

WORKING PAPERS



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WORKING PAPER NO. 66

June 1982

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BUREAU OF ECONOMICS
FEDERAL TRADE COMMISSION
WASHINGTON, DC 20580

VERTICAL RESTRAINTS AND ECONOMIC EFFICIENCY

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The opinions expressed are my own and do not necessarily represent those of the Federal Trade Commission, its staff or individual commissioners.

An earlier version of this paper was presented at the Annual Meeting of the Eastern Economic Association, Washington, D.C.,
April 29, 1982

Gerard Butters, Edward Golding, Michael Lynch and Morris Morkre made very helpful comments on a previous draft.

I - THE BORK-POSNER MODEL

Among economists and legal scholars a consensus may be developing that purely vertical restraints are beneficial and, perhaps, ought to be declared, per se, legal. The growing acceptance of this viewpoint is primarily due to the work of Robert Bork (5, 6, 7) and Richard Posner (25, 26, 27). They present the world of vertical restraints as essentially binary.

Either, A - the restraints were imposed on the manufacturer by a dealer cartel, in which event they are horizontal in nature and generally restrict output; or, B - the restraints were not imposed as in A and were therefore voluntarily adopted. In that event the manufacturer's principal motivation was to cure a free-rider problem and ensure that retailers did not provide a suboptimal amount of service with the manufacturer's product. Voluntary restraints are said to be efficient in each of three senses - they are profit maximizing for the manufacturer, increase the efficiency of distribution and improve the industry's welfare performance.

Bork is satisfied to proceed "by elimination" (6, p. 122-3). Since effective dealer cartels are relatively easy to spot, if A is not observed, we may assume that B has occurred. Further, Bork argues that given the difficulties of making meaningful and accurate welfare calculations, we should simply rely on economic theory for assurance that distributional efficiency and social welfare have, in fact, been advanced by the restrictions.

Posner is not as certain that dealer cartels are so easily discoverable. (26) Although Posner seems subsequently to have moved very close to Bork's position on measuring the welfare effects, he had previously proposed a simple test. If the manufacturer's output, or his market share if industry output was non-constant, increased (decreased) as a result of the vertical restraint, it should be concluded that social efficiencies had changed in the same direction. (26)

My ideas about the causes and effects of vertical restraints have been strongly influenced by three concepts - Schumpeter's theory of "creative destruction" (29), further developed by Palamountain under the heading of "intertype competition" (23), and by McNair's notion of the "wheel of retailing" (19). Inevitably, also, my approach incorporates observations and intuitions acquired over a 25 year period as a manufacturer in a number of consumer goods industries.

The A and B scenarios of Bork and Posner have, of course, often occurred. But the vertical restraint universe is far from binary. Inclusion of the realities that fall outside of the Bork-Posner dichotomy result in a considerably less benign assessment of the social welfare consequences of voluntary vertical restraints, especially from a dynamic efficiency perspective. I will sketch out a number of these non-conforming scenarios and then focus on the most interesting and important case - vertical restraints, voluntarily adopted by profit-seeking producers, that have socially adverse effects by impeding the growth of new, more efficient forms of retailing.

Plan of the Paper

In the following section the three distinctive, although somewhat overlapping, types of free-riders are presented and their welfare implications summarized. Realities not present in a Bork-Posner world are seen frequently to cause manufacturers voluntarily to embrace vertical restraints, rather than a more socially efficient solution to the traditional "special services" free-rider problem.

In Section IV it is observed that RPM and selective distribution are pervasive in industries where individual manufacturer's brands do not enjoy loyal consumer franchises and in those where consumers are poorly informed and depend on retailers for information about manufacturers' brands. Such industries are dominated by the distributive trade, and restraints on

intradbrand competition naturally evolve, whether or not there are free-riders or dealer cartels. The vertical restraints are seen to be associated with very wide gross distribution margins, and at least in a normative sense, with poor industry performance.

A prisoner's dilemma situation is then presented wherein one manufacturer adopts RPM to ensure that dealers provide special services, and other makers are forced to follow. Yet retailers in the aggregate furnish consumers no greater quantity or quality of services, and industry output declines with the higher retail prices.

The evidence referenced in Section V implies that through "marketing inertia" leading makers have retained outmoded intradbrand restrictions that no longer served to maximize the firms' profits, sometimes with deleterious social welfare consequences. Though such behavior is doubtless atypical, it appears more common than Bork and Posner have been prepared to admit.

In Sections VI and VII, the Low Margin Retailer and Dynamic Efficiency Perspective, I endeavor to identify some omitted relationships and erroneous implicit assumptions in the Bork-Posner model. First, by reference to the historical record, it is shown that the major mass retailing innovations (the original department store, mail order house and chain store in the 19th century and, more recently, the supermarket and discount store) have entered the marketplace with a different rather than an inferior package of services. Simultaneously, they have enjoyed lower costs than the incumbent merchants of the day in the performance of the normal retailing functions that are common to both classes of stores.

