"What's the name of the game?" Franchisee versus Company Ownership An Analysis of Franchisor Profit

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Abstract In this paper, we examine ownership structures of franchise chains and evaluate their impact on franchisor profit. Specifically we compare pure forms of franchising with those that use both company-owned and franchised outlets within one chain – a phenomenon termed the plural form. Theoretically such plural arrangements are supposed to provide franchisors with lower costs, higher growth, greater total-quality, and reduced business risk.
Empirical results of this study indicate the superiority of company-owned businesses over franchised units in generating franchisor profits. Moreover plurally organized systems compensate for losses from franchising with profits from company units and outperform purely franchised competitors in overall profitability.
Despite a clear financial inferiority of franchise outlets, franchisors of our sample do not convert plural structures into wholly-owned chains. We suspect the lack of entrepreneurial initiative (a non-financial aspect of franchising) to be one of the reasons for this. Hence when organizing the chain, franchisors face an inverse u-shaped profitablity curve with both pure franchising and pure company-ownership lying at the (undesirable) extremes and with a performance peak somewhere in between.

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1 Introduction

"As all of you know, the name of the game is not really franchising. The name of the game is company stores. ...It becomes obvious to you, if two hundred company-owned units out of 1600-1700 overall units produce 60 percent of the net after tax profit, the real name of the game is owning the stores yourself"[2]

Economic transactions within firms are organized either by hierarchy or by price mechanisms – or by a mixture of both. Concerning the matter of franchising, only a minority of today's leading franchise chains relies on pricing systems alone. The vast majority operates a minor but still significant number of company-owned stores (the hierarchy) side by side with their franchisees (the price system). Since Bradach/Eccles (1989) described such special hybrid arrangements, mixes of company and franchise units within the same system, have been known as plural forms. In contrast to early research propositions by Oxenfeldt/Kelly (1968), Hunt (1973), Caves/Murphy (1976) and Martin (1988), plurally organized franchise chains have not significantly altered their structure into entirely franchised or company-owned systems. Thus the plural forms appear to be a stable organizational phenomenon. Upon these findings, organization science began to explain the widespread use of plural forms by researching its advantages over pure franchise systems (Bradach (1997)).

Compared to pure hierarchy (full vertical integration) or pure price systems (pure franchise chain), plural forms are firstly supposed to lower overall agency (i.e. monitoring) cost and the cost of searching for and implementing local and highly specific information.

Secondly, it is argued that plurality improves system and process quality by the following effects: By signaling internal franchisor information to the franchisee, thus overcoming inefficiencies arising from asymmetrical information; by preventing conflicts among contracting parties through aligning divergent interests of principals (franchisors) and potential agents (potential franchisees); by combining a franchisee's innovational power with the hierarchy of the company-owned distribution arm, leading to accelerated innovation and internal change; and, finally, by creating a competitive environment where benchmarking franchisees against managers of company-owned units increases overall system performance.

Thirdly, plural forms are supposed to facilitate chain growth. While the franchise part alleviates resource constraints – such as capital and managerial talent – the company-owned units provide a high degree of flexibility for quickly developing new local markets.

Lastly the plural form is understood as a tool of company-wide risk management that enables

[2] Hooker, J. (1970): p. 171.

the principal to select franchising or ownership depending of specific local risk factors. In total, research has found that plural structures outperform pure forms of franchising and of company-ownership because of their positive effects on a chain's organizational costs, quality, growth and risk management (Ehrmann/Spranger (2004)).

Following Oxenfeldt/Kelly (1968), we are not fully convinced that these aspects suffice to entirely explain the continued existence and stability of the plural form. Certainly the arguments advanced by advocates of organizational science have force, but we are not fully persuaded by these because in their aim to solve the plurality puzzle, they focus on single aspects rather than analyzing the entire picture: analyzing the franchise chain as a profit producing unit. We therefore ask: Is it possible that the organizational structure impacts on a franchise chain's profit situation? If this is indeed the case, which then is the structure that maximizes franchisor profit?

Generally, the franchisor's streams of income result from specific or residual claims towards his agents and differ depending on the chosen mode of distribution. Franchisees on the one hand pay an initial franchise fee upon joining the system, an ongoing royalty amount, and an advertising fee as a percentage of the outlet's sales volume. Thus the franchisor's claims towards franchisees are of a precisely specified nature. Company units on the other hand provide profit resulting from the positive difference between sales revenue and operating cost. Hence the franchisor's claims towards company-owned units is of residual nature. From the perspective of the franchisor – which will be ours for the remainder of this essay – chain profit is defined as the difference of all revenues (i.e. franchisees' fees and amount of company sales) and all costs (i.e. franchising overhead and company units specific costs). It is important to note that costs arising from operating the single franchise unit remain the franchisee's and are irrelevant for the franchisor's financials. Thus comparing the individual profit of any franchise and company-owned units without assuming the franchisor's perspective (Shelton (1967)) is as pointless as it is meaningless to conclude from this analysis that franchisees outperform company managers in generating unit profit. From the principal's view, income streams of specific claims need to be challenged with those of residual claims in order to receive a meaningful statement regarding the profitability of distributional alternatives. Selected research work on ownership redirection has taken such an approach and implied explicitly (Hunt (1973)) or implicitly (Oxenfeldt/Kelly (1968)) a superiority in performance of company ownership over franchising.

In order to shed more light on these issues, we will explore in this paper whether and how organizational structure impacts the franchisor's income streams. Specifically we contrast

profitability of company-owned units with franchise units and ask whether and why plurally organized systems may be more efficient than purely franchised competitors. Our present approach is both theoretical and practical: In chapter two we will first use the findings of capital finance theory on the impact of financial structure on a firm's market valuation. We demonstrate how in the perfect world of Modigliani/Miller both company and franchise units should be equally efficient and therefore neither income streams nor firm value are affected by organizational changes. Then a second and contrasting step applies traditional capital structure theory, which accepts that structure influences profitability and therefore plays an important role in maximizing a firm's valuation. A subsequent practical review in chapter three will enliven these opposing theses with the results of a recent study by the International Franchise Association (IFA) as well as with genuine empirical data taken from franchisors' annual reports. We conclude in chapter four by discussing the implications of our findings for future franchising.

