

Explaining the Duration of Franchise Contracts: Evidence from the U.S. Fast Food Franchises

Tarique Hossain, Ph.D.

Assistant Professor

International Business and Marketing
California State Polytechnic University

3801 West Temple Avenue

Pomona, CA 91768

Tel: 909-869-2443, Fax: 909-869-3647

E-mail: tmhossain@csupomona.edu

Abstract:

This paper seeks to explain why franchisors offer contracts to franchisees with differing lengths of time - ranging from two to twenty years (and often perpetual) in the fast food franchise category. Building on existing literature on contract theories (Williamson, Klein et al, Joskow Goldberg, Wiggins, among others), I hypothesize that *ceteris paribus*, longer term contracts will occur when initial sunk costs made by franchisees are higher, franchisor's reputation is stronger, and finally, when franchisee and franchisor's effort is higher. This hypothesis is tested using data taken from Bond's *Franchise Guide* 2004 (15th edition). I find that initial investment and sum of royalty and advertising fees are statistically significant in explaining variation in duration of franchise contracts.

I. Introduction

In the U.S. franchising industry, one observes contractual relationship between franchisors and franchisees with durations ranging from two to twenty years (and some are even perpetual). Duration, or the terms of contract, is important because a higher initial term allows a franchisee enough time to build the business and enjoy the equity even before the initial term expires. Shorter terms, on the other hand, may be barely enough to establish the business but may leave the franchisee in a less secure position should there be any issues in renewal of the contract. Empirical literature, with the exception of Brickley *et al* (2003) on franchising, to my knowledge, has overlooked this particular, yet important aspect of franchise contracts and instead generally focused on determinants of franchisors' tendency to franchise as opposed to operate its own outlets by employee managers. Majority of this literature posit a signaling theory or agency cost argument in their approach to the problem (e.g. in Laffontaine (1992), Norton (1986), Rubin (1978), Brickley and Dark (1987)). In this paper, I focus on the nature of franchise contracts with particular attention to duration. This is important because once the decision regarding organization form (i.e. franchising versus company owning) has been made, understanding franchise contracts can very well provide insight why particular contractual provisions are observed.

II. Franchising and Contract theory

For a firm who already operate some "company-owned" outlets, franchising provides a low cost solution to moral hazard problems of managers of remote outlets, monitoring whom would be otherwise too costly. More importantly, in general the success of remote outlets critically depends on a high level of effort of a key individual whose efforts are difficult to assess. Franchising induces outlet managers efficient level of effort by conveying him ownership rights of the outlet (Wiggins (1990)) so that he can share the stream of revenues accruing to that outlet. Franchise contracts typically specify this right in a detailed manner, with provisions for strict quality control, operating procedures and often with provisions for unilateral terminations by franchisors, should a franchisee default with contract stipulations.

Franchise contracts, however; represent rather a class of incomplete contracts. Incompleteness in contracts arises when certain aspects of the contract are not verifiable (and hence not contractible). In case of franchising, for example, franchisees' effort is not contractible even though a franchisor would like his franchisees to follow strict quality control and supply effort at the first best level. Since a portion of the benefits of franchisee's effort is shared by franchisors and other franchisees, there is some incentive to shirking on the part of the franchisee due to this externality in the sharing of outcome.

In order to induce commitment to effort from the franchisee, a franchisor would like to "lock-in" a would-be franchisee into as much transaction specific investment as possible. A franchisee, once entered into a contract, typically pays a lumps sum fee and invests a substantial amount in equipping (which are often trade-marked and tailored to the business) the outlet, rendering investment sunk¹. In other words, this investment has little salvage value should they be used for other businesses. Franchisor, on the other hand, already operates several outlets of his own, indicating his interest in continued success of the chain. In addition, a franchisor typically engages in building a nation-wide (and often internationally) "good will" or brand name for the chain -- an investment which is also sunk. These bilateral sunk investments are apt to create quasi-rents, which may give rise to post contractual opportunism on the part of both parties. Franchisees may want to free ride, by degrading quality or by reduced effort, on the chain's nation-wide quality reputation

Franchisor too, once the franchise fee is appropriated, may slack off in maintaining its brand-name reputation. Furthermore, a franchisor shirking its responsibility under franchise contracts may find it profitable to buy back seemingly un-profitable units and convert them to company owned units later on in order to make more profit.

