

# **The Joint Economic Lot Sizing Problem: Review And Extensions**

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## **Summary**

With the growing focus on supply chain management, firms realize that inventories across the entire supply chain can be more efficiently managed through greater cooperation and better coordination. This paper presents a comprehensive and up-to-date review of the joint economic lot sizing problem (JELP) and also provides some extensions of this important problem. In particular, a detailed mathematical description of, and a unified framework for, the main JELP models are given. Additionally, a comparative empirical study of the main policies proposed for JELP is conducted. The focus of this study is on assessing the deviation of these policies from the optimal solution. Studying the performance of different models provides additional insights that will help in justifying their use in more complex supply chain models that involve more stages or other practical considerations of interest. (C) 2007 Elsevier B.V. All rights reserved.

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