

SNF Working Paper No. 66/02

**An Empirical Investigation of
Governance Structures in
the Hotel Industry**

av

**Robert Dahlstrom
Sven A. Haugland
Arne Nygaard
Aksel I. Rokkan**

SNF-prosjekt nr. 6495: "Value creation and performance in the Norwegian tourism industry"
The project is funded by the Research Council of Norway

INSTITUTE FOR RESEARCH IN ECONOMICS AND BUSINESS ADMINISTRATION
BERGEN, NOVEMBER 2002
ISSN 1503-2140

© Dette eksemplar er fremstilt etter avtale
med KOPINOR, Stenergate 1, 0050 Oslo.
Ytterligere eksemplarfremstilling uten avtale
og i strid med åndsverkloven er straffbart
og kan medføre erstatningsansvar.

An Empirical Investigation of Governance Structures in the Hotel Industry

Abstract

The study investigates alternative governance forms in the hotel industry. We analyze the choice among independently owned firms, voluntary chains, franchising, and vertically integrated chains. Based on agency theory, we argue that the need for control over service quality, financial risk, and the market environment affect the choice of governance form. Prior agency research emphasizes alternative governance structures employed by principals given local market conditions, agent incentives, and risk preferences. We augment the established principal-agent perspective with a discussion of agent motivations to join hotel alliances. Data from 650 hotels indicate that the number of service offerings, distance to headquarters, population, population density, and hotel scale influence governance.

Key words: Distribution, agency theory, services marketing.

An Empirical Investigation of Governance Structures in the Hotel Industry

Closely intertwined with the worldwide expansion of the service industry, we have observed a transformation of interorganizational structures from traditional independent firms into complex networks of arrangements that include voluntary groups, franchised systems, and vertically integrated outlets (Contractor and Kundu 1998 a). Despite substantial anecdotal evidence, few empirical studies (Pak 2002; Brown *et al.* 2000; Michael 1999; Contractor and Kundu 1998 a) have considered whether properties outlined in agency theory provide insight into governance structures in the hospitality sector. The dearth of agency applications in this area is surprising given that hospitality agents operate in contexts characterized by conflict between principals and agents, marked outcome uncertainty, and substantial challenges associated with evaluating agent performance (Eisenhardt 1989). Unlike the production of goods, the production and transaction of the services are limited in time to the contact with the customer. The owner of a brand name faces a problem safeguarding transactions that are costly to monitor and control. The service function creates satisfaction and brand loyalty and brand value. The brand owner must address an important strategic problem: how can a choice of governance structure, either a traditional system or a vertical marketing system, safeguard the brand value against opportunistic behavior given the asymmetry of information associated with services? Substantial research has addressed governance structures (Bergen *et al.* 1992), yet the information asymmetry endemic to service delivery challenges the perspective drawn from research in other industries (Rindfleisch and Heide 1997).

The purpose of this study is to gain an understanding of factors related to interfirm contracts in the hotel industry. Prior studies (e.g., Contractor and Kundu 1998 b) focus on the challenges encountered by global hoteliers. Our research seeks to augment this perspective along several

fronts. First, we focus on a single Western market in which the hotel industry is already well established. Analysis of a single mature market provides the opportunity to counterbalance the principal's perspective with consideration of the agent's motivations to forge alliances (Stanworth and Kaufmann 1995). In a mature industry, entrepreneurs will exploit many markets before multinational enterprises (MNE) consider entrance. Our context provides an opportunity to investigate conditions that favor independence over interfirm alliances.

A second contrast from prior research concerns the form of alliance under investigation. Research (e.g., Contractor and Kundu 1998b) that emphasizes the alternatives available to MNE's examines whether these firms implement vertically integrated hotels, management contracts, or franchises. Our study augments this research with analysis of voluntary chains and independent hotels. This perspective enables us to augment rationales associated with the principal's desire to control service quality with discussion of the agent's incentives to join a hotel alliance.

The third novel contribution of the research is the analysis of the amenities offered by the hotel. Several studies examine hotel contracts (e.g. Ingram and Baum 1997), yet these studies do not consider the influence of the hotel's services on contractual structure. By contrast, we investigate the relationship between these service offerings and governance structures in the hospitality industry.

We investigate factors related to interfirm contracting in the Norwegian hotel industry. Over the last few decades, this industry has witnessed an increased focus on chains, strategic alliances and brands. The mix of contracts employed in European markets varies considerably from those employed in North America (International Hotels Group Directory 1998). Less than 10 % of all North American hotels are wholly owned whereas 80 % are managed by franchise agreements or

management service contracts. Franchising and management service contracts are used in Europe and in Asia, yet wholly owned hotels represent a larger portion of the industry in Europe than in North America. Many Norwegian hotels operated before national and multinational chains gained a foothold in the market. Consequently, the empirical setting provides the opportunity to augment rationale from principal-agent theory with consideration of entrepreneurial incentives to join hotel chains.

The paper proceeds as follows: We describe the organizational forms employed in the empirical setting, and we present the theoretical perspective underlying our research. We develop hypotheses that link economic antecedents to governance, and we then describe the method and empirical test. We close with a discussion of implications and limits of the research.

