

Strategic Role of Retailer Bundling in a Distribution Channel

Qingning Cao^{a,*}, Xianjun Geng^b, Jun Zhang^c

^a Owen Graduate School of Management, Vanderbilt University, Nashville, TN 37203, United States

^b Jindal School of Management, The University of Texas at Dallas, Richardson, TX 75080, United States

^c School of Business, Renmin University of China, Beijing, China

Abstract

We study retailer bundling in a distribution channel when the manufacturer for one bundled product can strategically set the wholesale price. We show that the retailer can use a bundling option as a strategic leverage to extract concessions from the manufacturer in form of a lower wholesale price. This finding contributes a novel rationale for retailer bundling to the bundling literature. Whenever the bundling option causes this concession-extraction effect, the retailer always benefits from the lower wholesale price. The manufacturer, nevertheless, does not necessarily suffer because bundling can lead to a higher consumer demand. We also show that the manufacturer's marginal production cost plays a critical role in driving the retailer's bundling decision, concession extraction behavior and consequently the total channel profit.

© 2014 New York University. Published by Elsevier Inc. All rights reserved.

Keywords: Channel; Bundling; Concession extraction

Introduction

Retailers often bundle products from powerful manufacturers who set the wholesale prices with retailers' own products (or products from fringe manufacturers that have little pricing power). This is the case for retailers who bundle national-brand products with their own private-label products. For example, drug stores such as Walgreen, CVS, and Rite Aid routinely sell bundles of national brand medicines and their own private label drugs: Tylenol is sold in bundles with a private-label decongestant; Sudafed is sold in bundles with a private-label pain reliever (Evans and Salinger 2005). Grocery stores such as Safeway routinely provide discounts on bundles that mix both national brands and private labels (Scaff et al. 2011). Outside of the private-label industry, we also observe instances of retailer bundling of products from both powerful and fringe manufacturers. For example, while major gaming console manufacturers (e.g., Nintendo, Microsoft and Sony) often dictate their wholesale prices given their market dominance, manufacturers of games or

gaming accessories often face a commoditized wholesale market and thus cannot raise their wholesale prices even when electronic retailers such as BestBuy and Toys R Us are reaping high margins from games or accessories bundled with gaming consoles (Hills 2007; Sengupta 2013).

This paper analyzes a channel consisting of a retailer and a powerful (i.e., wholesale-price-setting) manufacturer when the retailer has a *bundling option*: the retailer can either sell the manufacturer's product alone, or bundle it with the retailer's private-label product (or product from a non-strategic fringe manufacturer at a fixed wholesale price). We focus on the strategic role of retailer bundling and ask the following research questions. *First, how does the bundling option affect the interactions between the retailer and the powerful manufacturer, and consequently the wholesale price? Second, how does the bundling option affect retailer profit and manufacturer profit? Third, what role, if any, does the powerful manufacturer's marginal production cost ("manufacturer cost" hereafter for abbreviation) play in retailer bundling?*

Our first key finding is that *the downstream retailer can use the bundling option as a strategic leverage to extract concessions from the upstream manufacturer in form of a lower wholesale price.*² Such concession extraction can happen when the retailer

* Corresponding author at: Owen Graduate School of Management, Vanderbilt University, 401 21st Avenue S, Nashville, TN 37203, United States. Tel.: +1 615 322 1501; fax: +1 615 343 7177.

E-mail addresses: qingning.cao@owen.vanderbilt.edu (Q. Cao), geng@utdallas.edu (X. Geng), jzhang4@gmail.com (J. Zhang).

¹ Post-Doctoral Research Scholar.

² Hereafter we abbreviate "powerful manufacturer" to "manufacturer."

bundles (i.e., executes the bundling option) in equilibrium: in this case, it is the retailer's off-equilibrium threat of unbundling that puts downward pressure on the wholesale price that the manufacturer sets. Concession extraction can also happen when the retailer unbundles (i.e., forfeits the bundling option): the retailer's off-equilibrium threat of bundling now leads to the concessions. This finding also highlights that it is the *option* to bundle, rather than the action of bundling in equilibrium, that drives concession extraction.

Extant literature highlights two reasons why a firm bundles: bundling results in better price discrimination against consumers (Adams and Yellen 1976; Banciu, Gal-Or, and Mirchandani 2010; Basu and Vitharana 2009; Fang and Norman 2005; McAfee, Mcmillan, and Whinston 1989; Prasad, Venkatesh, and Mahajan 2010; Schmalensee 1984), and bundling serves as an effective competition tool (Balachander, Ghosh, and Stock 2010; Chen 1997; Ghosh and Balachander 2007; Nalebuff 2004; Whinston 1990). Our first finding complements the above two streams of research by offering a new rationale for product bundling.³

Our second key finding concerns the impact of concession extraction on firm profits. Whenever the retailer extracts concessions from the manufacturer, we show that the retailer always benefits from the bundling option. Interestingly, concession extraction by the retailer does not necessarily hurt the manufacturer. Specifically, when the retailer bundles and extracts concessions from the manufacturer, while the manufacturer faces a reduced margin due to concession extraction, his sales increases because retailer bundling expands the consumer demand.⁴ This market expansion, and consequently improved total channel profit, is shared by the retailer and the manufacturer. In this case, the bundling option induces both concession extraction and market expansion, thus results in win-win for both channel members.

