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Vertical Restraints and the Forgotten Function of Prices in Brand Management

Roman Inderst & Frank Maier-Rigaud[1]

I. INTRODUCTION

Vertical restraints remain high on the policy agenda, in particular in the European Union where the European Commission ("EC") is about to re-appear on the scene. The EC had left the field to Member States such as Germany, France, and the United Kingdom, who have brought a wide range of vertical cases since the publication of Regulation No 330/2010 of 20 April 2010 and the Guidelines on Vertical Restraint.[2]

The underlying reason for the return of the EC in the vertical restraints arena is driven by concerns about policy coherence within the European Competition Network and arguably, also, the European dimension of most of the practices considered in the cases brought on a national level. Nevertheless, the continued interest in how to properly assess vertical restraints such as RPM is also due to an increasing growth of e-commerce that is triggering specific debates not only about dual pricing but also platform competition—to name only two areas covered by recent vertical cases. These developments have not only brought old topics on vertical restraints back to the fore but have also triggered new practices given the new business opportunities presented by the internet.

While vertical restraints cannot be reduced to questions of price, the ultimate control over who sets prices is one of the core aspects in the debate. Fundamentally, the question is how much control non-dominant manufacturers are allowed to have over their products' prices and price-setting policies. In the following, two separate functions that prices fulfill in the context of vertical restraints are isolated. Focusing only on one of these functions to the detriment of the other leads to an inappropriate assessment and balancing of possible pro- and anticompetitive effects of vertical restraints. It also threatens to reduce or eliminate the possibility of manufacturers to manage and develop their brands, with corresponding potential negative effects not only for product quality and innovation but also for consumers.

The current discussion among scholars and practitioners already stresses various rationales for an effects-based approach to judging potential harm from vertical restraints, but misses two related issues: the role of price as, first, a core attribute of branded products and, second, as a core strategy variable in the vertical competition between retailers and manufacturers. Even if a given vertical restraint had the potential to raise the price, at least in the

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[2] *See* Commission Regulation (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices, OJ L 102, 23.4.2010 and Commission notice - Guidelines on Vertical Restraints, Official Journal C 130, 19.05.2010.

short run, or to prevent a price cut, though this need not necessarily be the case, the somewhat simplistic view equating low prices with high consumer welfare and high prices with low consumer welfare is certainly at odds with a more nuanced understanding of what have to be considered two important roles of prices in the assessment of vertical effects. Neglecting the function that prices have for branded products amounts to restricting the manufacturers' control over the retail price and therefore ultimately the positioning and development of its brand. This may lead to substantial inefficiencies.

In standard economic theory, a good is described as a bundle of characteristics—such as its quality or the time and place of its availability. Price, however, is traditionally not seen as one of a product's or brand's characteristics.[3] Based on this view, economic theory has primarily considered only the allocative role of prices, i.e., their role as a mere transfer or means of exchange between economic actors. This is also the role of prices that competition economics has almost exclusively focused on. It is therefore not surprising that the canonical competition policy view identifies price primarily as a cost to consumers and high prices as typically associated with competition law infringements.

This article emphasizes that the role of price as a cost to consumers is but one relevant role that prices play in the context of vertical restraints of branded products. In addition to being costs and signals of relative scarcity, prices also convey information, such as on the quality of the product or service. This has been widely acknowledged not only by marketing practitioners but also in the academic marketing literature that is briefly reviewed below. The arguments developed in the following are built directly on the recognition of this wider role that prices can play.[4]

To demonstrate the role of prices as a quality indicator, and the role that vertical restraints can play in this context, consider a potential free-riding problem among retailers. A retailer that lowers its price essentially free-rides on the positive quality image that has been created by the higher prices set by other retailers. This argument builds directly on a link between higher prices at other retailers and a higher quality perception of consumers.[5] While an individual retailer will want to free-ride and boost sales at its own outlets through setting a lower price, the manufacturer fully internalizes the effect that price choice has on quality and quality perception across all outlets and all sales.