Organizational Forms in the Norwegian Hotel Industry

In their 1989 study, Bradach and Eccles recognize that distribution processes can be coordinated via integrated channels, networks of independent agents, and hybrid arrangements. Moreover, they call for additional efforts to account for selection among these governance structures. There are several reasons why hotel management firms forego independence for alliances. For example, a local company that traditionally has had control over the entire operation may find it difficult to get international visitors, and thus decides to enter an agreement with an international hotel chain. In this way, the local hotel can get access to an international brand name and an international reservation system. Furthermore, the brand owner can provide the local hotel with managerial competence. At the same time, the interfirm alliance reduces the capital investment for the hotel chain. In addition, the international hotel chain rests its operations on the local entrepreneurial drive, management talent, and local market knowledge (Lafontaine and Kaufman 1994). From both actors' perspective, this is a question of control over

activities versus getting access to resources provided by other companies (Harrigan 1984). By cooperating on specific activities, both the local hotel company and the international hotel chain get access to resources provided by the other actor, but at the same time they have control over other activities.

Contractor and Kundu (1998 a) argue that four dimensions are especially important to control in the hotel industry. These dimensions refer to control over (1) operational management and quality, (2) capital and property, (3) competence and expertise, and (4) the brand and reservation system. In Norwegian hotels, control over these activities is achieved via four organizational forms. In *vertically integrated* hotels, a national or international firm controls all four dimensions. *Franchise agreements* establish interfirm alliances between a franchisor and the local representative, a franchisee. The latter party usually maintains control over local capital investments and is the residual claimant to profits. The franchisor's operating and monitoring systems yield control over operations and expertise, and the franchisor maintains control over the branded operating system. A hotelier that is a member of a *voluntary chain* maintains control over capital and oversees operations, quality, and competence. The chain, however, controls the brand and reservation system. Finally, *independent hotels* are not members of a chain and oversee all aspects of operations. Consider now several economic factors that favor alternatives among these governance forms.

Theory and Hypotheses

Governance, control and ownership of hotel services

The relationship between a hotel chain and the local hotel is a principal-agent relationship. The brand owner (principal) delegates operational decisions to the local hotel. According to agency theory (Bergen *et al.* 1992; Fama and Jensen 1983; Eisenhardt 1989), the contractual

problem is to design and implement an agreement so the agent acts according to the interests of the principal. For example, it is explicitly determined under the U.S. law (American Law Institute 1958) that the agents duties to the principal are to be loyal (§387), to act in accordance with the principal (§383), to obey the principal (§385), and to avoid dealing with the principal as an adverse party (§389). The brand owner who employs an agent always has the power to revoke the agent representing the hotel brand (Shindler 1997).

Based on the specific tasks the agent is supposed to perform, the primary contract choice is between behavior-based and outcome-based contracts. The specific character of the task determines the contractual form. Two task characteristics likely to influence the choice of contract are *monitoring costs* and *quality control* (Eisenhardt 1989). We also include *market size*, the *competitive environment*, and *hotel scale* as factors exogenous to the principal-agent relationship that influence governance (Hart 1983). Consider first the role of monitoring costs.

Monitoring Costs

Location Considerations. An important task for all service operations is to provide and secure quality at the local level in manner that maintains the value of the brand. Quality is achieved via superior execution of service delivery that establishes a symbolic and evocative image (Muller 1998). Each local hotel provides service quality via the interaction between the hotel and the customer, and the control of service quality is an important function that produces price premiums and customer loyalty. According to agency theory, the principal's ability to control service quality is closely related to the principal's ability to acquire valid and accurate information about the agent's actions (Eisenhardt 1989). Information systems that monitor operations provide a level of control, and the principal's ability to develop such systems affects the choice of contract.

Agency theory emphasizes the *principal's* interest and efforts to control the activity of agents. Research investigating the choice between integration and intermediate contractual forms (i.e., franchising) suggests that the need to control service quality is higher in establishments located where customers are likely to frequent a particular hotel only once (Brickley and Dark 1987). When the customers are in these “non-repeat” locations, the value of a brand name is larger. Non-repeat customers have limited ability to choose the hotel based on previous experience with a particular hotel. Brand names are important means of signaling standard quality and reduce the perceived risk for the customer. Moreover, if the quality of a hotel operating under a brand name is low, other hotels operating under the same brand name incur the costs of poor quality through decreased brand loyalty (Brickley *et al.* 1991). Agents have incentives to reduce brand equity building costs by cutting the number of employees or having fewer trained employees. These hotels may also lower advertising and maintenance expenditures without bearing the costs of dissatisfied customers as patrons will not return regardless of their levels of satisfaction. By contrast, hotels located in areas where they are dependent on a high degree of re-buy from the same group of customers incur the negative consequences of inferior quality (Dahlstrom and Nygaard 1994). In the local market, the hotel has no incentive to free ride because dissatisfied customers will switch hotels next time. We therefore expect brand-owners to prefer integrated hotels to voluntary hotels and franchising in non-repeat customer environments.

Vertical integration should also be more prevalent than independent operations at highway locations. Monitoring costs and responsibility shirking serve as motivations for principals to own locations in non-repeat locations, but agents also are motivated to forge alliances in these locations. Independent entrepreneurs that maintain hotels in non-repeat settings have limited

opportunity to make customers aware of their property. By contrast, affiliation with a chain enables the agent to gain exposure via system-wide promotional campaigns and reservation systems. Thus, we propose the following hypothesis:

H 1: Hotels located in non-repeat customer environments will be more vertically integrated than hotels located in repeat customer environments.

