

The Limit of Market-share Contracts

Yong Chao and Mingjun Xiao*

July 10, 2023

Abstract

Market-share contracts are a pricing scheme that conditions not only on a buyer's purchase quantity from a seller, but also on the seller's share in the buyer's total purchase, which is a contentious issue in antitrust. We explore the *optimal* market-share contract a dominant firm can offer when competing with a minor firm, where the minor firm can only respond to the dominant's firm's market-share contract with a per-unit price. Given any subgame following the dominant firm's market-share contract, we can construct pseudo additively separable tariffs to implement the equilibrium outcome under the market-share contract. This implementation yields a tight lower bound of buyer's surplus under any market-share contracting equilibrium. With such a tight lower bound, we transform the optimal contracting problem into an optimization/selection of the class of subgames. We then characterize the profit limit the dominant firm can achieve through its market-share contract. In the limit, the dominant firm can extract full surplus *as if it were the monopoly supplier to the buyer* and squeeze both the minor firm's profit and the buyer's surplus to zero. Such a limit of market-share contracts always dominates exclusive dealing from the dominant firm's perspective. We also discuss the antitrust implications and possible regulatory remedies for market-share contracts.

JEL Classification: D43, K21, L13, L42

***Chao:** College of Business, University of Louisville, Email:yong.chao@louisville.edu; **Xiao:** School of Economics and Management, Wuhan University, Email: mjxiao@whu.edu.cn. We are grateful to Bo Chen, Wonki Cho, Guoqiang Tian, Siyang Xiong and seminar participants at UC Riverside for helpful comments.