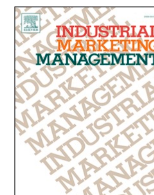
Industrial Marketing Management 105 (2022) 94–108

Contents lists available at ScienceDirect

Industrial Marketing Management

journal homepage: www.elsevier.com/locate/indmarman



Research paper

Choosing contracts to support ALFO strategy: Insights from comparing franchised and managed hotels

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ARTICLE INFO

Keywords:
Franchising
Management contract
Hotel
Knowledge
Governance choice
Online scores

ABSTRACT

Although franchise and management contracts constitute the dominant way of organizing business-to-business relationships within hotel chains, no study has compared their relative performance. This paper aims to explain their differences and assess their impact on online scores, currently a key performance indicator in the hotel industry. We argue that franchises are less effective than management contracts for operating upscale hotels due to the relative advantages that the latter have in transferring and enforcing tacit knowledge, typically embedded in skilled staff and very relevant in such quality-tier hotels. Conversely, franchising is better for large hotels because, first, its incentive structure better addresses managerial shirking (typically more severe as hotel size increases) and, second, it offers advantages when the standardization of business procedures is key to success (as is true for large establishments). Our empirical findings broadly support these arguments in a dataset of 467 Spanish hotels, also providing evidence that no single organizational solution fits all situations.

1. Introduction

Like the tourism industry, the hotel sector has grown significantly in recent decades. According to the World Tourism Organization, international tourist arrivals rose worldwide from 686 million in 2000 to 1461 million in 2019.[1] This growth has facilitated hotel firm specialization, driving companies to focus on fewer supply chain stages (Stigler, 1951). A clear example is the move by the world's leading hotel groups to divest properties (*i.e.,* real estate business) and specialize in hotel operations and brand management (Blal & Bianchi, 2019).

This tendency has resulted in the so-called asset-light and fee-oriented (ALFO) strategy (Li & Singal, 2019; Sohn, Tang, & Jang, 2013, 2014), which relies critically on the development of effective business-to-business relationships between hoteliers. Started years ago by US market leaders, such as Marriot and Hilton, the ALFO strategy is currently a dominant industry trend (Balyozyan, Perret, & Martin, 2017; Mercier, 2020). Its aim is to grow by developing brands and business concepts and then incorporating affiliated hotels that pay a fee for their use. However, this affiliation means that several independent firms must cooperate by contributing the assets that are necessary to offer a full lodging service.

As the inter-organizational relationship literature highlights (*e.g.,* Gulati & Nickerson, 2008; Roehrich, Selviaridis, Kalra, Van der Valk, & Fang, 2020; Williamson, 1991), the choice of governance structure for such inter-firm cooperation is critical to its success and performance. Governance structure refers to how assets, decision rights, and payoffs are allocated to articulate collaboration between firms (Baker, Gibbons, & Murphy, 2008). In the hotel industry, two different governance structures are particularly prominent and have been widely used to underpin the ALFO strategy: franchising and management contracts (Collins & Perret, 2015).

Surprisingly, despite their relevance in the hotel industry—the European averages for management contracts and franchises in major hotel groups are 21% and 50% respectively, and in the US, 13% and 85% (Collins & Perret, 2015)—little research has been done on their differences and relative performance. The research in this area (governance choice) is substantially biased toward analyzing franchising, ignoring management contracts. Most of these studies have examined the franchised hotels' relative (dis)advantages compared to chain-owned hotels (*e.g.,* Lawrence & Perrigot, 2015; Michael, 2000; Moon & Sharma, 2014; Perrigot, Cliquet, & Piot-Lepetit, 2009; Zhang, Lawrence, & Anderson, 2015), but without reaching conclusive results (*e.g.,* Kosová, Lafontaine,

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[1] Data available at: https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-01/Barometro-Jan-2020-EN-pre.pdf). Data referring to 2020 are not considered to avoid the COVID-19 pandemic effect, which is not relevant in our analysis.

https://doi.org/10.1016/j.indmarman.2022.05.015
Received 29 April 2021; Received in revised form 21 March 2022; Accepted 23 May 2022
Available online 9 June 2022
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& Perrigot, 2013; Vázquez-Suárez, Mejía-Vásquez, & Sánchez-Gómez, 2020). Surprisingly, some have grouped management contracts with chain-owned establishments in a single category named company-operated hotels (*e.g.,* Kosová et al., 2013; Kosová & Sertsios, 2018), thereby overlooking the distinction between chain-owned establishments (where the brand owner is also the residual claimant of the outlet's operations) and managed establishments (where there is a clear separation between brand and hotel owners).

Other studies have grouped both franchising and management arrangements in a single category (*i.e.,* the ALFO solution) to compare it with ownership (*e.g.,* Kim, Noh, & Lee, 2019; Li & Singal, 2019; Sohn et al., 2014) and highlight its financial advantages for hotel corporations (Bourke, Izadi, & Olya, 2020; Seo & Soh, 2019; Sohn et al., 2013). Nevertheless, these scholars consider that such advantages are equally achievable through both types of contract. The literature analyzing international hotel group expansion is the only exception. It takes franchising and management contracts, among other governance structures, as separate categories and highlights their differences (*e.g.,* Chen & Dimou, 2005; Contractor & Kundu, 1998; Dev, Erramilli, & Agarwal, 2002; Kruesi, Hemmington, & Kim, 2018). However, it only focuses on explaining the probability that a specific type of contract will be chosen, without analyzing its effect on performance.

In the current study, we address this research gap by comparing the relative performance of franchising and management agreements. We start from the idea that the ALFO strategy implies significant changes in the incentive structure of hoteliers and a loss of brand control over hotel properties (Blal & Bianchi, 2019) that may negatively impact hotel performance (Sohn et al., 2013). However, we claim that management and franchise contracts differ in their capacity to avoid (or instigate) these drawbacks because of their different governance capacities. To explain these differences, we draw on the complementary approaches of transaction cost economics (TCE), the knowledge-based view of the firm (KBV), and agency theory. According to agency theory (*e.g.,* Brickley, Dark, & Weisbach, 1991; Eisenhardt, 1989; Lafontaine, 1992), we postulate that the different incentive structure of both types of contract will determine their relative ability to prevent various opportunistic behaviors. Moreover, following TCE and KBV arguments, this governance choice will also affect the effectiveness with which knowledge needed to run the hotel may be transferred and replicated (*e.g.,* Argote, McEvily, & Reagans, 2003; Easterby-Smith, Lyles, & Tsang, 2008; Grant, 1996; Kogut & Zander, 1993; Shaw & Williams, 2009). On this basis, we further hypothesize that hotels' attributes will determine the type and level of exchange hazards between brand- and hotel-owners and hence the most appropriate governance solution (franchise *vs.* management contracts). Therefore, the study empirically investigates whether there are systematic differences in the characteristics of hotels (*i.e.,* category and size) whereby one formula outperforms another. Our performance variable is online scores, a KPI in the hotel industry (*e.g.,* Kwok, Xie, & Richards, 2017; Sainaghi, Phillips, & Zavarrone, 2017; Yang, Park, & Hu, 2018).

The study makes two main contributions to the literature. First, we address the recent call from TCE literature for a more accurate theorization and empirical investigation of different governance alternatives (Cuypers, Hennart, Silverman, & Ertug, 2021). We focus our analysis on the governance alternatives of the ALFO strategy and the unresolved question of which contractual alternative we should rely on when implementing it (franchising *vs* management) (Blal & Bianchi, 2019). To date, the governance-choice literature for hospitality chains has focused on aggregations that do not truly reflect the many options that hotel groups consider in their expansion decisions. Second, as Cuypers et al. (2021) highlight, previous research has been primarily concerned with explaining strategic choices, devoting less work to the performance implications of these choices. This work provides new empirical evidence on how governance (mis)alignment with hotels' attributes can explain differences in their performance. We thus contribute to the still scarce literature that uses a contingent approach to analyze the performance consequences of governance-choice in hospitality chains (*e.g.,* Fernández-Barcala, González-Díaz, & López-Bayón, 2021; Seo, Woo, Mun, & Soh, 2021; Sveum & Sykuta, 2019; Yin & Zajac, 2004), providing new evidence about which contractual solution (franchising or management) fits best with hotel characteristics.

2. The ALFO strategy in the hotel literature: an incomplete view of governance

Through the ALFO strategy, hotel companies focus on developing their intangible strategic assets (*i.e.,* brand equity, business know-how, and reservation systems) and then grow by incorporating affiliated hotels that pay a fee in exchange for their use. Therefore, this strategy involves reducing the real estate ownership at stake and basing revenue generation on the collection of fees from property owners—relatively less volatile than operating profits generated by chain-owned outlets—(Li & Singal, 2019; Sohn et al., 2013, 2014).

The hotel management literature has drawn on financial and resource scarcity theories to highlight the ALFO strategy's ability to reduce operating and financial risks (Bourke et al., 2020; Kim et al., 2019; Sohn et al., 2013, 2014) and, second, to efficiently expand the hotel business by leveraging its intangible assets and focusing on the core business (*e.g.,* Contractor & Kundu, 1998; Seo et al., 2021). Recent research does seem to confirm the risk management advantages of the asset-light strategy (*e.g.,* Kim et al., 2019; Li & Singal, 2019; Sohn et al., 2013, 2014). However, the evidence for its ability to improve hotel chains' performance is inconclusive. Whereas some studies suggest positive impacts on performance (*e.g.,* Seo et al., 2021; Seo & Soh, 2019; Sohn et al., 2013), others find negligible differences (Blal & Bianchi, 2019) or even unfavorable differences in the financial performance of asset-light *vs.* asset-based (*i.e.,* with significant ownership stakes) hotel groups (Low, Das, & Piffaretti, 2015).

