocate without Sylvania's approval. While not strictly speaking an agreement to establish exclusive territories, the arrangement had a similar effect. Stressing the importance of economic analysis in applying antitrust law, and the role of territorial restrictions in potentially stimulating interbrand competition, a majority of the Supreme Court rejected the per se approach to exclusive territories, concluding that they should be considered instead under the rule of reason. Since then, as with most practices governed by the rule of reason, territorial restrictions have rarely been challenged successfully.

Exclusive territories law in the EU raises interesting trade-offs. On the one hand, the case law has long recognized the potential economic benefits of such restraints; on the other hand, in addition to concerns about intrabrand competition, exclusive territories raise concerns about the greater integration of the EU itself.<sup>34</sup> The trade-off has manifested in the case law and Commission guidelines over the years, most recently in the EU 2010 Guidelines that contain a general disapproval of exclusive distribution, but with fairly broad exceptions.

Under the Guidelines, strict exclusive territories are classified as a "hardcore" restriction on competition, which as set out above not only removes them from the possibility

<sup>31</sup> 388 U.S. 350 (1967).

<sup>32</sup> 388 U.S. 365 (1967).

<sup>33</sup> 433 U.S. 36 (1977).

<sup>34</sup> See, e.g., *Consten and Grundig*.

of falling within a safe harbor, but moreover establishes a presumption of illegality.<sup>35</sup> There are, however, important exceptions to this treatment. For example, block exemptions are available for restrictions on the buyer's place of establishment as long as they do not also contractually confine sales to a particular territory. Perhaps the most significant exception concerns the distinction between "active" and "passive" sales. Active sales are sales that result from action by the downstream firm, while passive sales are unsolicited. Reflecting trade-offs between economic and integration concerns, the Guidelines allow upstream firms to impose restrictions on active sales by downstream firms outside of designated territories, but disallow a restriction that prevents downstream firms from making passive sales. This is typical of the compromises that EU law on exclusive territories has incorporated over the years, but there was an important addition in the 2010 Guidelines. The Guidelines treat Internet sales as passive sales and, thus, territorial restrictions cannot prevent sales outside a designated territory on the Internet. Other exceptions to hardcore treatment of territorial restrictions include restrictions that prevent wholesalers from selling to end users, from selling to unauthorized distributors, and from selling components to competitors of the upstream firm.

In summary, the EU is again stricter than the United States: exclusive territories are subject only to rule-of-reason review in the United States, but may be presumptively problematic under EU law.

### 15.4.3. Tying

The treatment of tying in the United States is simple to state, but much more complex to apply. The basic rule is that tying is per se illegal. But there are preconditions for tying to be per se illegal that undermine significantly the importance of the per se label. First, there must be two separate and distinct products that the seller ties together. The second requirement is that the seller must have market power.

The requirement of two products is in some respects a logical prerequisite for a tying agreement, but is not straightforward to apply. Products have multiple features, and distinguishing two features of a single product from two distinct products may be difficult in practice. Cars come with tires; are these elements of a single product, or is this a tie (bundle)? Shoes come with laces; a single package may contain several oranges; a cable television package may have several channels—are these tying arrangements? The Supreme Court offered some guidance on the question in the leading case of *Jefferson Parish Hospital District No. 2 v. Hyde*.<sup>36</sup> In this case a hospital entered into an agreement with a designated professional corporation that it would rely only on its anesthesiologists in providing services to patients. Dr. Hyde, an anesthesiologist who was prevented by the arrangement from providing services to the hospital's patients, challenged the arrangement as an unlawful Section 1 agreement, and the case found its way to the

<sup>35</sup> See Guidelines, *supra* at para. 50.

<sup>36</sup> 466 U.S. 2 (1984).

Supreme Court. A majority of the Court upheld the per se illegality of tying, but ultimately held that the arrangement at issue was not per se illegal. In so finding, the Court found the existence of two separate products, setting out a test that asked not whether it was feasible for the seller to sell the items separately, but rather whether there existed sufficient demand for each item independently such that they could be considered separate products for the purposes of tying law. Here there was sufficient evidence of distinct demand for anesthetic services independently from hospital services that there were two products, and thus there was a tying arrangement.

