

Contractibility and ownership redirection in franchising: A property rights view[☆]

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Abstract

This paper offers a property rights theoretical interpretation of the ownership redirection hypothesis advanced by Oxenfeldt and Kelly [Oxenfeldt, Alfred R. and Kelly, Anthony O. (1968). “Will Successful Franchise Systems Ultimately Become Wholly-owned Chains?”, *Journal of Retailing*, 44, 69–83]. In a nutshell, couched in resource dependence theory, the ownership redirection hypothesis argues that successful franchise systems will eventually become corporate owned systems because of the reacquisition of franchisee units by the more powerful, and resource-flush franchisors. We argue that the structure and dynamics of ownership patterns in franchising networks depends on the contractibility of the franchisor’s system-specific assets and the contractibility of the franchisee’s local market assets. Under the property rights view, ownership redirection will result from an increase in the contractibility of the franchisee’s local market assets (local market information, financial resources, and managerial capabilities) and the resultant increase of the franchisor’s bargaining power during the contract period. We extend the franchise literature by arguing that informational, financial and managerial resource constraints are only relevant for the change of ownership structure if they are noncontractible. This hypothesis is evaluated using data collected from the Austrian franchise sector. The empirical results are largely supportive of the hypothesis.

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Introduction

Couched in resource dependence theory, Oxenfeldt and Kelly’s (Oxenfeldt and Kelly 1968) ownership redirection thesis (i.e., that successful franchise systems will eventually become corporate owned systems because of the reacquisition of franchisee units by the more powerful franchisors) has inspired intense research attention for over 35 years now (cf. Hunt 1973; Caves and Murphy 1976; Dant et al. 1992, 1996, 1998; Dant and Kaufmann 2003; Norton 1988a). The

continued fascination with the ownership redirection thesis is not difficult to understand: the thesis conjures up the worst fears associated with franchising since it is based on the assumption that there may be a deliberate effort on the part of the more powerful franchisors to systematically convert the previously franchisee-owned outlets into company-owned outlets, especially if they happen to be performing well. In addition to the resource dependence view, the ownership redirection hypothesis has been examined from an agency-theoretic and transaction cost analysis perspectives as well (e.g., Berkovitz 1999; Brickley and Dark 1987; Brickley et al. 1991; Lafontaine 1992; Lafontaine and Kaufmann 1994; Dahlstrom and Nygaard 1994, 1999; Lafontaine and Shaw, 2005).

This paper offers a property rights theoretical foundation of the ownership redirection hypothesis of Oxenfeldt and Kelly. We argue that the structure and dynamics of ownership rights in franchising networks depend on the contractibility of the franchisor’s system-specific assets and the franchisee’s

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local market assets. If the franchisor's intangible assets are more important for the generation of residual income relative to the franchisee's, more ownership rights should be transferred to the franchisor, and the higher should be the proportion of company-owned outlets. Under the property rights view (cf. Hart and Moore 1990; Hart 1995; Maness 1996; Baker and Hubbard 2004), ownership redirection is expected to result from an increase in contractibility of the franchisee's local market assets (local market information, financial resources, and managerial capabilities), and hence from the increase of the franchisor's bargaining power during the contract period. In essence, we derive the following core property rights hypothesis related to the ownership redirection phenomenon: If the contractibility of franchisee's local market assets increases during the contract period, the proportion of company-owned outlets will increase resulting in ownership redirection. The hypothesis is tested by using data from the Austrian franchise sector.

Our main contribution is to extend the extant franchising literature and the resource dependence interpretation of the ownership redirection (Combs and Castrogiovanni 1994; Combs and Ketchen 1999a, 1999b; Lafontaine and Kaufmann 1994; Alon 2001; Dant and Kaufmann 2003) by arguing that informational, financial and managerial resources, the key resources sought by the resource-constrained franchisors from their prospective franchisees, are only relevant for the change of ownership structure if they are noncontractible. Hence, we provide a new theoretical foundation of the ownership redirection hypothesis by applying the property rights theory. In addition, in doing so, we attempt to improve and provide a finer cut to the measurement of the franchisee's financial, informational and managerial resources (Dant and Kaufmann 2003) by differentiating between more and less contractible assets because the use of proxy variables with low validity has contributed extensively to contradictory empirical results (Combs and Ketchen 2003; Dant et al. 1996).

The rest of the paper is organized as follows. We begin with a brief review of the relevant literature. The following section summarizes the property rights view of the allocation of ownership rights in franchising, in turn followed by the ensuing derivation of the property rights hypothesis that ownership redirection results from an increase in contractibility of the franchisee's local market assets. Finally, we describe the empirical test of the hypothesis carried out using the data from the Austrian franchise sector.

Brief review of relevant literature

Couched in the resource-based view of the firm (Penrose 1959; Wernerfelt 1984) and resource dependence theory (cf. Pfeffer and Salancik 1978), the original ownership redirection hypothesis was first proposed by Oxenfeldt and Kelly (1968). Briefly, Oxenfeldt and Kelly argued that once the initial constraints of financial resource availability, human resource

availability, and informational resource availability (deemed to be the three critical barriers to rapid growth of franchise systems) are relatively overcome with system growth, the attractiveness of the franchisees will be greatly diminished in the eyes of the franchisors, who may then resort to ownership redirection rather than share revenue streams with their franchisees.

According to this resource scarcity view, then, during the initial stages of the organizational life cycle, the mix of franchised and company-owned outlets arises because it allows entrepreneurial-minded franchisor firms to efficiently and quickly obtain access to scarce financial, managerial and informational resources by partnering with franchisees (Hunt 1973; Lillis et al. 1976; Anderson 1984; O'Hara and Thomas 1986; Padamanbhan 1989; Norton 1988a, 1988b; Minkler 1990; Thompson 1994; Dant and Paswan 1998), a need that is expected to dramatically decrease as the franchise systems grow and mature, thereby fostering a tendency toward a higher proportion of company-owned outlets arising during the later stages of the organizational life cycle.