2 Corporate Finance for Governance Structures

Shaping the organizational setting of a chain means to choose between selling any new outlet to an independent franchisee or running it under company-ownership by hiring an experienced store manager. Hence structuring a franchise chain initially appears to be an issue of organizational choice only. Because each form is characterized by a specific mode of revenue and costs, from the controller's perspective the choice of the organizational form results in decisive consequences for the franchisor's corporate finances and thus concerns more than just organizational efficiency. The main differences between any franchise and company-owned unit stem from divergent ownership patterns. Whereas the franchisor will have to bear the costs of investment in every company unit himself, franchise units will ideally be financed through the investment of the franchisee. Accordingly, residual ownership of the first remains with the chain, but of the second lies in the hands of the franchisee. In case of bankruptcy, the franchisor is liable for the company units, while claims against the franchise unit stay with the franchisee. While the franchisor receives residual profits from company-owned operations, franchisees in turn pay fees for entering the system, for using the common brand name and infrastructure and they contribute to advertising funds. With these specific attributes, the choice between organizational alternatives is as much an issue of corporate governance as it is of the franchisor's corporate finances. According to Williamson (1988), using different organizational modes for running a system is comparable to the choice of the appropriate mode of financing a firm or a project. The difference is to be found in a rather sharp dichotomy – fi-

nancing the latter is done either by equity or by debt money.

Due to the characteristics of franchise and company-owned units, franchising means to finance the project (the new outlet) with money from outside (the investment is made by the franchise undertaking), while for company-ownership investment sources come from inside the system (the franchisor needs to invest himself). Accordingly, the franchisor's claims towards franchisees are specific (like a creditor's charges for debt) and those towards company-owned units are residual (like a creditors charges for equity). Thus when asking whether the choice of corporate governance influences the firm value, one could alternatively ask whether the capital structure of a firm, being a mix of equity and debt, does influence the value of the firm.

2.1 Modigliani/Miller for Franchising

In their classical work, Modigliani and Miller (1958) propose a model that attempts to explain the effects of a firm's capital structure on its market value. By grouping firms "into 'equivalent returns' classes, such that the return on the shares issued by any firm in any given class is proportional to (and hence perfectly correlated with) the return on the shares issued by any other firm in the same class"[3], they separate the risk of capital structure from the income risk, as now all firms in the same class have identical return patterns. They conclude that in an economist's ideal world of complete and perfect capital markets and with full and symmetric information among all market participants, the total market value of all the securities issued by a firm is governed by the earning power and risk of its underlying real assets and is independent of how the mix of securities, issued to finance it, is divided between debt instruments and equity capital. Differences in market valuations of heterogeneously financed firms within the same class would then be eliminated through arbitrage by rational investors. When applying Modigliani/Miller's model of 'leveling-the-field' arbitrage dealing to the specific case of franchising, the irrelevance of financial (and thus organizational) structure on a chain's value becomes obvious.

For the adjusted model, we consider two public chains in the same class with an expected identical return of X. The unlevered chain 1 may be financed entirely by equity, thus consisting of company units only, whereas chain 2 is levered with some debt in its capital structure, being plurally organized and consisting of company and franchise units. Suppose further the market value of the levered firm, V_2, to be initially higher than that of the unlevered one, V_1.

[3] Modigliani/Miller (1958): p. 266.

Now consider an investor holding s_2 dollars' worth of the shares of chain 2, representing a fraction α of the total outstanding stock, S_2. The return from this portfolio, Y_2, would be a fraction α of the total return X_2 less the interest charge r on the debt D_2. Since we assumed to have identical returns in the same class under all circumstances, X_1 will equal X_2, which we simplify in the expression X. Hence the return of the investor's portfolio can be expressed as:

$$(1) \qquad Y_2 = \alpha\,(X - rD_2)$$

Now suppose the investor sold his $\alpha\ S_2$ worth of chain 2 shares and acquired instead an amount $s_1 = \alpha\ (S_2 + D_2)$ of the shares of company 1. Since (the unlevered) chain 1 is fully financed by equity the investor could replicate the leverage of his former portfolio by using the dollars realized from the sale of $\alpha\ S_2$ and borrow an additional amount of $\alpha\ D_2$ on his own credit, pledging his new holdings in chain 1 as a collateral. Thus he would acquire a fraction $s_1 / S_1 = \alpha\ (S_2 + D_2) / S_1$ of the shares and the income of chain 1. Assuming proper interest payments on his personal debt, the investor's return Y_1 of his new portfolio amounts to:

$$(2) \qquad Y_1 = [\alpha\ (S_2 + D_2) / S_1]\ X - r\ \alpha\ D_2 = \alpha\ [(V_2 / V_1)\ X - r\ D_2]$$

Comparing formulas (1) with (2), we understand that as long as $V_2 > V_1$, the result $Y_1 > Y_2$ will motivate owners of chain 2 to exchange their shares in favor of those of company 1, thereby depressing S_2 and hence V_2 and raising S_1 and V_1. With the investors' ability to add equivalent leverage by borrowing on personal account, levered (plurally organized) companies would ultimately be priced equally (i.e. no price premium would be charged) to unlevered (pure) competitors of the same return class. As long as it is impossible to increase a chain's market value by exchanging company units for franchise units (like in the model), or vice versa, both forms have to be considered equally efficient for the franchisor.[4] Alternatively, these results could be translated into a discounted cash flow model for calculating a firm's fair price. Accordingly the market value of a firm results from discounting future earnings with the interest rate measuring the weighted average costs of capital. The only ways of increasing V, the value of a firm, is by increasing returns Y and/or decreasing interest rates r. As long as altering a firm's leverage will not affect the discounting interest rate of chains within one class, firm

[4] To be consistent with the Modigliani/Miller proof, we compared a fully integrated (fully company owned) with a plurally organized one. Of course the proof holds true also for the comparison of a wholly franchisee owned chain with a plurally organized one.

value will be independent of financial and in particular, for our case also of corporate governance structure.