Next, we explore improvements in distributional efficiency and their relationship to vertical restraints. Two forces, often interacting symbiotically, appear to deserve major credit for generating advances in the productivity of distribution - the advent of a new and more efficient retailing form and of manufacturers' brand advertising into a product class. With their markups

severely depressed from these two sources, incumbent dealers, acting independently and at times collectively, have persuaded manufacturers that it was in their self-interest to restrain intrabrand competition. Contrary to the direction of causation in the Bork-Posner version, vertical restraints did not produce the initial productivity gains but instead reflect the efforts of high cost trade firms to contain or roll back the initial gains in distributional efficiency.

The manufacturer's reluctance to do business with discounters will be greatest when traditional dealers have cartelized, and otherwise, in product classes where consumer decisions are heavily influenced by store reputation and by the product information imparted by retail sales clerks. Yet neither dealer (nor producer) cartels nor free-riders need be present. For as generations of consumer good makers have discovered, price cutting by entering low-margin retailers can cause the manufacturer to lose considerable volume from his existing network of relatively inefficient dealers. The manufacturer is likely to adopt vertical price or distributional restraints should the expected near-term loss loom larger than the expected near-term gain from supplying the challengers free of RPM. The outcome of the calculation is crucially dependent on the respective market shares of the two types of retailers, a relationship ignored in the Bork-Posner paradigm.

In sum, the problem for the new mass retailing innovation is its combination of low market share, superior efficiency, and frequently also, a poor consumer image. Its pace of entry can be severely retarded by an initial inability to obtain popular manufacturers' lines, and the reputation that goes with them.¹ And I believe that the historical record sustains Schumpeter's and Palamountain's insight that most advances in distributional efficiency owe far more to intertype competition from new kinds of retailing institutions than to the vigor of inter-dealer competition between conventional

¹ RPM often has the same effect as a refusal to supply, for an entering mass merchant can jeopardize his low-price image by selling well known brands for the same price as traditional stores.

stores. Therefore, even voluntary restraints can create rigidities that sustain the market share of high cost, incumbent dealers and delay the development of a more efficient retailing structure in the industry.

Just as the establishment of vertical restraints was seen to imply negative externalities, the abandonment process involves positive ones. The restrictions break down when a leading producer decides to commence supplying the mass retailing segment free of RPM, but the producer does not capture the full benefit of the process he sets in motion. For once the mass merchants can offer a preeminent manufacturer's line in a product class, their market share and consumer reputation receive a decisive boost. Shortly, many other producers come knocking on the mass merchants' door. Dealer margins and consumer price levels fall, and industry output rises.

Simultaneously, manufacturers distributing through capital intensive, generally self-service retailers, will expand their advertising outlays to provide the basic product information formerly furnished by the sales clerks of labor intensive stores. Such expenditures are also essential to strengthen the brand's consumer franchise, so that its retail distribution can be maintained in the face of declining dealer margins.

As argued in Section VIII, the new mass advertising/mass merchandising structure that now emerges represents a far more efficient vertical system in most consumer goods industries. It is also shown, by example of the toy industry, that free-riders play a greatly diminished role when manufacturers are no longer beholden to relatively inefficient retailers for their distribution and for the provision of basic information about their products.

III - FREE-RIDERS

The Special Services Free-rider

The traditional "special services" free-rider, as Lester Telser dubbed it, (34) occurs when a consumer who obtains information (or other services) about a product from a "full service" dealer, such as a department

store, purchases it elsewhere at a discount price from a retailer who does not provide the special service. It is only the avoidance of this cost that is said to enable the second merchant to undersell the first. Given this assumption, a functional allowance would seem the optimal solution, both privately and socially. By reimbursing the department store on proof of performance for its extra cost in providing the special service, the discounter's cost advantage is eliminated. Unlike vertical price or distributional restraints, this should allow the manufacturer's product to continue receiving the valuable informational services of the department store while also benefitting from additional distribution and lower resale prices through its presence in discount stores.

The literature poses two, generally mistaken, objections to this solution. First, it speculates (6, 27, 34) that high transaction costs make functional allowances unfeasible. Yet vertical restraint programs tend to be even costlier due to the expenses of careful dealer selection, policing transshipments, and discovering and disciplining price cutters.