Rubin (1978) criticized the capital scarcity explanation because investing in a single outlet is considered riskier than investing in a portfolio of shares from all outlets in a chain. Hence, the franchisees are expected to demand a risk premium to compensate them for their nondiversified investment in a franchise system. According to Rubin, then, the franchisor firm could raise capital at a lower cost through selling stocks to debt holders as passive investors. However, Rubin's argument has been criticized on several grounds. Foremost, the supply of capital by the franchisees causes lower financial transaction costs than by the external suppliers of capital. Franchisees have more information regarding their own entrepreneurial capabilities, compared to passive investors that rely on public information regarding the firm's capabilities and strategies (Combs and Ketchen 1999a, 1999b). Martin (1988, p. 61) argued that under tight credit conditions, young immature franchisors will be rationed out of the market by the "loan qualification process." This occurs because of market failure due to asymmetric information between the franchisor and the external suppliers of capital (Martin and Justis 1993). In this case, the franchisor tries to adjust the mix of company owned to franchised outlets in favor of more franchised units in order to maintain a certain level of growth rate. In addition, passive investors may foresee motivational problems under a chain of company-owned outlets because they are characterized by weaker incentives (i.e., because of the classical agency problems associated with salaried managers) than franchised outlets. Hence, these investors are likely to demand a higher risk-premium compared to an investment in a firm with a higher proportion of franchised outlets (Lafontaine 1992). On a more positive note, the franchisees' investments represent the efficient bundling of all three critical resources (i.e., managerial talent and local market knowledge in addition to just the financial capital).

However, empirical findings do not consistently confirm the influence of resource scarcity on the ownership patterns;

hence, the evidence regarding ownership redirection has been mixed (Hunt 1973; Martin 1988; Dant et al. 1996; Dant and Paswan 1998; Dant and Kaufmann 2003; Lafontaine and Kaufmann 1994; Combs and Ketchen 1999a; Alon 2001). This may also be due to the heterogeneous indicators used for the resource scarcity variables in various empirical investigations of the phenomenon (Combs and Ketchen 2003; Dant et al. 1992). Recently, Dant and Kaufmann (2003) used formative indicators to operationalize the firm's scarce resources and presented some evidence of ownership redirection as the systems mature and gain greater access to resources.

In addition to the resource dependence view, the coexistence and the dynamics of franchised and company-owned outlets has been examined from an agency-theoretic and transaction cost analysis perspectives as well. According to the agency theory, the decision between company ownership and franchising depends on the individual characteristics of the outlets (Brickley and Dark 1987; Norton 1988a; Brickley et al. 1991; Lafontaine 1992; Dahlstrom and Nygaard 1994; Shane 1998; Alon 2001). The agency theory offers the following explanation: Under the conditions of low monitoring costs, company-owned outlets, despite their lower-powered incentive mechanisms, are more efficient than franchised outlets. This might occur in a series of outlets located in geographic proximity to each other. However, when the monitoring costs rise, due to uncertainty and opportunism, franchised outlets are more efficient because of their higher-powered incentive effects. More recently, Bai and Tao (2001) have extended the classical agency-theoretical view by presenting a multitask model of the existence of franchised and company-owned outlets.

The transaction cost analysis (TCA) explanation is based on the assertion that differences in asset specificity, frequency of transactions, and uncertainty may explain the ownership of the individual outlets. The investigations based on TCA have primarily attempted to evaluate the influence of specific investments on the tendency toward vertical integration by company-owned outlets (Klein 1980; Williamson 1985; Dnes 1992; Manolis et al. 1995; Berkovitz 1999). Due to the hostage effect of the outlet-specific investments, the franchisor's opportunism risk is reduced, requiring a lower degree of vertical integration. On the other hand, a higher brand name capital is positively related to the degree of vertical integration (Minkler and Park 1994). According to a recent study of Lafontaine and Shaw (2005), the brand name value has an important impact on the proportion of company-owned outlets. They found evidence of a tendency toward a long-term stable proportion of company-owned outlets during the organizational life cycle. They explained the stable mix with the investments in brand name assets. Brand name value and control are positively related because high brand name value requires more control by the franchisor to protect the brand name value from franchisee's free-riding. However, Lafontaine and Shaw do not include the franchisee's specific assets as explanatory variable of the contractual mix, as pro-

posed by the resource scarcity and property rights approach (Dant and Kaufmann 2003; Windsperger 2004).

Generally, we can conclude that the agency and transaction cost theory suffer from the following two deficits. First, in a strictly methodological sense, the agency theory cannot explain the allocation of ownership rights as residual rights of control, due to the complete contracting assumption (Hart 1995, 2002; Masten 2000; Brousseau and Glachant 2003). Secondly, as Whinston (2001, 2003) has argued, the asset specificity theory does not differentiate between the various types of specificity that matter for integration decisions—for instance between contractible specific assets and noncontractible specific assets.

In sum, the extant franchising literature on ownership redirection suffers from the following theoretical and empirical deficits. *First*, although the resource dependence perspective does offer an explanation of ownership redirection, it does not differentiate between contractible and noncontractible resources. Under the property rights approach this differentiation is critical for the explanation of asset ownership: The property rights theory states that only intangible resources determine the ownership structure (Hart and Moore 1990; Baker and Hubbard 2004). As Baker and Hubbard (2001, 2004) have argued, increasing the contractibility of assets may explain changes in the ownership structure. *Second*, the arbitrary and disparate usage of proxy variables with low construct validity encountered in investigations belonging to these two frameworks is a failure of the operationalizations of these theories. For instance, resource dependence has been measured by age, system size, and growth rate that more likely represent agency-theoretical variables that explain the firm's use of franchising (Combs and Ketchen 2003; Dant et al. 1996). The objective of this paper, then, is to develop a property rights interpretation of ownership redirection. We extend the resource dependence view by differentiating between noncontractible and contractible resources. In doing so, we also attempt to improve the measurement of the resource dependence indicators by differentiating between the more and the less contractible resources. In effect, as shown in the next section, the property rights theory offers a finer cut to the resource dependence perspective to the ownership redirection phenomenon.