It should be noted that most of these studies have disregarded the drawbacks that asset separation may have on chain governance, namely, higher inter-firm relationship complexity and additional transaction costs (Blal & Bianchi, 2019). In particular, the governance structure resulting from the ALFO strategy contrasts with that of independent and chain-owned hotels—where hotel owners operate under their own brands. In the ALFO strategy, the hotel group contributes the brand and the business know-how according to a proven business system, while a separate company contributes all the local assets (facilities, furnishings, fixtures and fittings, and equipment) and has the ownership of, and right to the residual income of the property (Contractor & Kundu, 1998; Melissen, van Ginneken, & Wood, 2016). Therefore, both companies must partner to utilize their co-specialized resources and provide lodging services. This separation of hotel ownership (*i.e.,* real estate) from strategic intangible assets can lead hotel groups to lose control over their brands and business formats (Blal & Bianchi, 2019; Contractor & Kundu, 1998). It may also entail critical changes in the economic incentives of the agents involved in hotel management. As a result, various conflicts and exchange hazards might arise, causing inconsistencies in the quality and operations of ALFO hotels and thus explaining why the performance advantages of the ALFO strategy are neither uniform nor immediate (Sohn et al., 2013).

From this perspective, the success of the ALFO strategy will critically depend on the mechanisms employed to govern these business-to-business relationships. Specifically, two governance solutions exist to implement the ALFO strategy and articulate collaboration between hoteliers: the *management* contract and the *franchise* contract (*e.g.,* Balyozyan et al., 2017; Collins & Perret, 2015, 2019; Mercier, 2020). Both types of contract lead to meaningful differences in the governance structure of hotels —*i.e.,* in the way decision rights and payoffs are allocated between the parties (Baker et al., 2008)—that can alter the type and severity of exchange hazards/opportunism faced by hoteliers. However, the hotel management literature has overlooked the comparative analysis of the costs and benefits of franchise *vs.*

management contracts and their differential effects on hotel performance (Kruesi et al., 2018). See Appendix 1 for a summary of this literature.

2.1. The governance fit problem

The TCE theory, built on the seminal work of Coase (1937) and Williamson (1985), has been extensively used to shed light on the governance choice of inter-firm relationships (*e.g.,* franchise *vs.* management) and how it can shape exchange hazards and thus firms' performance (Cuypers et al., 2021; Leiblein, 2003). The fundamental prediction of TCE rests on a discriminant alignment hypothesis that states that "transactions, which differ in their attributes, are aligned with governance structures, which differ in their costs and competencies, in a discriminating (mainly, transaction-cost-economizing) way" (Williamson, 1991:277). Therefore, there is no one-size-fits-all governance solution and neither the management contract nor the franchise contract would be universally superior vis-à-vis the other. Following this argument, this paper highlights significant differences in the incentive structure and control instruments underlying both contracts. These differences explain their relative competence in managing the contractual hazards caused by hotel asset separation in different settings (*i.e.,* hotel types). Specifically, we propose that hotels' attributes help explain the prevailing contractual hazards in ALFO hotels and, therefore, the most efficient form of governance to respond to them and assure better service. We therefore start out with the following governance alignment hypothesis:

H1. The impact of governance choice (franchise vs. management contract) on hotel performance (online scores) is not direct but contingent on hotel characteristics.

The following section elaborates on the (governance) differences underlying both types of contract that are the main source of their comparative advantages.

3. Franchising *versus* management contracts: governance differences and comparative effectiveness

In a *franchise* agreement, the franchisor (brand owner, typically a hotel group) owns a business concept and grants the right to operate it to the franchisee (hotel owner, *i.e.*, a local hotelier) for a term in exchange for a *franchise fee* (Brickley & Dark, 1987; Rubin, 1978). In a *management* contract, the hotel owner (also called the 'managed company') hires a management company as an agent to operate the hotel business on its behalf in exchange for a *management fee* (DeRoos, 2010; Eyster, 1988)[2]. Therefore, in the management contract, in addition to the business concept, the hotel group also provides the management skills of its staff to the local hoteliers.

Contractor and Kundu (1998) emphasize that the main difference between the two types of contract lies in the degree of control retained over strategic business assets (*e.g.,* brand name, global reservation system, and business know-how embedded in routines and daily operations). Thus, in a management contract, the hotel group retains responsibility for directing and managing the establishment's operations. That is, the hotel group appoints a general manager to run the local hotel directly, usually in collaboration with other local managers who are hired by the managed company (Brookes & Roper, 2010; Contractor & Kundu, 1998; Kruesi et al., 2018; Melissen et al., 2016). Consequently, the owner of the business concept (the hotel group) has substantial (*administrative) control* and influence over most of the daily decisions of the local hotel that affect its value. In contrast, under a franchise contract, the hotel group (franchisor) has less control over the intangible assets because it has delegated day-to-day management of such assets to the franchisee, and no franchisor representative is present daily at the local level. Clearly, the franchisees must abide by the contract and the operations manual, but they independently interpret how to operate the hotel establishment.

Relatedly, franchising and management contracts differ in how knowledge flows. In franchising, it occurs *between* organizations since franchisees independently run their properties and need to replicate the hotel group knowledge at the local level. Conversely, in management contracts, knowledge transfer is from one unit to another *within* the same firm. That is, the general managers who operate each new unit and oversee the application of brand know-how have already acquired it in different branches/units of the hotel group (*i.e.,* the knowledge flows among management company's employees) (Ferrary, 2015).

Another key distinguishing feature is that the management contract entails the clearest separation between the *operation* of the hotel and its *ownership* (*i.e.*, ownership over real estate and residual income) (Melissen et al., 2016). In franchised hotels, the person who operates the establishment (franchisee) also receives the (major) residual income from the business; however, in managed hotels, the operator (management company) is not the major residual claimant. This feature leads to significant differences in the incentives underlying both contractual solutions. Managed firms and franchisees bear the main economic and financial risks of the hotel business and, as proprietors, will be endowed with *high-powered incentives* to maximize their outlets' profits (Williamson, 1991)[3]. However, unlike franchisees, the general managers of managed hotels have no residual claim on the profits of the establishments because they are employees of the management company. This condition will provide them with flat or less powerful incentives to perform (Freedman & Kosová, 2014; Hodari, Turner, & Sturman, 2017).

Therefore, following Williamson's (1991) terminology, there are critical differences in the control and incentive instruments of franchise and management contracts. The following sections discuss how such governance differences may explain their differential ability to deal with potential knowledge-transfer problems and managerial misbehaviors that threaten hotel performance.

3.1. Management contract advantages in (tacit) knowledge transfer

The relevance of knowledge transfer within and between organizations for sustaining competitive advantage has been extensively highlighted in the management literature (Argote et al., 2003; Easterby-Smith et al., 2008; Grant, 1996). This is clearly extensible to any hotel group following an ALFO strategy because it knows how to provide the service according to its business model, but faces the challenge of replicating this business concept at the facilities of the local owners, which requires transferring knowledge (Shaw & Williams, 2009).

Both the KBV and TCE literatures pose that the effectiveness of this transfer will depend on the properties of the knowledge itself and the features of the relationship (*e.g.*, the governance form), among other

[2] The *franchise fee* follows a nonlinear payment schedule, with a fixed initial fee plus variable continuing fees (*e.g.,* royalty fee, advertising or marketing fee, reservation fee, loyalty fee). The continuing fees can be tied to the gross revenue or the number of rooms (Collins & Perret, 2019; Mathewson & Winter, 1985). By contrast, the *management fee* is composed of a base fee and an incentive fee. The base fee can be a fixed sum or a percent of revenues/profits. The incentive fee depends on the achievement of a certain predefined profit level and is usually linked to gross operating profit (for the operator to monitor the hotel's operating costs). Thus, the incentive fee implies a risk-sharing arrangement with the management company (Hua et al., 2020).

[3] The hotel group only partially retains the role of the residual claimant through franchise and management fees. These fees are mainly linked to the number of rooms or revenues per room (ranging 1–5%) in franchising (Collins & Perret, 2019) and mainly linked to gross operating revenue (ranging 2–4%) or operating profit (under 15%) in management contracts (Balyozyan et al., 2017).

context variables (Argote et al., 2003; Cuypers et al., 2021). First, literature on the knowledge-based view sustains that tacit knowledge (*i.e.*, knowledge that is difficult to articulate and codify) is more challenging to transfer than explicit knowledge (*i.e.*, knowledge that can be written down and taught) (Argote et al., 2003; Grant, 1996; Nonaka, 1991) because the former is always embedded in persons so can only be transferred among persons through its application and practice, demanding additional efforts in terms of coordination and organizational design (Grant, 1996; Kogut & Zander, 1992). Additionally, the choice of governance mechanism also affects the transfer of knowledge, especially tacit knowledge, being less challenging within an organization than between organizations (Easterby-Smith et al., 2008; Iddy & Alon, 2019; Kogut & Zander, 1992). This advantage is founded on the greater likelihood that parties (both donor and recipient) from the same organization share cultures, codes and languages, enhancing the communication and coordination needed for knowledge transfer (Kogut & Zander, 1992).