Second, Bork (6, p. 435) and Posner (25, p. 161) contend that the producer's most cost effective method of ensuring that his dealers render the desired level of special services is simply to adjust the restrictiveness of the intrabrand restraints. This disregards the common experience that, whatever the extent of restrictiveness, linking payment to proof of performance dramatically increases the quantity of special services that dealers will in fact provide.²

Rather, the resort to vertical restraints is commonly due to relationships that are not present in a Bork-Posner world. RPM may be necessary because a functional allowance covering the traditional merchant's

² With a partial exception for products sold through highly specialized retailers, where territorial exclusives may provide all the necessary motivation.

cost for providing the special service erases only part of his cost disadvantage to the discounter. Or the department store may object to the manufacturer supplying the discounter because the latter's image will be enhanced by the carriage of popular manufacturers' lines.

In conclusion, although voluntary vertical restraints are by definition intended to be efficient for the manufacturing firm, when they, rather than a functional allowance, are embraced to solve the special services free-rider problem, the private and social welfare consequences can be divergent.

The Missionary Work Free-rider

What might be termed the "missionary work" free-rider can appear within a homogeneous set of dealers, some of whom incur the initial cost of popularizing the manufacturer's brand in their market and the rest of whom wait to see if the item catches on before stocking it. This type of free-rider is most frequently encountered in the early life cycle phase of complex, new products as well as with small market share brands (like Sylvania) competing against well established manufacturers lines.

Compared to performing a special service, missionary work commonly involves a far greater firm-wide resource commitment and significantly more risk for the merchant. Therefore the manufacturer generally finds that a functional allowance is not adequate to the task, and that he may be compelled to restrain intrabrand competition to achieve the desired dealer cooperation. This probably represents the most socially useful application of vertical restraints. ³

3

Although, if the industry becomes structured so that manufacturers can perform most of the missionary work, new products can often be introduced with few or no vertical restraints, to the still greater benefit of society.

The Reputation Free-rider

The role of what I refer to as the "reputation free-rider" has not been sufficiently appreciated. When a brand whose reputation has benefitted by association with prestigious stores becomes distributed in outlets whose pedigree has been less firmly established, there is a "rub off" of goodwill on to the less well regarded stores that helps to establish their bona fides with consumers. Since reputations are not costless to come by, the latter retailers are free-riding to the extent that carriage by the prestigious stores had enhanced the brand's reputation. However, no free-rider is involved with respect to the rub-off of that portion of the brand's goodwill that was created by the manufacturer - say, through advertising or word of mouth from satisfied users.

Vertical distribution restrictions voluntarily imposed to avoid reputation free-riders would appear to be socially efficient in a static context but do raise dynamic efficiency problems. These are more thoroughly analyzed in Section VII.

IV - CONSUMER INFORMATION AND DEALER POWER

In this section we briefly examine the relationships that typically obtain for all non-commodity type goods in unadvertised product classes and then contrast the situations encountered in convenience and shopping good classes where manufacturers' brands have substantial market power.⁴ To the extent that producers are dependent on dealers, they will tend, voluntarily or otherwise, to adopt vertical restraints. The confident Bork-Posner assertion that the intrabrand restrictions produce an efficient distribution system is difficult to support.

The Unadvertised Industry

Typically in unadvertised, non-commodity type consumer goods industries,

⁴ The analysis is similar in many but not all aspects to Michael Porter's. (24)

individual manufacturers' brands are sparsely distributed and are resold by dealers for a high and uniform retail price. This pattern prevails in the absence of dealer collusion, even in product classes where merchants perform few services and free-rider problems are unimportant.

In such categories individual manufacturer's brands do not enjoy a loyal consumer following, and shoppers are generally content to make their selection from among the items the merchant chooses to offer. Dealers are then in the position decisively to guide interbrand choice according to the particular manufacturers' lines they elect to stock. Simply to get and maintain their brands on retail counters, manufacturers need to adopt policies assuring that intrabrand price competition does not erupt.

In fact, only occasional formal effort is needed to enforce the rule of thumb by which retailers will approximately double the factory invoice price to set their resale price. For the underlying conditions that make for a competitive intrabrand market at the retail level are not present.⁵ The de facto RPM is a product of consumer ignorance, arising from the high cost of inter and intrabrand search that results from a socially suboptimal level of manufacturers' advertising and sparse distribution of individual brands. This does not imply that retailers are making supracompetitive rates of return. For, in Chamberlinian fashion, entry generally turns short term profits into longer term costs, leaving society no better off than before.

Although the vertical restraints are associated with inefficient distribution, as mere reflections of basic structural relationships in the industry, they are not remediable by consent orders against individual manufacturers. For should a little price cutting then break out on the brand, the dealer need only substitute another in its place.

⁵ What is required is a host of consumer buyers and of retail resellers and immediate consumer recognition that Xa, Xb and Xc - the same manufacturer's Brand X on sale in stores a, b and c - are homogeneous. Otherwise, there is product differentiation in the intrabrand market. See (32, 33).

