

Commitment Based Revenue Sharing Contract

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Abstract : In this paper, we proposed a commitment based revenue sharing contract for a supply chain comprising one manufacturer and one retailer facing highly uncertain demand of a short life span fashionable product. In our model, the retailer reserves a commitment level with the manufacturer prior to the selling season. In response, the manufacturer allocates and produces a specific quantity which is the maximum available quantity for the retailer. The retailer is motivated to commit more by offering higher revenue sharing percentage for reserved capacity than non-reserved capacity. Due to asymmetric information, it is found that the manufacturer can optimize quantity allocation decision while the commitment level decision of the retailer may not be optimal.

Keywords : supply chain coordination, revenue sharing contract, commitment based revenue sharing, quantity allocation

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