Huh, Woonghee Tim; **Janakiraman, Ganesh**

(s, S) optimality in joint inventory-pricing control: An alternate approach. (English)

Zbl 1167.90332
Oper. Res. 56, No. 3, 783-790 (2008).

Summary: We study a stationary, single-stage inventory system, under periodic review, with fixed ordering costs and multiple sales levers (such as pricing, advertising, etc.). We show the optimality of (s, S)-type policies in these settings under both the backordering and lost-sales assumptions. Our analysis is constructive and is based on a condition that we identify as being key to proving the (s, S) structure. This condition is entirely based on the single-period profit function and the demand model. Our optimality results complement the existing results in this area.

MSC:

90B05 Inventory, storage, reservoirs
90C39 Dynamic programming

Full Text: DOI Link