Advertised Convenience Good Industries

In advertised convenience good industries (where the goods are low in price and repetitively purchased), the leading advertised brands are ubiquitously distributed through efficient, capital intensive, self-service outlets. There is virtually no resale price maintenance and gross distribution margins are thin. Despite the narrow markups, retailers are unable to substitute for Maxwell House Coffee, Campbell's Tomato Soup, or Tide.⁶ Significantly, consumers of such items do not rely on retailers for basic product information. They receive this via the manufacturer's advertising messages and package copy and from experience with the product itself.

Shopping Good Industries

By comparison to convenience goods, shopping goods are expensive, infrequently purchased, generally more complex, and stylishness is more likely to be an important attribute. In shopping goods, as Michael Porter (24) and before him Neil Borden (4) observed, consumers are more reliant on the merchant's advice and reputation. Therefore, even with quite popular and well advertised manufacturers' lines, the important retailer is in a position substantially to influence interbrand choice, and his bargaining leverage against the manufacturer will be stronger. Accordingly, even in the absence of retailer cartels, RPM and restricted distribution are likely to be found in shopping good product classes.

Nonetheless, case histories suggest that on powerful, long established staple brands, removal of the restraints can lead to increases in distributional efficiency and in social welfare for the industry.

⁶ Storewide, supermarket gross margins in 1980 averaged 23.4%, but were only 9.8% in ground coffee, 11.9% in tomato soup and 14.5% in laundry detergents. (10) Gross margins of the leading advertised brands are virtually always well below average for their product class.

Special Services and the Prisoner's Dilemma

When the advice of retailers is important in guiding consumer selection, the industry's manufacturers may voluntarily adopt vertical restraints that raise price and reduce industry output without producing any increase in the quality or aggregate quantity of information provided consumers of the industry's goods. This prisoner's dilemma situation, which may be reasonably common, might occur in a proprietary drug category in which individual brands enjoy a degree of consumer recognition and market power, but "special services" (i.e. the pharmacist's recommendation) also influence consumer buying decisions.⁷

Suppose, in recognition of this relationship, the maker of Doctor X's Headache Powder increases his market share by raising the druggist's margin and by protecting it with RPM. Other manufacturers are then forced to follow suit, the degree of elevation in suggested resale prices being dependent on interbrand cross-elasticities of demand. But the industry demand curve is not thereby shifted out, since, as before, the pharmacist can only recommend one remedy per customer with a headache. The higher dealer markups reduce industry output. All manufacturers are worse off than before the RPM, but none can now afford to drop it without being worse off still.

The new equilibrium will probably prove stable unless, A - one of the makers can so strengthen his consumer franchise through advertising that druggists are forced to stock his remedy at reduced margins, and/or B - there is a rapid and fairly simultaneous entry of a new type of self-service outlet that provides a sizable alternate distribution channel for manufacturers who abandon RPM and are dropped by the traditional druggists. Both events undermine the traditional druggists' monopoly power on information.

⁷ Telser presents this very situation in which both drug producers and drug retailers have market power. He concludes: "The special services argument explains why one manufacturer may want to establish retail prices but it cannot explain why a group of competing manufacturers would favor this policy". (34, p. 96) That result, he suggests, would require collusion. But the prisoner's dilemma situation can also produce it.

V - MARKETING INERTIA

Bork and Posner both recognize that if manufacturers erroneously adopt RPM the consequences can be socially inefficient. However, they each conclude that mistakes of this sort are extremely rare. (5, p. 404; 25, p. 157) Other respected scholars are not so certain. In fact, Neil Borden, (4, p. 800) Stanley Hollander (16, pp. 86, 94) and Gould and Yamey (15, p. 728) have found that manufacturers of wellknown brands have retained RPM and other vertical restraints past the time that they seemed to serve the firm's profit maximizing purpose, and that the results may have been socially inefficient. The explanation for such conduct runs to underestimating the elasticity of consumer demand, ignorance, extensive risk aversion and satisficing behavior. All of the foregoing might be subsumed under the term marketing inertia, recently suggested by Thomas Bonoma. (3)

Of course, only manufacturers whose brands enjoy strong consumer franchises are in a position to contemplate abandoning vertical restraints, for it is this property which makes it difficult for retailers to drop or even downplay items when intrabrand competition develops. Examining the aftermaths of vertical restraint cases against some wellknown brands yields some interesting results. In the Corning (13) and Levi Strauss (17) RPM cases brought by the FTC, extensive retail price cutting and output gains appear to have ensued after the abandonment of RPM. ⁸

⁸ Regarding Levi Strauss, the maintained resale price on Levi's appears to have held an umbrella over dealer margins and retail prices of other brands in the basic jeans business. The end of RPM by Levi's led to a decline in dealer margins throughout the category, to some increases in the manufacturing margins and unit sales of Levi's, but forced a decline in the factory prices of other brands. There was a substantial decline in overall consumer price levels. (31) In other words, per the Posner prediction, the restrictions proved inefficient for Levi Strauss, for the distribution system and for social welfare.