Distance. The agent and principal have financial incentives to establish interfirm agreements as locations become more remote. The agent's incentive is associated with desire to increase consumer awareness and occupancy. The independent agent's costs to generate awareness and patronage are appreciably greater in remote locations, but affiliation with a chain markedly lowers these costs. From the principal's perspective, assessment and control costs are lower for hotels located close to major metropolitan areas. As the distance to the hotel increases, the costs to monitor vertically integrated outlets will also increase (Shepard 1993), resulting in less effort-based governance and more outcome-oriented contracts (Holmstrom 1979). We therefore suggest the following:

H 2: As the distance to chain headquarters increases, franchising and voluntary chain hotels will be more likely than independent agents or integration.

Quality Control

Hotel Amenities. The amenities offered by the hotel have implications for the form of governance. From an agent's perspective, each amenity offered by the hotel reflects additional investments in capital. For example, an eighteen-hole golf course requires a sizeable investment in property and equipment. As the number of amenities increases, one would expect agents to have stronger incentives to become associated with a hotel chain. The chain's promotional efforts, the reservation system, and the brand capital should generate a client base and revenues unavailable to the independent agent.

Principals are also concerned with the ancillary amenities offered by the hotel. Service quality and customer response may only be controlled during the time-limited interaction with the customers. The information asymmetry therefore is a crucial aspect of the relationship between the brand name owner and the local hotel. Brand building activities performed by the local hotel may be difficult and costly to observe and control. It will be expensive for a brand name owner to monitor the daily operation of a local hotel since control demands a high degree of managerial supervision. Moreover, as the hotel adds amenities, it becomes increasingly more difficult to monitor the agent's performance. As the monitoring of agents' behavior becomes more difficult, principals increasingly prefer outcome-based contracts such as franchises and voluntaries.

The entrepreneur's incentives and the principal's desires to ensure quality should simultaneously direct governance. As the number of amenities increases, entrepreneurs will favor affiliations with chains. By contrast, principals will prefer interfirm contracts to integration. Thus, the following is proposed:

H_{3a}: As the breadth of ancillary services offered by the hotel increases, franchising and voluntary chains will be employed more frequently than independent outlets or integration.

The previous hypothesis identifies conditions that favor hybrid contracts (Bradach and Eccles 1989), yet it does not distinguish among the intermediate arrangements. We suggest that it is relevant to look at the type of amenities offered by the hotel. Agency theory (Eisenhardt 1989) emphasizes the monitoring of agent behavior, and this monitoring varies with the type of service offered by the hotel. For example, the monitoring costs incurred with a sauna should be substantially lower than costs to maintain an alpine ski lift. Principals should have lower costs to regulate amenities characterized by a high level of observability in their delivery. Because these

amenities can be regulated with low monitoring costs, principals should prefer intermediate contracts such as franchises. Principals garner higher revenues in franchises, but their costs to monitor service delivery are relatively low. Amenities with low levels of observability have associated high control costs. Principals will forego efforts to monitor franchises in these locations and will prefer voluntary alliances. Therefore, the following are proposed:

- H3_b: As the number of ancillary services offered with observable delivery increases, franchises will be employed more frequently than voluntary contracts.
- H3_c: As the number of ancillary services offered with unobservable delivery increases, voluntary arrangements will be employed more frequently than franchises.

Market Size

Population Considerations. Agents and principals motivations for establishing alliances are likely to be influenced by local market characteristics. Although some agents are large publicly held companies, most proprietors manage relatively small enterprises (Stanworth and Kaufmann 1995). As the market becomes large, the potential for these agents to operate on an independent basis is likely to decline. Moreover, as the concentration in the market increases, property values should serve as strong disincentives to independent operators. They have limited resources to invest in large markets with high population densities, and as independents, they will not have scale economies to support on-going efforts to promote their establishments. Therefore, one would expect fewer independent entrepreneurs in sizeable and densely populated markets.

Principals also incur costs for operating in urban areas, but management can benefit from scale economies (Shepard 1993). The presence of several hotels in such markets may represent some degree of normative pressure (e.g. benchmarks) that all hotel operators will try to follow (Abrahamson and Fombrun 1994). Transparency and the presence of norms may be sanctioned

through, for example, the value of job offers from other companies (hotels) in the industry. Furthermore, it will be easier and less costly for the chain to observe the behavior of the local hotel in larger markets as traveling costs to such locations are likely to be less than the costs associated with travel to smaller markets (e.g. due to airports and other transport systems).

Similarly, monitoring costs should be reduced if multiple units are located in densely populated markets (Nygaard and Myrtveit 2000). Area managers can control multiple units at lower costs per location (Norton 1988) thus making integration more feasible in urban areas. We therefore advance the following hypotheses:

- H 4: As markets become more populated, more hotels are likely to be operated as vertically integrated outlets.
- H 5: As the population density in a market increases, more hotels are likely to be operated as vertically integrated outlets.

Competitive environment

Competition in the local market should also influence the form of governance. Prior research, however, offers contrasting views regarding the willingness of contractual parties to assume risk. Earlier studies do not consider the spectrum of governance forms but address the choice between two contractual alternatives. In their study of franchise purchase decisions, Stanworth and Kaufmann (1995) suggest that franchising, relative to independent operations, lowers the risk incurred in operating a business. Previously self-employed persons polled in their study indicated that business support services were franchising's most salient features. These findings suggest that franchisees are more risk averse than independent entrepreneurs. Because the organizational support systems endemic to integration are more elaborate than those associated with franchise support systems (Bradach 1998), it is consistent with the logic of the

Stanworth and Kaufmann (1995) study to suggest that integrated operations would be more risk averse than other governance systems.

