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European Economic Review 50 (2006) 977–993
EUROPEAN ECONOMIC REVIEW
www.elsevier.com/locate/econbase

Strategic spin-offs of input divisions

Ping Lin*

Department of Economics, Lingnan University, Tuen Mun, N.T., Hong Kong

Received 14 February 2003; accepted 20 December 2004
Available online 2 March 2005

Abstract

When a downstream producer enters backward into the input market, a "helping the rivals effect" exists: Such entry hurts the firm's downstream business as it increases upstream competition and thus benefits its rival downstream firms. This negative externality prevents the newly-created upstream unit from expanding. A spin-off enables the firm to *credibly* expand in the input market, thereby forcing its upstream competitors to behave less aggressively. Spin-offs occur in equilibrium if and only if the number of downstream firms exceeds a threshold level. When there is more than one integrated firm, a spin-off by a firm can trigger spin-offs by others that would not occur otherwise.

JEL classification: L13; L22; L42

Keywords: Spin-offs; Commitment effect; Successive Cournot oligopoly; Multilateral negotiations

1. Introduction

Large corporations often voluntarily spin off their key input divisions. For example, The Big Three automakers in the United States recently ended a relationship with their suppliers that began in as early as 1918. In 1999, General Motors spun off component maker Delphi Automotive Systems, turning Delphi into the world's largest and most diversified supplier of auto components, systems and

*Tel.: +852 2616 7203; fax: +852 2891 7940.
E-mail address: plin@ln.edu.hk.

0014-2921/$ - see front matter
doi:10.1016/j.euroecorev.2004.12.001

modules. In June 2000, Ford Motor Co. spun off its parts supplier Visteon Corp, partly in response to the GM–Delphi spin-off. In the telecommunications industry, AT&T cut off its communication equipment arm and acclaimed Bell Labs research unit in 1996 to form Lucent Technologies Inc. (and its computer division to form NCR Corp).[1]

An immediate consequence of such spin-offs is, obviously, that the spun-off input division will supply downstream competitors of the parent company. For example, while 80% of its sales were to GM in 1999, Delphi was targeting a 50/50 ratio of GM to non-GM business by the end of 2002.[2] Likewise, Visteon has been broadening its customer base since its separation from Ford, now selling to GM, Nissan, Fiat, and Volkswagen, among others. In the case of the Lucent–AT&T spin-off, Lucent now supplies equipment to other telecommunication service providers such as MCI/WorldCom, British Telecommunications, and Cable & Wireless (USA). By the end of 1996, shortly after the spin-off, more than 50% of the Lucent revenues came from competitors of AT&T.[3]

These observations raise a puzzling question: Why would a company spin off its input unit which would then help its rival firms in the downstream market? If the company's goal is to capture the profits in the input market, why not enter the input market directly without a spin-off so that its external input supply decisions are better coordinated with its downstream business plans?

According to a conventional explanation of spin-offs, companies as they grow big may spin off certain divisions so as to reduce the costs of managing giant firms. In the literature of financial restructuring, two hypotheses can be found, both focusing on the effects of spin-offs on shareholders (Krishnaswami and Subramaniam, 1999). According to the core-operation hypothesis, spin-offs create value by removing unrelated businesses and allowing managers to focus attention on the core operations of a company. Spin-offs can also help eliminate the cross-subsidization that is common in large companies. The information hypothesis states that the separation of a firm's divisions into independently traded units through a spin-off enhances value because it mitigates information asymmetries about the firm. In particular, spin-offs isolate slow-growth segments of a large company and thus help provide financial clarity to investors.

The present paper offers a rationale of spin-offs based on strategic considerations. Consider the incentive of a self-sufficient producer in a two-tier industry to enter backward into the input market. While generating new revenues in the input market, such entry by the firm benefits its downstream rivals by increasing input supply (a "helping the rivals effect"), thus hurting its downstream business. This negative externality prevents the newly-created upstream unit from expanding. Following a spin-off, however, the independent input unit does not have to worry about the

[1]Nippondenso, now one of the largest auto parts manufacturers in the world, was spun-off by Toyota Motors in 1947. According to a detailed study of Japanese spin-offs by Ito (1995), such spin-offs are generally quite prevalent in the Japanese auto parts industries and have increased over time.

[2]See *Detroit Free Press*, May 19, 2000 and *Buffalo Business First*, August 10, 1998.

[3]*Photonics Spectra News*, November 1996.