By contrast, the Arnold, Schwinn & Co. share of the domestic market shrunk from 22.5% to 12.8% in the decade following adoption of its restrictive distribution policy (7) that was successfully challenged by the government. (35) The Posner output or market share test would suggest that the vertical restraints were detrimental to the firm and therefore also to society. In the bicycle trade one hears the former interpretation but not the latter. For other bicycle makers simply moved in to fill the distributional void, so that social welfare was not affected by the presumed deterioration in Schwinn's private welfare.

VI - THE LOW MARGIN RETAILER

The final, and perhaps the most important shortcoming in the Bork-Posner rubric, is its treatment of the price cutting retailer. I cannot find a kind word on behalf of discounters in this entire literature, a considerable irony for a school that so admires efficient distribution. The explanation clearly is that the discounter's lower prices are ascribed entirely to free-riding on the services performed by traditional merchants.

The Bork-Posner school does not seem to have entertained the proposition that the lower prices reflect lower costs for the performance of those services which are provided by both types of retail stores, nor that the discounter's total service package might more accurately be described as different than rather than inferior to the one offered by the so-called "full service" retailer. Evidence for the above proposition is briefly sketched below, leaving to the following section a description of the behavior of traditional retailers and of manufacturers to the entry of the low margin retailer.

In summary, most advances in distributional efficiency have involved enlarging the scale of operation, greater capital intensity and improved management techniques. These have been achieved by internalizing the

wholesaling/retailing functions under one ownership, by (within limits) increasing average store size and by the chain method of operation. (8, 20, 23) Self-service, which permits a substitution of capital for labor, has been central to many of the recent productivity gains in the distribution of popular priced consumer goods. It has been achieved by shifting the information burden from store sales clerks backward to the manufacturing level. It is my thesis that the replacement of the mass advertising/mass retailing structure for the manufacturer/wholesaler/labor intensive, small retailer format normally results in increased productivity for the entire vertical system.

Major Mass Retailing Innovations

Innovations with the potential for advancing distributional efficiency have characteristically been embodied in new retailing institutions. The principal mass retailing innovations have been the original department store and the general mail order house in the post-Civil War period, the chain store at the end of the 19th century, the supermarket in the 1930s and the discount store in the 1950s.⁹

It is worth noting that the evidence presented below seems generally supportive of Malcolm McNair's "Wheel of Retailing" theory. (19) In this life cycle concept, new retailing institutions enter as low cost, low margin operators and eventually evolve into high cost, high margin sellers vulnerable to the next retailing innovation.

Department Stores. The original department stores (among which were A. T. Stewart, Wanamaker, R. H. Macy and Marshall Field) collected a far vaster assortment of merchandise under one roof than the specialized retailers of the

⁹ There have also been a number of innovative, low cost specialized types of retailers, of which jean chains and toy supermarkets are among the more recent examples. Catalog showroom retailers, originally jewelry specialists, are now underselling discount houses in many markets on traffic appliances, electronics and related goods - illustrating the propensity of the specialist, after successful entry, to branch out into other merchandising lines.

day. They introduced "satisfaction guaranteed" policies. A major department store innovation was the single price, no-haggling policy that reduced transaction time and opened the way for the provision of increased information by large scale newspaper ads that included price. While providing this rich bundle of services, the department stores were able to capture much of the apparel market from the traditional drygood stores by being able profitably to operate at nearly half the former's gross margin. (8, p. 60) They also cut prices on bicycles, the first consumer durable good to be aggressively advertised, and took trade from the traditional cycle dealers in the 1890s.

The General Mail Order House. Meanwhile, the original general mail order houses, Montgomery Ward and Sears & Roebuck, were bringing to rural and small town America a far larger assortment of goods and more sophisticated "big city styles" than were available in the country store. They also offered, of course, the convenience of shopping at home. It was this service package, in combination with major operating efficiencies, that proved so devastating to the turn of the century small town merchant. These efficiencies permitted the mail order firm to undersell the local competition, while operating at gross margins that were 20 percent or so below the combined margins of the general store and the wholesaler who serviced it. (2, p. 92)

Chain Stores. The chain store method of operating proliferated in food, drugs, general merchandise and other categories of goods beginning in the late 19th century. Compared to the independent, the individual chain store unit was larger, offered a somewhat greater merchandise selection, but otherwise had a generally similar service package. An exception was Frank Woolworth's innovation involving a new dimension of specialization. Originally nothing sold for over a dime in a Woolworth store.