Most agency research offers a contrasting perspective on the relationship between risk and interfirm contracting (Bergen *et al.* 1992). Principals are usually presumed to be more risk neutral than agents. As the level of uncertainty in a market becomes more pronounced, it becomes increasingly more difficult to transfer risk to agents. Thus, increases in marketplace uncertainty should be associated with higher incidences of vertical integration. Because empirical findings and theory offer contrasting viewpoints on the relationship between competition and governance, we offer the following hypothesis:

H 6: The level of competition in the local marketplace influences the governance form employed by the hoteliers.

Hotel Scale

When establishing a new hotel, a brand owner will be concerned about the investment itself, and the amount of capital that will be locked into the investment. It is also likely that such capital investments will affect the choice of governance form. In particular, capital investment considerations should be more important for establishing larger hotels than smaller hotels. When a company is exposed to risk, the company will demand a premium for accepting the risk. This premium represents a cost (reduced risk-adjusted net present value) for the owner, and vertical integration will reduce this cost. First, vertical integration offers the local hotel different benefits such as a brand name, reservation system, and competence; and furthermore, vertical integration gives the owner a better assurance of not losing the investment when establishing larger hotels (Brickley *et al.* 1991). There might also exist scale advantages in marketing and in administration of hotels that encourage integration (Scherer 1980). Second, in the case of full vertical integration, ownership of the hotel lies with the chain and not a local businessperson. As

an integrated hotel chain owns and operates several hotels, the chain is better able to reduce risk through diversification. Therefore, the following hypothesis is proposed:

H 7: Larger hotels will be more vertically integrated than smaller hotels.

Method

The hypotheses were tested in the Norwegian hotel industry. The database was constructed from the *Norwegian Travel Book* (2000). This reference is the most complete Norwegian hotel directory, and offers information about hotels, hostels, cabins and camping sites. Because we are interested in examining hotels with the potential to become affiliated with a chain, we focused on hotels with more than twenty-five beds. The 650 hotels in the study represent over 51% of the 1270 hotels operating in Norway, and reflect the vast majority of candidates for an alliance. Among these hotels, 306 were independently owned and managed, 151 were members of voluntaries, 70 were operated as franchises, and 123 belonged to vertically integrated chains.

The following data were obtained from the Norwegian Travel Book (2000): (1) whether the hotel was independently managed and owned, or a member of a voluntary, franchised, or vertically integrated chain, (2) location of chain headquarters, (3) the specific hotel location, (4) number of beds, and (5) number of offered activities. Furthermore, we checked whether each hotel was located close to a road with dense traffic or not, and investigated which hotels were located in urban areas (cities and towns), and those that were located in rural areas (villages). In order to track this information, we used map and distance information published by the Norwegian Automobile Association. We also received information about the number of inhabitants in the local community of each hotel, and the total number of hotel beds in these communities. This information was obtained from the Statistical Yearbook for Norway (1998).

After developing this database, we constructed and measured the following variables:

Governance form. Consistent with Coughlan et al. (2001), marketing channels can be defined into two major governance categories: traditional systems of independent firms, and vertical marketing systems of vertically owned firms or firms coordinated through a more or less explicit contract. We observed four governance forms: (1) independent hotels owned and managed by a local business entrepreneur, (2) voluntary hotel chains where a number of relatively independent hotels cooperate on activities such as procurement, a common brand name, reservation system and marketing, (3) franchised hotel chains and (4) vertically integrated hotel chains. These governance structures represent structural degrees of the level of vertical integration. Traditional independent hotels are close to market transactions. Voluntary groups are less integrated than franchising systems, and franchising systems are less integrated than vertically owned hotels (Coughlan *et al.* 2001).

Customer environments. Closeness to a road with dense traffic (Brickley *et al.* 1991; Dahlstrom and Nygaard 1994) served as a proxy for non-repeat customer environment and an indication of potential free riding opportunities for the single hotel. Hotels closely located to such roads were classified as being in non-repeat customer environments, and hotels far away from such roads were classified as being in repeat customer environments.

Distance. The distance in kilometers from chain headquarters to each hotel was established (Brickley and Dark 1987). For independent hotels, we calculated the distance from Oslo to the hotel (as most chain headquarters are located in the capitol, Oslo).

Hotel Amenities. Two measures of the breadth of activities were included (Shepard 1993; Nygaard and Myrtveit 2001). **Observable amenities**, those associated with low costs to monitor quality, include swimming pool, fitness room, sauna, solarium, bicycle rental, hiking, tennis, and squash. **Unobservable amenities**, those associated with high costs to monitor quality, include

horseback riding, boat rental, fishing, alpine skiing, and golf. The variables were constructed as the sum of respective services offered by each hotel.

Market size. Two proxy variables were used as indicators of market size. These are (1) **population size** and (2) **population density**. Population size was measured as the number of inhabitants in the local community (Chung and Kalnins 2001), and population density was based on whether the hotel was located in an urban (city/town) or rural area (village) (Norton 1988). Hotels located in urban areas were classified as being in densely populated areas, and hotels located in rural areas were classified as being in less densely populated areas.

Competitive environment. The number of inhabitants in the community divided by the total number of hotel beds in the local community was used as a proxy for competitive environment. This proxy variable captures the potential demand in the market relative to the established capacity, and thus reflects the attractiveness of the market. Due to scaling, higher values reflect less competitive markets, and lower values indicate markets that are more competitive.

Hotel size. Size was measured as the number of beds in the hotel (Chung and Kalnins 2001).

Descriptive statistics and the correlation matrix are presented in Table 1.