2.2 Traditional Capital Structure Theory for Franchising

Another approach towards the influence of capital structure on firm value is taken by supporters of traditional capital structure theory. They criticize the Modigliani/Miller assumptions as being unrealistic. These conditions are six fold. First Modigliani/Miller assume the existence of risk classes in which all firms share one identical pattern of income across changing states of the world. Second their model requires a frictionless perfect capital market, where asset trading actors are able to carry out arbitrage deals due to missing transaction costs and institutional restrictions. Third, taxes are neglected or perceived to be neutral, meaning to be identical across taxpayers and for all income sources. Forth, investors are able to borrow or lend on the same terms as firms and fifth, there are no bankruptcy costs as in the state of failure all revenue is assumed to be given to the bondholders leaving them without serious financial damage. Finally firms are supposed to be unable of conveying information and thus influencing their market value by adjustment of their capital structure.

When transferring the Modigliani/Miller model into franchising reality, we encounter significant difficulties with most of the assumptions. Assuming a perfect capital while information asymmetries between actors, incomplete information or costs of bankruptcy and trading (e.g. equity into debt) remain real, is far from explaining actual market scenarios. Obviously for instance it is neither costless nor frictionless to exchange franchise units for company-owned ones. Moreover franchisees seem to anticipate different risk structures of franchise chains according to their organizational setup. As Ehrmann/Spranger (2004, 2005) demonstrate for a sample of US-franchisors, plurally organized chains attracted much larger investment volumes and charge lower royalty rates than pure franchise chains. The latter on the other hand realize significantly smaller investments from franchisees and charge them a lower franchise fee but a significantly higher royalty rate. Apparently franchisees demand fee-based risk compensation from those franchisors that relied too heavily on “debt” (“equity”) just as bond (stock) holders do with low (high)-equity firms.

These results call for an analysis of the franchise organization process under the rules of traditional capital structure theory. In contrast to Modigliani/Miller, traditionalists propose a non-linear relationship between costs of debt and equity. Exchanging one form – organizational or financial – for another would then potentially minimize the costs of capital and thus maximize

the firm's valuation.

Using the parameters from above, a firm's total value V may be the sum of its valued equity S and debt D, i.e. $V= \alpha S + (1- \alpha) D$. An all-equity financed firm ($\alpha = 1$) may now lower its costs of capital and thereby increase its market value by substituting some equity for debt. As long as debt is the higher ranking collateral in case of bankruptcy, its risk of termination is then less than it is for equity. Consequently, for the franchisor, debt will be cheaper to accumulate than equity. While exchanging equity for debt, the franchisors are subsequently limiting their financial scope during recession. This exposes their creditors to an increasing risk of losing their claims in the aftermath of entrepreneurial downturns. Therefore beginning at some point α^* of leverage, creditors will start to compensate for such increased risks by adding a price premium on to their claim, which gradually equates the cost of debt and equity and makes additional degrees of leverage unfavorable. Correspondingly, leverage at α^* represents the minimum of the weighted average cost of capital and, everything else being equal, the maximum of the firm's valuation.

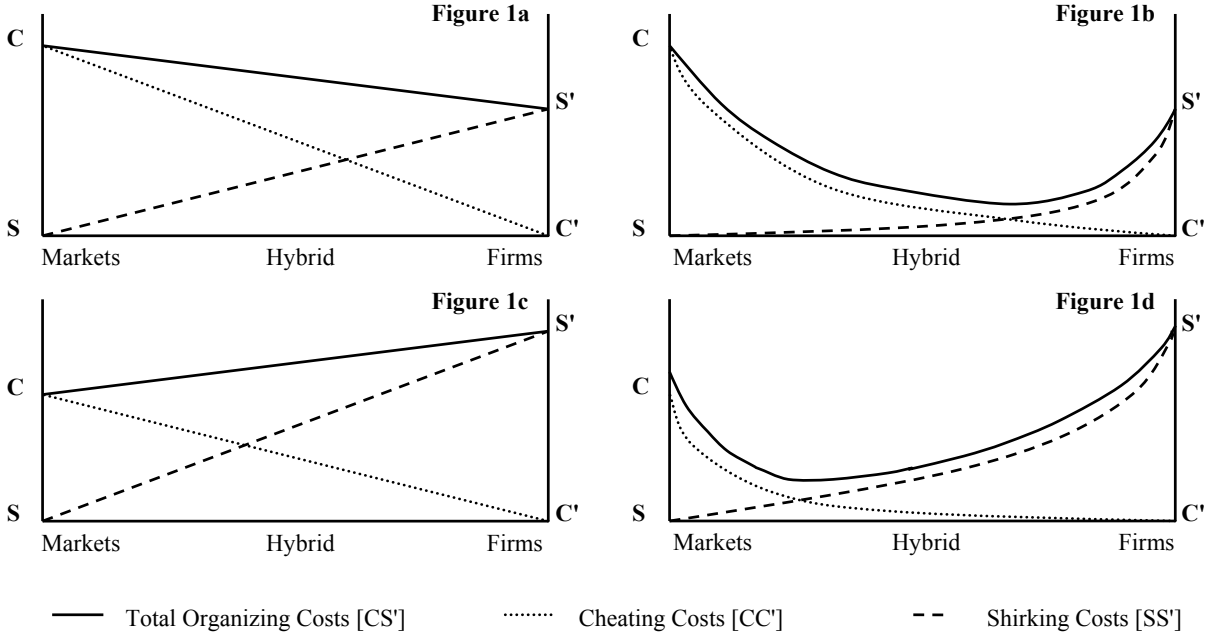
Applying this approach to the case of plural franchise chains suggest that mixing company and franchise units is more efficient than running a pure system. The fact that franchisors escort organizational changes with adjustments of their franchise fees and royalty rates, reveals that franchisees anticipate leverage risks just like every other creditor does. With the specific costs and benefits of each organizational form, the overall organizational efficiency is supposed to increase when leveraging closer to the ratio α^*. According to traditional capital structure theory, if leverage is too low, say the chain is wholly company-owned, the firm's value increases by issuing more debt (to emphasize franchising) in exchange for equity. If leverage is too high – to much franchising compared to company ownership – the firm's value increases by issuing equity (emphasizing company ownership) in exchange for debt (Bailey (2003)). In such a setting it would be the franchisor's assignment to identify the chain-specific value-maximizing mix of company ownership and franchising.