The market power requirement is also far from straightforward, with courts taking more hawkish and more dovish views at different points in time. The leading case is again *Jefferson Parish*, which, in holding that the tying arrangement in question was not per se illegal, stressed the importance of the market power requirement. Some indication of market imperfections that might lead to some degree of market power on the part of the seller, such as the presence of insurance in the health services market and thus price-insensitive buyers, is not sufficient; rather, the majority stated that the seller must use its market power to force the buyer into buying a product that the buyer did not want at all, or that the buyer might have preferred to buy from a different seller. Such market power was not present in *Jefferson Parish*, and the tie was not per se illegal.

Given the significant degree of market power required under *Jefferson Parish*, the later case of *Eastman Kodak Co. v. Image Technical Services, Inc.* took many by surprise. In this case Kodak ceased to supply parts to independent service operators (ISOs) that worked on its photocopy equipment. ISOs launched an antitrust complaint under Sections 1 and 2 of the Sherman Act, contending, among other things, that Kodak tied the sale of service parts to the sale of its parts. Kodak responded by arguing, among other things, that it did not have market power in the original equipment market, and thus could not have market power in “aftermarkets” for service and parts even if its market share were 100%. The Supreme Court held that summary judgment in Kodak’s favor was not appropriate. Information problems on the part of buyers who may not anticipate high prices in aftermarkets, or problems resulting from buyers being “locked in” to Kodak aftermarkets given past investments in Kodak equipment, could result in the necessary market power that would support a per se tying claim. The “post-Chicago School” approach to market power in *Kodak* suggests greater scope for successful per se tying claims than *Jefferson Parish* might imply.

In Europe, tying is not treated as a hard core restriction, and thus is eligible to fall within the safe harbor if both seller and buyer have market shares below 30% in both the tying and the tied product markets. Outside the safe harbor, tying arrangements will be assessed on the merits and not subject to any kind of presumption of illegality. The 2010 Guidelines outline the key considerations in a review of the tying arrangement. As in the United States, the determination of whether there are two distinct products, a logical prerequisite for a tie, depends on demand-side considerations.<sup>37</sup> If there is sufficient demand for the

<sup>37</sup> Guidelines, *supra* at para. 215.

sale of the items independently of each other, then there are two products. Laces are not independent from shoes, for example, and thus selling laces with shoes is not tying.

The analysis of harms to competition from tying turns importantly on the presence of market power. If the seller faces effective competition, the Guidelines conclude that “no anti-competitive effects can be expected . . . unless other suppliers are applying similar tying.”<sup>38</sup> Interestingly, however, in reviewing the potential for tying to increase prices, the Guidelines observe that customers may not always be able to calculate the consequences of tying where aftermarkets are involved.<sup>39</sup> This would seem to cast doubt on the importance of market power in original equipment markets, as in *Kodak*.

While the requirements of two products and market power are similar to the US approach to tying, the EU diverges from the US approach by requiring an analysis of competitive effects before condemning a tying arrangement. Foreclosure is a central concern, with the Guidelines calling for an examination of the percentage of sales that are covered by the tying arrangement. The Guidelines observe that a tying arrangement may foreclose entry by forcing entrants to provide both tying and tied goods, or by denying scale to independent sellers of tied goods. The Guidelines also express concern about higher prices in aftermarkets, as noted above, and the use of tying as price discrimination: the tied good may meter demand for the tying good, allowing the seller to extract greater surplus from buyers. The focus on high prices, and concern about price discrimination, suggest that tying may be problematic even without competitive effects if the practice helps a seller exploit its market power.

The leading case on tying in recent years in the EU is the *Microsoft* case.<sup>40</sup> In this case, Microsoft was found by the Commission to have unlawfully tied Windows Media Player to Windows Operating System. The Court of First Instance found that these were two separate products, and that Microsoft had market power in operating systems. The Court also found that there was the risk of foreclosure associated with the tie; thus there were the requisite competitive effects to make an order against the practice, as well as a fine of 497 million euros. The analysis of foreclosure did not engage in a far-ranging analysis of what the economic benefits to Microsoft would be from extending a monopoly in operating systems to media players, but rather emphasized that the tie prevented competition in media players given Windows’ share of operating systems, and thus was unlawful.

