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Coordinating Channels Under Price and Nonprice Competition

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Abstract

This paper analyzes how manufacturers should coordinate distribution channels when retailers compete in price as well as important nonprice factors such as the provision of product information, free repair, faster check-out, or after-sales service. Differentiation among retailers in price and nonprice service factors is a central feature of markets ranging from automobiles and appliances to gasoline and is especially observed in the coexistence of high-service retailers and lower price discount retailers. Therefore, how a manufacturer should manage retail differentiation is an important channel management question. Yet, the approach in the existing literature has been to examine channel coordination under the standard “symmetric contracting” assumption that offering a uniform contract to all the retailers in a market will be sufficient for coordination. I bring this assumption into question and ask when is it optimal for the manufacturer to use the channel contract to deliberately induce retail differentiation (even if the retailers were ex-ante identical in their cost and other characteristics). The paper identifies the type of channel contracts that can endogenously induce symmetry as opposed to differentiation among retailers.

Next, the paper highlights a type of channel conflict that arises from the very nature of retail price-service competition. A manufacturer might find the retailers to be excessively biased towards price competition at the cost of service provision or vice-versa. The paper establishes when a manufacturer is likely to stimulate greater price as opposed to greater service competition among the retailers.

The framework that I develop to address these issues highlights the role of two basic types of consumer heterogeneity. Consumers are heterogeneous in their locations (as in the spatial models of horizontal differentiation) and in their willingness to pay for retail services (as in the models of vertical differentiation). The model also uses a natural relationship in retail markets between the travel/time cost incurred by a consumer and her willingness to pay: The more affluent consumers who have a higher willingness to pay for retail services also have a higher cost for their personal time. Given these market features, the paper analyzes the problem faced by a manufacturer who sells to competing retailers.

The paper shows that the standard notion in the literature of offering similar contracts to all the retailers is sufficient only in markets with substantial locational differentiation

relative to the differences in the willingness to pay. Effective channel management in these markets simply requires mechanisms that ensure that retailer interests are aligned so that they compete by offering a mix of price and service that is desirable from the manufacturer’s point of view. However, in markets with small locational differentiation and substantial diversity in consumer willingness to pay, the manufacturer’s problem is not just to align retailer interests, but to also use the channel contract to induce the correct level of retail differentiation. This helps the manufacturer to better cater to the diversity in consumer willingness to pay and to prevent the cut-throat competition that the retailers would otherwise have indulged in. The manufacturer can achieve this through the use of menu-based contracts. Menu-based contracts induce differentiated retailer behavior despite the fact that the retailers are not “forced” into accepting different terms of trade. This aspect can be useful in shielding manufacturers from litigation under the Robinson-Patman act.

The paper also shows that for relatively high-ticket items retailers tend to be excessively biased towards competing in the provision of retail services. The correlation between consumer willingness to pay for service and travel costs implies that for high-ticket products, the competing retailers will focus on the more service-sensitive customers at the cost of ignoring the price-sensitive consumers in the market. The manufacturer is therefore likely to encourage greater price competition among the retailers. In contrast, for low-ticket items the manufacturer prefers to reduce price competition and encourage greater provision of services. This provides an endogenous rationale for the use of price ceilings versus floors.

The basic model is also extended to consider the effect of upstream competition between manufacturers. Under upstream competition, coordinating retail price and service decisions is not always optimal for an individual manufacturer. This extension to manufacturer competition provides a basis for understanding the role of retail price-service differentiation in the context of a channel duopoly. It also shows that a mixed distribution channel (a channel in which one manufacturer chooses to be coordinated while the other chooses to be noncoordinated) can be an equilibrium in markets with weak brand loyalty.

(Channel Coordination; Retail Differentiation; Retail Services; Menu-Based Contracts; Consumer Heterogeneity)