A property rights view of asset ownership

Under positive transaction costs, the assignment of property rights is relevant for the efficiency of resource allocation (Coase 1960; Demsetz 1966). In this case, the economic agents cannot conclude complete contracts because transaction costs are too high to specify all relevant circumstances in the contract. Incompleteness of contracts means that there will remain some residual rights that are not included in the contract (Hadfield 1990). All rights to the asset not specified in the contract will hence accrue to the residual claimant (Fama and Jensen 1983). Under the property rights perspec-

tive, the critical asset characteristic relevant for the determination of ownership structure is the degree of intangibility of the asset (Hart and Moore 1990; Brynjolfsson 1994; Maness 1996). Intangible assets refer to the knowledge, skills and capabilities (know-how) largely stored in the mind of individual (Itami 1984; Lev and Radhakrishnan 2002) that cannot be codified and easily transferred to other agents since they include an important tacit component (Polanyi 1962). Therefore, they show a low degree of contractibility.

What are the intangible assets in franchising? The franchisee's intangible assets refer to the outlet-specific know-how in local advertising and customer service, quality control, human resource management, and product innovation (Sorenson and Sørensen, 2001). The franchisor's intangible assets refer to the system-specific know-how and brand name assets (Klein and Leffler 1981; Norton 1988a). They include knowledge and skills in site selection, store layout, product development and procurement (Kacker 1988). The property rights view of asset ownership in franchising can be summarized by the following proposition (Windsperger 2002, 2004): If the franchisor's intangible assets are very important to generate the residual income of the network relative to the franchisee's intangible local market assets, the franchisor should have an important ownership stake to provide the necessary investment incentives; and if the franchisee's local market assets are very important to create the residual surplus relative to the franchisor's system-specific assets, the franchisees should have a relatively large fraction of ownership rights. This is consistent with Rubin's view. Rubin argued (Rubin 1978, p. 229), that the franchisor's and the franchisee's part of the residual rights of control "can be understood as an attempt to give property rights to the parties to the transaction in those areas that they can efficiently control."

Based on the property rights approach, we illustrate the allocation of ownership rights between the franchisor and the franchisee with the following hypothetical example. In this illustration, we examine the cases of two types of systems (i.e., a "nonintegration" (or a franchisee contract) system and an "integration" (or company-ownership) system) under the assumption that there are only two relevant assets, namely, a_0 and a_1 where, a_0 represent the system-specific franchisor assets and a_1 the local market specific franchisee assets.

Case of nonintegration or franchisee owned unit

We assume that both a_0 and a_1 show a high degree of intangibility. Therefore, the system-specific know-how and the local market investments cannot be specified in the contract. In this situation the franchisor's ownership of both assets is not efficient. If both assets were internally coordinated, the total surplus value would be reduced because the franchisor has no access to the requisite local outlet-specific assets. Hence, the efficient ownership structure is ownership of a_0 by the franchisor and ownership of a_1 by the franchisee.

The franchisor is better off under nonintegration (franchisee owned unit structure) because the franchisee's more valuable local market know-how creates a higher residual surplus for the network that could not be realized under integration (i.e., company ownership scenario). In other words, even though the franchisor must share its claims to the residual surplus with the franchisee under the nonintegration condition, it does so on a larger base of revenue (i.e., franchisee's local market know-how creates a higher residual surplus for the network). This resultant revenue stream may exceed franchisor's larger proportional share of the smaller total residual surplus created under the integration condition (i.e., company ownership scenario).

Case of integration or company-owned unit

We assume the franchisor's asset, a_0 , has a high degree of intangibility and the franchisee's asset, a_1 , has a low degree of intangibility. Hence, a_0 is not contractible and a_1 is contractible. If the franchisor makes an investment in its intangible system-specific assets and creates the residual surplus, the franchisee may expropriate fractions of the surplus value. Under incomplete contracts the franchisor and franchisee must bargain for the division of residual income. Since each party only receives a fraction of the residual surplus, they will both under-invest under this governance structure. Since only the franchisor has intangible assets that generate residual surplus, the franchisee can expropriate a large fraction of the residual income. In this case, the investment incentive of the franchisor is significantly and negatively affected. Hence, the question arises whether the franchisor should have ownership of both assets. If the franchisor owns both assets, its investment incentive is commensurately increased because it gets a larger fraction of residual income. At the same time since a_1 is contractible, it can be easily acquired by the franchisor. Consequently, the residual rights of control of both assets should be given to the franchisor because it creates the residual income stream.

In conclusion, then, if the franchisor has noncontractible system-specific assets and the franchisee is the holder of contractible local market assets, the franchisor should be the residual claimant and hence the owner of both assets. Consequently, ownership redirection is hypothesized to occur if the franchisee's local market assets become more and more contractible over time.

Property rights hypotheses

Based on the resource dependence view (cf. Oxenfeldt and Kelly 1968; O'Hara and Thomas 1986; Padamanbhan 1989; Dant et al. 1996; Dant and Kaufmann 2003), ownership redirection results from resource constraints (i.e., financial, local information, and management resources) that franchisor-entrepreneurs encounter in the early periods of

Table 1
Resource dependence versus property rights programs: a philosophy of science view

Attributes ↓	Resource dependence perspective	Property rights perspective
Intellectual Foundations	Organizational Behavior Oxenfeldt and Kelly 1968; Pfeffer and Salancik 1978; Wernerfelt 1984; Dant et al. 1992 Strategic organizational choices and inter-firm governance depicted as a coping response to the forces of environmental uncertainty and limited firm specific resources	Applied Microeconomics Coase 1960; Demsetz 1966; Fama and Jensen 1983; Grossman and Hart 1986; Hart and Moore 1990; Hart 1995; Maness 1996 Allocation of residual decision and residual income rights to motivate investments in noncontractible (intangible) assets
Concept of man	Behavioral Man: A rational information processor who forms beliefs, attitudes, and intentions within the constraints of an organizational context that are causally determinant of his behaviour	Economic Man: Seeks to maximize his utility subject to constraints of time, income, information, and institutional rules
Appraisal Criteria	Intuitive plausibility, validity and reliability of measurement instruments	Mathematical elegance, simplicity, internal consistency
Research Methods	Predicted experimental effects; correlation in ex-post facto studies at the micro level	Mathematical models; correlation in ex-post factor studies at the micro and macro level

the growth of franchising. With passage of time and presumably system-growth and more franchising experience, the percentage of company-owned outlets rises because the franchisor is expected to improve its financial position and also acquire outlet-specific knowledge and capabilities. The property rights perspective, by differentiating between more and less contractible resources, then provides a finer cut to the predictions based on resource dependence theory. According to the property rights theory, only noncontractible assets can explain asset ownership, and hence ownership redirection. In Table 1, we compare and contrast these two theoretical frameworks based on a philosophy of science perspective.

