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THE STACKBERG GAME OF ONLINE RETAILING SUPPLY CHAIN BASED ON RISK PREFERENCE

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Abstract

This paper constructs the online retail supply systems with risk preference to study participants' pricing strategy. In the Stackberg game, the adverse selection method is used to solve the problem. The utility function is established by using the mean-variance method. The results show that, for the optimal strategy of product price, risk appetite and standard deviations are important influence factors to the optimal pricing strategy of manufacturer and online retailer. For the optimal expected return, a numerical example is provided to show which one is more dominant in Stackberg game.

Keywords and phrases: Stackberg game, online retailing supply chain, mean-variance method.