2.3 Explaining the "Swollen Middle"

In order to relate the existence of plural franchise chains to a maximization of firm value, evidence needs to be presented that mixing organizational methods (hierarchy and the price system) results in similar non-linear cost/benefit-effects as mixing debt and equity in traditional capital structure theory. According to Hennart (1993), the costs of using the market or the hierarchy depend on each form's specific enforcement properties. When principals pay a fixed salary to the agent, they may impose behavior constraints in turn and hence exert control

through hierarchy. Measuring an agent's production though, and rewarding him for the fulfillment of a predefined output, the principal imposes price constraints and thus exerts control through price mechanisms. Concerning the agent's reaction towards each form of constraint, each mode of control gives way to a distinct trade-off situation. Price constraints, on the one hand, maximize personal effort (minimizing shirking) but encourage cheating, either by offering unacceptable high prices or low quality. Behavior constraints on the other hand, work exactly the opposite way. They reward individuals for following directives and discourage them from cheating. In the absence of proper supervision though, they provide room for excessive shirking through the minimization of work effort. Consequently, the trade-off between price system and hierarchy is one involving low shirking and high cheating or high shirking and low cheating cost. Based on rationality, any given transaction should be exercised by a mix of price and hierarchy resulting in the lowest organizational costs.[5] Depending on the linkage of shirking and cheating costs, figures 1a through 1d reveal four trade-off settings and their effect on organizational structure.

Figure 1: Linear and Nonlinear Organizing Costs (Hennart 1993)



In case the relationship between the level of constraint and the specific amount of shirking and cheating costs is one of a linear nature, the choice of organizational form will tend towards one of the extremes. If it is easier, i.e. cheaper, to observe the agent's behavior than the

[5] Organizing costs are the sum of cheating and shirking costs in this case. As will be explained, there can be non-financial factors other than cheating and shirking costs that determine the degree of efficiency.

outlet's output (Figure 1a), behavior constraints are applied. If it is easier to control the output than the agent's behavior (Figure 1c), price constraints prevail. So as long as organizing costs are linear, mixing behavior and price constraints into plural forms will never reduce the total organizing costs. Should, on the other hand, the sum of costs (benefits) increase (decrease) non-proportionally as the organization specializes into one method, substitution results in a hybrid form similar to the leverage α^* from above. At this point, the chain's organizational costs (benefits) are at their minimum (maximum) and thus firm value is at its maximum (Ouchi 1980). Depending on the specifics of cheating and shirking costs, the organizational mix is skewed more or less towards one of the extremes – resulting in hybrid forms that are dominated by behavior constraints as in Figure 1b, or by price constraints as in Figure 1d.

There is evidence that franchisors may find a non-linear relationship between the efficiency of franchising and company ownership. Empirically, the mix of franchise to company-owned outlets ranges from 2:1 (Pénard/Raynaud/Saussier (2002)), to 3:1 (Lafontaine/Shaw (2001)) all the way to 9:1 (Ehrmann/Spranger (2004)). Bradach (1997) and Lewin-Solomons (1998) have argued such non-linearity exists because franchisors realize synergies when applying the plural form. Ehrmann/Spranger (2004, 2005) have summarized those effects that may cause plural structures to be more efficient than pure forms: Plural forms may reduce agency and information cost, they may foster growth by overcoming limited resource accessibility without losing flexibility and keep entrepreneurial risk under control. Furthermore these plural forms improve system quality by signaling internal information, by harmonizing divergent interests, by balancing innovation streams and by advancing intra-firm competition.

Although franchising research has just started to explore the practicability of these aspects, it should positively impact the plural franchise firm's profitability if any, some or all of these aspects apply. As a first step, the upcoming empirical analysis therefore needs to examine the income streams of both company-owned and franchise units more closely. H1 aims to compare the general productivity of both forms in terms of unit profit to the franchisor. In a second step, data is used to compare the overall profitability of plural chains with those of pure forms. As stated in H2, one mode (plural or pure) is supposed to outperform the other. What remains for testing in step three is the proposition of H3 that plurality (as it is supposed to apply to other hybrid forms) is a temporary phenomenon which will, sooner or later, dissolve into pure forms of market or hierarchy:

H1A: Company owned units are more profitable to the franchisor than franchise units.

H2A: Plural franchise chains are more profitable than purely franchised competitors.

H3A: Plural chains will therefore end up as wholly-owned systems.

These hypotheses are contrasted by the following anti-theses:

H1B: Franchise units are more profitable to the franchisor than company units.
H2B: Pure franchise chains are more profitable than plural competitors.
H3B: Plural chains will therefore end up as wholly-franchised systems.