Second, TCE argues that transferring tacit knowledge is more costly than explicit knowledge because the object of the exchange (tacit knowledge) is poorly defined in the contract as it cannot be codified and is only embedded in persons (Foss, 1996; Jensen & Meckling, 1995). This increases the measurement costs of both the output (*e.g.*, parties are unaware of the extent to which the knowledge has been really transferred) and parties' behavior (*e.g.*, whether the donor made enough effort to transmit the knowledge), which increase the risk of opportunism (or behavioral uncertainty) and consequently the transaction costs (Barzel, 1982; Cuypers et al., 2021). Furthermore, regarding the choice of the governance form, the transfer of tacit knowledge is more effective within a firm (hierarchy) than between firms (market). On the one hand, transferring tacit knowledge requires more transaction-specific investments because its tacitness forces persons to interact directly (as opposed to explicit knowledge that can be articulated in a manual that can be used elsewhere and, consequently, is not so transaction-specific). Williamson (1985) argues that specific investments are better protected within a firm (hierarchy) because parties do not compete for the residual income (there is only one residual claimant). On the other hand, knowledge appropriability hazards are also lower within the same organization because the conflict of interest is smaller, and incentives are less intense (Cuypers et al., 2021; Foss, 1996)[4] Conversely, when the transfer is between firms, as the parties are residual claimants, communication might be less effective and reliable, and problems of knowledge appropriability and quasi-rent expropiability might arise.

Based on the above theoretical arguments, we hypothesize that hotel groups will choose the type of contract depending on the type of knowledge they consider is most relevant to the success of the local property. Specifically, because of the weakness of a franchise contract for transferring tacit knowledge (Paswan & Wittmann, 2009), they will use management contracts when the tacit component of the knowledge to be transferred is essential to replicate the business concept at local level. In a franchise relationship, literature sustains that the proprietary and distinctive franchisor's knowledge is slowly articulated into business practices (*e.g.*, Barthélemy, 2008; Combs & Ketchen Jr., 1999; Windsperger & Gorovaia, 2011) that are subsequently conveyed to the franchisee through operation manuals and initial training (Paswan & Wittmann, 2009). This transfer of knowledge (mostly explicit) is *between* independent firms and is therefore more costly than if it were *within* the same company, as argued above. Nevertheless, franchising is viable in many cases because it is specialized in business replicability (Iddy & Alon, 2019; Windsperger & Gorovaia, 2011), and the franchise contract itself works as a safeguard and reasonably solves appropriability problems and other contractual hazards (Solís-Rodríguez & González-Díaz, 2019).

This transfer can become imprecise or too expensive when we refer to *tacit* knowledge because it cannot be fully articulated in electronic databases or manuals (Barthélemy, 2008; Combs, Ketchen Jr., & Hoover, 2004; Paswan & Wittmann, 2009; Winter, Szulanski, Ringov, & Jensen, 2012). Management contracts attenuate this problem because a substantial part of the transfer takes place *within* the same company. The general manager who operates the new unit and oversees the application of brand know-how has already acquired it throughout their experience in the company (Shaw & Williams, 2009). The management company specializes in recruiting, training, and managing qualified staff (*i.e.,* general managers and experts responsible for specialized departments) and then assigning them to the group's establishments. Knowledge acquisition for managers and staff is not only based on manuals and initial training (as in the case of franchisees), but also on internships, and daily practice within the hotel group (Ferrary, 2015). Furthermore, internal knowledge transfer facilitates the informal links, communication, and learning by doing that are needed to develop and absorb tacit knowledge (Reed & DeFillippi, 1990). Therefore, unlike franchisees, general managers of managed hotels have access to the repository of (tacit) knowledge held by the hotel group's skilled staff. Consequently, when the tacit knowledge must be transferred to a local property, management contracts present a relative advantage (over franchising).

3.1.1. The category of the hotel and the tacitness of knowledge

The category of the hotel might determine the tacitness of the knowledge to be transferred. Upscale and luxury hotels are knowledge-intensive companies, and most of this know-how is more complex and difficult to codify (tacit) than that of lower-category hotels (Ferrary, 2015; León-Darder, Villar-García, & Pla-Barber, 2011). Upscale hotels are also more difficult to monitor than lower-category hotels because it is very costly to determine ex-ante the attributes and procedures for delivering a high-value service and, thus, establish reasonable standards to evaluate them. In this regard, Ehbauer and Gresel (2013) highlight how luxury retail still lacks adequate management tools because of the difficulty of designing qualitative and quantitative KPIs to ensure effective management in upscale stores.

In sum, where the hotel group must transfer more tacit knowledge to the local owner, as in upscale or luxury properties, franchising would be less effective than management contracts. This is because the subsequent articulation of the franchise in manuals and documents (explicit knowledge) is not enough to ensure adequate compliance with brand quality standards in high-end hotels. Conversely, the knowledge transfer that enables management contracts is larger because tacit knowledge is also conveyed as it takes place among employees within the same organization, reducing communication costs and opportunism (behavioral uncertainty). This shortage of knowledge for franchised hotels may result in poorer service and lower customer satisfaction (*i.e.*, lower online scores) than for managed hotels. Thus:

H2. The interaction of franchise (vs. management) contracts and hotel category has a negative effect on online scores.

3.2. Franchising advantages for fostering managerial effort and standardization

Agency theory (*e.g.,* Alchian & Demsetz, 1972; Eisenhardt, 1989; Fama, 1980; Jensen & Meckling, 1976) provides a complementary view to TCE and KBV on what are the main contractual risks and on the governance alternatives that can minimize their costs (Kim & Mahoney, 2005; Tan & Mahoney, 2006). This theoretical approach is concerned with how economic incentives can be aligned *ex-ante* to reduce

[4] Appropriability hazard is the risk that an economic actor cannot protect its knowledge from leakage to other parties (Teece, 1986).

inefficiencies in *principal-agent* relationships[5]. In our particular setting, it focuses on how governance choices can modify the *ex-ante* economic commitment and incentives (of the agents) to preclude exchange hazards (*e.g.,* moral hazard problems such as free-riding and effort avoidance) and save on ex-post monitoring and enforcement costs (by the principal) (Lajili & Mahoney, 2006).

In fact, the agency approach has been widely accepted to explore the incentive structure of *franchise* agreements in channel relationships and its relative efficiency compared to vertical integration (*e.g.,* Brickley et al., 1991; Carney & Gedajlovic, 1991; Lafontaine, 1992; Rubin, 1978). The hospitality literature has also used this approach to analyze *franchised versus company-owned* hotels (*e.g.,* Kosová et al., 2013; Kosová & Sertsios, 2018; Lawrence & Perrigot, 2015; Michael, 2000; Moon & Sharma, 2014; Zhang et al., 2015). These studies emphasize the *high-powered incentives* of franchisees and the ability of the franchise contract to (a) incentivize adequate management efforts (*i.e.,* avoiding managerial shirking), but also to (b) promote free-riding hazards.

On the one hand, because of their flat or low-powered incentives, hired managers at chain-owned hotels may pursue sub-goals and may not be motivated to fully promote the economic interests of proprietors (residual claimants). In contrast, as hotel owners, franchisees will act with the utmost diligence to pursue the profitability of their local establishments. Therefore, when it is costly to prevent or monitor managerial self-seeking behaviors, for example, in networks of geographically distant and dispersed establishments, the franchise solution is expected to outperform vertical integration (*e.g.,* Lafontaine, 1992; Rubin, 1978).

The question at this point is whether *management contracts* can match this advantage of franchising. As discussed earlier, the general directors of managed hotels are employees of the management company, so they are also endowed with less powerful incentives to perform than franchisees —*e.g.*, in closely supervising and monitoring hotel personnel and operations, or in engaging with local actors to gather specific knowledge about the local market— (Freedman & Kosová, 2014; Hodari et al., 2017)[6]. Clearly, management companies can monitor their behavior and introduce incentive systems that better align interests, such as performance-based variable pay (*e.g.,* executive bonus plans), linking managers' compensation with hotel performance measures (Namasivayam, Miao, & Zhao, 2007; Patiar & Wang, 2020). In line with this argument, Freedman and Kosová (2014) analyzed compensation policies within hotel establishments, comparing franchised and company-managed hotels. The latter tended to use more performance-based payments to compensate for their managers' lower commitment and monitoring efforts. However, these compensation plans cannot always replicate the high-powered incentives of franchisees tied to their position as hotel proprietors (Alchian & Demsetz, 1972; Hajdini & Windsperger, 2019). In short, management contracts likely offer a weaker solution for incentivizing adequate management effort (*i.e.,* preventing shirking) at the local level than franchising.

On the other hand, both franchisees and owners of managed hotels can use their leeway as hotel proprietors to *free-ride* on brand equity and maximize profits at the local level at the expense of the overall interests of the hotel group. This theoretical problem translates into different types of misbehavior that have been studied for both franchises (Brickley & Dark, 1987; El Akremi, Mignonac, & Perrigot, 2011; Kidwell, Nygaard, & Silkoset, 2007; Michael, 2002) and management contracts (Schlup, 2004; Turner & Guilding, 2010; Van Ginneken, Koens, & Fricke, 2019). Free-riding in franchise relationships usually includes failure to meet chain service and quality standards and unjustified price increases. Other opportunistic behaviors include the concealment of critical local information, evasion of royalties, or undue deviation from standards. In management contracts, Turner and Guilding (2010) also underline a horizon problem. Managed hotels' proprietors will be interested in the investments that can contribute most to improving the hotel's net benefits (bottom-line) in both the short and long term. Conversely, the management company will prefer investments that can enhance overall brand value or hotel revenue (or gross profits) in the short term (*i.e.*, management and incentive fees).