Results

The hypotheses were tested by a series of multinomial logit analyses with governance form as the dependent variable. Logistic regression is suitable for classifying a categorical dependent variable based on a set of criterion variables. The results are shown in Table 2. The model fits the data reasonable well (-2 Log likelihood = 1317.282, χ^2 (24) = 304.757; $p < .05$; Cox and Snell R Square = .374) and correctly classifies 58.3 % of the hotels.

TABLE 1

Descriptive statistics and correlation matrix

	Mean	Std. dev.	1	2	3	4	5	6	7
1. Customer environment ¹	0.46	0.50							
2. Observable Amenities	2.19	1.86	.15 ²						
3. Unobservable Amenities	2.02	1.65	.16	.51					
4. Distance to HQ (km)	527.5	579.0	-.09	-.13	-.09				
5. Population size	62148	131584	-.32	-.25	-.41	-.26			
6. Population density	0.48	0.5	-.11	-.20	-.38	-.03	.44		
7. Competitive environment	7.53	10.17	.16	.28	.33	-.08	-.23	-.36	
8. Hotel size (# beds)	139	110	-.03	.40	.02	-.15	.22	.26	.08

1 1 = repeat, 0 = non-repeat

2 Correlations greater than .08 are significant at $p < .05$.

H1 predicted that hotels located in non-repeat customer environments would be more vertically integrated than hotels located in repeat customer environments. The hypothesis was not supported with respect to the likelihood of integration over independent ($\beta = -.278, p > .05$), voluntary ($\beta = -.200, p > .05$), or franchised hotels ($\beta = .126, p > .05$).

The second hypothesis suggested that as the distance to the chains' headquarters increased, franchising and voluntary chain hotels would be more likely than independent agents or integration. Contrary to **H2**, integration is *more* likely than franchising ($\beta = -.008, p < .05$) and voluntary chain hotels ($\beta = -.008, p < .05$). There is no significant difference between independent locations and franchising ($\beta = -.001, p > .05$), and voluntary hotels ($\beta = -.001, p > .05$) based on the distance to hotel headquarters.

H3_{a-c} addressed relationships among hotel amenities and governance. **H3_a**, which claimed breadth of ancillary services, favored franchising and voluntary chains, received partial support. As the number of observable amenities increases, franchising ($\beta = -2.587, p < .05$) and **voluntary chains** ($\beta = -1.736, p < .05$) were employed more frequently than independent

outlets. In contrast, the number of observable amenities did not favor franchising ($\beta = .113$, $p > .05$) or voluntaries ($\beta = -.737$, $p > .05$) over integration. Franchising was more likely than integration ($\beta = 2.180$, $p < .05$) yet voluntary chains ($\beta = .445$, $p > .05$) were not used more frequently than integration as the number of unobservable amenities increased. Neither franchising ($\beta = -1.066$, $p > .05$) nor voluntary chains ($\beta = .669$, $p > .05$) were used more frequently than independent operations as unobservable amenities increased. The results did not support that claim made by H3_b that increases in the number of **observable services favor franchising** ($\beta = -.850$, $p > .05$) over **voluntary contracts**. In contrast to H3_c, increases in the number of unobservable amenities favored franchising ($\beta = -1.735$, $p < .05$) over voluntary arrangements.

H4-5 addressed the influence of the local market on governance forms. H4 was partially supported given that integration was more likely than independence ($\beta = -.442$, $p < .05$) or franchising ($\beta = -.339$, $p < .05$) in markets with larger populations. Nevertheless, integration was not more likely than voluntary chains ($\beta = -.148$, $p > .05$) in large markets. H5 suggested that markets with greater population density would raise the likelihood of integration. The hypothesis was supported in the relationship between integration and independence ($\beta = -1.170$, $p < .05$) and voluntary chains ($\beta = -.897$, $p < .05$), but it was not supported for franchising ($\beta = .825$, $p < .05$).

The relationships between the level of competition and governance form was the focus of **H6**. Contrary to the hypothesis, competition did not influence the likelihood of integration over independence ($\beta = -.001$, $p > .05$), voluntary operations ($\beta = -.002$, $p > .05$), or franchising ($\beta = -.001$, $p > .05$). Competition also did not raise the likelihood of franchising over independence ($\beta = .002$, $p > .05$) or voluntary chains ($\beta = .002$, $p > .05$), nor did it raise the likelihood of voluntary ($\beta = .001$, $p > .05$) chains over independent operations.

The final hypothesis examined the relationship between scale of operations and ownership. **H7** was supported given that increases in the number of beds were associated with higher levels of integration than independence ($\beta = -1.620, p < .05$) and voluntary operations ($\beta = -.912, p < .05$), but not franchising ($\beta = -.202, p > .05$). Franchising was more likely than independent operations ($\beta = -1.418, p < .05$) or voluntary chains ($\beta = -.710, p < .05$), and voluntary chains were more likely than independent operations ($\beta = -.700, p < .05$) as the number of beds increased.

In sum, our hypotheses received mixed support. The two monitoring costs hypotheses (H1-2) did not receive any support. We received some support for the quality control hypotheses (H3_{a-c}), as we found that breadth of ancillary services tend to favor franchising and voluntary chains. The two market size hypotheses (H4-5) also received some support. Our results indicate that hotels tend to be more vertically integrated as markets become more populated, and the population becomes denser. We did not find, however, any effect of the level of competition on governance (H6). Finally, the hotel scale hypothesis (H7) was supported with one exception. Larger hotels were in general more vertically integrated. Nevertheless, we did not find integrated hotels to be larger than franchised hotels.

