

# CO-OP ADVERTISING STRATEGIES IN MANUFACTURER RETAILER SUPPLY CHAINS

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## ABSTRACT

In this study, we explore the role of cooperative (co-op) advertising efficiency of transactions between a manufacturer and a retailer. We address the impact of brand name investments, local advertising, and sharing policy on co-op advertising programs. Game theory concepts form the foundation for the analysis. We begin with the classical co-op advertising model where the manufacturer, as the leader, first specifies its strategy. The retailer, as the follower, then decides on its decision. We then relax the assumption of retailer's inability to influence the manufacturer's decisions and discuss full coordination between the manufacturer and the retailer on co-op advertising.

Main results on classical co-op advertising model: For manufacturer, if his marginal profit is high (for instance, those manufacturers who produce infrequently purchased good such as appliances and linens), he/she knows that infrequently purchased products are not very standing out most noticeably to most consumers, except at the time of purchase or need. Once consumer decides to purchase this kind of product, one always or often makes an overt search among local sources of information, seeking specific product information. In order to give the retailer more incentive to attract consumers, the manufacturer should share more local advertising expenditures with the retailer. On the other, if retailer's marginal profit is high, at this situation retailer has strong incentive to spend money in local advertising to attract consumers to buy these products, even though the manufacturer only shares a small fraction of local advertising expenditures.

Main Results on full coordinated vertical co-op advertising model: (1) All Pareto efficient schemes are associated with a single local advertising expenditure and a single manufacturer's brand name investment and with the fraction of the manufacturer's share of the local advertising expenditures between. (2) Among all possible advertising schemes, the system profit (i.e., the sum of the manufacturer's and the retailer's profits) is maximized for every Pareto efficient scheme, but not for any other schemes. (3) Pareto efficiency yields (a) higher system profit than at Stackelberg equilibrium, (b) higher manufacturer's brand name investment than at Stackelberg equilibrium, and (c) higher local advertising expenditures than at Stackelberg equilibrium. (4) Both the manufacturer and the retailer can gain more profits compared with Stackelberg equilibrium. It should be noted that not all Pareto efficient schemes are feasible to both the manufacturer and the retailer. Neither the manufacturer nor the retailer would be willing to accept less profit at full coordination than at Stackelberg equilibrium.