To summarize, the United States has a per se rule against tying, but requires that there be two products and that there be market power in the tying market. The EU also requires two products and market power, and indeed establishes a safe harbor for tying arrangements involving less than 30% of the tying and tied product markets up- and downstream. To show that tying is unlawful, the Commission must show negative competitive effects from the practice, though the Guidelines (with their contemplation of price discrimination as a problematic motivation, for example) and the case law (most prominently, *Microsoft*) do not impose a high hurdle for such a finding.

<sup>38</sup> *Ibid.* at para. 220.

<sup>39</sup> *Ibid.* at para 217.

<sup>40</sup> *Supra.*

#### 15.4.4. Exclusive Dealing

As with other practices, the law on exclusive dealing in the United States has undergone a number of twists and turns with the adoption of different tests over time. The earliest leading case is *Standard Fashion Co. v. Magrane-Houston Co.*<sup>41</sup> In this case, a supplier of paper patterns for women's and children's clothing entered into exclusive dealing arrangements with a large number of retail outlets. As a result of a contractual dispute, Magrane-Houston, one of the retailers, accused Standard Fashion of violating Section 3 of the Clayton Act by foreclosing a large number of potential outlets for dress patterns. The Supreme Court observed that Section 3 condemned arrangements that "tended" to create a monopoly, but held that this required that an arrangement probably lessens competition or creates an actual tendency to monopoly. The threshold for such a finding was not high, however. The Court concluded that Standard Fashion's large market share, and the fact that 40% of potential outlets had agreed to exclusivity, would foreclose competition, and consequently there was a violation of Section 3.

The strict posture toward exclusive dealing became even more aggressive in *Standard Oil of California v. U.S.*<sup>42</sup> Standard Oil contractually required independent service stations that collectively had 6.7% of the market to buy gasoline exclusively from it. The government contended that the exclusive dealing agreements violated the Sherman and Clayton Acts. The Supreme Court in this case observed that exclusive dealing should be treated more leniently than tying, stating, "Tying arrangements serve hardly any purpose beyond the suppression of competition," while exclusive dealing may be economically advantageous to both sellers and buyers.<sup>43</sup> At the same time, however, Justice Frankfurter expressed skepticism that courts would be able to engage in the economic analysis necessary to apply a full rule-of-reason approach. In the result, the Court concluded that exclusive dealing was unlawful where a substantial share of the line of commerce that was involved. It thus failed to overturn the finding of the district court that foreclosing 7% of retail outlets with exclusive dealing contracts was illegal per se.

The Supreme Court took the economic merits of exclusive dealing more seriously in *Tampa Electric Co. v. Nashville Coal Co.*<sup>44</sup> The Court rejected lower court findings that an agreement between a coal supplier and an electric company that the latter would buy coal only from the former violated Section 3 of the Clayton Act. The lower courts examined the volume of commerce affected by the contract, a very large volume in absolute terms, and concluded that exclusivity must lessen competition by foreclosing access to the electric company by other coal suppliers. The Supreme Court redefined the relevant geographic area that was covered by the arrangement to a much larger area than that considered by the lower courts. As a consequence of this redefinition, the foreclosed commerce was less than 1% of the relevant market. This was sufficient to find for the

<sup>41</sup> 258 U.S. 346 (1922).

<sup>42</sup> 337 U.S. 293 (1949).

<sup>43</sup> *Ibid.* at 305–6.

<sup>44</sup> 365 U.S. 320 (1961).

defendant, but the Court went on to set out a test for substantial foreclosure that invited lower courts to follow a rule-of-reason, and not a *per se*, approach in the future:

To determine substantiality in a given case, it is necessary to weigh the probable effect of the contract on the relevant area of effective competition, taking into account the relative strength of the parties, the proportionate volume of commerce involved in relation to the total volume of commerce in the relevant market area, and the probable and immediate effects which pre-emption of that share of the market might have on effective competition therein.<sup>45</sup>

As Hovenkamp points out, following *Tampa Electric*, lower courts have generally followed the rule of reason in assessing exclusive dealing (Hovenkamp).