In addition, retailers and manufacturers may have different and often conflicting preferences. Retailers may sometimes prefer a lower price level than the respective manufacturer, but this may not always lead to greater efficiency. In fact, the retailer's preference for a lower

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[3] This characteristics-based approach goes back to K. Lancaster, *A New Approach to Consumer Theory*, J. POL. ECON. 132: 132–157 (1966).

[4] The focus here is on price but the analysis is easily extended also to the wider role that, for instance, a (restricted) choice of distribution channels can play beyond its possible anticompetitive effects that are typically emphasized.

[5] It can easily be imagined that retail price setting in brick-and-mortar stores versus online stores creates such distinct pricing patterns.

price may not be aligned with wider consumer preferences.[6] This observation relates to a much broader theme, namely that of vertical competition. This theme captures the notion that retailers' and manufacturers' interests are not always aligned, and that these interests are in conflict even beyond the question of how to distribute a given level of channel profits through the respective wholesale and retail margins. Retailers may prefer a particular level of retail price specifically because it influences their competitive position vis-á-vis the manufacturer and thus the way future profits are shared in the vertical relationship. More precisely, this may be used to strategically influence bargaining power in the vertical relationship. Retailers have fewer incentives than the manufacturer to uphold the quality image of the manufacturer's product, as this may shift future bargaining power away from the retailer and towards the manufacturer. When retailers are given control over the price, brand manufacturers are no longer able to use price as an additional instrument to control brand image and, notably, to make their brand "stand out" among potential substitutes.[7]

The rest of the paper is organized as follows. Section II provides a brief review of what is known about the link between price and quality from the literature. Section III establishes the central argument of the dual role of prices of particular relevance in the context of vertical restraints, and Section IV concludes.

II. PRICES, QUALITY, AND BRANDS

In economics, a good can be described as a bundle of characteristics such as its quality or the time and place of its availability. Price, however, is traditionally not seen as one of a product's or a brand's characteristics. Economic theory has considered the role of prices in the allocation of resources and competition policy has followed this lead.

Businesses and business scholars are, however, very much aware of the wider role of prices. The marketing literature considers price not only as a means of exchange between buyer and seller, so that a higher price is merely a higher sacrifice for the consumer. It also recognizes the key role of prices in the context of a firm's optimal marketing mix.[8] In this context, prices can serve as a cue for the quality of a product.[9]

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[6] From a narrow point of view, that is *ceteris paribus*, consumers will of course always prefer to pay a lower price, especially if they are the only ones paying the lower price and if this has no impact on the characteristics of the product they purchase.

[7] Incidentally, note that the two arguments may apply to a different degree depending on whether there are large and powerful retailers or whether the retailer landscape is dispersed. In the former case, the argument of vertical competition may be particularly applicable. In the latter case, free-riding may potentially be more likely to apply.

[8] The term marketing mix usually refers to the "4 Ps of marketing", which stand for **P**roduct (quality, design, functions, etc.), **P**rice (unit price, discounts, credit policy, etc.), **P**romotion (advertisement, etc.), and **P**lace (sources of selling, inventory control, etc.). *See*, for instance, E.J. MCCARTHY, BASIC MARKETING (1964).

[9] For instance, Erickson & Johansson acknowledge that "the role price plays in a consumer's evaluation of product alternatives is very possibly not a unidimensional one ", and stress both that price determines (for the consumer) the reduction in wealth necessary to purchase a product ("price as a constraint"), and that it at the same time conveys information about the product quality ("price as a product attribute"). G.M. Erickson & J.K. Johansson, *The Role of Price in Multi–Attribute Product Evaluations*, J. CONSUMER RESEARCH 12: 195–99 (1985). Because of this dual role, prices are the most immediate and easiest to communicate marketing-mix variable, V.R.

