OLS12

Distribution Supply Chains with Price Fluctuations and Information Sharing

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Abstract

We consider a decentralized distribution supply chain with one supplier and multiple retailers. By comparing three multi-period, stochastic dynamic programming models, we show that price fluctuations through time periods can improve the supply chain performance, when retailers share their inventory information with the supplier. We also study the optimal magnitudes of the price fluctuations and the optimal schedule of price fluctuations across retailers, in order to minimize the total supply chain costs.

Conference Track

Operations, Logistics and Supply Chain Management