There are also differences in how free-riding is solved under these governance forms. We argue that a management contract reduces free-riding problems more easily than franchising because of the former's advantage in terms of the *administrative control* it can exert over the hotel's day-to-day decisions at the local level. The general manager of the managed hotel, *i.e.,* an employee of the hotel group, holds a more advantageous position for monitoring and preventing opportunistic behavior than the auditors, external supervisors, or mystery shoppers that a franchisor might occasionally establish to control franchisee behavior. In sum, management contracts solve free-riding on brand equity better than franchise contracts but worsen the problem of managerial shirking. Therefore, we expect franchised hotels to perform better than managed hotels in situations that demand more management effort while keeping free-riding hazards low.

3.2.1. Hotel size and monitoring difficulties

This paper considers hotel *size* as a relevant hotel attribute for assessing managerial shirking but with no significant effect on free-riding hazards in hotel groups. This is because we consider the size of a particular hotel property and not the size of the chain (*i.e.*, number of branded hotels). The number of rooms or guests directly affects the monitoring and organizational efforts required from managers (related to shirking) but not necessarily the abuse of shared brand assets (related to free-riding). Moreover, larger up-front investments by larger hotels can increase contract self-enforceability and prevent free-riding since they increase the potential losses imposed by contract termination, thus serving as effective hostages against misbehaviors (Kosová & Sertsios, 2018). On the other hand, bigger outlets are more demanding to manage (Lafontaine, 1992; Norton, 1988). A management error in a large hotel can be extremely costly because of the number of employees, assets, and guests involved. Large hotels also require more planning and supervising efforts than smaller hotels because, due to the size of their operations, nothing can be left to chance (*i.e.*, their responsiveness is very limited) (Hodari & Sturman, 2014). Therefore, the high-powered incentive advantages of franchisees are especially useful in large establishments. In line with this argument, Kosová and Sertsios (2018) found that hotels far away from the chain headquarters (*i.e.,* difficult to supervise) were larger when they were franchised hotels, but this size effect did not exist for chain-managed hotels.

Furthermore, large hotels require more standardized work processes than smaller ones because other coordination mechanisms (*e.g.,* direct supervision) are not effective in this type of organization (the so-called 'machine bureaucracy' to use the term coined by Mintzberg, 1979) (Baker & Cullen, 1993; Sutton & Dobbin, 1996). Franchising offers an advantage over management contracts when working under normalized environments because franchisees are used to employing standardized

[5] The relationship between a hotel group and its affiliated establishments has been traditionally simplified as a principal-agent relationship, in which the hotel group is the principal whose economic interests are influenced by the agents, *i.e.*, the hotel-unit owners. This clearly fits with the analysis of franchising (*e.g.*, Kosová et al., 2013; Lawrence & Perrigot, 2015; Zhang et al., 2015). However, the roles of the hotel group (principal) and hotel-unit owners (agent) are reversed in a management contract. The hotel-unit owner also acts as a principal by "delegating the management" of his establishment to the hotel group (the agent). We appreciate the comment of an anonymous reviewer in identifying this theoretical difference between franchising and management contracts.

[6] Note at this point that there may not be much difference in *incentives* between the executives of managed hotels and those of chain-owned hotels. However, in managed hotels, top management is controlled by both the hotel group and the property owner (managed firm). Therefore, although they may have a similar economic commitment to the business, we would expect a higher level of *control/monitoring* over top management in managed properties than in company-owned properties.

routines. Franchise businesses develop a set of formal and routine procedures to transfer their explicit knowledge and practices to franchisees (Paswan & Wittmann, 2009). The potential cognitive, cultural, and/or interest distance with their franchisee partners, together with the impossibility of resorting to hierarchical authority to oversee franchisee behaviors, means that franchisors must develop routine procedures, rules, and policies (contained, for example, in the franchise manual) to guide cooperation between the partners (Knott, 2003; Winter et al., 2012). In fact, the ability to create "standard operating routines" and communicate and transfer them to their franchisees is considered a key alliance capability in franchise chains (Gillis, Combs, & Yin, 2020). Moreover, we expect that this "alliance management capability" represents a differential advantage of the franchise agreement comprising the ability to ensure coordination and standardization in challenging contexts, such as in large hotels.

In sum, we expect franchising to be better suited to larger hotels than management contracts, resulting in better service and online scores.

H3. The interaction of franchise (vs. management) contracts and hotel size has a positive effect on online scores.

4. Empirical setting

To test our hypotheses, we use a dataset consisting of the 250 largest hotel groups (in terms of the number of rooms) with establishments in Spain during 2018. These hotel groups ran 3105 establishments (505,752 rooms) at the beginning of 2018 out of a population composed of 3887 hotels belonging to hotel groups (Mota, 2018). These figures do not take into account independent hotels, which were not considered in the empirical analysis because the aim of the paper leads us to focus only on hotel chains (*i.e.,* independent hotels are always company-owned hotels, so we do not observe variability in terms of organizational forms). The Spanish hotel industry is an appropriate setting because Spain's tourism industry is a consolidated sector, occupying the second position in the world by the number of international tourist arrivals and receipts (World Tourism Organization, 2019; p. 9). We focus on hotels from a single country—Spain—to maintain control over the possible effect that different countries may have on the choice of governance forms (*e.g.,* sector organization, regulation, and economic and political stability) (Lafontaine, Perrigot, & Wilson, 2017). Using a single country also avoids the appearance of bias in online scores from nation-specific features (Radojevic, Stanisic, & Stanic, 2017).

Data regarding the establishment features (governance form, stars, rooms, location, restaurants, hotel group, and opening date) were obtained from Alimarket, a well-known economic data producer in Spain. Given our interest in comparing franchising and management contracts (using chain-owned hotels as a control group), we restricted the dataset in the following way. First, we did not consider leased hotels (also included in the Alimarket database) because we did not want to contaminate our control group with other organizational forms in which different conflicts of interest might exist (*e.g.*, real estate owners and the hotel group). Second, we also ruled out any establishments whose business concept was not the canonical example of hotel accommodation, as these might introduce noise in the estimations. We rejected apartments, focusing only on hotels and aparthotels (hotels in which self-catering service apartments are available for rent), because the core services differ significantly (*e.g.,* meals, bedmaking, cleaning, *etc.*). Similarly, we rejected minor types, such as hostels, rural tourism establishments, and holiday villages. Finally, after rejecting any hotels for which we lacked information for all the variables, our dataset was 1664 hotels belonging to 220 hotel groups, of which 68 run franchised or managed hotels encompassing 467 hotels.

4.1. Variables

The dependent variable is *Score*, which is the weighted mean of three website scores for each hotel after homogenizing their scales. We took these scores manually from the Booking, Expedia, and TripAdvisor websites between March and June 2018 (one score for each hotel). We weighted each website score by its number of comments. We consider three websites to avoid the bias that a single source might produce (Bigné, William, & Soria-Olivas, 2019; Fernández-Barcala, González-Díaz, & Prieto-Rodríguez, 2010; Mariani & Borghi, 2018; Mayzlin, Dover, & Chevalier, 2014; Xiang, Du, Ma, & Fan, 2017). Website scores are increasingly used by hotel customers in their booking decisions (Cantallops & Salvi, 2014), thus becoming KPIs and being increasingly used in academic papers (Kwok et al., 2017; Yang et al., 2018).

We use two different dichotomous variables to identify the governance form of hotel i. The variable *Franchising* takes the value "1" when the chain operates a hotel through a franchise contract and "0" otherwise. Similarly, the variable *Management* takes the value "1" when the hotel group operates the lodging establishment through a management contract. Because of our research methodology, the variable governance form also acts as a dependent variable in an auxiliary regression, in addition to a predictor of online scores.

Upscale is a dummy variable that takes the value "1" if hotel I has more than three stars and "0" otherwise. In Spain, the hotel category is measured from one to five stars. We consider establishments with fewer than four stars to be different types of economy hotel. Conversely, upscale full-service hotels are those classified as 4- and 5-star hotels and are characterized by offering more sophisticated services and larger rooms. Specifically, 5-star hotels are characterized as having the best-equipped facilities and offering the most sophisticated set of services. The variable *lRooms* quantifies the size of the establishment as the logarithm of its number of rooms. *Renewal* measures the number of years since the establishment was built or renovated and is utilized as a proxy of the establishment's maintenance needs. *Restaurants* alludes to the number of eating places in the establishment and is used as a control variable.

Hotel group-z are dummy variables constructed for each of the z ($z = 1, \ldots, 68$) hotel groups included in the study. The list of hotel groups was extracted from the *Report of Hotel Groups in Spain 2018* (Mota, 2018) and aims to control for potential hotel group effects, such as corporate strategy or preferences in terms of governance forms.