More generally, the marketing literature typically embeds the role of prices in a wider framework. So-called "extrinsic quality cues" such as price, brand name, or store name are not directly related to the physical attributes of the product and can be changed without changing the product itself. By contrast, cues that can only be changed by changing the product itself—such as the nutritional content of a breakfast cereal—are called "intrinsic quality cues."[10]

Prices can serve as an extrinsic quality cue when consumers view a high price level as more indicative of a product's or brand's high quality.[11] That price can signal quality is also a key message that marketing scholars communicate to business practitioners, cautioning them about price reductions.[12] The role that higher prices can play in sustaining, for example, market outcomes exhibiting higher product quality should not be confused with the trivial fact that consumers interested in such a higher quality product would nevertheless attempt to purchase this higher quality product at the lowest possible price. This is, however, in no way a contradiction with the possibility that an overall high price range does benefit consumers or that conduct by manufacturers bringing such higher quality about is not benign.

While the present discussion focuses on the relationship between price, quality, and quality perception, it should be noted that apart from being a transfer between firms and consumers, price can play a much wider role—as was, for example, discussed in Veblen's & Leibenstein's theory of conspicuous consumption which argued for a willingness to pay a price above the intrinsic value to achieve a certain level of uniqueness and exclusivity.[13]

Rao, *Pricing Research in Marketing: The State of the Art*, J. BUSINESS 57: 39–60 (1984). More literature, including on the subsequently discussed issues, is reviewed in R. Inderst, *An Economic Analysis of Price Ownership by Branded Goods* Manufacturers, mimeo (2013), which was sponsored by the German Brands Association (Markenverband).

[10] *Cf.* A.R. Rao & K.B. Monroe, *The Effect of Price, Brand Name, and Store Name on Buyers' Perceptions of Product Quality: An Integrative Review*, J. MARKETING RESEARCH 26: 351–357 (1989).

[11] *Cf.* F. Völckner, *The Dual Role of Price: Decomposing Consumers' Reactions to Price*, J. ACAD. OF MARKETING SCIENCE 36: 359–377 (2008).

[12] For instance, Völckner & Hofmann warn "managers must be aware that price-quality inferences remain important aspects of consumers' behavior and consider them when setting prices. For example, setting a low selling price or lowering a price with a discount not only lowers consumer costs but also threatens to lower their perceptions of product quality through negative signaling effects. Managers should therefore be cautious when using discounts or pure penetration pricing to induce consumers to try new products or switch to less familiar brands and retailers. In these cases, consumers likely make negative price-quality inferences and begin to doubt the quality of the promoted product". F. Völckner & J. Hofmann, *The Price–Perceived Quality Relationship: A Meta–Analytic Review and Assessment of Its Determinants*, MARKETING LETTERS 18: 181–196 (2007).

[13] *Cf.* T. VEBLEN, THE THEORY OF THE LEISURE CLASS: AN ECONOMIC STUDY IN THE EVOLUTION OF INSTITUTIONS (1899); H. Leibenstein, *Bandwagon, Snob, and Veblen Effects in the Theory of Consumers' Demand*, Q.J. ECON. 64: 183–207 (1950); or, more recently, L.S. Bagwell & D. Bernheim, *Veblen Effects in a Theory of Conspicuous Consumption*, AMER. ECON. REV. 86: 349–373 (1996). It is noteworthy that at least one legal scholar has based a defence of RPM on these theories; Orbach calls this the "image theory." B. Orbach, *Antitrust Vertical Myopia: The Allure of High Prices*, ARIZONA L. REV. 50: 261–287 (2008) and B. Orbach, *The Image Theory: RPM and the Allure of High Prices*, ARIZONA LEGAL STUDIES: 09–39 (2010). *See also* Andrés Font-Galarza, Frank P. Maier-Rigaud, & Pablo Figueroa, *2013 RPM Under EU Competition Law: Some Considerations From a Business and Economic Perspective* 11(1) CPI ANTITRUST CHRON. (November 2013) for a discussion of RPM in a Veblen context and what that would imply in the context of the weighing of effects under Article 101(3) TFEU.