TABLE 2

Multinomial Logistic Regression with Governance Form as the Dependent Variable

Independent variables	Dependent Variables					
	ln [pr (independent agents) /pr (integration)]	ln [pr (voluntary chain)/ pr (integration)]	ln [pr (franchising)/ pr (integration)]	ln [pr (independent agents)/ pr (franchising)]	ln [pr (voluntary chains) /pr (franchising)]	ln [pr (independent agents)/ pr (voluntary chains)]
H1: Non-repeat customer environments	-0.278	-.200	.126	-.405	-.327	-.007
H2: Distance to headquarters	-0.001 ***	-.008 ***	-.008 **	.002	-.001	-.001
H3: Observable Amenities	-2.473 ***	-.737	.113	-2.587 ***	-.850	-1.736 ***
H3: Unobservable Amenities	1.114	.445	2.180 ***	-1.066	-1.735 ***	.669
H4: Population	-0.422 ***	-.148	-.339 ***	-.008	.190	-.274 ***
H5: Population Density	-1.170 ***	-.897 ***	.825 *	-1.995 ***	-1.722 ***	-.273
H6: Competitive environment	-0.001	-.002	-.001	.002	.002	.001
H7: Hotel size	-1.620 ***	-.912 ***	-.202	-1.418 **	-.710 ***	-.700 ***
-2 Log likelihood	1317.282	Cox and Snell	R Square .374	Correct	classification	58.3%
χ^2	304.757 ***					

* p < .10

** p < .05

*** p < .01

Discussion and implications

The goal of this research has been to gain an understanding of factors related to interfirm contracting in the hotel industry. To the best of our knowledge, it is the first study to use institutional economics to explain ownership strategies throughout a national hotel industry. In the following section, we outline limitations, managerial contributions, and theoretical implications of the research.

Limitations and future research

The limitations in our study restrict the implications that can be drawn and identify additional research opportunities. Instead of the dichotomous ownership variable used by most other studies of governance choice, we have applied a model that includes traditional systems and the different structural alternatives included in vertical marketing systems (Coughlan *et al.* 2001). We have modeled the hypothesized relationship spanning from traditional forms to vertical marketing systems (i.e., voluntary groups, franchising and vertically integrated hotels). This operationalization is consistent with Coughlan *et al.*'s (2001) perspective, but it treats a host of diverse contracts within the same category. For example, royalty rates vary across franchises, yet all franchise agreements are treated the same in our research. Future studies should consider more refined measures of contracts and their associated costs.

Our results suggest that non-repeat (versus repeat) customer environments and the competitive environment explain very little about contracting in the hotel industry. The customer environment was determined solely based on the street location whereas the competitive environment was measured as the number of hotel beds in a local community divided by the number of inhabitants. Future studies should more explicitly identify environmental factors that drive monitoring costs. For example, resort hotels are often located in or close to tourist

destinations such as skiing and hiking areas. The volume of hotel beds per inhabitant may be unrelated to competitive environment for such hotels. An alternative measure for resort hotels would be the number of hotel beds close to the resort divided by the yearly number of tourists visiting the resort.

The third notable limitation in our study is associated with the principal-agency theory (Eisenhardt 1989). Theoretical contributions and theory have focused on the *principal's* decision whether to own an asset. When a national industrial perspective is taken, principal-agency theory can only provide a partial explanation of rationales employed by principals. Theory is needed that augments the extant perspective with consideration of agents' motivations.

Managerial Contributions

The research augments prior investigations and provides managerial insight in three ways. First, our focus on a single, well-established market provides the opportunity to consider agents' motivations to remain independent entrepreneurs (Stanworth and Kaufmann 1996). The data suggest that independent agents prefer to operate smaller hotels in smaller markets. As the number of observable amenities increase, interfirm alliances replace independent operations. The implication for principals seeking to expand their networks through the purchase of existing hotels is to look for entrepreneurs that have larger operations that offer many amenities. These agents are more likely to value the services offered via integration or hybrid arrangements.

The second contribution lies in the examination of a breadth of contracts ranging from integrated channels to hybrid contracts to independent entrepreneurs (Bradach and Eccles 1989; Harrigan 1984). Information that identifies the conditions favoring certain governance structures is helpful to managers because it provides insight into the most appropriate way to coordinate a distribution channel. Managers can employ a variety of governance structures in a market

(Harrigan 1984), and the data offer evidence of conditions favoring each structure. Vertically integrated hotels are located in the most remote markets. They offer more observable amenities than independent agents do, yet the integrated hotels are larger and located in more highly populated markets than independents or voluntaries. Integrated hotels also operate in larger markets and offer fewer unobservable amenities than their franchising counterparts. Relative to independents and voluntaries, franchises are larger hotels operating in markets with higher population densities. They offer more observable amenities than independents and more unobservable amenities than voluntary chain affiliates. In contrast to independents, voluntaries are larger hotels, located in larger markets, and offer more observable amenities.

The third managerial implication lies in the focus on the amenities offered by the hotel. Principals that are evaluating whether to own or franchise a particular outlet should examine the amenities offered at the hotel. As the number of labor-intensive services increases, the hotelier may find it more efficacious to franchise the location. The franchisee as a residual claimant of profits has strong incentives to provide exceptional service.

