

延期支付条件下考虑坏账影响的三阶段经济订货模型

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Economic Order Quantity Model under Three Levels with Payment Delay Considering Bad Debt

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摘要 研究零售商处于强势地位的三级供应链结构中,考虑到顾客坏账率的影响,分析二阶延期支付策略下零售商的最优订货策略。分两种情形讨论了坏账影响下零售商的利息收入与利息支出,建立了相应的决策模型。通过模型的分析求解,得出零售商的最优订货周期和最优订货批量的判定方法,并进一步分析了各参数对零售商最优决策的影响。最后,通过数值分析对有关结论进行了验证。

关键词: 强势零售商 延期支付 经济订货策略 坏账率

Abstract: Optimal retailer's replenishment policies is discussed with bad debt and payment delay in the three-stage supply chain with the dominant retailer. The effect of bad debt is analyzed on the interest earned and interest charged to build the models of the retailer's decision in two cases. By analyzing the model, the retailer's optimal replenishment time and the optimal order quantity are obtained. Furthermore, the effect of parameters on the retailer's optimal order policies is analyzed. Finally, the numerical analysis is presented to demonstrate the conclusions.




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