Lastly, and although we refer to this in greater detail in the estimation section, to control for self-selection bias in the choice of the governance form, we use two variables as main instruments: *Geographic concentration* and *Ratio of j-form hotels*. *Geographic concentration* refers to the number of establishments of a hotel group in a province. *Ratio of j-form hotels* measures, for each establishment i, the ratio of establishments that its hotel group maintains in the same province with organizational form j over the total of the hotel group's establishments in that province. The variables are summarized in Table 1, Table 2 displays descriptive statistics, and Table 3 shows the number of groups/hotels/rooms in the dataset per governance form and category.

4.2. Estimation

Sample selection bias is a relevant issue in assessing the effect of organizational form choice on performance. This problem recurs in research (Gulati & Nickerson, 2008; Mesquita & Brush, 2008), and several authors have insisted on the fact that the choice of governance form may be made systematically rather than randomly (Hamilton & Nickerson, 2003; Masten, 1996; Shaver, 1998). Hotel group managers may self-select into different governance forms (*i.e.,* types of affiliated hotels). They may decide on the form that they expect to be most cost-effective for the hotel group. Therefore, a simple OLS of the *Score* (performance) as a function of the governance form may produce biased estimations (Hamilton & Nickerson, 2003; Masten, 1996; Mayer & Nickerson, 2005).

To correct this bias, we rely on the method proposed by Heckman (1979), which consists of running a two-equation model. The first is a "treatment" model that explains the self-selection decision. The second

Table 1
Variables.

Dependent variables	Definition
Score	Weighted mean of online ratings for hotel *i*
Franchising	1 for hotels operated under a franchise contract
Management	1 for hotels operated under a management contract

Independent variables	Definition
Upscale	1 for a 4- or 5-Star hotel
lRooms	Log of the number of rooms
Renewal	Number of years since the hotel facility was built or renovated
Restaurants	Number of restaurants in the hotel.
Geographic concentration	Number of group hotels in the same province
Ratio of franchised hotels	Ratio of franchised hotels to total hotels of the hotel group to which hotel *i* belongs in the same province as hotel *i*.
Ratio of managed hotels	Ratio of managed hotels to total hotels of the hotel group to which hotel *i* belongs in the same province as hotel *i*.
Ratio of chain-owned hotels	Ratio of chain-owned hotels to total hotels of the hotel group to which hotel *i* belongs in the same province as hotel *i*.
Hotel group z (z = 1, …68)	1 for a hotel belonging to the *z* hotel group.

is a performance regression, which is estimated to fit the self-selection of the first equation. The two-stage estimator used in the model is shown in Maddala (1983: 120–122) and the Stata reference manual (2015, pp. 59–64). In our case, we estimate a probit model of the treatment equation that is specified as follows:

$$Franchising/Management_i = \alpha_0 + \alpha_1{*}Upscale + \alpha_2{*}lRooms + \alpha_3{*}Renewal + \alpha_4{*}Restaurants + \alpha_5{*}Geographic\ concentration + \alpha_6{*}Ratio\ of\ franchised\ hotels + \alpha_7{*}Ratio\ of\ managed\ hotels + \alpha_8{*}Ratio\ of\ chain-owned\ hotels + \alpha_9{*}Hotel\ group\ 1 + \ldots + \alpha_{76}{*}Hotel\ group\ 68 + \varepsilon_{1i} \quad (1)$$

In Eq. (1), ε_{1i} is the random error term and *Franchising/Management*$_i$* represents unobservable measures of the organizational form. Nevertheless, we do see the chosen governance form, a dichotomous variable, ***Franchising/Management***$_i$, with *Franchising/Management*$_i = 0$ if *Franchising/Management*$_i$ $* \leq \mu_1$ and *Franchising/Management*$_i = 1$ if $\mu_1 <$ *Franchising/Management*$_i$ *.

The second step estimates the scores conditioned by the choice of governance form and other hotel features as follows:

$$Score_i = \beta_0 + \beta_1{*}Upscale + \beta_2{*}lRooms + \beta_3{*}Renewal + \beta_4{*}Restaurants + \beta_5{*}Franchising/Management + \beta_6{*}Franchising/Management{*}Upscale + \beta_7{*}Franchising/Management{*}lRooms + \beta_8{*}Franchising/Management{*}Renewal + \beta_9{*}Hotel\ group\ 1 + \ldots + \beta_{76}{*}Hotel\ group\ 68 + \beta_{77}{*}Hazard_j + \varepsilon_{ij} \quad (2)$$

It is important to note that we must econometrically identify Eq. (1). This means that we need to introduce at least one instrument in the treatment regression (first stage) that is not considered in the performance regression (second stage). Specifically, we use *Geographic concentration* and *Ratio of franchised/managed/chain-owned hotels* as the instruments for *Franchising/Management*, which are the endogenous variables. We expect the ratio of hotels in a hotel group with governance form *j* in a given province to be inversely related to the unit costs of monitoring establishments with identical governance forms (Kosová et al., 2013). This ratio captures the unobservable costs of selecting a governance form in a given province. In addition, there may be economies of scale in the mechanisms and activities developed to control each governance form (Dahlstrom, Hauglandc, Nygaard, & Rokkan, 2009; Hoffman & Preble, 2003; Shane, 1996). In short, as the ratio of establishments with a given governance form in a geographic area increases, the cost of controlling additional establishments with that governance form decreases and the likelihood of choosing it for other establishments increases. The *Geographic concentration* variable allows us to take into account the size of the hotel group. Therefore, it facilitates weighting the effect of the economies of scale that we have approximated using the previous variable. It is reasonable to assume that neither of the two instrumental variables influences the online scores. Actually, when guests rate a hotel, they do not necessarily know either the total number of hotels of the hotel group in the province or which have the same governance form as the one in which they are staying.

4.3. Results

Table 4 shows the main results reflecting the performance comparison of hotels operated under franchise and management contracts. Although our interest is in the second stage, it also shows the first-stage results for their methodological value (Appendix 2 summarizes descriptive statistics for the two-stage estimations). These results suggest that Heckman's correction is not needed. The coefficients of *Hazard*, which is the parameter that Stata uses to estimate *Rho* (*i.e.,* the correlation between the error terms of Eqs. (1) and (2)), are not significantly different from zero, and thus we cannot reject the null hypothesis of no correlation between these error terms. Therefore, the equations can be considered independent because bias selection is statistically nonsignificant. Furthermore, some of our instruments are statistically significant (*Ratio of franchised/managed* are significant and have the expected effect on the organizational form),[7] which suggests that they fulfill the requirement that they should be correlated with the choice of organizational form so they can identify the Eq. (1).

For the second stage, we estimated a baseline model with the direct effects and an augmented model in which we also consider the interactive effects of the organizational form and the features of the hotels. Both models are significant, displaying $\chi 2$ statistics at the 99% confidence interval, which yield R^2 statistics of 0.16 and 0.17 respectively.

[7] Please note that these two variables do not need to add up to 1 because in the ratio calculations, we consider the four existing types of organizational form: franchise, managed, leased, and chain-owned hotels. Consequently, they can be considered simultaneously in the regression.

Table 2
Descriptive statistics.

Variable	Management contracts				Franchise contracts				Chain-owned			
	Observations: 313				Observations: 154				Observations: 1197			
	Mean	Std. Dev	Min	Max	Mean	Std. Dev	Min	Max	Mean	Std. Dev	Min	Max
Score	8.206478	0.597637	4.618231	9.85492	8.104001	0.478558	6.496135	9.077864	8.217112	0.7141081	4.997114	9.944622
Franchising	0	0	0	0	1	0	1	1	0	0	0	0
Management	1	0	1	1	0	0	0	0	0	0	0	0
Upscale	0.8083067	0.3942634	0	1	0.5	0.5016313	0	1	0.7368421	0.4405314	0	1
lRooms	4.805491	0.7854878	2.302585	6.818924	4.656464	0.6325929	1.791759	6.767343	4.972374	0.7681025	2.197225	7.035269
Renewal	7.01278	4.756894	1	23	8.409091	4.020558	2	20	10.48956	6.570884	0	54
Restaurants	1.124601	1.003425	0	8	0.8701299	0.8060336	0	5	1.104428	1.073373	0	16
Geographic concentration	6.626198	7.066821	1	29	6.512987	7.406266	1	29	7.745196	7.918232	1	34
Ratio of franchised hotels	0.036055	0.10879	0	0.7692308	0.7948638	0.3012549	0.0344828	1	0.0030326	0.0267148	0	0.3478261
Ratio of managed hotels	0.6920246	0.3191718	0.0344828	1	0.0749383	0.1762475	0	0.8947368	0.0370874	0.103505	0	0.6666667
Ratio of chain-owned hotels	0.1349308	0.229907	0	0.875	0.0241942	0.085644	0	0.6	0.8648239	0.2243845	0.0434783	1

Table 3
Number of groups/hotels/rooms in the dataset per organizational form and category.

Organizational form	Category		Total
	Upscale (4–5 stars)	Economy (<4 stars)	
Management contract	48/253/44,865	34/60/6791	65/313/ 51,656
Franchise	12/77/12,587	12/77/7383	17/154/ 19,970
Total	51/330/57,452	40/137/14,174	68/467/ 71,626

Table 4
Regression models (I).