When both parties make bilateral sunk investments in a business, they have incentives for a long-term continued relationship [Goldberg (1976)]. In the context of franchising, apart from initial sunk investments, a franchisee typically invests in "local know-how" in order to develop and establish clientele in his locality. For example, personal services, business services, automotive services etc. typically require frequent dealing with customers and building a clientele takes some time. Most of these efforts are sunk because they are not readily transferable². Moreover; these efforts usually take multiple periods to realize outcomes. Hence if success of his business critically depends on supplying local know-how a franchisee would like to secure a contract with longer

and high end of the figures. Table 1 provides the descriptive statistics based on the usable sample. The variable total fee is created by adding royalty fee and advertising fee for possible inclusion in the regression because it represent a significant part of average (total) variable cost to the franchisee.

Table 1 Descriptive Statistics

Variable	N	Mean	Standard Deviation	Minimum	Maximum
Duration	92	13.92	5.26	1.00	20.00
Years in Business	92	32.13	15.75	6.00	89.00
Initial Investment (\$000)	90	427.02	368.51	65.00	1750.00
Total Fee(% of sales)	90	7.26	2.16	0.00	16.50
Advertising Fee(% of sales)	2.42	91	1.57	0.00	6.00
Royalty Fee(% of sales)	4.81	91	1.30	0.00	12.50
Franchise Fee (up front)	23.21	92	11.92	0.00	85.00

It is noteworthy that the postulated relationship in (1) requires that measures of franchisee's sunk cost, effort, and franchisor's reputation be available for statistical estimation. Direct measures of these variables are not available from the secondary data in Bond's Guide. Hence, the next step is to identify proxies for variables in (1) for econometric estimation.

Franchisee's sunk cost

This is measured by initial set up cost (excluding lump sum franchise fees) as reported by franchisees in the sample . To the extent these costs (of investments) are sunk depends on their salvage value in alternative uses, if franchisees choose to terminate business. Restrictive terms in franchise contracts further reduce salvage value of these assets to franchisees . *Franchising in the economy* reports the lowest, highest, and the median set up costs for each industry group. As mentioned above, the median set up cost is used to measure franchisee's sunk cost

Franchisor's reputation

Several proxies may be used to measure franchisors' reputation - number of years in business/franchising, number of outlets owned/operated by the franchisor, brand equity of the franchisor, among others. Obtaining operational measure for any of these is another matter. For the purpose of our model, I will use number of years in business as a proxy for franchisor's reputation.

Franchisor's effort

Effect of franchisors' effort on duration can be captured by using the average number of employees in a franchise unit. However, Bond's data in 2004 seem to have incorrect number of employees reported for several franchisors⁷. For example, Dairy Queen shows 470 employees. If data from all industries could be included then one could test franchisor effort by including industry specific effects—testing if higher involvement industries display longer term contracts. High effort industries would be those where customers are typically repeat buyers and need considerable local level service. Health ad fitness services, business services, lawn care etc would fall in this category. Low effort industries would include convenience stores, soft drink bottlers, auto rentals, hotels & motels etc. Since the data set used in this model come from a single fast food industry, the model is not in a position to use dummy variables to test industry (effort) effect. Since the employee number is not fully corrected, the next option is to include royalty or advertising fee as a proxy for franchisor's effort.

I estimate the following linear functional form:

$$Dura_i = a + b_1Years_i + b_2Initial_i + b_3Fee_i \quad (2)$$

Where Dura = Duration of contracts by the franchisor

Years = number of years since the franchisors first franchised

Initial = initial investment required to open the franchise unit

Fee=total of royalty and advertising fee charged by the franchisor (percentage of sales revenue).

Model (2) is estimated by ordinary least squares (OLS) in SAS. The estimated model is (t-statistics given in parentheses):

$$Dura_i = 6.12 + 0.04 Years_i + 0.006 Initial_i + 0.54 Fee_i \quad (2')$$

(3.72) (1.35) (4.48) (2.40)

$R^2 = 0.357$, Adjusted $R^2 = 0.334$, F-statistics = 15.54 (degrees of freedom = (3, 87))

The adjusted R^2 and the F-statistic suggest that the model provides a good fit considering this is cross section data. All the coefficients have the expected signs. The coefficient of *Years* variable is positive and marginally significant (at 18%). This implies that for each year change in years since first franchised, the contract terms are likely to increase by .04 years or about two weeks. Both *Initial* and *Fee* shows coefficients with expected signs and statistically significant at under 5% level. It appears from the results above that for each thousand dollar increase in initial investment, the contract term increases by about a third of a week (*i.e.* three weeks for every ten thousand dollars). Last, but not the least, one percent increase in total fee tends to increase the duration by over six months. Thus, in terms of magnitude, the biggest driver of contract duration seems to be the sum of royalty and the advertisement fees. When the royalty fee and advertising fees are included simultaneously in the model, none of them turn out significant. The possible reason may lie in a trade off between the two fees faced by many franchisors. As far as the franchisees are concerned, it is the total fee that constitutes a big part of the average variable cost of running the business. As such, I used a total fee as well and that turns out to be statistically significant.