Even though the two frameworks come from different paradigms, they are phenomenologically connected in that they offer predictions about the same subject, that is, ownership redirection in franchising. Such cross-paradigm investigations often provide critical insights into the phenomenon under study because they are not fettered by the limitations of a single paradigm. Examples of such investigations that have combined variables from seemingly incommensurable paradigms can be found in the inter-organizational literature at large (e.g., Nootboom et al. 1997; Zaheer and Venkatraman 1995) and within the ownership redirection literature as well (e.g., Bradach 1997; Bradach and Eccles 1989; Lafontaine and Kaufmann 1994; Dant and Kaufmann 2003). Hence, in the ensuing sections we develop hypotheses on ownership redirection in the tradition of inferences program (cf. Bloor 1976; Barnes 1977).

Mix of franchised and company-owned outlets

Based on the property rights theory, the contractual mix between franchised and company-owned outlets depends on the distribution of intangible system-specific assets of the franchisor and the local market assets of the franchisee (Windsperger 2004). The higher the proportion of the franchisor's intangible assets relative to the franchisee's intan-

gible assets for the generation of residual income, the more property rights must be transferred to the franchisor and the higher should be the percentage of company-owned outlets (PCOWN). Hence, if the intangible system-specific assets of the franchisor are relatively important compared to the intangible local market assets of the franchisee, the PCOWN should be relatively high. Conversely, if the local market assets of the franchisee are relatively more important compared to the system-specific assets, the PCOWN should be relatively low. Hence, the distribution between contractible and noncontractible assets is expected to explain the proportion of company-owned outlets or PCOWN. This is formally stated in our first hypothesis:

H1. The percentage of company-owned outlets is positively related to the franchisor's intangible system-specific assets and negatively related to the franchisee's intangible local market assets.

Franchisee as the supplier of local knowledge assets

Our next hypotheses directly focus on franchisee as the supplier of local market assets (i.e., local knowledge assets in the form of informational and managerial resources, and financial assets). We begin by broaching the issue of the extant differences in the contractibility of these different local market assets, and evaluate their impact on ownership redirection.

Franchisee's knowledge assets refer to the franchisee's local market know-how consisting of 'exploration' assets and 'exploitation' (or managerial) assets (March 1991; Sorenson and Sørensen 2001; Thompson 1994; Bradach 1997). The 'exploration' assets include local market knowledge and innovation capabilities, and the 'exploitation' assets include quality control, human resource management, and administrative capabilities (Wicking 1995). 'Exploration' assets closely approximate the "adaptive innovation" construct proposed by Bradach (1997).

Recall that the central argument of the property rights theory in explaining the tendency toward ownership redirection is that changes in asset ownership result from changes in their contractibility (cf. Baker and Hubbard 2001, 2004; Wernerfelt 2002). Applied to franchising, this is tantamount to changes in the intangibility of local market assets due to organizational learning by the franchisor who acquires local market knowledge during the organizational life cycle. According to Nonaka's knowledge model (Nonaka 1994; Nonaka and Takeuchi 1995; Nonaka et al. 2001), organizational learning triggers a knowledge conversion process that changes the nature of local market knowledge from tacit to more explicit knowledge. Therefore, contractibility of local market assets rises during the contract period that, in turn, increases the bargaining power of the franchisor. Under the more contractible (less intangible) local market assets of the franchisees, the franchisor's system-specific assets are more important for the creation of residual surplus of the network. Hence, ownership rights must be transferred to the franchisor to secure the franchisor's investments in system-specific and brand name assets and to prevent the hold-up from opportunistic franchisees. Consequently, due to this knowledge conversion from tacit to more explicit knowledge, contractibility of local market assets rises resulting in a higher proportion of company-owned outlets (PCOWN) during the organizational life cycle. Qian (2001) argues in a similar way when he says that once the converted assets are well understood by the franchisor and can be maintained by the internal hierarchy without the need for franchisee as original creator, they, in effect, become assets owned by the franchisor firm.

Since 'exploration' assets show a higher degree of intangibility than 'exploitation' assets, their contractibility is lower and, consequently, their impact on the allocation of asset ownership between the franchisor and the franchisee should be higher because they would generate more directly traceable residual income (Gu and Lev 2003). This is due to the higher knowledge spillover potential of more intangible, more tacit knowledge assets (i.e., 'exploration' assets) during the organizational life cycle (Blodgett 1992).² If the franchisee's local market knowledge is outlet-specific and intangible at the beginning of the contract period, the knowledge gap between the franchisor and the franchisee is high. Alternatively, if the franchisee's local market knowledge is less outlet-specific and less intangible, the knowledge gap is relatively small. Therefore, the more intangible knowledge assets the franchisee has at the beginning of the contract period, the larger is the knowledge conversion effect from more tacit to explicit knowledge (Nonaka et al. 2001), and the larger is the increase in contractibility, and consequently their impact on asset ownership. Consequently, exploration assets (being more intangible local market knowledge) have

a stronger impact on ownership redirection than exploitation assets. We summarize this expectation in the following hypothesis:

H2. The influence of the more intangible local market assets (exploration assets) on ownership redirection is higher than the influence of the less intangible local market assets (exploitation assets).

Franchisee as a supplier of financial assets

Norton (1995, p. 88) argues that franchising exists in order to reduce "operating and financial transactions costs." Operating transaction costs occur at the acquisition of exploration and exploitation assets discussed above, and financial transactions costs are incurred at the acquisition of financial assets. Hence, the capital constraint or the resource dependence hypothesis is only valid if franchising provides capital for the franchisor at lower transaction costs than other sources of capital (Norton 1988a). The operative issue, then, becomes the identification of the conditions under which the franchisor may realize an advantage by using the franchisee's financial resources.