In both the food and the drug business during the early decades of the 20th century, large chains were able to undersell independents by a

combination of internal operating economies and lower invoice costs due to larger purchases. (8, 23)

Supermarkets. Many students of retailing consider the supermarket the most important of all retailing innovations. It was launched in the depressed 1930s by independent entrepreneurs and later adopted by the major chains.

The essence of the non-price appeals of the supermarket lay in long hours of operation, free parking, wider merchandise selection and a format that facilitated easy inspection and rapid checkout of the goods. The pioneer supermarkets operated at 10 to 11 percent gross margins, half or so of the clerk serviced chain and independent stores. (8, p. 86) The early supermarkets often undersold the major food chains by 10 to 15 percent on well known brands. (1) Of all the principal retailing innovations, the growth of supermarkets has been the least hampered by vertical price and non-price restraints. 10

Discount Stores. The discount store innovation applied supermarket techniques to non-food retailing and offered the same non-price appeals of convenience and of economy in shopping time. During the 1960s and 70s discount stores like K-Mart undersold variety stores, mail order houses and department stores. They replaced the latter as the leading outlet for general merchandise, apparel and furniture. 11 The discounter's gross margin has held at around 27 percent,

10 There are several reasons. Much of the merchandise is produce or commodity-type goods whose resale prices cannot be maintained without a distributor or producer cartel. There are more obstacles to RPM on branded foodstuffs than on branded non-food items. Agricultural raw materials, whose prices are constantly fluctuating, are the dominant component of the former's cost. And compared to non-foods, food products have fewer credence attributes and are purchased more frequently, enabling consumers more readily to judge comparative brand quality by trial. Thus, a single food manufacturer setting supracompetitive retail margins and prices would more rapidly lose market share to a non-price maintained manufacturer's brand or to the retailer's private label.

11 Recent trends in the popular priced shoe business indicate why self-service is not necessarily poor service. In operations like K-Mart, which now sells 7.4 percent of all pairs of shoes in the United States, (9) one can often try on and check out the shoes in less time than it takes the shoe clerk in the traditional store to finish with the customer he is waiting on and go back to the stock room to find your size.

while that of the department store has escalated from about 22 percent in 1889 to about 36 percent in 1947 and over 42 percent currently. (2, 21, 22)

VII - INCREASING THE EFFICIENCY OF DISTRIBUTION

This section brings to bear the various relationships earlier identified to explore how increases in distributional efficiency have historically been generated and what role vertical restraints have played in that process.

Recall, in the Bork-Posner rubric it is the adoption of vertical restraints by a manufacturer with a free-rider problem to solve that improves the efficiency of distribution by ensuring that dealers provide an adequate level of services.

Note that the causation here runs only in one direction, from vertical restraints to distributional efficiency! Moreover, distributive efficiency is very narrowly and curiously specified in terms of dealer service levels, without reference to the quantity of society's resources required to move goods from factories to household consumers.

As I read the historical record, productivity gains in distribution have been primarily due to two forces, often acting in concert - the entry of a new type of retailer and the introduction of manufacturers' brand advertising into a product class. Elsewhere, I have shown that the coming of advertising drives down the factory/consumer price spread by increasing intrabrand competition and by lowering dealer costs through faster turnover. (30, 31, 32, 33) The conventional, labor intensive dealer, whose margins have already been depressed from this source, now finds himself under horizontal assault from the new-breed retailer. The latter's capital intensive production function, often featuring self-service, is exactly suited profitably to resell wellknown, high turnover brands at slim markups over factory invoice cost.

In fact, all major mass retailing forms have entered the fray as price cutters, (20) seeking to use their comparative cost advantage to gain

market share from traditional dealers by underselling them on staples and on the most popular manufacturers' brands - the items whose prices are most familiar to consumers. (18, 33)

The Role of Vertical Restraints

In this recurrent scenario, contrary to the Bork-Posner model, vertical restraints are the result not the cause of increased distributional efficiency! They represent a desperate counterattack on the part of the besieged, less efficient elements in the trade to stem or roll back the rising tide of distributional productivity.