Predictors	First stage: Estimates (β) for *Governance form*	Second Stage: estimates (β) for *Score*	
	Franchising *vs.* management	Franchised and Management	
		Baseline model	Augmented model
Upscale	−1.0525677**	0.4854087***	0.62254414***
lRooms	0.117914	−0.12671228***	−0.17564839***
Renewal	0.02982326	−0.01024148*	−0.00789178
Restaurants	0.00295741	0.06349429**	0.06690741**
Franchising	–	0.06080103	−0.47803964
Franchising x Upscale	–	–	−0.34749606***
Franchising x lRooms	–	–	0.18123349**
Franchising x Renewal	–	–	−0.01079423
Geographic concentration	0.00847343	–	–
Ratio of franchised hotels	4.9570793***	–	–
Ratio of managed hotels	−2.4955424*	–	–
Hazard		−0.00848623	−0.04150931
Cons	−1.3599676	8.4227736***	8.5241422***
N	467	467	467
Goodness of fit		Wald chi^2 = 102.51*** R^2 = 15.82	Wald chi^2 = 116.26*** R^2 = 17.30

Estimates (standard deviation): $^*p < 0.10$; $^{**}p < 0.05$; $^{***}p < 0.01$.

The results of the baseline model in Table 4 indicate, first, that the hotel scores positively depend on their category and on the number of restaurants and negatively depend on the size of the hotel (in terms of rooms) and on the date of renovation of the facilities. However, the *Franchising* coefficient is not statistically significant, suggesting that none of these organizational forms is better on average in terms of scores. This is an expected result because it broadly supports the idea that there is no universally superior organizational form that works for all types of hotel (in regard to improving performance) (hypothesis 1).

Second, the augmented model results reflect two important findings. On the one hand, we observe that when hotel groups decide to operate upscale hotels under franchise contracts, the expected performance in terms of score is lower ($\beta_{6F\text{-}M} = -0.3475\ p < 0.01$) than that of upscale hotels run under management contracts. Consequently, it seems that franchising is the worst solution for higher-category hotels, as proposed in hypothesis 2. By contrast, franchising positively moderates the negative effect of hotel size on score. We obtain a positive and significant parameter for the interactive effect in Table 4 ($\beta_{7F\text{-}M} = 0.1812\ p < 0.05$), as expected (hypothesis 3). This means that for large hotels, franchising is more effective than management contracts (*i.e.*, it mitigates the impact of size on scores).

As a robustness check, we also present the results from comparing

Table 5
Regression models (II).

Predictors	First Stage: Estimates (β) for *Governance form*		Second Stage: Estimates (β) for *Score*			
	PANEL A	PANEL B	PANEL A		PANEL B	
	Franchising *vs.* Chain-Owned	Management *vs.* Chain-Owned	Franchised and Chain-Owned		Management and Chain-Owned	
			Baseline model	Augmented model	Baseline model	Augmented model
Upscale	0.18063894	−0.36349802	0.57499578***	0.61405879***	0.61202769***	0.6100477***
lRooms	−1.1965523	−0.06502195	−0.14394519***	−0.15450748***	−0.1588431***	−0.15693078***
Renewal	0.0282128	−0.05115913***	−0.00894029***	−0.00878288***	−0.00878119***	−0.00887956***
Restaurants	−0.34886706	−0.02849674	0.04672628***	0.04700466***	0.05257359***	0.05269114***
Franchising	–	–	−0.02351866	−0.52804703	–	–
Management	–	–	–	–	−0.11220408**	−0.07728482
Franchising x Upscale	–	–	–	−0.33877289***	–	–
Management x Upscale	–	–	–	–	–	0.01378616
Franchising x lRooms	–	–	–	0.16314338*	–	–
Management x lRooms	–	–	–	–	–	−0.01117172
Franchising x Renewal	–	–	–	−0.00916697	–	–
Management x Renewal	–	–	–	–	–	0.00092246
Geographic concentration	−0.17827745	0.00526968	–	–	–	–
Ratio of franchised hotels	45.273563	–	–	–	–	–
Ratio of managed hotels	–	4.080705***	–	–	–	–
Ratio of chain-owned hotels	−24.466003	−3.1226136***	–	–	–	–
Hazard			−0.09536655	−0.1298443	−0.00073542	0.00275527
Cons	8.34662	0.92729631	8.5506097***	8.5721181***	8.5899636***	8.5830791***
N	1351	1510	1351	1351	1510	1510
Goodness of fit			Wald chi^2 = 263.66*** R^2 = 15.89	Wald chi^2 = 274.88*** R^2 = 16.29	Wald chi^2 = 317.04*** R^2 = 16.62	Wald chi^2 = 317.11*** R^2 = 16.45

Estimates (standard deviation): *$p < 0.10$; **$p < 0.05$; ***$p < 0.01$.

the performance of franchised and managed hotels with that of company-owned hotels (Table 5). The aim of adding this comparison is twofold. First, it facilitates the comparison of our results with the extant literature and, second, it helps check the soundness of the hypotheses if they can also predict the differences with these new comparisons. Panel A compares franchised and chain-owned establishments (the dependent variable in the first stage is *Franchising*) and Panel B considers hotels operated under management contracts and chain-owned hotels (the dependent variable in the first stage is *Management*).

The results corroborate our previous main findings. First, Panel A in Table 5 (augmented model) shows that the choice of franchising also reduces the positive effect of *Upscale* on the expected score when compared with chain-owned hotels ($\beta_{6F\text{-}O} = -0.3388\ p < 0.01$). Meanwhile, Panel B in Table 5 (augmented model) shows that managed hotels are not significantly different in terms of score from company-owned hotels for operating upscale establishments. Both results are consistent with H2, which argues that franchising is the least appropriate organizational form for operating upscale hotels. Second, the *Franchising x lRooms* parameter is also positive and significant in the augmented model of Panel A in 5 ($\beta_{7F\text{-}O} = 0.1631\ p < 0.1$) but is not statistically

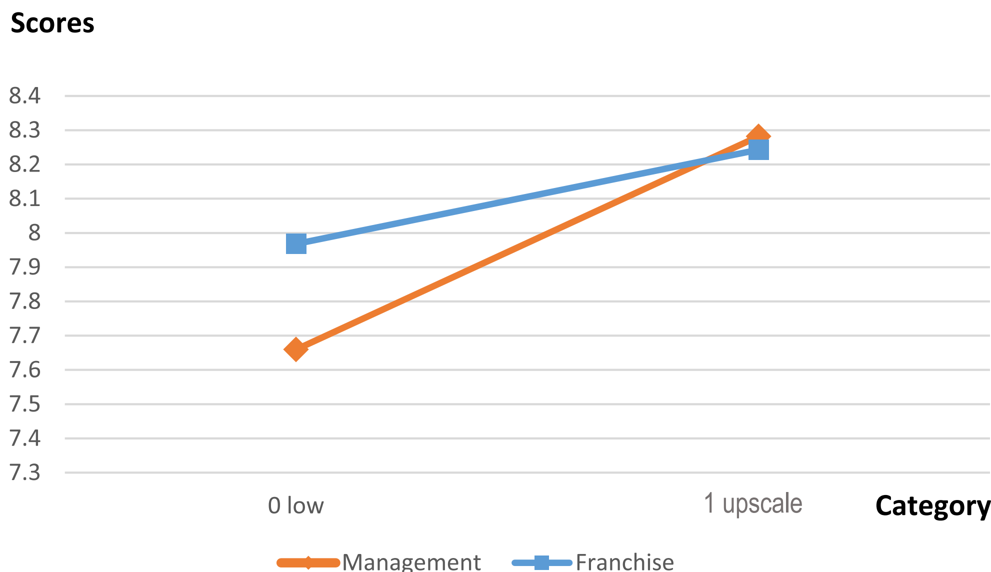

Fig. 1. Interaction effect of the governance form (franchise *vs.* management contract) and the hotel category on scores.

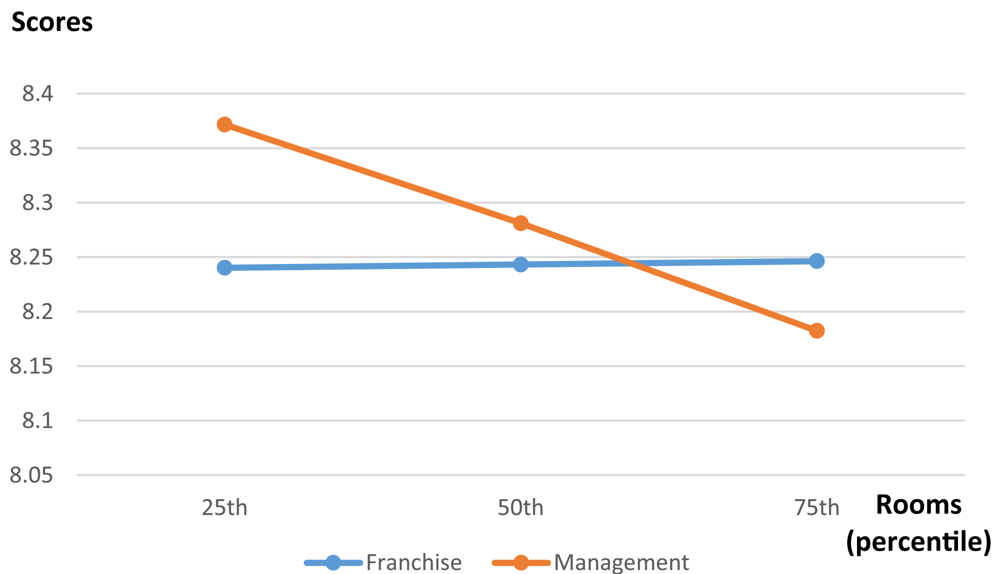

Fig. 2. Interaction effect of the governance form (franchise *vs.* management contract) and the hotel size on scores.

significant in the estimate of *Management x lRooms* (Panel B in Table 5), which again is consistent with H3. Finally, the *Management* coefficient in Panel B in Table 5 (*i.e.,* managed *vs.* owned hotels) is significant and negative ($\beta_{5M\text{-}O} = -0.1122\ p < 0.05$), which suggests that management contracts deliver worse scores than company-owned hotels, irrespective of the characteristics of the hotels, in contrast to H1.