3 Empirical Analysis of the Profitability of Plural Chains

3.1 Unit profitability

The underlying supposition of those promoting ownership-redirection tendencies is – as explicitly stated in the introductory quote of John Hooker – that a franchisor extracts more profit from company-owned stores than from franchise units. Otherwise franchisors have little incentive to buy back successful franchises once their contracts have expired (as those supporting ownership redirection expect to happen). Franchising would then turn out to be a transitory phenomenon, serving the franchisor for a variety of reasons: the acquisition of capital (Caves/Murphy (1976); Mathewson/Winter (1985)) or managerial talent (Thompson (1994)), the compensation of extraordinary risks (Martin (1988)) or the integration of entrepreneurial spirit (Bradach (1997)). In order to clarify the profitability schemes of both organizational modes, we model the income and cost structures of company-owned and of franchise units.

Under the franchise contract, the franchisor will primarily receive an initial franchise fee plus ongoing royalty and advertising payments based on the franchisee's sales. Further he may charge the franchisee for training and business development, for leasing property and equipment and for purchased raw materials and supplies from the franchisor (Justis/Feltes (1986)). For company-ownership, the franchisor receives revenue due to the outlet's amount of sales of products or services.

Concerning a franchisor's cost, there are one-time as well as ongoing expenses. Examples of one-time costs are: developing new sites, investing in hard- and software, recruiting staff, etc. Ongoing costs are either variable, like those for input material and labor, or fixed, such as management salaries/benefits or rental and lease payments. Whereas franchisees will pay outlet specific costs, the franchisor bears all expenses accumulated by company-owned outlets. Thus the decision to franchise or to own is also a choice of two alternative income streams.

Table 1: Unit profitability of seven large franchisors

Chain	McDonald's	Carl's Jr	Hardee's	Denny's	Wendy's	Applebee's	YUM[1]
1. Year of annual report	2002	2003	2003	2002	2002	2002	2002
2. Company-owned units (CU)	9.000	440	730	547	1.320	357	7.523
3. Franchised & licensed units (FU)	22.108	547	1.499	1.010	4.933	1139	25.397
4. Franchising in %	71,07%	55,42%	67,25%	64,87%	78,89%	76,14%	77,15%
5. Total system-wide revenue[2]	$15.406	$694	$628	$949	$1.979	$827	$7.757
6. CU sales	$11.500	$508	$562	$859	$1.700	$725	$6.891
7. Cost of CU sales	$9.907	$397	$500	$738	$1.380	$614	$5.790
8. CU margins	$1.593	$110	$62	$120	$320	$111	$1.101
9. Margin per single CU	$0.177	$0.250	$0.085	$0.220	$0.242	$0.311	$0.146
10. FU revenue	$3.906	$186	$66	$90	$279	$102	$866
11. Cost of FU revenue	$840	$163	$33	$29	--	--	$49
12. FU margins	$3.066	$23	$33	$61	$279	$102	$817
13. Margin per FU	$0.139	$0.042	$0.022	$0.061	$0.057	$0.089	$0.032
14. General & admin. expenses	$1.713	$43	$47	$50	$175	$81	$913
15. Other operating (inc.) expenses	$833	$34	$38	$82	$86	$2	($30)
16. Operating income CU[3]	$857	$76	$35	$74	$265	$91	$899
17. Operating income FU[3]	$1.256	-$20	-$24	-$24	$73	$39	$136
18. Total operating income	$2.113	$56	$11	$50	$338	$130	$1.035
19. Operating income per CU	$0,095	$0,173	$0,047	$0,135	$0,201	$0,255	$0,120
20. Operating income per FU	$0,057	-$0,036	-$0,016	-$0,024	$0,015	$0,034	$0,005
21. Margin ratio CU: FU	1,28	6,03	3,86	3,62	4,28	3,47	4,55
22. Operating income ratio CU: FU	1,68	-4,78	-2,98	-5,61	13,52	7,50	22,36

[1] YUM operates KFC, Pizza Hut, Taco Bell, A&W and Long John Silver's. Figures are for the entire company.
[2] dollars in millions
[3] (14) and (15) are deducted proportionally to (4).

Table 1 displays calculations for both options of seven large public US-restaurant retail chains for which suitable data were available through their annual 10-k fillings with the US Securities and Exchange Commission. In total, our sample contains ten of the best-known franchise chains in the restaurant business worldwide. With more than 76.500 franchise and company-owned outlets, they generate combined revenue of more than $28 billion.[6]

For each chain, we first calculated the difference of revenue and direct costs for each form (rows 6-7 and 10-11 in Table 1) and received the gross margin that each segment contributed to the gross profit. Secondly, we subtracted common cost (14 and 15) according to the form's share of outlets. Finally we divided both margin (8 and 12) and operating income (16 and 17) positions of both segments by the number of company-owned and franchised outlets to receive the contribution that each single outlet made to the company's overall gross margin (9 and 13) and to the operating income (19 and 20).

The results in rows 21 and 22 of figure 1 exhibit both the gross margin ratios as well as the

[6] Furthermore they represent six of the 2002 top-ten Technomic100 chains. No data was available of the 2002's No. 2 (Burger King) and No. 4 (Subway) because of private ownership. The data of Starbucks (No. 9) and Domino's (No.10) lacked the necessary breakdown of revenue and costs. See www.technomic.com.

operating income ratios for company-owned to franchised units. For each chain analyzed, the single company-unit added far more to both the gross margin and to the total operating income than the single franchise unit. The operating income ratio of Carl's Jr., Hardee's and Denny's are negative. Hence franchisors of our sample profited from self-run units but lost part of it again due to franchise operations. Three limitations apply to the analysis in table 1:

First, our sample does not claim to represent the entire spectrum of all quick service restaurants, as for instance size and business experience of our sample chains are greater than the industry average.[7] Nevertheless by analyzing just eleven out of the 100 largest restaurant brands, we covered 36 % of all revenue and 33 % of all outlets of this population.[8]

Second, we are fully aware of the difficulty associated with breaking-down general and other operating expenses (14 and 15 in figure 1), although all other computable specific costs, per definition, have been already deducted in rows 7 and 11. We therefore included gross margins and the gross margin ratio and find the latter also supporting the thesis of company-ownership superiority.