The answer lies in the low contractibility of the financial assets in the early phases of the organizational life cycle. The franchisor may be quite constrained by the information asymmetry between the prospective conventional lenders (e.g., banks, venture capitalists) and himself concerning the profitability of investment project envisioned by the franchise concept. Due to their low salvage and/or liquidation value, the conventional lenders are likely to find it more difficult and risky to finance investment projects if the investments are in intangible assets as compared to tangible assets such as plant and equipment (Caves and Murphy 1976; Combs and Ketchen 1999a, 1999b).

This information asymmetry can be reduced by the franchisor by setting-up a franchising network as a quasi-internal capital market through the bundling of ownership, management and capital and hence through the transfer of residual decision and residual income rights to the franchisee (Gertner et al., 1994; Kochar 1997; Norton 1995; Combs and Ketchen 1999a, 1999b; Rajan and Zingales 2001; Triantis, 2004; Stein 2003). The franchisee may be in a better position to evaluate the investments risk associated with the franchisor's concept because he is not only the supplier of financial resources but also of the entrepreneurial skills and local market assets that show a high degree of intangibility and high local market specificity, the latter resulting in high financial transaction costs for the conventional lenders (Long and Malitz 1985; Williamson 1988; Choate 1997; Menendez-Alonso 2001). Under this property rights view, then, the contractibility of operating assets (exploration and exploitation assets) influences the contractibility of financial assets. The lower the contractibility of operating assets, the lower is the contractibility of financial resources, and the more difficult it becomes for

² Similar knowledge conversion effects arise in the organizational life cycle of joint ventures (Inkpen and Beamish 1997).

Table 2
Estimation of nonresponse bias^a

Attributes ↓	Mean (standard deviations) and counts ^b			
	Respondents	Non respondents	Test statistic	p-value
Initial investment required (\$)	273,808 (1,562,275) N = 74	208,840 (1,172,791) N = 127	$t = 0.312$.775
Initial franchise fees (\$)	11,048 (23,233) N = 76	16,099 (46,682) N = 127	$t = 1.031$.304
Royalty rate (percent)	4.29 (4.32) N = 70	4.39 (4.78) N = 127	$t = 0.154$.878
Age (years)	5.96 (5.66) N = 75	10.45 (6.99) N = 114	$t = 4.851$.000
Products versus service	34 ^c	69 ^c	$\chi^2_{(df=1)} = 2.22$.162
	45 ^d	58 ^d		
	N = 79	N = 127		

^a The related measures of royalty rate, initial investment, and initial franchise fees were first tested by a MANOVA to ensure independence of these measures and to contain their comparison at the experiment-wise error rate of 0.05. Manova was nonsignificant (Wilks' Lambda_(df 3,179) = 0.373, $p = .772$). Age variable was tested using a stand-alone t-test, whereas product versus service dichotomy was tested utilizing the χ^2 test on relative frequencies of this characteristic across the two sub-groups.

^b Counts differ across different attributes because of item nonresponses.

^c Product.

^d Service.

the franchisor to get financial resources from the conventional lenders, and hence the higher is their impact on the ownership structure of franchising firm. Consequently, the “financial architecture” of the franchising firm is closely intertwined with the organizational architecture because it “adapts to support the co-investment of human and financial capital” (Myers 1999, p. 139). This yields our final hypothesis:

H3. The influence of the franchisee's financial assets on the ownership structure of the franchising firm varies with the contractibility of local knowledge assets.

Methodology

Sampling procedures

The empirical data for the test of these hypotheses were collected from the franchising sector of Austria. Since Lehman (1985) advocates sampling all significant entities in industrial surveys, we commenced our empirical work by first obtaining the complete list of all franchise systems in Austria that were registered members of the Austrian Franchise Association (AFA) in 1997. The directory identified a total of 216 franchised systems in Austria, and it is estimated that more than 90 percent of all franchise systems operating in Austria are listed in the directory of AFA. Hence, the AFA directory provided the most comprehensive listing of franchise systems operating in Austria. A national mail survey was utilized in the actual data collection, which occurred in the 1997–1998.

After several preliminary steps in questionnaire development and refinement, including in-depth interviews with select franchisors in Vienna and the representatives of the AFA, the final version of the questionnaire was pretested with six franchisors. The questionnaire took approximately 20 min to complete on the average. The revised questionnaire,

which incorporated the alterations suggested by the pretest, was mailed to all 210 franchisors listed in the directory of AFA (216 total franchisors less six utilized in the pretest). We received 83 completed and usable responses with a response rate of 39.52 percent.

An estimation of nonresponse bias was carried out using two approaches. Foremost, nonresponse bias was estimated by comparing early versus late responders (Armstrong and Overton 1977), where late responders serve as proxies for nonrespondents. Operationally, the late respondents' pool comprised of firms that completed the questionnaire 4 weeks after the first group. The comparisons were carried out across theoretical variables as well as demographic classification measures. No significant differences emerged between the two sub-groups of respondents. The second approach utilized a direct comparison of the respondent pool with the nonrespondents along variables for which population statistics were available, that is, system age, whether the franchise systems dealt with products versus services, royalty-rates payable by franchisees, initial franchise fees, and initial investment required from the franchisees (Gewinn 1998; Franchise-Chancen in Österreich 1997). As the results of Table 2 demonstrate, respondents and nonrespondents seem to have come from the same population in all respects except that the nonrespondents belonged to significantly older group (average age of 10.4 years) as opposed to the respondent pool (with average age of about 6.0 years). Age variable differences should not theoretically interfere with any of the hypotheses. In sum, nonresponse appeared not to be a concern with the dataset.

Measures

The survey instrument asked the franchisor respondents to provide details of ownership patterns in their systems (i.e., the number of company-owned units, and the number of franchised units in the system in 1998), fee structures of their

systems (i.e., initial fees, initial investments, and ongoing royalties payable by franchisees), operational details of their systems (i.e., the age of their systems and annual training days) and answer a series of questions related to the relative resource advantages enjoyed by the franchisees. These are briefly discussed below and the full battery of questions is presented in the appendix.

