3-1-2014

Quality Signals and Franchising Growth

Laura Lucia-Palacios
University of Zaragoza

Victoria Bordonaba-Juste
University of Zaragoza

Melih Madanoglu
Florida Atlantic University

Ilan Alon
Rollins College, ialon@rollins.edu

Published In

Lucia-Palacios, Laura; Bordonaba-Juste, Victoria; Madanoglu, Melih; and Alon, Ilan, "Quality Signals and Franchising Growth" (2014). *Faculty Publications*. 95.
http://scholarship.rollins.edu/as_facpub/95

Quality Signals and Franchising Growth

Abstract

Purpose – The goal of this article is to demonstrate how signaling support services and contractual arrangements that create value for incumbent franchisees can help to create value for the whole network by attracting prospective franchisees.

Design/methodology/approach - Using data from *Bond's Franchising Report* the study analyses franchisors operating between 1994 and 2008 via a Generalized Method of Moments (GMM) model for an unbalanced panel of 2,474 franchisors.

Findings – Training, financial assistance, sub-franchising and restrictions against passive ownership, and the use of area development agreements are found to be valuable for prospective franchisees. Experience and the number of company-owned and franchised units also attract prospective franchisees.

Research implications – Our findings imply that not all value-creating services and contractual arrangements are interpreted in the same way by prospective franchisees. Franchisors should offer training and financial assistance to new franchisees in the early stages of a franchise. They should also allow sub-franchising but restrict passive ownership and offer the possibility for area development agreements as contractual arrangements to appeal to new franchisees. Franchisors should focus not only on expansion, but should view the chain in a holistic manner by sustaining and growing both franchised and company-owned units.

Originality/value – The findings contribute to the franchising literature by providing new evidence on how offering and signaling some contractual arrangements and support services can help franchisors create value for incumbent franchisees and can attract new franchisees. Our research shows that value in franchising is created differently depending on whether the franchisees are incumbent or prospective.

Keywords – Signaling theory, Franchising, S-D logic, Quality value, Growth

Paper type – Research paper

Introduction

In a franchise relationship, each party is essential to sustain profitability. The success of a chain is usually related to whether or not there is a good relationship between the franchisor and to whether there is chain growth. The franchisor sells the rights to use the brand name and the franchisee benefits from the franchise's reputation and know-how in return for an initial franchising fee and ongoing royalties. The franchisee manages day-to-day business decisions within the local environment to deliver the performance and operational standards expected by the franchisor.

Franchisors, like many firms, offer goods, service activities, information, experience, and other resources to franchisees to help them manage their business units. Ideally, both parties should gain value and develop a long-term relationship (Grace and Weaven, 2011).

Value in franchising has seldom been analyzed (Grunhagen and Dorsch, 2003; Grünhagen *et al*., 2008; Harmon and Griffiths, 2008; Grace and Weaven, 2011). Franchisee satisfaction and system growth are closely related. Therefore, while striving to create value for incumbent franchisees, franchisors should also attract new partners (i.e., franchisees), thus creating value for the entire network (Michael and Combs, 2008). Consequently, those networks that offer more value potential will attract more franchisees. For proof, this paper examines the relationship between signaling system value from the perspective of the current franchisees and system growth. If current and prospective franchisees agree on the value in franchising, then all elements constituting value will contribute to the growth of the system. Previous research has analyzed from the perspective of the incumbent franchisees how to invest the franchisors' resources to create value (Grace and Weaven, 2011). However, do prospective franchisees perceive value in the same way as incumbent franchisees? What are the most important value-creating signals that attract franchisees and increase the size of the chain?

Based on the Service Dominant logic (S-D logic) perspective and signaling theory, this article analyzes what quality value cues influence chain growth. We analyze a range of franchisor services and contractual arrangements that, according to the franchising literature, are valuable from the perspective of the franchisee. These include initial and ongoing support, disclosure of earnings claims, multi-unit alternatives, and passive ownership. We also include experience and financial restrictions as cues that may affect chain growth.

This article makes a singular contribution to the franchising literature by empirically testing the effect of quality value cues to attract franchisees. The results should help franchisors understand what attributes prospective franchisees perceive as valuable, as well as to understand the consequences of signaling. We apply two different perspectives, the S-D logic and signaling theory, to explain value creation in franchising and focus on the role of signaling in understanding how a firm can reveal its unobservable qualities and values in the context of franchising. Hence, we investigate the consequences of signaling resources and assets related to quality value creation in terms of attracting new franchisees.