In order to capture the relationship in (2) in terms of percentage change so that the coefficients would indicate elasticities, a logarithmic model was also estimated using the SAS. Results are qualitatively similar to the ones reported here.

V. Summary and Conclusion.

This paper proposes an explanation as to why franchise contracts are offered in various contract durations for the initial period. An operational model is put forward based on the transaction cost theory literature. An empirical test of this hypothesis is carried out using data from Bond's Franchise Guide. Results demonstrated that duration of franchise contracts depends on the level of initial investment required by franchisor from the franchisee, strength of reputation of franchisor; and finally, on the reputation and effort of the franchisor itself. Also found is that the biggest driver of contract duration is the sum of royalty and advertising fees. Franchisee's effort is argued to play a role in the determination of contract duration but could not be tested due to lack of correct employee data in the publicly available data source: *Franchising in the Economy*, published by the U.S. Department of Commerce.

References

- James A. Brickley, Sanjog Misra, R. Lawrence Van Horn (2003), "Contract Duration: Evidence From Franchise Contracts", Working Paper No. 03-08, University of Rochester.
- Bonds, E., " *Bond's Franchise Guide 2004* (15th edition), Source Book Publications; 15th edition (April, 2004)
- Brickley, J.A., and R.H. Dark, 1987, "The Choice of Organizational Form: The Case of Franchising." Journal of Financial Economics, 18, pp.404-420.
- Dnes, Antony W., 1992, "Unfair Contractual Practices and Hostages in Franchise Contracts", Journal of Institutional and Theoretical Economics, 148, pp.484-504.
- Goldberg, V, 1976, "Regulation and Administered Contracts" Bell Journal, Autumn, pp.
- Joskow, P., 1987, "Contract Duration and Relationship-Specific Investment" American Economic Review, 77, pp.168-185
- Justis, Robert T., and Judd, Richard J. Franchising, 2nd edition, 2002, Thomson Learning.
- Klein, B., and K. Leffler, 1981, "The Role of Market Forces in Assuring Contractual Performance," Journal of Political Economy, 89, pp.615-641.
- Klein, B., R. Crawford, and A. Alchian, 1978, "Vertical Integration, Appropriable Quasi-Rents, and the Competitive Contracting Process," Journal of Law and Economics, pp.297-326.
- Laffontaine, E, 1992, "Agency Theory and Franchising: Some Empirical Results," Rand Journal of Economics, 23, No.2, Summer, pp.263-283.
- Norton, S.W., 1988, "An Empirical Look at Franchising as an Organizational Form" Journal of Business, 61, pp.197-217.
- Rubin, H., 1978, "The Theory of Firms and the Structure of Franchise Contracts," Journal Law and Economics, 21, pp.223-233.
- Wiggins, Steven N., 1990, "Possession, the Order of Performance, and Contractual Enforcement," Working Paper; Texas A&M University, Department of Economics, pp.1-25.
- Williamson, O., 1983, "Credible Commitments: Using Hostages to Support Exchanges" American Economic Review, pp.519-540.

Footnotes

1. Franchisee's investments are sunk also due to restrictive terms in franchise contracts that forbid resale of the outlet to a third party without franchisor's approval.
2. Most franchise contracts even restrict franchisees business in the vicinity for a substantial period of time, once the contract is terminated.
3. Termination of contracts is very common in franchising. Termination occurs by both franchisor and franchisee, on various accounts such as financial dispute, non-payment of fees, quality control violations etc. This probability of termination causes another friction in the franchise contracts, reducing first best effort by franchisee and franchisor. Franchisor too, views termination as costly because of lost revenues, retraining, finding a replacement and also risking closure of an outlet may have damaging effect on reputation. However, I do not incorporate termination probability in this paper.]
4. Sunk local level efforts may serve as a "ugly princess"(Williamson 1983) hostage to franchisor because these local reputation has little value to franchisor so he can't appropriate it, but has value to franchisee if he opens a business of his own by relating reputation to his name rather than the chain he used to work for.].
5. Brickley and Dark(1987) posits inefficient risk sharing in their explanation why firms use franchising. He argues that franchisees typically invest a larger proportion of their wealth in the outlet, which makes his investment portfolio relatively undiversified. This may, he continues, lead franchisees to invest less than an efficiently diversified decision maker.
6. Bond's Franchise Guide was known as *The Source Book of Franchise Opportunities* prior to 1995.
7. This was confirmed by author's phone call to the Bond's Source Book office in Oakland, California. The author was told the 2005 corrects the numbers and will be available soon.