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Interfaces with Other Disciplines

Strategic interactions in traditional franchise systems: Are franchisors always better off? ☆

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ABSTRACT

The effects of price competition and advertising spillover on franchisees' decision to cooperate and on franchisor's contractual preferences are investigated. We show that the franchisees' decision to cooperate or not depends on the type of franchise contracts. Under exclusive territory contracts, any mode of play between franchisees give the same profits to the franchisees and franchisor. Contracts that allow price competition and well targeted local advertising offer a good ground for horizontal cooperation, which may or may not benefit the franchisor depending on whether the prices are strategic substitutes or strategic complements. Contracts in which price competition is allowed and the burden of advertising decisions is totally transferred to the franchisor lead to cooperation between franchisees at the expense of the franchisor. Franchisees do not cooperate to the benefit of the franchisor if local advertising is predatory and price competition is not allowed in the contract, but franchisees are given the responsibility to undertake local advertising. Also, the franchisor endorses cooperation between franchisees when local advertising has a public good nature, but such a cooperation may never occur when the impact of local advertising on demand is significant. We finally show that while some contracts always dominate others, the choice of a franchise contract may also depend on local competition and/or the franchise goodwill.
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1. Introduction

Traditional franchising is believed to account for approximately three quarter of all the sales of franchised chains in the United States of America. It is primarily made of car dealers, gasoline stations, and soft-drink bottlers. According to Blair and Lafontaine (1999, pp. 27–28), in a typical traditional franchising agreement, "the franchisor is a manufacturer that sells finished or semifinished products to its dealers and franchisees. The franchisors' revenues from their dealer network arise from the markups they earn on these products." Traditional franchising differs from business-format franchising as practiced in industries such as fast-food, automotive services, lodging, personal services, and restaurants in which, franchisors mainly sell the use of their business models, generally in exchange for franchisee fees and royalty payments.

Because franchise contracts are incomplete by nature, full ex-post monitoring of a franchise system is almost impossible (Mathewson and Winter, 1985). In fact, the franchisees are legally independent entrepreneurs who manage their own businesses under some contractual parameters from a franchisor, but most of the time, they do not have to abide by all of the franchisor's policies and requirements, especially those related to pricing and advertising (Lafontaine, 1998; Michael, 2002). The relative autonomy given to franchisees allows them to engage in post contractual behaviour that may often be counterproductive. For instance, because of the public-good nature of brand building advertising in franchising, franchised chains advertise less than corporate chains (Michael, 1999). Also, intra-system price competition is believed to lower retail prices and consequently damage franchisee profitability. In such a context, from a franchisee's perspective, a relative local monopoly is desirable to avoid intra-system competition with fellow franchisees. But, while franchisors may agree to offer exclusive territory clauses to address franchisee aspirations to a local monopoly, it is now well established that these

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clauses may not totally eradicate intra-franchise competition and free-riding. In fact, there is evidence that despite territory exclusive clauses, incumbent franchisees in mature franchise systems generally suffer from territory encroachment (Kalnins, 2004).

Both practitioners and scholars are increasingly looking for various alternatives of reducing horizontal externalities and improving franchise efficiency. Horizontal cooperation among franchisees is ever more considered as one of such alternatives. In many industries, franchisees are reported to cooperate for various purposes including, building up their bargaining power vis-à-vis the franchisor, improving communication with the franchisor, and coordinating their purchasing and marketing decisions. The efficiency is improved through direct communication among independents franchisees. Muhleman (1994) who investigated the use of advertising cooperatives in franchising observed that some franchisors encourage horizontal cooperation among their franchisees and set aside rebate funds to support formation of co-ops or local use of national advertising programs. The general belief in this business literature is that horizontal cooperation among franchisees is good for both franchisors and franchisees. This belief needs to be investigated given that franchise contracts do not generate the same externalities. In fact, if cooperation among independent franchisees was very effective in improving franchise efficiency in all contexts, logically, it would pervade the franchising business.This seems not to be the case. Casual evidence suggests that independent franchisees do not always cooperate as intra-franchise competition remains a challenging issue in some franchise systems (Kalnins, 2004). Also, according to Kalnins and Lafontaine (2004, p. 749), horizontal cooperation among franchisees may not always be in the franchisor's interest as "some degree of intra-chain competition will tend to enhance franchisor profits." While some of these ideas are discussed in the literature, very little is known with authority on their impact on the relationships among franchised outlets under various franchise contracts and on the franchisor's preferences.