To reinforce the above results for H2 and H3, we plotted the interaction effects, as shown in Figs. 1 and 2. These figures show the relationship between the category/size of the hotel (the x axis) and the scores (y axis) for each value of the moderating variable (*i.e.,* franchise and management contract). As shown in Fig. 1, as the category of the hotel increases, although both governance forms enhance scores, franchising becomes a worse choice compared to management contracts (H2) because its scores grow at a lower rate. Fig. 2 shows that as the size of the hotel increases, the two forms of governance clearly have differing performance. Management contracts worsen their scores, while franchising improves them, albeit only slightly (H3). Consequently, above a certain size, franchised hotels exceed the scores of managed hotels, making franchising a better option for large establishments.

5. Discussion

One of our most interesting results is that franchise contracts are less effective for operating upscale hotels than management contracts. This finding is aligned with our second hypothesis, which argues that the disadvantages of franchising are most relevant in high-quality services because of the difficulties in transferring tacit knowledge (Ferrary, 2015; León-Darder et al., 2011). We sustain that this type of knowledge is more effectively transferred *within* organizations (*i.e.,* through company-personnel interactions in daily work) than between organizations (*i.e.,* through codification in manuals and contractual documents) (Van Wijk, Jansen, & Lyles, 2008). In other words, tacit knowledge is transferred more effectively in managed hotels than in franchised hotels. Initial training, remote assistance, and operations manuals (*i.e.*, typical franchising procedures) are efficient devices for conveying explicit knowledge (Iddy & Alon, 2019; Solís-Rodríguez & González-Díaz, 2019; Windsperger & Gorovaia, 2011), but the transfer of tacit knowledge demands alternative tools (Paswan & Wittmann, 2009). Management contracts incorporate some of these tools because it is the company personnel themselves (*e.g.,* the general manager) who teach the local partners while they perform their tasks (Ferrary, 2015; Kruesi et al., 2018; Kruesi, Kim, & Hemmington, 2017). Here, employees are the repository of firm' tacit knowledge.

We have not found any previous research that has compared these two organizational forms, so we cannot relate these findings to previous results. However, this weakness of franchising also holds when comparing franchised hotels with company-owned hotels (Table 5). This finding is consistent with previous results *(e.g.,* Barthélemy, 2008; Michael, 2000), and makes sense because company-owned establishments use the same tacit knowledge transmission system as managed properties (which is more effective than those in franchising). Relatedly, this argument of the tacitness of transferred knowledge has been empirically tested as a determinant of the entry mode of multinationals in host countries (Kogut & Zander, 1993).

A second striking result is that franchising is more effective than management contracts for operating large hotels. The overall negative effect of hotel size on guests' scores for the lodging service is more attenuated in franchised hotels than in managed establishments. This finding is in line with our third hypothesis that maintains that large hotels perform better when operated under the form of a franchise (*vs.* management contract). A plausible explanation is because the general manager (the franchisee) is more motivated to prevent managerial shirking than in managed hotels (being an employee of the hotel group) (Freedman & Kosová, 2014; Hodari et al., 2017) and more used to applying standardized and codified business concepts (*i.e.,* the franchise package is a standardization of the business model and a procedure for transfer to local partners) (Maalouf, Combs, Gillis, & Perryman, 2020). These relative advantages are especially relevant in larger hotels because both shirking and the need for standardized procedures are also expected to increase with the size of the hotel (*e.g.,* Hodari & Sturman, 2014; Kosová & Sertsios, 2018). We also find similar results when we compare franchising and ownership because, in terms of managerial shirking, managed hotels and company-owned hotels are similar. Kosová and Sertsios (2018) also found this correlation in their comparison of franchised and company-managed hotels.

Finally, there is direct and indirect evidence corroborating the organizational fit hypothesis. The indirect clues come from the results just discussed, which show that management contracts are more suitable for operating upscale hotels, while franchising is better for operating large hotels. The direct evidence is derived from the lack of significance of the direct effects of the organizational form in most of the estimations (*Franchising* in Tables 4 and 5). These results supporting the organizational fit hypothesis are also in line with those of other papers in different settings (*e.g.,* Blal & Bianchi, 2019; Fernández-Barcala et al.,

2021; Gulati & Nickerson, 2008). However, one of our results does not support this hypothesis because the direct result of *Management* suggests that managed hotels outperform company-owned hotels on average, regardless of hotel characteristics. Clarification of this result requires further research on management contracts (as also suggested by Hua, DeFranco, & Abbott, 2020), since we only control for two characteristics of the establishments in which management contracts and ownership are very similar (knowledge-transfer problem: both are personnel-based and within the organization; and managerial shirking: both are salaried employees of the hotel chain).

6. Conclusion, managerial implications, and limitations

In sum, this work shows that differences in performance exist between the two main business-to-business organizational solutions that constitute the ALFO strategy, so one size does not fit all (*i.e.,* solutions are contingent on organizational problems). Management contracts prove more effective than franchising in upscale hotels. We argue that this is because transferring tacit knowledge *within* the organization (as management contracts do) is less costly than transferring it *between* companies (as franchising does). Conversely, we also find that franchise agreements outperform management contracts for operating large hotels in terms of online scores, arguably because they provide high-powered incentives to prevent managerial shirking and facilitate the standardization and codification of business procedures.

The theoretical implication of this work is that to explain the choice of the business-to-business relationship, it is necessary to understand not only the problem we want to solve (the replication of a business concept without large capital investments) but also the comparative advantages of the organizational solutions applied (*i.e.,* management contract *vs.* franchising). Hua et al. (2020) have recently shown that management contracts provide value, and we qualify this by stating that part of this added value is because they guarantee the transfer of tacit knowledge better than a franchise contract does. Overall, a deeper analysis of governance choice is necessary to disentangle the still fuzzy category of so-called hybrid governance solutions (Williamson, 1991). Studies comparing extreme governance mechanisms (*i.e.*, hierarchy and market) with specific hybrid solutions are relatively frequent. However, the delimitation of hybrids and their differences have been much less studied (Cuypers et al., 2021). In this sense, these results help advance understanding of the two leading hybrid solutions of the hotel industry (ALFO).

However, although the empirical results are clear, their interpretation should be taken with caution because other problems might remain hidden. Contractual clauses (not observed) distribute decision rights and risks of operations and investments, modifying the parties' incentives and behavior. This type of fine-grained study (*e.g.*, Arruñada, Garicano, & Vázquez, 2001) based on the allocation of property rights, which already exists in other types of contract such as franchises or alliances, is missing for management contracts and it is necessary to understand how they truly work. In the same vein, the effects of different types of multi-franchisees on franchise chains have also been partially studied (*e.g.,* Grünhagen, González-Díaz, Hussain, & Monteiro da Silva Filho, 2022; Grünhagen & Mittelstaedt, 2005; Kaufmann & Dant, 1996), but the equivalent effects of small sets of managed hotels (owned by a single hotelier) on hotel groups have not yet been studied. Summing up, avenues for further research remain open.

The findings of this study also have managerial implications. Hotel groups are influenced by multiple and complex (financial and strategic) criteria when choosing the governance form of their hotels. Given the increasing strategic relevance of online scores (as drivers of consumer decisions and as a KPI), it is important to be aware of how the governance choice for a hotel may influence such scores. The consequences that this choice has on the incentives of hotel general managers are crucial since, within this sector, it is an axiom that "a hotel is only as good as its manager" (Forte, 1986, p. 119). From this point of view, our study highlights differences between hotels under management and under franchise contracts, which translate into their ability to satisfy guests. Specifically, hotel group managers should be aware that franchising is weak for transferring tacit knowledge, so they must develop complementary devices for transmitting this non contractible knowledge to the local partner. Otherwise, franchising should be restricted in favor of management contracts, for example, in upscale and luxury hotels. From this perspective, it makes sense first to use a management contract, and once the transfer of tacit knowledge is guaranteed, transfer to a franchise agreement to increase incentives. This hybrid form is what practitioners call "manchising" (Collins & Perret, 2019), and our arguments provide a theoretical explanation for its existence.

In contrast, management contracts are more effective in protecting hotel group knowledge because the business concept is not as explicitly transferred as in franchising. This is relevant because franchisees with an entrepreneurial orientation use franchising as "schools or entrepreneurial 'internships'" to gather new skills before launching their own brand or concept (Grünhagen et al., 2022). The hotel group can prevent this by tying the franchisee to larger investments (properties), since this makes it more difficult for them to exit. Kosová and Sertsios (2018) empirically observe this practice for distant hotels.

