

## Two-sided hub-and-spoke collusion: Evidence from the grocery supply chain

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### Abstract

This paper studies a cartel that operated in the Canadian market for fresh commercial bread. Over a period of about fifteen years suppliers helped to coordinate retail prices and retailers helped to coordinate supplier prices – a two-sided hub- and-spoke cartel. Such an observation is hard to rationalize, since we typically assume that manufacturers have incentive to limit market power in the retail sector, and vice versa, in order to avoid problems of double marginalization. Our explanation is that, in the absence of collusion, market power at both ends of the vertical chain may be limited. Scarce shelf provides retailers with bargaining power when negotiating with suppliers, but at the same time local market competition can lower retailer profits. We develop a model which characterizes the negotiation between retailers and suppliers as an auction for premium shelf space, and provides conditions under which competition is strong enough to provide incentive for both types of players to engage in collusion. We use data from Statistics Canada to evaluate the effectiveness of the the cartel.