

Quantity discount strategies and returns policies

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Abstract

This paper examines the relationship between a quantity discount strategy and a return policy by means of a three-stage game approach. In the first stage, the manufacturer considers how to employ a quantity discount strategy and/or a return policy. If he decides to employ a quantity discount strategy, in the second stage the manufacturer will ask the retailer to order the quantity which provides an optimal stocking level for joint profits. The buyback price is also determined by negotiation between the manufacturer and the retailer in the second stage. Finally, the manufacturer sets the wholesale price to keep his promise that the retailer's profits before and after the strategy remain the same in the third stage. In order to keep the retailer's profits unchanged, the buyback price is positively linked with the wholesale price. The quantity discount could be negative if the buyback price under the return policy is too high.

Keywords : Return policy, quantity discount strategy, subgame perfection.

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