Finally we have ignored the fact so far that company units are financed by the franchisor, which deserves substantial amounts of franchisor capital. Franchise units in turn are financed by franchisees and do not dilute the franchisor's capital resources. Return-on-investment-figures, which fill this gap, cannot be derived from the data because chains do not report detailed-enough asset information. To overcome this weakness, we estimate the cost of capital for company-owned operations in table 2.

Table 2: Capital cost of company operations

Chain	McDonald's	Carl's Jr	Hardee's	Denny's	Wendy's	Applebee's	YUM*
23. Average investment per CU[1, 2]	$ 1,050	$ 0,991	$ 0,935	$ 1,385	$ 1,222	$2,455	$0,970
24. S&P credit rating[3]	A-1	B-	B-	CCC+	A-2	---	BB+
25. Long-term interest rate (10 yrs $TSR)[4]	4,61%	4,01%	4,01%	4,61%	4,61%	4,61%	4,61%
26. Cost of capital per CU[2]	$0,048	$0,040	$0,037	$0,064	$0,056	$0,113	$0,045
27. Adj. margin per CU	$0,129	$0,211	$0,048	$0,156	$0,186	$0,198	$0,102
28. Adj. income per CU	$0,047	$0,133	$0,010	$0,071	$0,144	$0,142	$0,075
29. Adj. margin ratio CU: FU	0,93	5,07	2,17	2,57	3,29	2,21	3,16
30. Adj. operating income ratio	0,82	-3,68	-0,62	-2,96	9,73	4,18	13,99

[1] Source: Entrepreneur Magazine 2002
[2] Dollars in millions
[3] www.standardandpoors.com
[4] www.federalreserve.gov, 2002: 4.61%, 2003 4.01%.

[7] Compare the industry average of size, age and degree of franchising as displayed in studies by Lafontaine/Shaw (2001), Pénard/Raynaud/Saussier (2002) and Ehrmann/Spranger (2004, 2005).
[8] See www.technomic.com figures of 2002.

Evidently, even if costs of capital are included in the model, the superiority of company operations over franchising remains valid for any chain but McDonald's (see table 2). To be perfectly accurate, financing rates would have to be raised by surcharges to the general market rates according to each company's individual credit rating. As surcharges of usually 50 to 120 basis points (according to the credit rating category) do not change the results of table 2, such speculative calculations have been omitted for the purposes of this analysis.

Summarizing the findings on unit profitability we conclude: Operating company-owned units is more profitable in terms of maximizing the franchisor profit than engaging in franchise activities. Within the limits of our sample, we therefore accept H1A (and reject H1B) and will examine the profitability patterns of more heterogeneously organized and smaller firms more closely in the next section.

3.2 Chain profitability

In order to identify and measure the key profit drivers in franchising, the IFA surveyed financial data of 65 member chains and published these findings in the 2001 Financial Benchmarking Study. Since survey participants volunteered for the study and were not selected according to statistical sampling methods, the data collected may not be a representative cross-section of all IFA member chains. Despite this limitation, the analysis contains valuable insights into the profitability patterns of franchisors, consisting both of plurally organized and of purely franchised chains. Table 3 displays the descriptive statistics of the sample chains.

Table 3: Descriptive Statistics 2001 IFA Study

Characteristics						
	< 10 years	10 to 19 yrs	20 to 29 yrs	>30 yrs		Total
Age of Company	15%	29%	30%	26%		100%
Years of Franchising	34%	36%	15%	15%		100%
Total Franchise Revenue	< $2 Mil.	$2 to $5 Mil.	$5 to $20 Mil.	> $20 Mil.		
	24%	28%	31%	17%		100%
Number of FU	< 100 FU*	100 to 200 FU	200 to 300 FU	> 300 FU		
	32%	24%	23%	21%		100%
Franchise Type	Maintenance	Food	Business Serv.	Personal Serv.	Retail	
	22%	23%	20%	22%	13%	100%
Organizational Structure	5% or more Company-owned		95% or more Franchise focused			
	23		42			65
		35%		65%		100%
Median Number of CU*		130		0		
Median Number of FU		112		215		
Degree of Franchising λ*		46%		100%		

* CU = Company Units, FU = Franchise Units, λ = FU/(CU+FU)

In total, the IFA sample covers a substantial part of the very broad spectrum of franchise systems. Only a minority of the chains is relatively young (15% < 10 years in business, 34% < 10 years of franchise experience) and small (24% < $2m in franchising revenue, 32% < 100 franchise units). Furthermore, different industries are well represented by the sample. Only the ratio of plurally organized to the purely franchised systems does not fully correspond to the figures of much larger samples (see the studies listed in part 2.3 above). Still with 23 chains being plurally structured (46% franchising on average) and 42 systems being fully franchised, the two groups are sufficiently different concerning their organizational structure.

Franchisor profitability is calculated in a way similar to the approach taken in the previous section. As a first step, the participants calculated gross profit of all franchise operations as the residual of revenue (including franchisees' fees and royalties[9]) and costs of goods sold. After deducting employee and general/administrative expenses for operating the franchise activities, the franchising profit is received. Then the participating franchisors were asked to determine the profit from company-owned operations separately from that of franchising. Finally the sum of both profit streams, less the amount of other income, determines the extent of profit before tax. Note that in table 4 analysis, the IFA choose to express the profit before tax figure as percentage on the chain's franchise revenues only – and not on all revenue of franchise and company-owned operations. For gaining insights into each channels economics, we separated the sample of 65 chains into those chains with 5% or more of company units out of all outlets and those with less than 5% when calculating the profitability ratios. Consequently we were able to use the same calculation scheme as for tables 1 and 2. Hence the sum of profit from franchising and company ownership is adjusted by other income/expenses[10] weighted with the proportions of company-ownership and of franchising. Again we allocated each outlet's contribution, here, to the franchise revenue and not to the overall revenue.[11]

[9] International Franchise Association (2003): p. 25.