The paper has some limitations. The main problem is that our empirical research is based on secondary sources of information, which has two effects. On the one hand, this forced us to use observable proxies of the concepts, adding noise to the interpretation of our estimated correlations. Our results are coherent with the theoretical arguments, but we do not obtain statistical evidence on them. This would require primary information about the type of knowledge and opportunism. On the other hand, we only observe the performance of the relationship (online ratings), not the contribution of each party (local hoteliers or hotel group) to that outcome, which prevents us from knowing which party affects more the performance and checking if the reversion of the role played by each hotelier in management contracts (as opposed to the franchise relationship) matters in terms of performance. In this sense, although dual agency relationships (Grünhagen, Zheng, & Wang, 2017) in these contracts really complicate the assessment of parties' contribution, it opens new research opportunities. A second problem is that it is difficult to gain precise information about the comment review policy of each website, which undoubtedly affects scores. Unlike several previous papers, we believe that these potential biases have been corrected by aggregating several websites that use different algorithms and are run by different people. The third problem is related to generalization of the results. Focusing on a single country has the advantage of controlling for institutional effects on the results because they are theoretically constant but limits the validity of our results when we want to extrapolate them to other countries with different institutional environments. Therefore, there is a strong need for an international comparative study.

Declarations of interest

None.

Acknowledgments

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Spanish Ministry of Economy, Industry and Competitiveness (Project ECO2017-85704-R).

Appendix 1. An overview of ALFO strategy-related research in the hotel industry literature

Author(s) and year	Governance modes considered	Theoretical approach(es)	Objective
Blal and Bianchi (2019)	ALFO	Finance and strategic management theories	To examine whether the implementation of the ALFO strategy affects financial performance in the lodging sector
Bourke et al. (2020)	ALFO	Finance and game theories	To investigate the impact of an asset disposal strategy, often coupled with share repurchase programs, by international hotel companies on financial performance, earnings stability, and share values
Brickley and Dark (1987)	Franchise and company-owned	Agency theory	To analyze the agency problems associated with owned *vs.* franchised units: (i) determining their effect on the own/ franchise decision, and (ii) examining the determinants of observed provisions in contracts
Brookes, Altinay, and Aktas (2015)	Franchise	Agency and social exchange theories	To examine opportunistic behavior in hospitality franchise agreements
Chen and Dimou (2005)	Franchise, management contracts and company-owned	Transaction cost economics and agency theory	To examine the expansion choice in decisions between 'hierarchical' and 'market' modes of development by international hotel companies
Contractor and Kundu (1998)	Franchise, management contracts, shared ownership (joint ventures) and full control modes	Transaction costs, agency theory, corporate knowledge and organizational capability theories	To advance the theory and testing of the entire spectrum of modal choices, including relatively neglected modes, such as management service contracts and franchising
DeRoos (2010)	Management contracts	Legal framework, agency and property rights theories	Historical overview of hotel management contracts and benchmark for management contract practice
Dev et al. (2002)	Franchise and management contracts	Organizational capabilities (resources and capabilities) theory	To examine the factors that hotels consider in making the choice between expanding *via* franchises or with management contracts in international markets
Eyster (1988)	Management contracts	Legal framework, management theories	To build up a step-by-step guide to the successful administration of management contracts
Fernández-Barcala et al. (2021)	Franchise, management contracts, leased and company-owned	Transaction cost economics and agency theory	To study how the choice of the mechanism of governance affects online ratings of hotels
Ferrary (2015)	Franchise and management contracts	Human capital, knowledge management, resource-based view, strategic alliance, and transaction cost theories	To explore an organizational design that allows firms to invest in transferable strategic human capital
Freedman and Kosová (2014)	Franchise and (managed + company owned)	Agency and compensation theories	To exploit variation in organizational form across similar hotels and its implications for employee monitoring to shed light on the relationship between monitoring and worker compensation
Hodari and Sturman (2014)	Management contracts and independent hotels	Agency theory	To consider the nature of the General Manager's role and fill the gap about GMs' decision autonomy in five areas: operational, human resource, marketing, financial, and strategy
Hodari et al. (2017)	Management contracts	Agency theory	To examine how owner-operator goal congruence relates to hotel performance
Kosová and Sertsios (2018)	Franchise	Agency theory	To bring more evidence on the relationship between the principal's monitoring costs, the initial requirements the principal specifies in the agreement, and the ex-post rents the agents generate from those requirements
Kosová et al. (2013)	Franchise and (managed + company owned)	Agency theory	To study the effect of vertical integration decisions on the pricing and performance (occupancy rate and RevPar) of individual hotels
Kruesi et al. (2018)	Franchise and management contracts	Transaction cost economics and resource-based view	To investigate the views of hotel executives at decision-making level with respect to what factors impact most on their non-equity entry mode decisions
Lawrence and Perrigot (2015)	Franchise and company-owned	Agency theory	To understand the relationship between organizational form and customer satisfaction in non-business *versus* business customers
León-Darder et al. (2011)	Franchise, management contracts, shared ownership (joint ventures) and full control modes	Transaction cost and organizational capabilities perspectives.	To identify the factors that influence the mode choice of incorporating each new hotel within the chain and to reflect the specific nature of the hotel industry with regard to other industries
Li and Singal (2019)	ALFO	Capital structure theories: trade-off and pecking order theories	The link of ALFO strategy to capital structure decisions of hospitality firms
Low et al. (2015)	ALFO	Modern portfolio theory	To examine the role of US hotel stocks and indices in mixed asset portfolios: (1) examining pure-play indices to compare their performances, (2) focusing on the relative performance of asset-heavy and asset-light
Melissen et al. (2016)	Management contracts	Sustainable development, internationalization and agency theories	To explore whether hotel management contracts are suited to facilitating progress toward sustainable development
Michael (2000)	Franchise and non-franchise	Agency theory	To determine reasons why competition in organizational form has not eliminated non-franchising chains
Moon and Sharma (2014)	Franchise and non-franchise	Resource scarcity and agency theories	To gain insights into the impact of franchising on lodging firms' profitability and ability to create value
Perrigot et al. (2009)	Plural form and predominantly company-owned/franchised	Empirical	To compare plural form chains in terms of efficiency to predominantly franchised chains and predominantly company-owned ones
Rivas-Yarza, Crespí-Cladera, and Orfila-Sinte (2013)	Management contracts, leased and no chain affiliated hotels	Transaction cost economics, property rights, agency and resource-based view theories	To analyze the determinants that explain the choice of the mechanism of governance

(*continued on next page*)

(*continued*)

Author(s) and year	Governance modes considered	Theoretical approach(es)	Objective
Schlup (2004)	Management contracts	Legal and consulting perspectives	To discuss the inherent conflict of interest between owners and operators and describe the most important business and legal issues from an owner's and an operator's perspective
Seo and Soh (2019)	ALFO	Finance literature	To investigate the effects of the asset-light business model on investment-cash flow sensitivities and return on invested capital
Seo et al. (2021)	ALFO	Dynamic capabilities view	To examine: (1) the effect of asset-light business model on performance; (2) the moderating effect of environmental forces on the asset-light business model-performance relationship
Sohn et al. (2014)	Franchise/management contracts and non-fee based	Finance, asset-pricing models and resource-based view theories.	To examine how the impacts of the strategy of pursuing fee-based business (management/franchise) vary with the business cycle
Sohn et al. (2013)	ALFO	Strategic management (resource-based view) and capital structure theories	To explain how the value of the ALFO strategy is realized, considering the mediating roles of profitability and operating risk
Turner and Guilding (2010)	Management contracts	Agency theory	To examine management contract provisions pertaining to hotel operator remuneration and explain shortcomings to gauge the relative merits of alternative determinants of hotel operator fees
Van Ginneken et al. (2019)	Management contracts	Agency, internationalization and property rights theories. Grey literature and everyday practice	To explore how both owners and hotel management companies ("operators") perceive aspects of ownership in managed hotels
Zhang et al. (2015)	Franchise and (managed + company owned)	Agency theory	To investigate the effect of triadic structure on financial performance in the context of franchising operations

Appendix 2. Descriptive statistics of the two-stage regressions

Variable	Franchise and management contracts				Franchise contracts and chain-owned				Management contracts and chain-owned			
	Observations: 467				Observations: 1351				Observations: 1510			
	Mean	Std. Dev	Min	Max	Mean	Std. Dev	Min	Max	Mean	Std. Dev	Min	Max
Score	8.172685	0.56272	4.61823	9.85492	8.204219	0.6921176	4.99711	9.94462	8.214908	0.691406	4.61823	9.94462
Franchising	0.3297645	0.4706317	0	1	0.1139896	0.3179164	0	1				
Management									0.2072848	0.4054956	0	1
Upscale	0.7066381	0.4557911	0	1	0.7098446	0.454002	0	1	0.7516556	0.4321957	0	1
LRooms	4.756347	0.7412148	1.79176	6.81892	4.936364	0.7603418	1.79176	7.03527	4.937782	0.774438	2.19722	7.03527
Renewal	7.473233	4.570482	1	23	10.25241	6.365586	0	54	9.768874	6.394287	0	54
Restaurants	1.040685	0.9496182	0	8	1.07772	1.048752	0	16	1.108609	1.05896	0	16
Geographic concentration	6.588865	7.17277	1	29	7.604737	7.868688	1	34	7.513245	7.760464	1	34
Ratio of franchised hotels	0.2862832	0.4065162	0	1	0.0932931	0.2725598	0	1				
Ratio of managed hotels	0.4885315	0.4034204	0	1					0.1728459	0.3163597	0	1
Ratio of chain-owned hotels					0.7690008	0.3418461	0	1	0.7135282	0.3720633	0	1

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