This article is organized as follows: First, we present the theoretical framework explaining the S-D logic and signaling theory. The next section explains the methodology, followed by the results. We conclude with a discussion of the results, including the implications, limitations, as well as avenues for future research.

Theoretical Background

Two theoretical approaches are used to build our arguments and our subsequent hypotheses: the S-D logic and signaling theories. Borrowed from the fields of marketing and entrepreneurship, these provide a milieu for examining franchising signals in value creation. A short summary of both approaches follows.

Value creation in franchising and the S-D logic

From a marketing perspective, value, typically defined from the perspective of the consumer, includes the functional aspects of the product, and the social, emotional, and relational components (Sheth *et al*., 1991; Boksbergen and Melsen, 2011). Value creation is important as the consequence of offering value to a consumer is a willingness to buy (McDougall and Levesque, 2000).Therefore, a firm's success hinges upon the customer's perceived value of the product. Relational components constitute the core of the service marketing literature, generating the S-D logic (Vargo and Lusch, 2004).

The S-D logic suggests that although goods continue to play an important role in business, service-driven principles are dominant, where service is defined as the application of competencies such as knowledge, skills, and intangible and dynamic resources that create value. Providing these services for use by another party involves obtaining reciprocal services (Vargo and Lusch, 2008), which in turn means reciprocal value creation (Grönroos and Ravald, 2009). Therefore, to create value, businesses must develop and maintain sustainable long-term relationships. As Vargo and Lusch (2008) suggest, the relational orientation is implicit.

The S-D logic has been mainly analyzed in a B2C context, and there are many fewer examples in a B2B context (Eggert and Ulaga, 2002; Grace and Weaven, 2011). Storbacka and Lehtinen (2001) contend that any firm or partner may become a co-creator of value by offering assistance. As the partners interact, each party will influence the perceptions and actions of the other party (Ballantyne and Varey, 2006). Examples can be found in the B2B context where suppliers may be value creators to enhance the value of the entire firm (Walter *et al.,* 2001). Franchising is a suitable context in which to apply the S-D logic. Franchisees can be viewed as partners or members of a channel. Satisfaction and the involvement of incumbent franchisees are necessary preconditions for engagement in the co-creation of network value. This is highly relevant in franchising due to the co-dependency between the franchisors and the franchisees. In the case of franchisees, they are more concerned about the relationship and management of the system (Gauzente, 2003).

Grace and Weaven (2011) apply this perspective to understand what creates value from the perspective of incumbent franchisees and to determine the outcomes of a value-in-use evaluation of franchisor behavior. Grünhagen and Dorsch (2003) also analyze whether a franchisor provides value to a franchisee. A franchisee is satisfied with the network if the franchisor makes decisions based on the success of the business concept and the system (Bürkle and Posselt, 2008), the perceived security of the system, and how franchisors support the products, services, image consistency, stability of unit operations, franchise unit survival, ongoing system and network growth (Harmon and Griffiths, 2008; Grünhagen *et al*., 2008; Roh and Yoon, 2009; Croonen and Brand, 2011).

Concerns related to franchise survival, ongoing system and network growth are correlated. Growth increases visibility, is a signal of network profitability and a key factor that explain survival (Bordonaba-Juste *et al.*, 2011). As a consequence, it is up to the franchisor to attract new partners. In order to attract new franchisees, the franchisors can signal the system potential value (Shane *et al.*, 2006). To do this, the franchisors first need to know from the franchisees' perspective what creates value. Previous research has analyzed how franchisors create value from the incumbent franchisee's point of view and how incumbent franchisees assess franchisors' strategies to increase their satisfaction (Grünhagen and Dorsch, 2003; Harmon and Griffiths, 2008; Roh and Yoon 2009; Croonen and Brand, 2011; Grace and Weaven, 2011). Value creation for incumbent franchisees is related to how well the franchisors manage the franchise system and satisfy not only their own interests, but also the interests of the franchisees. The franchisors can create value by increasing trustworthiness, transparency, and security through initial support and assistance and through the disclosure of earnings. Expansion strategies are important for both present and prospective franchisees (Guilloux *et al.,* 2004) as is the franchisor's experience, the size of the system, and the finances. From the S-D perspective, the services provided by a franchisor to its franchisees form a foundation of value-adding activities that go beyond merely the supply of products for sale to the final consumer. Intangible assets (such as know-how and flexible operating models) may provide a competitive advantage, both for the franchisor by attracting additional franchisees and for the franchisees by providing a successful business model in their respective geographic areas.

