

A note on the optimal manufacturer's policies in the EPQ model under two levels of trade credit policy

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Abstract

Teng and Chang [European Journal of Operational Research 195 (2009) 358-363] consider optimal manufacturer's policies in the EPQ model under two levels of trade credit policy. The main purposes of this note are twofold:

- (1) This note explains why equation (17) in Teng and Chang (2009) is not true in general. So, the validity of the proof of Theorems 1 and 2 in Teng and Chang (2009) is doubtful.
- (2) The inventory models in Teng and Chang (2009) are correct and interesting. However, processes of proofs and arguments of Theorems 1 and 2 in Teng and Chang (2009) fill shortcomings. From the viewpoint of logic, their proofs are not complete.

So, the main purpose of this paper is to overcome those shortcomings and present complete proofs for Teng and Chang (2009).

Keywords: *Inventory; EPQ; Trade credits; Permissible delay in payments*