Schumpeter pointed out that this kind of challenge to the incumbent merchants "strikes not at the margins of the profits and the outputs of existing firms but at their foundations and their very lives". (29, p. 24) The new retailing innovations were for him part of the process of "creative destruction". It was they, rather than "additional shops of the same type", that have provided "the competition that matters" in the retail trade. (29, p. 25)

Joseph Palamountain dubbed this rivalry between different kinds of retailers "intertype competition", and he showed that it has played a decisive role in promoting efficient distribution. (23)

The strategy of the traditional trade has been to "cut the enemy's supply lines", as Palamountain observed. (23, p. 45) For, effective entry into mass retailing is importantly a matter of obtaining a good selection of popular medium and low priced manufacturers' lines. The traditional trade would prefer that the manufacturer refuse outright to supply the new-breed retailers, but adoption of RPM often has a similar result. For the entrants commonly refuse to sell wellknown items at the same prices as conventional stores, lest they lose their low-price image. Through their efforts the

traditional trade has openly organized to boycott manufacturers who supply price cutters, and to use political pressures to secure passage of anti-chain store taxes, Fair Trade legislation and the like. (23)

However, frequently no cartel activity has been necessary to persuade the manufacturer to adopt vertical restraints. The market share of the new retailing form is always crucial to the manufacturer's decision, a reality that is not recognized in the Bork-Posner writings. In the absence of either dealer collusion or free-riders, the manufacturer's decision not to supply the low cost/low market share entrants free of resale price constraints may simply reflect a calculation that the expected gain from supplying them would be less than the expected loss of volume from the high cost/high market share, traditional retailing segment.

On the demand side, the initial inability of the new-breed retailers to obtain popular manufacturers' lines retards, per se, their rate of growth. On the cost side, the lower sales volume vitiates part of the mass merchants' comparative advantage over the incumbent dealers by making it more difficult for them to reach minimum efficient scale;¹² and due to the mass merchants' capital intensive production function, MES is likely to require a large output level.

A further welcome result from the traditional trade's viewpoint is that the imposition of vertical restraints diminishes the incentives for manufacturers to expand their advertising budget. It limits the elasticity reducing and marginal revenue product enhancing effects that normally accrue from a fall in the brand's gross distribution margin and a rise in its retail penetration due to increased advertising. (33)

¹² Salop and Scheffman have recently proposed that incumbent firms may create entry barriers by actions that burden entrants with higher costs than the incumbents have. (28)

Reputation Interactions

Vertical restraints frequently also exact a longer term welfare penalty because of the two-way interaction between brand and store reputation. As McNair observed, (19) new mass retailing forms are suspect, even despised at their birth. They desperately need to augment their goodwill by lining their shelves with famous brands. In product classes where traditional stores are able to monopolize the carriage of these desirable lines, new types of retailers find it difficult to improve their image and manufacturers fear to supply them lest that poor image rub off on and degrade the reputation of their brand.

Admittedly, there is also a reputation free-rider in operation, to the extent that the brand's past association with fine traditional stores is responsible for its present standing. But from the viewpoint of dynamic efficiency, the question may be raised, for how long a time period are vertical restraints to deal with reputation free-riders socially beneficial if they have the further result of retarding the entry of more efficient retailers, offering a not inferior bundle of services?

Collapse of the Restraints

In all events, there is a solution to the catch-22 in which leading makers are afraid to deal with mass merchants lest the former's poor reputation, which in good part derives from a previous inability to procure the leading brands, proves harmful to the image of the manufacturer's brand. The breakthrough generally occurs when a leading manufacturer, whose line traditional stores will be slow to drop, is made available to the mass retailing segment. The brand's demand function below its previously maintained resale price proves highly elastic. Huge quantities are moved through the new distribution channel, tempting other producers in the industry also to knock on the mass merchandiser's door.

Always assuming that the mass retailing segment has attained sufficient size, so that the manufacturers who have begun to supply it are no worse off or better off despite the loss of volume from the traditional segment, a great leap forward has been made to a higher welfare plateau. The prior reputation disadvantage of the low margin retailing segment is rather quickly vitiated in this product category by the presence of popular brands on its counters. ¹³

To assure that retailers cannot substitute away from their lines, now that they are being sold at much thinner markups over factory price, the leading manufacturers will typically boost their advertising budgets.

Historically, many product classes have undergone this type of metamorphosis. For there was a decided reluctance on the part of some leading makers to supply the early department stores and later the drug and variety chains, free of resale price maintenance. The failure of the original mail order houses to obtain the most popular manufacturers' lines led them into an increasing reliance on their own private labels. More recently, the early discount houses were plagued by the general unavailability of the most demanded medium priced lines in many merchandise classes.

However, beginning in the late 1950s the most desirable manufacturers' lines in small appliances, toys, cameras, power tools and in most other so-called "hard good" segments became available to discount stores. Vertical restraints continue to prevail on many of the most popular manufacturers' lines in apparel and other soft goods, although there are some hopeful signs that the intrabrand restrictions are weakening.

¹³ The process is analogous to what occurs when a poorly regarded college fraternity with excellent physical facilities manages to pledge the most popular members of the freshman class.