Theoretical Implications

Our theoretically derived hypotheses suggested that the monitoring costs, market environment, and scale are factors that affect vertical integration in the hotel industry. The results are mixed with regard to the monitoring costs hypotheses. Although the likelihood of repeat patronage was unrelated to ownership, the influence of amenities on governance structures received some support. Consistent with agency theory, franchises are more likely than integration when the hotel offers multiple unobservable amenities. In contrast to theory and hypothesis, franchising is more likely than voluntary outlets when the hotel offers multiple amenities. These findings underscore an opportunity for theoretical contributions to agency.

Although many studies support agency logic for ownership decisions (Bergen *et al.* 1992), the field can be advanced via further investigations that examine the choice among alternative hybrid contracts (Bradach and Eccles 1989).

Surprisingly, we found the effect of distance from headquarters to the local hotel to be opposite of our predictions. We argued that monitoring costs would be a function of geographical distance. Previous studies have supported this argument (Rubin 1978; Brickley and Dark 1987). However, this finding might indicate that better and less costly communications and information technology increase the ability to control behavior at the local hotel regardless of geographical distance, and at lower costs. Examples of such communications are better physical transportation, as well as the development of telecommunications (e.g. email/internet) and electronically based monitoring systems (Waters 2001).

We found some evidence that vertical integration of hotels is related to the competitive attractiveness of the local market, although the results are mixed. The hypothesized effect was generally supported in the relationships among integrated outlets, voluntaries, and independents. Further investigation should consider the alternative theory that competitive pressure is itself a disciplinary device for the brand name owner. Hart (1983) confronts the prediction from agency theory that separation of ownership and control is costly no matter the competitive environment in the market (Fama 1980). Machlup (1967) and Hart (1983) argue that agency costs only exist when competition is imperfect. According to this theoretical perspective, we should expect the exact opposite effect of more attractive non-competitive environments. Given less competitive pressure, the brand owner should apply less integrated and more outcome dependent dealer contracts. Under conditions of "cut throat"-competition there is no room for opportunism, moral hazard or managerial slack; thus it is less costly for the brand owner to use vertical integration or

less outcome dependent contracts (Machlup 1967). Allied with this perspective is the need to respond directly and immediately to competitive forces. This can best be achieved by vertically integrated systems. Although some empirical evidence from the hotel industry supports this approach (Pak 2002), these conflicting perspectives warrant further evaluation. Other empirical research from the hotel industry supports a non-competitive strategy. Empirical evidence from the Sidney hotel industry shows that friendship among hotel managers from competing hotels leads to increased performance (Ingram and Roberts 2000). Further research should focus on how such informal inter-organizational structures affect inter-brand competition, governance choice and performance in local markets.

Another allied aspect of this study is the possible positive effect of high degree of competition and unit density. Marshall (1920) argues that competition increases product quality and heightens demand. Such “agglomeration” effect might balance the loss caused by more intense competition. For example, Chung and Kalnins (2000) found that chain hotels and larger hotels contributed most to production efficiencies or heightened demand in rural areas of Texas. Similarly, both Baum and Mezias (1992) (Manhattan hotels) and Ingram and Inmam (1996) (Niagara Falls Hotels) found that the failure rate decreased with increased local competition. Our findings that hotels organized as vertical marketing systems are mostly located in urban areas might be contra-productive to such agglomeration effects in the hotel market. Nevertheless, the results from this study that hotels that belong to vertical marketing systems dominate urban areas are in line with previous findings from the hotel industry. Based on longitudinal data from 1898-1980, Ingram and Baum (1997) found that chain affiliation improved survival rates for Manhattan hotels.

Consistent with prior industry analyses (PriceWaterhouseCoopers 2000), our study indicates that size (i.e., number of beds) is a critical factor in determining governance form within the industry. Size seems to foster vertical integration along the whole continuum from independent hotels to full vertical integration. Vertical integration reduces the relative risk in two ways. First, vertical integration offers the local hotel benefits such as brand name, reservation system, and competence. In addition, vertical integration gives the owner better assurance for not losing the investment-- particularly when investing in larger hotels (Brickley *et al.* 1991). Second, by vertical integration, the chain reduces risk more effectively than the local businessperson does.

Conclusion

Our purpose has been to gain an understanding of factors associated with governance structures in the hotel industry. Hotel location, amenities, and environmental factors implicated in agency theory offer insight into governance. Nevertheless, the principal-agency perspective provides only a partial explanation of ownership decisions. We hope that this research is informative to researchers seeking to make further theoretical and empirical contributions to this important managerial decision.