In the EU, exclusive dealing, or “single branding,” is judged on what is effectively the rule of reason: the arrangement must lessen competition to be unlawful. Single branding is not a hard core restriction and thus is eligible for a safe harbor under the Guidelines. For this practice, there is both a market share and a temporal requirement for the safe harbor: if seller and buyer have less than 30% of their respective markets *and* the exclusive arrangement is less than five years long, then the practice will not be challenged.

Arrangements that fall outside the safe harbor are not presumed wrongful, but rather will be subject to a competition test. The Guidelines recognize that if there is competition for the entirety of each customer’s business, then exclusive dealing raises little competitive concern. The test turns on foreclosure. The greater the seller’s market share, and the longer the duration of the agreement, the stronger the probable impact of the arrangement on foreclosure. The Guidelines also stress the importance of entry barriers, indicating that if entry is easy, single branding is unlikely to pose a problem.

The Guidelines contemplate the potentially cumulative anticompetitive effects of single branding arrangements, holding that even if each supplier is covered by the block exemption (safe harbor), withdrawal of the exemption may be appropriate where there are such cumulative effects. The Guidelines state that where the largest market share of a supplier is below 30% and the market share of the five largest suppliers is below 50%, there is unlikely to be a single or cumulative anticompetitive situation. The Guidelines do not, however, indicate any market share threshold for concluding that such a cumulative anticompetitive effect is probable.

To summarize, both the United States and EU consider exclusive dealing under the rule of reason. A complainant must establish that there are negative competitive effects from the practice.

One of the prominent forms of legal restrictions on distribution contracts in the EU Guidelines is on vertical restraints over Internet distribution. The set of regulations is complex, distinguishing “passive sales,” which are transactions in which consumers’ search effort plays an important role, from “active sales,” which are transactions in which a distributor expends effort to reach consumers in a specific territory or a specific

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<sup>45</sup> *Ibid.* at 329.

customer group. A distributor website is an example of passive sales, and territory-based banners on third-party websites are a form of active sales in the territory in which the banners are shown. With some exceptions, vertical restraints on passive online sales by a distributor are a hard core restriction, illegal without a market-share-based safe harbor. Active sales by a distributor in support of a (legal) distribution system with exclusive territories or customers is allowed.

## 15.5. CONCLUSION: WHERE THE LAW AND ECONOMICS DIVERGE

In the absence of evidence that vertical restraints are being used to aid collusion or to aid in the exclusion of firms from a market, the restraints should be legal. A manufacturer adopting vertical restraints on intrabrand competition must be doing so for a reason: the restraint on price competition is a cost to the manufacturer since higher retail prices reduce demand, and this cost would not be incurred without a benefit. Many theories are available as to why retailers would not provide enough sales effort (defined broadly) under simple price contracts—and why vertical restraints can resolve the incentive problems. We showed that vertical restraints can be explained by a difference between the marginal rates of substitution over price versus nonprice demand-enhancing activities. Many different specific sources of incentives for vertical restraints fall within this general framework.

The welfare effect of vertical restraints is sometimes discussed in terms of a trade-off between reduced intrabrand competition and greater interbrand competition—or as an instrument by which an upstream firm can better compete.<sup>46</sup> Certainly in European law dominance on the part of a manufacturer creates suspicion about vertical restraints, and such dominance appears to be a requirement in the US approach to per se illegal tying, but many academic contributions also point to the trade-off, or the importance of upstream competition, in assessing vertical restraints. We disagree. Even in the case of a pure monopolist upstream, without even the threat of competition, there is no presumption that trading off higher prices in exchange for demand-enhancing activities is harmful to welfare. For this reason, we would reject the approach of the EU Guidelines that describes the reduction of intrabrand competition as a generally harmful competitive effect that may result from vertical restraints.<sup>47</sup> This approach leads the Guidelines astray in a number of specific respects, perhaps most prominently in restricting RPM

<sup>46</sup> Rey and Vergé (2008) write, “Even when vertical restraints eliminate intra-brand competition, if there is sufficient competition from other structures [supply chains] this will not decrease economic welfare since the structure will be unable to exercise market power.”