VIII - DYNAMIC EFFICIENCY PERSPECTIVE

It is my thesis that the most efficient vertical allocation of functions in most sizable, moderate priced consumer goods industries provides that the manufacturer furnish basic product information through national and regional advertising, package copy and point of purchase materials. The retailer's informational contribution, aside from effective display, generally consists of small space-per-item newspaper ads which simply identify the commodity or brand and its price. An integrated retailer, or the retailer and the wholesaler, also perform the other distributive functions, taking advantage of the latest state-of-the-art economies of scale and scope. ¹⁴

A major welfare problem with voluntarily adopted vertical restraints is that they introduce rigidities that retard the transition to a more efficient structural arrangement in the industry. When mass merchandisers have small market shares, manufacturers are hostage to traditional small scale, labor intensive retailers not only for distribution but also for the provision of information about their goods. Accordingly, special service, reputational and missionary work free-riders will proliferate, and it will often pay the manufacturer to restrain intrabrand competition in order to cure them. Unfortunately, the vertical restraints also slow the pace of entry of more efficient retailing institutions, although the latter's eventual development probably cannot be prevented except by statutes that legalize collectively imposed intrabrand restrictions. ¹⁵

¹⁴ This arrangement does not invariably optimize welfare in an industry. Under the Manufacturers' Brand Domination structure, in say the internal analgesic industry, intensive brand advertising is associated with towering factory price levels which, despite the thin gross distribution margins, produce inflated retail prices on the large market share brands. The remedy is to encourage the growth of chain store private labels rather than a return to a less efficient distribution system. (31, 32)

¹⁵ It was precisely because such statutes in Scandanavia (and elsewhere in Europe) had held in place an amazingly anachronistic retailing segment in which supermarkets, discount stores and mail order houses barely existed, that the laws were eventually overturned. (36)

History also records that once the new retailing institution has grown to some critical size, it is able successfully to branch out into new merchandise categories. Through this process of intertype competition, the ratio of low to high margin retailers is raised in other industries, leading to further gains in allocative and technical efficiency and to the abandonment of vertical restraints that had previously seemed optimal to manufacturers.

Examples of intertype competition abound. Drug chains originally captured much of the proprietary drug business from independent pharmacies by price cutting, only to become partisans of Fair Trade under siege from the "pineboards" during the recession. (19, p. 104) But after World War II supermarkets, grown large in the food business, entered aggressively and invigorated price competition. In the 1960s discount stores, having achieved success in other fields, began using the price weapon to carve out a major share of the health and beauty aids market.

Example of the Toy Industry

The U.S. toy industry furnishes an excellent example of the foregoing dynamic process. (31) Prior to the mid-1950s, most of the industry's output moved through wholesalers to traditional retailers, where it was resold at fair traded retail prices that were approximately twice factory prices. Toy makers were not only dependent on dealers of this sort for distribution, but for demonstration to consumers of the features of the myriad new product concepts introduced annually. Few industries could have been subject to as many free-riders!

Then came the roughly simultaneous advent of television advertising and the enormous growth of discount stores. No longer were toy manufacturers beholden to relatively inefficient retailers to provide distribution and basic product information. With the transition to a mass advertising/mass

retailing strategy during the 1960s and 70s, intrabrand price restraints were rapidly abandoned. Industry output continually rose, while gross distribution margins and consumer price levels fell. R&D expenditures and product innovation rose apace.

By contrast, the growth, productivity and innovation performance of the toy industry in most European nations during most of this era was retarded by combinations of resale price maintenance statutes, prohibitions on television advertising of toys and the low market share of American style discount houses.

VIX - CONCLUSION

Vertical restraints are sometimes an efficient means of launching new product concepts and of enabling secondary brands to compete with the established leaders. They are likely to be more common and more beneficial in shopping than in convenience good industries.

Still, voluntary vertical restraints are often associated with consumer information problems, inefficient distribution and poor industry performance. For they often represent the manufacturer's optimal adjustment to an industry structure in which distribution remains predominantly in the hands of high cost, traditional dealers on whom consumers rely for quality signals and basic product information.

The process of successful abandonment of voluntary vertical restraints in an industry has virtually always been initiated by a manufacturer whose brand enjoyed a powerful consumer franchise, generally the preeminent one in its field. Typically the manufacturer has acted of his own choice, but occasionally he did so under legal compulsion. If the former restrictions are replaced by vigorous intrabrand competition, there will be a substantial gain in distributional efficiency and in social welfare.

The existence of a low margin, mass retailing segment of some critical size has often been a prerequisite to the initial abandonment decision and to a socially efficient outcome. Therefore, public policy should favor, and certainly ought not discourage, the emergence and growth of efficient new retailing institutions.



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