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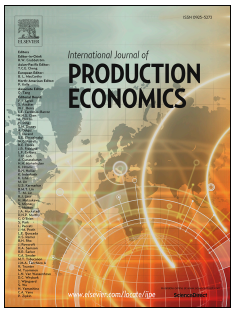

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Conditions of Reverse Bullwhip Effect in Pricing under Joint Decision of Replenishment and Pricing

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Abstract

A "reverse bullwhip effect in pricing (RBP)" occurs when an amplification of price variability takes place moving from the upstream suppliers to the downstream customers in a supply chain. In this study, we investigate RBP conditions for supply chains where joint replenishment and pricing decisions are made. Commencing with a single-stage supply chain in which a retailer faces a random and price-sensitive demand, we extend the results to a multi-stage supply chain using a game theoretical framework. We discuss RBP conditions for supply chains where newsvendor and continuous review inventory policies are employed, and present numerical examples for commonly used demand functions.

Keywords: Pricing, Inventory Control, Newsvendor, Continuous Review, Bullwhip Effect, Supply Chain Management, Game Theory.

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