Based on the literature reviewed, an important question is what theoretical rationale can underpin the observed link between price, quality, and quality perception. The existence of such a link was introduced at an early stage into the academic literature, in fact both in economics and marketing. In a 1944 publication,[14] Scitovszky lucidly expressed one important link between price and quality. He argued that price is informative precisely for those consumers who do not directly observe quality. Then, for an uninformed consumer to judge the quality of a product by its price "implies a belief that price is determined by the competitive interplay of the rational forces of supply and demand." That is, if enough other consumer "experts" are able to directly observe a brand's quality, this belief is in fact justified since the "differences in price can be trusted to reflect differences in quality as appraised by experts." In this case, the uninformed consumer "can assume that the prices facing him are what they are because others found them reasonable and justified." A high price thus reflects high quality because if quality was not sufficiently high, informed consumers would refuse to buy the brand at that price.

If the quality of a product cannot be evaluated before purchasing, and there is no way for the seller to credibly signal the quality of his product, then this may well lead to a situation where only sellers of goods with poor quality remain in the market, at least when products are relatively indistinguishable.[15] This is, however, no longer the case when the manufacturer can credibly and convincingly use the aforementioned cues to communicate superior quality. How such a separation between high-quality and low-quality products can be achieved through prices is further discussed below.[16]

In the case of goods where quality can change quickly in production and distribution, e.g. where it depends critically on care and hygienic standards, past experience may, however, provide little information about present (or future) quality of a product. The manufacturer can, however, still be incentivized to maintain high quality, and higher prices can still serve to further increase these incentives. If a manufacturer does not take sufficient care to continuously monitor and maintain the high quality of its products—for instance, by ensuring the necessary hygienic standards in processing dairy products—its reputation may be seriously and permanently damaged if a severe decline in quality becomes public—in the context of food scandals as cases of

[14] In his original article Scitovszky discusses the phenomenon mostly based on anecdotal evidence and notes *inter alia* that "in the United States 'expensive' is in the process of losing its original meaning and becoming a synonym for superior quality. Worse still, one of the largest American breweries uses the advertising slogan: 'Michelob, America's highest-priced beer!'" T. Scitovszky, *Some Consequences of the Habit of Judging Quality by Price*, REV. ECON STUDIES 12: 100–105 (1944).

[15] Following Akerlof, this is called the lemons problem in economics. A classic example is the market for used cars. Someone who considers selling his car, which he knows to be in good shape, will find it very hard to convince a potential buyer that he in fact never had an accident with the car. Hence, the potential buyer will take into account the risk of ending up with a "lemon" and is therefore only willing to pay a price that is less than the value of a car in good shape. At such a low price, however, the owner of a car in good shape would not be willing to sell. Hence, only someone who knows that his car is a "lemon" would be willing to sell at this price, so that the fact that a particular car is up for sale in such a "lemons" market indicates that it must have poor quality. G.A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, Q. J. ECON. 84: 488–500 (1970).

[16] Related arguments have been made, for instance, by A. Wolinsky, *Prices as Signals of Product Quality*, REV. ECON. STUDIES 50: 647–58 (1983) and M.H. Riordan, *Monopolistic Competition with Experience Goods*, Q. J. ECON. 101: 265–279 (1986).

safety or health hazards. In this case, consumers often may continue to shun the manufacturer's products in the future although his quality issues may be long gone. The higher the prices, and therefore the higher the margins of the manufacturer, the more expensive this will be.[17]

While there is the need to preserve incentives for the manufacturer to ensure high quality as well as a corresponding perception of high quality for already established products, with new products the issue of quality perceptions is arguably particularly relevant. This is the case even when some aspects of quality are relatively persistent, as early in the lifetime of a product only very few consumers will be able to evaluate its true quality. In particular, in such circumstances it seems that the proper choice of price, as a means of communicating information about quality to those consumers who had no or only limited experience of the product, is of particular importance.[18]

The link between price and perceived quality was put to empirical testing very early on in the marketing literature.[19] Some of the respective findings are singled out below. While evaluating and comparing the positive and negative attributes of different products represents a difficult task for consumers, price—by contrast—is relatively easy to compare. This would suggest, as has been documented in the literature, that price is of particular relevance as a cue for quality when consumers have to decide quickly.[20] Further, an individual quality cue such as price should be more relevant if consumers have few alternative cues to infer a product's quality. This can be the case for new products or brands that are still little known. So there can also be a complementary role of price and other quality cues in the optimal marketing mix.[21]