References

- Abrahamson, Eric, Charles J. Fombrun 1994. Macrocultures: Determinants and consequences. *Acad. Management. Review.* **9** (4) 728-55.
- American Law Institute. 1958 *Restatement of the Law of Agency* 2nd ed. St. Paul, MN: American Law Institute Publishers §383-389.
- Baum, Joel, Steven J. Mezas. 1992. Localized competition and organizational failure in the Manhattan hotel industry, 1898-1990. *Adm. Sci. Q.* **37** (4) 580-604.
- Bergen, Mark, Shantanu Dutta, Orville C. Walker, Jr. 1992. Agency relationships in marketing: A review of the implications and applications of agency and related theories. *J. Marketing.* **56** (3) 1-24.
- Bradach, Jeffrey L. 1998. *Franchise Organizations*. Boston, MA, Harvard Business School Press.
- Robert G. Eccles 1989. Price, Authority and Trust: From ideal types to plural forms. *American Review of Sociology* **15** 97-118.
- Brickley, James A., Frederick H. Dark. 1987. The choice of organizational form: The case of franchising. *J. Fin. Econom.* **18** (July) 401-420.
- Brickley, James A., Frederic H. Dark and Michael S. Weisbach. 1991. The economic effects of franchise termination laws. *J. Law Econom.* **34** (April) 101-132.
- Brown, James R., Chekitan S. Dev, Brown, Dong-Jin Lee. 2000. Managing marketing channel opportunism: The efficacy of alternative governance mechanisms. *J. Marketing.* **64** (April) 51-65.
- Chung, Wilbur, Arthur Kalnins. 2001. Agglomeration effects and performance: A test of the Texas lodging industry. *Strategic Management J.* **22** (10) 969-988.
- Contractor, Farok J., Sumit K. Kundu. 1998a. Modal choice in a world of alliances: Analyzing organizational forms in the international hotel sector. *J. Intl. Bus. Studies.* **29** (2) 325-358.
- 1998 b. Franchising versus company-run operations: Modal Choice in the Global Hotel Sector. *J. Intl. Marketing.* **6** (2) 28-53.
- Coughlan, Anne, Erin Anderson, Louis Stern, Adel El-Ansary. 2001. *Marketing Channels*. Englewood Cliffs, N.J., Prentice Hall.
- Dahlstrom, Robert, Arne Nygaard. 1994. A preliminary investigation of franchised oil distribution in Norway. *J. Retailing.* **70** (2) 179-91.

- Eisenhardt, Kathleen M. 1989. Agency theory: An assessment and review. *Acad. Management Review*. **14** (1) 57-74.
- Fama, Eugene F., Michael C. Jensen. 1983. Separation of ownership and control. *J. Law Econom.* **26** (June) 301-326.
- Harrigan, Kathryn R. 1984. Formulating vertical integration strategies. *Academy of Management Review*, **9** (December) 638-652.
- Hart, Oliver. 1983. The market mechanism as an incentive scheme. *Bell J. Econom.* **14** (Autumn) 366-382.
- Holmstrom, Bengt. 1979. Moral hazard and observability," *Bell J. Econom.* **10** (Spring) 74-91.
- Ingram, Paul, Joel A. C. Baum. 1997. Chain affiliation and the failure of Manhattan hotels, 1898-1980. *Adm. Sci. Q.* **42** (1) 68-102.
- , Crist Inman. 1996. Institutions, intergroup competition, and the evolution of hotel populations around Niagara Falls. *Adm. Sci. Q.* **41** (4) 629-658.
- , Peter W. Roberts 2000. Friendships among competitors in the Sydney hotel industry. *Amer. J. Sociology.* **106** (2) 387-423.
- International Hotel Groups Directory 1998.
- Jensen, Michael C. & William Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *J. Fin. Econom.* **3** (4) 305-360.
- Machlup, Fritz. 1967. Theories of the firm: Marginalist, behavioral, managerial," *Amer. Econom. Review*, **57** (March) 1-33.
- Marshall, Alfred. 1920. *Principles of Economics*, Macmillan, London.
- Michael, Steven C. 1999. Do franchised chains advertise enough? *J. Retailing.* **75** (4) 467-478.
- Lafontaine, Francine, Patrick J. Kaufmann. 1994 The evolution of ownership patterns in franchise systems. *J. Retailing.* **70** (2) 97-115.
- Muller, Christopher C. 1998. [Endorsed branding: the next step in restaurant-brand management.](#) *Cornell Hotel Restaurant Admin. Q.* **39** (3) 90-95.
- Norton, Seth W. 1988. An empirical look at franchising as an organizational form. *J. Business.* **61** (2) 197-218.
- Norwegian Travel Book* (2000), Oslo: Norsk Reiseinformasjon AS.

- Nygaard, Arne, Ingunn Myrtveit 2000. Moral Hazard, competition and contract design: Empirical evidence from managerial, franchised and entrepreneurial businesses in Norway. *Applied Econom.* **32** (3) 349-356.
- Pak, Yong Suhk Pak. 2002. The effect of strategic motives on the choice of entry modes: An empirical test of international franchisers. *Multinational Bus. Review.* **10** (1) 28-36.
- PricewaterhouseCoopers* 2000. *Hospitality Directions U.S. Edition*. New York, PricewaterhouseCoopers
- Rindfleisch, Aric M., Jan B. Heide 1997. Transaction cost analysis: Past, present, and future applications. *J. Marketing.* **61** (October) 30-54.
- Rubin, Paul H. 1978. The theory of the firm and the structure of the franchise contract. *J. Law Econom.* **21** (April) 223-233.
- Scherer, F. M. 1980. *Industrial Market Structure and Economic Performance*. Boston, Houghton Mifflin Company.
- Shepard, Andrea 1993. Contractual form, retail price, and asset characteristics in gasoline retailing. *Rand J. Econom.* **24** (1) 58-77.
- Shindler, Michael C. 1997. The principle of the principal: An examination of hotel-management agreements and the laws of agency. *Cornell Hotel and Restaurant Admin. Q.* **38** (4) 22-27.
- Stanworth, John, Kaufmann; Patrick J. 1995. The decision to purchase a franchise: a study of prospective franchisees. *Journal of Small Business Management*, **33** (4) 22-31.
- Statistics Norway. 1998. Statistisk Årbok (Statistical Yearbook). Statistisk sentralbyrå. Oslo, Norway.
- Waters, C. Dickinson. 2001. Sybra beefs up kitchen technology at Arby's units. *Nation's Restaurant News*. New York: July 9.