Our third key finding is that the manufacturer's marginal production cost plays a critical role in driving the retailer's bundling decision, concession extraction behavior and consequently the total channel profit. When this cost is moderately high, the retailer always extracts concessions from the manufacturer when she bundles. This leads to a lower wholesale price that alleviates the double marginalization problem in the distribution channel, thus results in better coordination between the retailer and manufacturer and improved channel profit. When this cost is low, however, a bundling retailer cannot extract concessions from the manufacturer in most cases because the wholesale price under the no-bundling-option benchmark is already low. In fact, the bundling option actually leads to a higher wholesale price in most cases under a low marginal production cost. This worsens

the double marginalization problem in the distribution channel and reduces total channel profit. This finding suggests that, when studying bundling in a channel context, ignoring marginal product costs can lead to incomplete conclusions.

Literature Review

Our paper is related to the rich literature on product bundling and tying in marketing and economics. In the context of monopolistic bundling, a number of papers study the optimal bundling strategy in different contexts: when the number of products in a bundle is two (Adams and Yellen 1976; Schmalensee 1984), very large (Armstrong 1999) or finite (Fang and Norman 2005), when component products are complements or substitutes (Venkatesh and Kamakura 2003), when consumers differ in their abilities of assessing the value of a component product (Basu and Vitharana 2009), when the seller auctions off his products (Subramaniam and Venkatesh 2009), when component products are vertically differentiated and production capacity is limited (Banciu, Gal-Or, and Mirchandani 2010), when the distribution of consumer valuation is heavy-tailed (Ibragimov and Walden 2010), and when products have network externality (Prasad, Venkatesh, and Mahajan 2010). Besides monopolistic bundling, the bundling literature also studies oligopolistic bundling and tying where there are two or more retailers. This stream of literature shows how a firm can use bundling as a competition tool from different perspectives: bundling can leverage a firm's monopolistic power in one market into another oligopolistic market (Whinston 1990), soften competition (Anderson and Leruth 1993; Balachander, Ghosh, and Stock 2010; Chen 1997; Ghosh and Balachander 2007), or deter entrance (Nalebuff 2004; Wilson, Weiss, and John 1990). See Stremersch and Tellis (2002) and Venkatesh and Mahajan (2009) for comprehensive reviews of the bundling literature. While the above two streams of literature highlight retailer–consumer and retailer–retailer interactions, we focus on retailer–supplier (manufacturer) interactions in this paper. We offer a new reason why a firm bundles: the downstream retailer can use the bundling option as a strategic leverage to extract concessions from the upstream manufacturer in form of a lower wholesale price.

Our paper is also related to the broad literature on distribution channel management and coordination. One stream of literature examines various marketing mechanisms for coordinating a decentralized channel (Cui, Raju, and Zhang 2007; Gerstner and Hess 1995; Iyer 1998; Iyer and Villas-Boas 2003; Jeuland and Shugan 1983; Lal 1990; Moorthy 1987; Raju and Zhang 2005). Our paper adds to this literature by showing when and how downstream bundling can improve channel coordination. Another stream of channel literature studies how channel structure affects firms' marketing decisions and profitability (Bhaskaran and Gilbert 2009; Cai, Dai, and Zhou 2012; Choi 1991; Coughlan 1985; Coughlan and Wernerfelt 1989; Desai, Koenigsberg, and Purohit 2004; Liu and Cui 2010; Liu and Tyagi 2011; McGuire and Staelin 1983; Shulman, Coughlan, and Savaskan 2010). Our work complements this literature by showing how a decentralized channel structure can distort a downstream firm's bundling decision. Some recent papers study

³ This finding also contributes to the literature on private labels. It is known that retailers can use a private label to obtain a lower wholesale price for a competing national brand due to the demand substitution effect (Mills 1995; Narasimhan and Wilcox 1998). Our work shows that a retailer can use a private label to obtain a wholesale price concession from the manufacturer of a non-competing national brand due to the bundling effect.

⁴ We use "she" to refer to the retailer and "he" the manufacturer throughout this paper.

Download English Version:

<https://daneshyari.com/en/article/886285>

Download Persian Version:

<https://daneshyari.com/article/886285>

[Daneshyari.com](https://daneshyari.com)