To cope with both the vertical and horizontal interactions inherent to franchising, we focus on a traditional franchise system and build a model in which a franchisor sells a product to two adjacent franchised outlets. The franchisor commits to investing in national (or brand-building) advertising and sets the wholesale prices, while the two franchisees determine their retail prices together with their local advertising rates. A franchisee's local advertising may be either predatory or may generate positive spillover for the benefit of the two franchisees depending on whether it aims at attracting customers from a fellow franchisee or attracting new customers to the franchise system (Piga, 1998). We consider a situation where the two franchised outlets are relatively close, such that, some customers may reasonably consider buying from either one. Competing franchised outlets determine their decisions separately and deal either with free-riding or competition in local advertising as well as competition in retail prices. Cooperating franchised outlets set their decision variables jointly, to avoid both competition and free-riding.

The framework of differential games is used to deal with the carry-over effect of the franchisor's national advertising and to derive strategies that depend on the current level of the franchise goodwill. As it is common in the franchising literature, the franchisor enjoys the leadership role within the franchise system and the franchisees, individually or acting as a cartel, are followers (e.g., Jørgensen et al., 2003). We characterize the impact of the type of franchise contracts, and the externalities that come with it, on the franchisees' decision to cooperate or not to cooperate. We also characterize the regions in the parameter space where such cooperation is beneficial or detrimental to the franchisor. Finally, we identify the conditions under which the franchisor may implement either franchise contract in the context where franchisees do not cooperate.

This research builds on an extensive marketing and economics literature. Franchise contracts have been examined with analytical models from the principal-agent perspective. The major questions investigated in this literature are: why do franchise contracts exist? Why do these contracts differ from one franchise system to another? The perspective offered in this stream of work is that franchise contracts exist because of agency problems between the franchisor and the franchisees. A well-designed contract should give incentives to franchise partners to undertake ex-post decisions that maximize the franchisor's profits even while the franchisees are pursuing their own self-interest (e.g., Brickley and Dark, 1987; Mathewson and Winter, 1985; Lal, 1990). Recently, Desai (1997) investigated the franchisor's selection of contracts with either a fixed or a sales-based advertising fee. Sigué and Chintagunta (2009) also investigated the franchisor's choice of different advertising arrangements.

Our paper complements these previous works by examining whether the type of franchise contracts the franchisor proposes creates externalities that the franchisees may want to address through cooperation. We contend that, once franchisors opt to have franchisees, one of their major ex-post concerns is to find optimal strategies in response to the franchisees' chosen form of horizontal organization. In other words, franchisors need to be prepared to operate in regional bilateral monopoly-like structures, where they interact with cartels of franchisees, or in a monopoly with regional multiple independent franchisees. We focus here on a single region where the franchisor deals with two franchisees. A striking contribution of this paper is to delineate conditions under which either of the two franchisee organizations may be implemented, and to discuss their implications on the vertical relationship between franchisors and franchisees under various contracts. In other words, our research demonstrates that the way franchisees handle the horizontal externalities created by franchise contracts affects franchise decisions, profits, and relationships. We also show that while some contracts always dominate others, the choice of a franchise contract may also depend on local price and advertising competition and/or the importance of the franchise goodwill.

The remainder of the paper is organized as follows. Section 2 presents the model. Section 3 derives equilibria. Section 4 compares the results of cooperating and competing franchisees. Section 5 compares the franchisor's contractual preferences. Finally, Section 6 provides conclusions and suggestions for future research.

2. The model

We consider a franchising system made of one franchisor (player F) and two symmetric franchisees (players 1 and 2). The assumption of symmetry is to ensure that the differences in outcomes between the different settings are only due to the behavioral assumptions and not to some other data. The franchisor controls the transfer price $w(t)$ to the franchisees, while franchisee i decides the retail price $p_i(t)$, at time $t \in [0,\infty)$. The franchisor also controls his advertising investment $A(t)$, designed to build the franchise reputation or stock of goodwill, $G(t)$. We assume that the evolution of this stock is governed by the following differential equation à la Nerlove and Arrow (1962):

$$\frac{dG}{dt}(t) = kA(t) - \delta G(t); \quad G(0) = G_0 > 0, \tag{1}$$

where $k > 0$ is the advertising effectiveness parameter and $\delta > 0$ denotes the decay rate of goodwill stock.

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