

Title: Returns allowance and channel performance

Abstract

Accepting returns of unsold stock is costly. Some manufacturers impose a restocking fee while others set a limit/allowance on the quantity of unsold stock that they take back from retailers. The literature has investigated the rationales for accepting returns with a restocking fee and the effects on optimal retail decisions of channel members. However, it is unclear how quantity allowance may impact the profitability of channel members as well as the performance of the channel as a whole. This paper explores the impact of alternative contractual agreements—which include various returns policies (i.e., with a restocking fee vs. a quantity allowance) along with a wholesale price—between channel members facing an uncertain demand on their respective quantity and pricing decisions. We develop a mathematical model involving a supplier and its retailer in Stackelberg leader and follower roles, respectively, and derive the optimal policies to be included in the contract. Our analysis characterizes the tradeoffs involved and identifies conditions (with respect to the channel members' risk aversion and the degree of market uncertainty) under which different returns policies are preferred by the supplier and retailer.

Keywords: Channel Management, Returns Policies, Retailing, Demand Uncertainty.