<sup>47</sup> Guidelines, *supra* para. 100.

because the direct impact of the practice is to raise price. This may be an impact of RPM in a case, but this says nothing about the effect of RPM on horizontal competition.

The law currently places too much emphasis on free-riding as an explanation of vertical restraints. For example, in his dissent in the important *Leegin* case, Justice Breyer of the US Supreme Court writes:

Petitioner and some amici have also presented us with newer studies that show that resale price maintenance sometimes brings consumer benefits. Overstreet 119–129 (describing numerous case studies). But the proponents of a per se rule have always conceded as much. What is remarkable about the majority's arguments is that nothing in this respect is new. . . . The one arguable exception consists of the majority's claim that, even absent free riding, resale price maintenance may be the most efficient way to expand the manufacturer's market share by inducing the retailer's performance and allowing it to use its own initiative and experience in providing valuable services . . . Ante, at 12. *I cannot count this as an exception, however, because I do not understand how, in the absence of free-riding (and assuming competitiveness), an established producer would need resale price maintenance.* Why, on these assumptions, would a dealer not expand its market share as best that dealer sees fit, obtaining appropriate payment from consumers in the process? There may be an answer to this question. But I have not seen it. (551 U.S. 15 (2007) Breyer, J., dissenting [emphasis added])

The European Commission Guidelines on Vertical Restraints also place undue emphasis on free-riding as an evidentiary *requirement* for the proposition that resale price maintenance is efficient for established firms.<sup>48</sup> In explaining why the practice may be used to induce retailers to provide additional presales service, the Guidelines describe the traditional free-riding argument (involving consumers' obtaining services at one outlet and then purchasing from a low price outlet), and then state (at paragraph 225):

The parties will have to convincingly demonstrate that the RPM agreement can be expected to not only provide the means but also the incentive to overcome possible free riding between retailers on these services and that the pre-sales services overall benefit consumers as part of the demonstration that all the conditions of Article 101(3) are fulfilled.

Like Justice Breyer's opinion in *Leegin*, the apparent theory is that the efficiency role of resale price maintenance is limited to the free-riding argument. Our position is that manufacturers use vertical restraints to readjust the mix of price and nonprice competition among retail distributors of their products for a host of reasons. The traditional free-riding theory is only one, narrow explanation. For example, retail distributors design their strategies to attract consumers not just away from other products, but also

<sup>48</sup> The Guidelines also recognize limited roles for resale price maintenance for new products and for short-term price promotions.

away from other retailers. Designing strategies for the latter purpose is wasteful for the supply chain as a whole, and is likely to involve low prices and less sales effort. A manufacturer can correct the distortion (in terms of achieving maximum profits) with vertical restraints.

Our view that competition policy should examine only horizontal effects on competition across supply chains is not based on the assumption that the adjustment of price and nonprice competition such as service quality or promotion by a manufacturer will *necessarily* increase consumer surplus or total surplus. Our position is that it may; that isolating the evidentiary requirements for identifying whether it does or not is impractical or impossible; and that the burden of proof in antitrust restrictions contracts should lie on the side of intervention. We do not regulate a manufacturers' mix of prices or promotion when these decisions are made directly, for example, in a vertically integrated firm. Nor should we regulate these decisions when they are implemented indirectly through vertical restraints.<sup>49</sup>

Turning to specific restraints, in the United States, following *Leegin*, resale price maintenance is no longer per se illegal, but the burden of proof on the firm adopting the practice to establish various conditions is misguided. A fortiori, the continuing approach of the EU to treat price maintenance as a hard core vertical restriction that is subject to a presumption of illegality is also a mistake.