[10] According to the shares of company-ownership and franchising displayed in table 3.

[11] Franchise Revenue for the "5% or more CU"-Group ("95% or more FU"-Group) in this sample is made up by the following components: Royalties: 59.4% (62.9%), Initial Franchise Fees: 11.4% (18.4%), Other Franchise Fees: 0.8% (2.1%), Product or Service Sales to Franchisees: 16.8% (10.7%) and Other Revenue: 11.6% (5.6%). See the report of the International Franchise Association (2003): p. 25 f.

Table 4: Profitability Breakdown Chart[12]

	All 65 Companies			All 65 Companies Adjusted*			
	5% or more CU	**95% or more FU**		**5% or more CU**		**95% or more FU**	
			CU	130		0	
			FU		112		215
Franchise Revenues	100%	100%		100%		100%	
- Cost of Goods Sold	14.5	10	-	14.5		10	
= Gross Profit	85.5	90.0	=	85.5		90	
- Employee Expenses	56.2	34.9	-	56.2		34.9	
- General & Administ. Exp.	68.5	39.6	-	68.5		39.6	
= Profit from Franchising	- 39.1	15.5	=		-39.1		15.5
+ Profit from CU**	91.0	.6		91.0		.6	
+/- Other Income/Expenses	-14.1	-2.9		-6.6	-7.5	0	-2.9
Profit Before Taxes**	**37.8%**	**13.2%**		**84.4%**	**-46.6%**	**0.6%**	**12.6%**
			Sum	37.8%		13.2%	

* weighted with degree of organization λ **as percentage of franchise revenues

As clearly revealed in table 4, plurally organized chains display a distinctly different income pattern from that of pure franchisors. In terms of franchise revenue, franchisors with 5% or more of company ownership earned almost as much profit from their owned locations as they received in total franchise revenue. These figures are contrasted by negative profit that plurally organized chains encounter through their franchising business. Pure franchise chains on the other hand operate their franchising activities with profit. Contrasting the total profit before taxes of both organizational alternatives though, purely franchised chains achieve just one-third of the profit before taxes in proportion to the franchising revenue that was achieved by the group of plurally structured systems. Thus the central result of this analysis is that plural franchise chains of this sample realize negative profits from their franchise activities, but offset these losses with highly profitable company-owned outlets. Overall, plural arrangements from this IFA survey are more beneficial for maximizing the franchisor's profit than purely franchised competitors.

Regarding the data's consistency, proper allocation of revenues and cost to each organizational type may pose an accountancy problem to franchisors. Plural chains, for instance, will most likely incur higher expenses due to operating locations by themselves. The large difference in general/administrative and employee expenses of both sample groups might indicate that costs of company operations had not been allocated correctly and thus were wrongly deducted from the franchising revenue. Even though the IFA explicitly advised all participants to separate the cost of each form, some doubt about the reliability of the data remains. Additionally the IFA purposely[13] refrained from analyzing the efficiencies of company operations,

[12] International Franchise Association (2003): p. 24.
[13] See footnote 12.

but requested members to summarize a complex income stream within one single profit figure which in turn is then related to franchise revenue.

Within these limitations though, the data supports hypothesis H2A (rejecting H2B). Accordingly plurally organized chains of the sample incur losses from franchising but compensate for these by being highly profitable in their company operations. Purely franchised systems contrariwise are profitable with their franchise business, but finish overall with just about one third of the profitability of plurally organized competitors. Although profits of both modes are not comparable on an absolute basis (due to relating company-owned profit to franchise revenues), these findings support the non-linearity of organization costs as acknowledged by Hennart (1993) and presented in part 2.3 above.

3.3 Chain development

What remain to be tested in a third step are the potential effects that the results of H1 and H2 may have on the evolution of franchise organizations. According to evidence from above, plural franchise chains outperform purely franchise-based competitors in unit profitability. Much more, plural systems profit from their company operations while they suffer losses from their franchise activities at the same time. Under a strategy of profit maximization, a rational franchisor running a mature system should ultimately turn franchises into company-operated outlets, coming up with a wholly-owned chain. Such a process of ownership redirection has first been described by Oxenfeldt/Kelly (1969) and reformulated by Dant/Paswan/Kaufmann (1996, p. 429) as follows: "Do franchisors use franchisees to open markets, develop consumer acceptance and preference for the franchisors' trademarks and then appropriate that brand equity by terminating or otherwise ending the franchisees' rights to continue to operate the business?"[14]

We test this thesis along a sample of the highest-ranking chains of the *Franchise500* report, which is annually published by the Entrepreneur Magazine. As the mean firm size decreases rapidly with lower rankings, concentrating on the first 300 systems hedges to some extent against fatal downward distortions.[15] To measure structural changes once franchise agreements expire, a second test includes firms with more than 10 years of franchise experience (which is the mean term of franchise contracts for the sample) both for 2001 and 2004. Since

[14] The central word of this quote is "appropriate". Thus the authors presume that there is some value to be gained by integrating formerly franchisee owned units. This supports our results from above that company-owned units generally provide a higher return on investment to the franchisor than franchised outlets do.

[15] The strongly decreasing means of outlets were for the 1st quantile (1-100): 2981, the 2nd quantile (101-200): 267 and for the 3rd quantile (201-300): 171.

the data is not distributed normally, we use non-parametric tests for measuring potential correlations between age (FRANAGE) and structure (LAMD).

