

LV15025

Richard Cho
University of New Brunswick

Vendor-Managed Inventory Systems with Stockout-Cost Sharing vs. Supply Chain Coordination under Limited Storage Capacity

Vendor-managed inventory (VMI) systems between a single supplier and a single customer are studied where there is a limited storage capacity in the retailer. Especially when stockouts occur at the customer, the stockout penalty is shared with the supplier. We study the optimal VMI contractual design under this situation and investigate the effect of the limited storage on the contract. This optimized VMI systems is compared with an integrated supplier-customer system where the supply chain total cost is minimized. We study the condition where VMI with stockout-cost sharing reaches the supply chain coordination.