While both the United States and EU are relatively permissive of exclusive territories, the EU's insistence that passive extraterritorial sales, including Internet sales, be permitted creates the kind of externalities that motivate exclusivity in the first place. This will be especially true as Internet sales grow in importance over time. It is not fair to judge the European approach to exclusive territories based only on economics given the political motive that influences the law in this area: the EU is concerned about economic integration as a political matter, and may sacrifice economic gains in order to promote it. But the EU approach does sacrifice efficiency. That said, the incentive problems that exclusive territories address are most worrisome for upstream suppliers where one downstream distributor actively pursues another distributor's customers. Restrictions on active, out-of-territory sales are permitted in Europe, so European law does permit an especially beneficial version of exclusive territories. This is not a justification for Europe's insistence on passive sales across territories, but is at least a positive feature of the Guidelines.

Vertical restraints on online passive sales by a distributor, including restraints on the proportion of sales online, are prohibited under the EU Guidelines. This is another clear case where competition law in Europe is at odds with economics. Vertical restraints against excessive online sales are not part of a scheme to lessen horizontal competition among manufacturers, but can instead be simply explained as a mechanism to correct distortions in distribution systems in which online sellers can free ride on the investments in product image and other point-of-sale demand enhancement such as information or sampling.

<sup>49</sup> This is not to say that resale price maintenance is always efficient. It may be used to suppress horizontal competition, as we discuss below.

The areas of exclusive contracts and tying present a more difficult challenge. While these restraints will ordinarily be benign, they will on occasion allow dominant firms to exclude rivals. Both the EU and United States appropriately require dominance before challenging these practices, but dominance is merely necessary and far from sufficient to conclude that the restraints are likely to lessen competition. While it is qualified in important respects, we do not believe that even a nominally *per se* approach to tying in the United States is appropriate. Rather, each case should be examined on its merits, and only in clear cases should such a restraint be regarded as anticompetitive.

Because of the difficulty in determining the economic impact of exclusivity and tying, we are also concerned about the relatively expansive approach of the EU to foreclosure. In the Microsoft media player case, for example, the EU was seemingly content to observe that tying a media player to a dominant operating system would give Microsoft a clear advantage in the media player market. What the EU did not clearly analyze, however, was how Microsoft would gain economically from doing so: if Microsoft was a monopolist in operating systems, why was it not content to reap its profits in that market? How did tying the media player increase Microsoft's profits? How did tying the media player hurt consumers? In our view questions like these should be at the forefront of investigations into exclusivity and tying arrangements, with the burden on those objecting to the restraints. Yet under the modified *per se* approach to tying in the United States, and the expansive approach to foreclosure in the EU, these questions are relegated to a minor role.

The EU and United States provide a useful contrast for the exposition of different approaches to vertical restraints. They are also the most important jurisdictions in practice, with many multinational distribution chains likely to be affected by American and/or European law. But of course many distribution chains will be narrower in scope and confined to a single jurisdiction governed by a different approach to vertical restraints. Given the absence of international consensus on optimal policy, even on such matters as hard core price-fixing cartels (for example, should they be criminalized?), it is not surprising that there is considerable worldwide variation in the approach to vertical restraints. Canada, for example, is a jurisdiction that has tended to move in recent years in the direction of the American, more permissive approach to vertical restraints. Its statute, which provides a much more complete code of antitrust rules on particular practices than that in either the EU or United States, was amended in 2009 to move the law from treating RPM as a *per se* illegal criminal offence to requiring that the practice have an "adverse effect on competition" to be subject to civil remedies, not criminal. Tying, exclusive territories, and exclusive dealing are also subject to a competition test. In each case, the practice must substantially lessen competition to be subject to an order. But this liberalizing trend is not true across different matters and different jurisdictions. For example, many significant jurisdictions, such as Germany and Australia, continue to treat RPM as *per se* illegal. Given that rules such as the *per se* illegality of RPM fail to account for the broad range of efficiency motivations that exist for many vertical restraints, and moreover are often based on an ill-conceived concern for intra-brand competition, the law on vertical restraints in many jurisdictions is due for reform.

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AQ: Please note that the reference "Salop, S.C., and D.T. Scheffman (1983)" has not been cross-referred in the text. Please provide the same.