

Spinoffs and Diseconomies of Scope in the U.S. Medical Laser Industry (WORKING)*

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ABSTRACT

[\(Link to Full Version\)](#)

This paper examines the role of spinoffs in addressing diseconomies of scope when firms expand into differentiated product markets. Using the U.S. medical laser industry as a unique setting, I study the operational tradeoffs between scale and scope that drive spinoff decisions independent of market power considerations. A key contribution is that I endogenize shifts in firms' organizational structure as part of their optimal strategy, departing from the current focus on mergers in the endogenous product choice literature. I leverage a novel dataset to accurately measure product differences between firms' origin and branch markets in terms of laser type (wavelength) and quality. My estimates suggest that, without spinning off, firms incur 70% higher fixed costs to produce branch market qualities that are highly differentiated from those of the origin. Firms also enjoy 10% fixed cost discounts for branch markets adjacent to their origin markets. Counterfactuals simulating no-spinoff scenarios reveal a 17.9% drop in total firm profit and a 7.6% decrease in overall welfare. At the market level, spinoffs are crucial for facilitating entry and competition in markets with one or no origin firms, as these experience a 9.3% decrease in consumer surplus when spinoffs are prohibited. In a monopolist setting, firm profit drops by 5.73%, while the fixed cost accrued increases by 59.1%.

Keywords: Spinoffs, Diseconomies of Scope, Firm Boundaries, Endogenous Product Choice, Multimarket Competition, Differentiated Products, Medical Laser Industry, Organizational Structure

JEL Codes: [L25, O32, D43]

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