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[17] *Cf.* B. Klein & K.B. Leffler, *The Role of Market Forces in Assuring Contractual Performance*, J. POL. ECON. 89: 615–641 (1981) or C. Shapiro, *Premiums for High Quality Products as Returns to Reputations*, Q. J. ECON. 98: 659–679 (1983). Adjusting the price over time, depending on perceived quality, may not be feasible as this not only confuses consumers or involves high costs for manufacturers and retailers, but also because a reduction in the price may itself be seen as an indication of low quality provision in the future.

[18] When high quality is more costly to produce than low quality, a low-quality firm's profit margin is higher, so that the immediate reduction in demand that is induced by a price increase is more costly for a low-quality firm than for a high-quality firm. As discussed above, this channel, which links price to quality perception, is present both here and when products are more mature but quality must be continuously upheld. *Cf.* K. Bagwell & M.H. Riordan, *Equilibrium Price Dynamics for an Experience Good*, Discussion Paper, Northwestern University, Center for Mathematical Studies in Economics and Management Science (1986); K. Bagwell & M.H. Riordan, *High and Declining Prices Signal Product Quality*, AMER. ECON. REV. 81: 224–239 (1991); K. Bagwell, *Pricing To Signal Product Line Quality*, J. ECON. & MGMT. STRATEGY 1: 151–174 (1992); or M.C.W. Janssen & S. Roy, *Signaling Quality through Prices in an Oligopoly*, GAMES & ECON. BEHAVIOR 68: 192–207 (2010). Focusing, in particular, on pricing over time, *see,* in the marketing literature, D.J. Curry & P.C. Riesz, *Prices and Price/Quality Relationships: A Longitudinal Analysis*, J. MARKETING 52: 36–51 (1988) or D.R. Lichtenstein & S. Burton, *The Relationship between Perceived and Objective Price–Quality,* J. MARKETING RESEARCH 26: 429–443 (1989).

[19] *Cf.* H.J. Leavitt, *A Note on Some Experimental Findings About the Meanings of Price*. J. BUSINESS 27: 205–210 (1954).

[20] *Cf.* R. Suri & K.B. Monroe, *The Effects of Time Constraints on Consumers' Judgments of Prices and Products*, J. CONSUMER RESEARCH 30: 92–104 (2003).

[21] There exist numerous meta-studies that systematically analyze the results from other studies. For instance, despite differences in the respective findings, Völckner & Hofmann conclude that consumers seem to apply simple heuristics, such as "you get what you pay for," which underpins such a link between price and quality perception, Vöockner & Hofmann, *supra* note 10. *See* for instance also V.A. Zeithaml, *Consumer Perceptions of Price, Quality,*

Taken together, the role of price as an important signal of quality, or, more generally, an important, sometimes constitutive part of a brands' image, is well established in the academic literature and even more so among practitioners. In what follows, we further add to the argument and then apply this concept to the respective antitrust question.

III. THE LINK BETWEEN PRICES AND QUALITY

In the previous section some of the marketing and economics literature establishing a link between prices and quality or quality perception was discussed. Based on the formal analysis developed in Inderst & Pfeil (2012),[22] three related channels establishing a link between price and quality can be isolated. Illustrating these channels in detail provides a sound background for our subsequent discussion of free-riding and vertical competition that demonstrates that both rely on the established link between price and quality.

When a higher price is chosen, there is more to be gained by sustaining demand through upholding higher quality. Conversely, when true and perceived quality drop off, e.g. as a consequence of a lowering of hygienic standards, the resulting loss in demand proves to be more costly when the margin that would otherwise be earned on a higher volume is itself higher. This can be termed a margin effect.

In addition, there is also a cost effect: keeping quality perceptions unchanged, a higher price would in itself reduce demand. Then, an increase in the per-unit costs—when this is associated with higher quality—has a smaller negative impact on overall firm profits.