Franchisor's intangible system-specific knowledge assets

Based on measures employed in earlier studies (e.g., Fladmoe-Lindquist and Jaque 1995; Argote 2000; Darr et al. 1995) we use 'annual training days' (ATDAY) as a proxy for the franchisor's intangible system-specific assets. Under the assumption that as the intangibility of franchisor's knowledge assets increases, so does the number of days of required face-to-face interaction with the franchisees, the number of 'annual training days,' hence, taps into the importance of the franchisor's intangible system-specific know-how needed to generate the residual income of the network. As argued by Simonin (1999), the higher the degree of intangibility, the less contractible are the knowledge assets, and the more personal (face-to-face) knowledge transfer methods are used, such as telephone, meetings, coaching, and training.

Franchisees' intangible local market knowledge assets

Franchisee's intangible knowledge assets refer to the franchisee's local market know-how consisting of 'exploration' and 'exploitation' assets. In the questionnaire, the franchisors were asked to rate their franchisees' intangible local market knowledge assets as compared to a manager of a company-owned outlet using five-point Likert-type scales (see Appendix A). Based on March (1991), Bradach (1997, 1998), Cliquet (2000, 2002), and Sorenson and Sørensen (2001), we used the following domains of indicators to measure the 'exploration' and 'exploitation' capabilities advantage of the franchisees relative to a manager of a company-owned outlet. The domain of the content of 'exploration' capabilities (LMEXPLOR) refers to (a) innovation and (b) local market knowledge, and the domain of the content of 'exploitation' capabilities (LMEXPLOIT) refers to (a) quality control and (b) administrative capabilities. Importantly, we used these scales as formative rather than reflective latent indicators of their respective constructs because the constructs are defined by theoretical judgement and produced by the indicators representing the domain of the content (Diamantopoulos and Winkelhofer 2001). If we omitted an indicator, the content of the construct would change (Bollen and Lennox 1991, p. 308). For instance, if 'innovation' item were removed from 'exploration' assets, this would change the essential nature of this construct. Since innovation and local market knowledge are characterized by a higher degree of tacitness than 'administrative' and 'quality control' capabilities, in the language of H2, 'exploration' assets are

expected to show a higher degree of intangibility (noncontractibility) than 'exploitation' assets.

Franchisees' financial assets

The franchisor respondents were again asked to rate the financial resource advantage (FINASSET) of franchised outlets compared to a company-owned outlet using a seven-point Likert-type scale (Appendix A).

Dependent variable of ownership rights

This was calculated as percentage of company-owned outlets (PCOWN) based on the answers received from the franchisors regarding the number of company-owned outlets operated by the franchise system in 1998 and the number of franchisee-owned outlets in existence in the chain in 1998 (see Appendix A).

Control variables: initial investments and system size

In addition, we also controlled for two variables that might affect the mix of company-owned and franchised outlets. They are drawn from the perspectives of transaction costs theory and agency theory, respectively.

According to the transaction cost theory, the tendency toward vertical integration is negatively related to the extent of transaction-specific investments of the franchisees because high outlet-specific investments increase the self-enforcing range of agreements (Klein 1995; Lafontaine and Raynaud 2002) and reduce the hold-up risks for the franchisor (Klein 1980; Williamson 1985). Hence, franchisee's 'initial investments' (IINVEST) was employed as a proxy for transaction-specific investments.

Agency theory suggests that the larger the size of the system, the higher are the agency costs (Alon 2001; Combs and Ketchen 2003). The firm, then has two recourses open to it towards the goal of reducing the agency costs. First, it can attempt to reduce the residual loss by increasing the monitoring activities and, secondly, it can allocate a higher fraction of residual income to the agents. The higher the monitoring costs of the firm due to environmental uncertainty and opportunism, the higher is the tendency toward franchising. Therefore, we use 'system size' (OUTLETS) (i.e., the total number of franchised and company-owned outlets) as a surrogate indicator of monitoring costs.

Results

Descriptive results

Table 3 presents descriptive statistics related to the sample. The items are presented in the sequence in which the measures appear in the appendix. Foremost, we note that the mean annual training days (ATDAY) is 15.14 a reasonably

Table 3
Descriptive statistics of the sample: franchise systems in Austria

Attribute/variable	N	Mean	Standard deviation
Annual training days	73	15.14	12.89
Innovation advantage of the franchisees	69	3.51	1.36
Local market knowledge advantage of the franchisees	71	3.87	1.28
Quality control advantage of the franchisees	70	2.79	1.39
Administrative capabilities advantage of the franchisees	69	3.30	1.26
Financial resource advantage of the franchisees	66	5.15	1.94
Company-owned outlets (1998)	82	5.91	22.99
Franchisee-owned outlets (1998)	82	24.41	44.97
Proportion of company-owned outlets (percent)	79	26.96	22.77
Initial investments (US\$)	74	273,808	1,562,275
Number of outlets	82	30.33	59.50
Age (years)	75	5.96	5.66

large number given its recurring nature. Overall, the franchise system size (OUTLETS) in Austria appears to be modest (mean = 30.33 units), and the mean value of the proportion of company-owned units (PCOWN) is 26.96 percent. The average age of the franchise systems in the sample was 5.96 years, a relatively younger group (as noted earlier) compared to the nonrespondents whose average age was 10.45 years. The mean initial investment (IINVEST) exacted by the franchisors from the franchisees was US\$ 273,808, a number that had not changed much over the years, that is, was not statistically different from what the older group of nonrespondents had paid (see Table 2). Hence, the inferential results we report next are bounded by these contextual descriptions.

