

Book review

Axsäter, S.: Inventory Control. Kluwer, Dordrecht 2000, 202 pp., NLG 225.00, ISBN 0-7923-7758-3

As the author states in his introduction, many books and overview papers have been written on inventory control in recent years, so why is it necessary to provide another? The aim of Axsäter's book is to give a more theoretical but compact overview and to include recent research developments, especially for multi-echelon models that have received increasing attention for supply chain management concepts.

The material is presented in five chapters. As in most other textbooks, the presentation starts with the forecasting techniques moving average and exponential smoothing and presents extensions of exponential smoothing for demands with trend and seasonal patterns. This is followed by a selection of single-stage inventory models for deterministic and stochastic demands. The material is classified into an overview on ordering systems and approaches for reorder quantities (lot-sizes) and reorder points (safety stocks). Using this as a building block, inventory models with multiple products and multiple stages are presented. For multiple products, the Economic Lot Scheduling Problem and the Joint Replenishment Problem are introduced. For models with multiple stages, the different concepts installation stock, echelon stock, and Material Requirements Planning are presented and compared analytically. Then, approaches for coordinated lot-sizing and safety stock determination are outlined. The final chapter gives a qualitative discussion on implementation issues for inventory control systems. In addition, the chapters include numerical examples, references, and problems (with hints and solutions in an appendix).

The book provides an excellent introduction for those who are planning to conduct quantitative research in the area of inventory control and have some mathematical background. It also might serve as a textbook in advanced seminars since the references offer a basis for a deeper study of the relevant quantitative research literature. The material focuses more on state of the art methods than on simple practical decision rules. As a reference for practitioners and to serve as a textbook in introductory courses, other recent books on inventory control offer more at a lower price, which is more a criticism on the publisher's pricing strategy rather than on the selection and presentation of the material.

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