Finally, an elasticity effect is identified. This effect arises, in particular, when not all consumers have the same marginal valuation for quality but when, instead, those consumers who value the product more also have a higher valuation for quality. As the price increases, the critical consumer type, i.e. the type of consumer who is just indifferent to purchasing or not purchasing, now values quality more and, consequently, reacts more strongly to a perceived change in quality. In other words, as the price increases, this renders the product's demand more responsive to changes in quality, which then increases the firm's incentives to indeed provide high quality.

Based on this link between price, quality, and quality perception, manufacturer price ownership could lead to higher equilibrium quality and quality perception than retailer price ownership. This is the case because only the manufacturer fully takes into account the implications that individual retail prices have on the product's overall quality perception. From the manufacturer's perspective individual retailers place too much emphasis on the sales in their individual store, ultimately resulting in free-riding on consumers' quality perception.

Further, when there is retail competition, what matters in negotiations between the manufacturer and individual retailers is how easily they can substitute for the counterparty, i.e. by stocking another product or relying solely on other outlets. When one retailer decides not to stock the respective product any longer, then the manufacturer will be able to attract more

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and Value: A Means–End Model and Synthesis of Evidence, J. MARKETING 52: 2–22 (1988) or Rao & Monroe, *supra* note 8.

[22] R. Inderst & S. Pfeil, *Branding, Quality, and Price Ownership through RPM*, mimeo (2012).

consumers and sales at other outlets when the product's quality perception is higher. In turn, the share of consumers that the retailer that delists this product attracts, and the respective profits, are then strictly lower. In essence, a higher quality perception, as sustained (credibly) through a higher price thus puts the manufacturer in a better—and the retailer in a worse—position when the two parties do not come to an agreement.

Taken together, the preceding discussion thus isolates two rationales for why control over the price matters for branded products in light of the established link between price, quality, and quality perception. Both rationales derive from a conflict of interest between retailers and manufacturers: first, manufacturers typically fully internalize the implications that prices have on consumers' overall perception of quality, whereas individual retailers will tend to free-ride; second, as consumers' perception of high quality enhances a manufacturer's bargaining power but may decrease that of retailers, the latter have less incentives to uphold high quality perception through the corresponding choice of the retail price.[23]

IV. CONCLUDING REMARKS

Competition law and economics has traditionally come to view high prices as a direct result of various forms of anticompetitive conduct. The nexus between higher prices and consumer harm is similarly ingrained in the minds of competition lawyers and economists alike. This also holds true for vertical effects, where efforts to control prices by manufacturers are easily interpreted as eliminating other sources of competition in an effort to maintain artificially high prices. This focus on low prices is also reflected in the weighing in of inter-brand competition as a counterbalancing force to eliminated or reduced intra-brand competition.

While vertical restraints can be used in an anticompetitive way, we have attempted to demonstrate that competition law risks overshooting the mark if no account is taken of both the fundamental use of price as a signal of quality and of the important role prices play for manufacturers in their overall "marketing mix" decisions. As set out above, there is a well-established link in both theoretical and empirical work between price and quality. More generally, price is recognized by both practitioners and (notably marketing) scholars as a key part of a product's brand image and, as such, as a key "cue" for consumers. It is thus far more than a simple transfer between consumers and firms, implying that a lower price is not always beneficial for efficiency and consumer welfare. While in a narrow sense, that is *ceteris paribus*, a lower price will always be better for a consumer than a higher price, especially if that consumer is the only one in the position to benefit from the reduced price, it has been shown in this article that the choice of price may have fundamental repercussions for the product itself, thereby rendering the required competition analysis in assessing the effects of vertical restraints much less straightforward.

Overall, ignoring these wider functions of prices when restricting manufacturers' practices, including the use of vertical restraints, may thus come at a cost. Ignoring these functions risks curtailing the possibilities available to brand manufacturers to successfully

[23] In both instances it is immediate that the retailers' preferred price may not coincide with the price level that maximizes efficiency and welfare. Competition law and policy that rigidly allocates control over the retail price to retailers may thus cause a reduction of consumer welfare.

develop a high quality brand and experiment with different distribution approaches in a changing market place.