Table 5: Non-parametric Correlations of the Franchise300

		FRANAGE01* / LAMD01**		FRANAGE03 / LAMD03	
		ALL	>10 yrs	ALL	> 10 yrs
Kendall's tau_b	Correlation Coefficient	-0,38	0,20	-0,59	-0,009
	Sig. (1-tailed)	0,179	0,337	0,082	0,423
	N	300	222	284	235
Spearman's rho	Correlation Coefficient	-0,54	0,27	-0,80	-0,011
	Sig. (1-tailed)	0,174	0,347	0,089	0,432
	N	300	222	284	235
Descriptive Statistics	N (ALL / > 10 yrs)	300 / 222	300 / 222	284 / 235	284 / 235
	Mean (ALL / >10 yrs)	19,38 / 23,61	90,56 / 90,53	21,38 / 24,02	92,21 / 92,51
	Std. Dev. (ALL / > 10 yrs)	12,43 / 11,78	17,30 / 16,20	12,43 / 11,97	15,88 / 14,15

* Franchise experience in years. ** Degree of franchising λ = FU/(FU+CU)

Three out of four tests revealed a slightly inverse relation between the firm's experience (FRANAGE) and the degree of franchising (LAMD), though strength decreased for the older-than-10-year fractions. Neither analysis however found the results to be significant on a confidence level of 5% or less. The sample therefore does not allow asserting the existence of a trend of converting franchisees into company-owned units.

Other studies of Lafontaine/Kaufmann (1994), Lafontaine/Shaw (1999) and Pénard/Raynaud/Saussier (2002) using much larger samples, were also not able to find empirical evidence for ownership redirection tendencies. Only recently, Dant/Kaufmann (2003, p. 63) presented data on 152 US-chains claiming "although franchisors value the benefits of the mix of ownership types and do maintain that mix over time, there is some evidence of a greater tendency to permanently convert existing franchised outlets to company-owned outlets as fast food systems mature and gain greater access to resources". We fully agree with the authors that such 'tendency' sounds plausible for reasons of profit maximization to franchisors with a strong emphasis on franchising activities. But – and that is the issue of ownership redirection – there is no empirical evidence that franchisors are permanently and fully converting their franchisees to company-owned units. As of the data presented, there is no significant relation between the degree of franchising and the length of franchise experience. Both H3A and H3B are therefore rejected. Despite a superiority of company over franchise operations concerning franchisor profit there is no indication for moving organizational structure into either one of the extremes. Chains are rather keeping it stable in the "swollen middle" of plural forms.

4 Conclusions and Discussion

Researchers of organization science remain puzzled by the heterogeneity in organizational structuring that they encounter when looking at matured franchise chains. Plural forms have long been viewed as unstable and transitory phenomena, being finally dissolved in either one extreme of market (franchising) or hierarchy (company ownership). The preceding pages have attempted to investigate whether and why such a moving to the extremes does not take place in reality. We applied an analogy of corporate governance and capital structure theory, stating that in a world other than the ideal of the Modigliani/Miller model, structure impacts the valuation of a firm or a project. With the help of Hennart we then hypothesized that exchanging franchising for company-owned operations (or vice versa) resolves in a non-linear relationship of net benefits – perhaps for the reason of cost reduction or revenue increase or a combination of both. Within the limits of the gathered data, we have further demonstrated that major franchise chains extract a higher operating income and return on investment per unit out of their company-owned operations compared to their franchised ones. To our surprise, some chains suffered losses per unit from their franchise activities. The analysis of the IFA data supported these findings by demonstrating that plural chains realized negative profits from franchise activities, but offset these losses with highly profitable company-owned outlets. Compared with the income of pure franchise chains, the plural arrangement proved to be almost three times as profitable – although the fair integration of capital costs did slightly alter, but not change this result. With this in mind – company operations are more beneficial for maximizing a franchisor's profit and plurally organized chains outperform purely structured competitors – we finally tested the thesis of ownership redirection on a sample of 300 franchise chains, but found no significant supportive results.

There are several conclusions to be drawn from these findings: First of all, in regard to the capital structuring analogy and in contrast to what Modigliani and Miller suggest, in the world of franchising, chain structure matters. As franchisors replace franchise units with company-owned ones, they improve their firm's profit situation. Second, this increase in benefit – financially and non-financially – seems to follow an inverse u-shape distribution, as otherwise evidence of ownership redirection would be significant. Thus the ultimate substitution of franchise business appears to be detrimental to the chain. More generally, this point is brought up by Bradach (1997, p. 298) formulating that "each structure has strengths and weaknesses, and if an organization can use each to leverage the strengths and ameliorate the weaknesses of the other, then overall organization will be stronger than if either structure operates alone". As we have shown in this paper, generating franchisor profit seems to be a major strength of

company operations and not one of franchising. By plurally organizing a formerly purely franchised system, a franchisor increases chain profit. While doing this, he gradually reduces the franchisee's influence and simultaneously gives up on multiple strengths of the franchising arm (e.g. franchising being an important source of acquiring resources like managerial talent and capital, cultivating entrepreneurial spirit and enhancing intra-firm innovation) – a move that we hypothesize to result in a net loss for the franchisor from some point on. This being the case we further conclude that there should exist some ratio λ^* just like a^* in capital structuring theory, at which the franchisor will have optimized the combination of strengths and weaknesses of both forms.

So how about John Hooker's 'name of the game'? As we have explained, he is right in so far as company units are important sources for franchisor profit. Pure franchise chains, disregarding this function, operate knowingly below their potential profit maximum and could win by emphasizing company operations. As in finance theory the optimal a^* depends on firm specific characteristics, λ^* will be individual for each chain and can hardly be determined from outside. Franchisors will first have to identify the strengths and weaknesses of both forms in regard to their firm specific characteristics. Then they will need to balance them realistically against each other in accordance to their firm specific business strategy.

Although we lack the proof that too much company-ownership causes detrimental effects to profitability, empirical evidence suggests that successful franchise systems rather remain plurally organized than becoming wholly-owned chains. Thus Hooker is wrong when postulating full ownership to be the desirable option for today's franchisors. As we have demonstrated, the name of the game is neither owning the stores yourself nor going the franchising-only route. There is much more evidence that the name of the game is the plural form.

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