

# Inventory holding and a mixed duopoly with a foreign joint-stock firm

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## Abstract

This paper investigates a two-period mixed duopoly model in which a state-owned firm and a foreign joint-stock firm are allowed to hold inventories as a strategic device. The timing of the model runs as follows. In period one, each firm non-cooperatively decides the level of production. In addition, each firm non-cooperatively decides the level of inventory it holds for the second-period market. By holding large inventories, a firm may be able to commit to large sales in period two. In period two, each firm non-cooperatively and simultaneously chooses its second-period production. At the end of period two, each firm sells its first-period inventory and its second-period production and holds no inventory. The purpose of this study is to trace out the reaction functions of the state-owned and foreign joint-stock firms in the mixed duopoly model with inventories.

Keywords: Inventory holding, state-owned firm, foreign joint-stock firm, reaction curves

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