Results from regression analysis

To test the property rights hypotheses (H1, H2 and H3), we conducted OLS regression analysis with the percentage

of company-owned outlets (PCOWN) as dependent variable (Table 4). The dependent variable (PCOWN) was modelled as the as the natural log of the ratio of the percent company-owned divided by the percent franchised outlets in the system. The explanatory variables refer to the annual training days (ATDAY), local market knowledge advantages resulting from ‘exploration’ and ‘exploitation’ capabilities (LMEXPLOR, LMEXPLOIT, respectively), financial resource advantage (FINASSET) and the interaction between FINASSET and LMEXPLOR, specific investments (IINVEST), and the number of outlets (OUTLETS). We also include years since the opening of the first franchised outlet (AGE) representing the ownership redirection effect based on the classical resource dependence perspective reasoning. Finally, the interaction terms with AGE (ATDAY*AGE, LMEXPLOR*AGE, and LMEXPLOIT*AGE) are included to provide additional insights into the property rights hypotheses. Consequently, we estimate the following regression equation:

$$\begin{aligned}
 PCOWN = & \alpha_0 + \alpha_1 ATDAY + \alpha_2 LMEXPLOR \\
 & + \alpha_3 LMEXPLOIT + \alpha_4 FINASSET \\
 & + \alpha_5 FINASSET * LMEXPLOR \\
 & + \alpha_6 IINVEST + \alpha_7 OUTLETS + \alpha_8 AGE \\
 & + \alpha_9 (ATDAY * AGE) \\
 & + \alpha_{10} (LMEXPLOR * AGE) \\
 & + \alpha_{11} (LMEXPLOIT * AGE) + \varepsilon
 \end{aligned}$$

Based on our first property rights hypothesis (H1), the higher the PCOWN, the higher is the number of annual training days (ATDAY), and the lower is the local market knowledge advantage (LMEXPLOR, LMEXPLOIT). Hence, α_1 is expected to yield a positive sign, and α_2 and α_3 are expected to have negative signs. Per H2, since ‘exploration’ assets (LMEXPLOR) are less contractible than ‘exploitation’ assets (LMEXPLOIT), the influence of LMEXPLOR on

Table 4
Inferential results of OLS regression

Variables	Effect	Expected sign	Model 1	Model 2
ATDAY	α_1	+	0.336**	0.458***
LMEXPLOR	α_2	–	0.401**	0.391**
LMEXPLOIT	α_3	–	–0.022	0.076
FINASSET	α_4	–	–0.021	–0.173
FINASSET*LMEXPLOR	α_5	–	–0.350**	–0.241*
AGE	α_8	+	0.058	0.083
AGE*ATDAY	α_9	+	0.407**	0.448**
AGE*LMEXPLOR	α_{10}	+	0.458***	0.475***
AGE*LMEXPLOIT	α_{11}	+	–0.177	–0.138
IINVEST	α_6	–		–0.141
OUTLETS	α_7	–		–0.040
Model summary statistics			$F = 3.54_{(df=9,41)}$ $p = .003$ Adjusted $R^2 = 0.314$	$F = 4.02_{(df=11,35)}$ $p = .001$ Adjusted $R^2 = 0.419$

*** $p < .01$; ** $p < .05$; * $p < .10$.

PCOWN should be higher than of LMEXPLOIT. According to financial asset hypothesis (H3), the expected negative relationship between financial resource advantage (FINASSET) and PCOWN is expected to be higher the more intangible local market assets (LMEXPLOR) exist; hence α_4 and α_5 are expected to have negative signs. IINVEST represents the TCA based asset specificity explanation that states that initial investments of the franchisees are negatively related to vertical integration. Hence, the a priori expectation of α_6 is a negative sign. In addition, OUTLETS, which represents the agency theory based monitoring cost view of franchising suggests that higher the number of outlets, the larger are the monitoring costs, and the more likely franchising occurs. Hence, α_7 is expected to have a negative sign. Furthermore, as noted earlier, the effect of AGE is included to represent the classical resource based ownership redirection effect due to the organizational life cycle. Recall that the ownership redirection hypothesis suggests that the greater the age (surrogate for franchisor's accumulation of resources), the greater the PCOWN. Therefore, under the resource dependence theory based explanation, the impact of AGE, α_8 , is expected to be positive. Finally, three interaction terms with AGE (LMEXPLOR*AGE, LMEXPLOIT*AGE and ATDAY*AGE) are included representing the ownership redirection effect based on the rationale of the property rights hypotheses. The ownership redirection hypothesis suggests that the influence of the local knowledge assets upon PCOWN is lower and the influence of the system-specific assets upon PCOWN is higher, the greater the franchisor experience (AGE). Therefore, the expected negative relationships between local market assets (LMEXPLOR, LMEXPLOIT) and PCOWN are expected to be lower and the expected positive relationship between system-specific assets (ATDAY) and PCOWN is expected to be higher, the greater the franchisor experience. Consequently, these effects related to the interaction terms on PCOWN should all be positive (i.e., α_9 , α_{10} , and α_{11} are expected to have positive signs).

In effect then, in the tradition of strong inferences program (cf. Bloor 1976; Barnes 1977), our test pits all the competing explanations of the ownership redirection (i.e., TCA view, agency-theoretic explanation, and of course, the resource dependence based view and the property rights explanation) against each other. The regression model itself is estimated in two steps. In Model 1, we test the three hypotheses derived

from property rights perspective and the resource dependence based effects without the control variables related to TCA and agency-theoretic explanations. Model 2 incorporates the control variables IINVEST and OUTLETS. Model 2 fits the data better in terms of a much larger adjusted R^2 as compared to Model 1.

The data partially support hypotheses H1 and H2. The coefficients of ATDAY and AGE*ATDAY show that the impact of the franchisor's system-specific assets upon the PCOWN rises during the life cycle. In addition, the more contractible 'exploitation' assets (LMEXPLOIT and LMEXPLOIT*AGE) do not significantly influence asset ownership. This result is consistent with the property rights view which states that only intangible assets influence the ownership structure. The results may indicate that the franchisor can easily acquire the franchisee's quality control and administrative capabilities (exploitation assets) to centrally control the local outlets. However, the positive coefficients of LMEXPLOR and LMEXPLOR*AGE indicate that the impact of franchisee's less contractible 'exploration assets' upon the PCOWN does not decline as hypothesized but increases during the organizational life cycle. This may be explained by the larger knowledge spill-over effect from the franchisees to the franchisor if the more intangible local market assets exist at the outlets resulting in a higher learning potential for the franchisor during the contract period. Furthermore, the influence of financial assets on the proportion of company-owned outlet is consistent with our hypothesis, H3. As predicted, the negative interaction effect FINASSET*LMEXPLOR indicates that the franchisee's financial assets only influence the ownership structure under a low contractibility condition of local market assets because in this case it is difficult for the franchisor to get capital from external suppliers due to the low liquidation value of the assets. Moreover, the predictions of the transaction cost analysis, the agency theory, and the resource dependence framework are directionally supported in that the coefficients of specific investments (IINVEST), and the number of outlets (OUTLETS) are negative, and the coefficient for age of the system (AGE) is positive; however, none of them are statistically significant. Finally, colinearity diagnostics were performed using correlations between the independent variables. The highest correlation, that between LMEXPLOR and LMEXPLOIT, is 0.554; however, the inflation factor (VIF) indicated only weak colinearity (Table 5).

Table 5
Correlations amongst the predictor variables

	ATDAY	OUTLETS	IINVEST	LMEXPLOR	LMEXPLOIT	AGE	FINASSET
ATDAY	1.000						
OUTLETS	-0.401	1.000					
IINVEST	0.006	-0.054	1.000				
LMEXPLOR	0.070	-0.152	0.169	1.000			
LMEXPLOIT	0.002	-0.228	0.114	0.554	1.000		
AGE	-0.171	0.475	0.116	-0.210	-0.153	1.000	
FINASSET	0.084	-0.022	0.046	-0.055	-0.031	-0.020	1.000

Discussion and conclusions

This study presents empirical evidence from the Austrian franchise sector on the property rights view of ownership redirection in franchising firms. As suggested by our data, noncontractible assets appear to significantly influence the asset ownership and in turn, influence the tendency toward ownership redirection. The econometric results partially confirm our property rights hypotheses of ownership redirection. In particular, it appears that, in line with hypotheses 1 and 2, the more intangible assets have a significant impact on the ownership structure. The influence of less intangible local market assets (exploitation assets) on asset ownership is not significant. We also obtain results consistent with the financial asset hypothesis (H3) which states that the more intangible the local knowledge assets are, the higher will be the influence of franchisee's financial assets on the proportion of company-owned outlets. This reflects the fact that the financial and organizational architecture of the franchising firm are closely interrelated (Myers 1984, 1999). This finding also contradicts Rubin's view that financial resource constraints are irrelevant for the allocation of ownership rights between the franchisor and the franchisee (Rubin 1978). Rubin implicitly assumes the same financial transaction costs for both the external supply and the franchisee's supply of capital. Such a situation can only exist if the local market assets are tangible and hence contractible, implying both low operating and financial transaction costs.

How are our property rights results different from the resource scarcity interpretation of ownership redirection? According to the resource scarcity view (Combs and Castrogiovanni 1994; Lafontaine and Kaufmann 1994; Combs and Ketchen 1999a; Alon 2001; Dant and Kaufmann 2003), the proportion of company-owned outlets varies negatively with the franchisor's restraints in financial, managerial and informational resources. Our empirical results do not support the managerial scarcity hypothesis measured by the impact of the franchisee's 'exploitation' assets on the PCOWN, because these assets show a relatively high degree of contractibility and, as predicted by the property rights theory, do not influence asset ownership. In addition, our data partially support the financial scarcity hypothesis. According to our property rights interpretation, financial assets only influence asset ownership if the underlying operating assets (exploration and exploitation assets) are noncontractible. Therefore, the differences between the resource scarcity interpretation and our property rights results are due to the fact that, contrary to the property rights approach, the resource scarcity view does not differentiate between intangible (noncontractible) and tangible resources.

A further contribution of our study is to improve the measurement of the franchisee's critical resources by differentiating between less contractible and more contractible assets. In line with the property rights theory, we developed and measured two knowledge assets constructs, such as "exploration assets" and "exploitation assets," that seems to be more valid

than many of the proxy variables used in other studies in the ownership redirection literature (see Combs and Ketchen 2003 for an excellent review). Therefore, we tried to improve the informational and managerial resource measures used in the resource scarcity literature (Dant and Kaufmann 2003) by constructing two-item formative indicators for more and less contractible local resources. However, the measurement of the constructs is not without limitations; but it is only a first step to operationalizing knowledge assets with different degrees of contractibility. A key criticism of our measures may be that these measures are based on the franchisor's perceptions. Hence, we recommend that in future research these operationalizations of franchisee's intangible assets be improved by collecting data from franchisees and/or dyadically. Another fruitful area for future investigations would be to extend this cross-sectional study into a longitudinal study to capture the precise dynamics of the ownership redirection phenomenon.

Our findings also yield practically relevant knowledge for the franchisor-manager. According to the property rights explanation of the ownership dynamics of franchising networks, franchisors are encouraged to get access to the critical intangible local market resources to increase their bargaining power and hence their ownership stake during the organizational life cycle. A successful franchise system should adjust the proportion of company-owned outlets according to the organizational capabilities by acquiring critical local market knowledge. In addition, since the organizational and the financial architecture of the franchising networks are closely intertwined under intangible local market assets, franchisors may achieve a competitive advantage by financing growth through the network as internal capital market.

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Appendix A

Measures employed

Franchisor's intangible system-specific knowledge assets (ATDAYS)

Number of annual training days.

Franchisees' intangible local market knowledge assets

5-Point Likert Scales anchored with: (1 = No Advantage to 5 = Very Large Advantage).

Exploration assets (LMEXPLOR): Franchisees' know-how advantage compared to the manager of a company-owned outlet as evaluated by the franchisor concerning.

1. Innovation
2. Local market knowledge

Exploitation assets (LMEXPLOIT): Franchisees' know-how advantage compared to the manager of a franchisor-owned outlet as evaluated by the franchisor concerning.

1. Quality control
2. Administrative capabilities

Franchisees' financial assets (FINASSET)

7-Point Likert Scale anchored with: (1 = No Advantage to 7 = Very Large Advantage).

Financial resource advantage under franchised outlet compared to the company-owned outlet as evaluated by the franchisor

Dependent variable of ownership rights (PCOWN)

$$\left[\frac{\text{Company-owned outlets}}{\text{Company-owned outlets} + \text{Franchised outlets}} \right] \times 100$$

Age (AGE)

Years since the opening of the first franchised outlet in Austria.

Control variables: initial investments and system size

Initial investments (IINVEST): Dollar value of franchisee's start-up investments needed to open an outlet.

Number of outlets (OUTLETS): Total number of franchised and company-owned outlets in the system.

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