Signaling theory

Signaling, based on economic contracting theory, focuses on the externalities of market imperfections and informational asymmetries. In general, a firm that has relevant information to close a transaction must decide whether and how to provide that information. The party at the other end of the transaction has to analyze the credibility and its level of trust in both the offering firm and the provided information (Stiglitz, 2002). Information asymmetries, commonplace in the real world, may occur because of the type or nature of the information or because of suspicious or opportunistic behavior by the firms that supply the information (Nelson 1970; Eisenhardt, 1989). According to Stiglitz (2000), the asymmetry is related to the quality and intent of the information. The former refers to when one party is not fully aware of the characteristics of the other party and the latter refers to the behavior of the other party.

Signaling is used in many businesses, such as industrial organizations, as well as in finance and management. There has been research on how CEOs signal the quality of a firm to attract investors via financial statements (Zhang and Wierserma, 2009), how employees try to signal their value in the recruitment process (Suazo *et al.,* 2009), and how CEOs and the top management signal their characteristics (Lester *et al*., 2006). Signaling is also widely used in marketing, such as in pricing decisions, product campaigns, and advertising, to confirm product or firm quality, value, or reputation (Herbig, 1996).

Signaling theory has also been applied to franchising (e.g., Gallini and Lutz, 1992; Dant and Kaufmann, 2003; Michael, 2009). How entrepreneurs attract resources is a central issue in studies of entrepreneurship, especially in franchising (Shane *et al*., 2006; Michael, 2009). Entrepreneurs with high-quality products or services have an incentive to signal their quality to prospective franchisees. Franchisors with low-quality products often misrepresent the quality of their offerings in order to sell their franchises. As a result, management of the adverse effects of information signaling has an important practical implication for firms.

The advantages of signaling are many. In all cases, firms, including those in franchising, seek to increase their profitability and attract the right partners or customers (Michael, 2009; Shane *et al*., 2006). Signaling firm value to future franchisees helps the latter make the right investment decisions. In franchising research, Gallini and Lutz (1992) and Lafontaine (1993) describe the signaling devices franchisors use. For example, outlet ownership is a credible signal of either chain profitability or chain growth.

Shane *et al.* (2006) use signaling theory and resource scarcity to examine factors, such as ownership, monetary or financial arrangements, and experience, that are important for increasing chain size. More recently, Michael (2009), in an analysis of earnings claims as a viable signal of firm profitability, finds that firms make earnings claims due to the low cost of signaling or in response to the competition.

However, to the best of our knowledge, no study has yet examined the effects of wide-range signaling value-creating assets other than monetary assets. The franchisor may disclose information about the value provided to its current franchisees, including information about quality and value. Different methods may be used to signal quality value.

Development of the hypotheses

Signals are data or information that a firm uses to make inferences about the behavior of the sender of the signals. A true signal should be transmitted by someone with the ability to change its nature, should consist of easy-to-acquire extrinsic information, and should provide a basis for making inferences about the quality and value of the signaled object. Signals should be clear, unambiguous, and credible and should have a cost for the firm (Herbig, 1996; Connelly *et al*., 2011). Franchisors usually disclose some of their contractual arrangements and the additional services they provide to their franchisees, which can be regarded as signals that comply with earlier signaling criteria.

Based on franchising research, we propose that franchisors can overcome information asymmetries using these signaling devices as proxies for potential chain value. Previous research finds that some services and contractual arrangements that reveal the franchisor's strategy and chain management contribute value to his/her relationship with the present franchisees (Roh and Yoon, 2009; Grace and Weaven 2011; Altinay and Brookes, 2012). We expect these signals to be positively valued by prospective franchisees, and hence these signals will contribute to increasing the size of the system and to creating value for the entire network.

Initial support and business assistance

Providing good initial support and business assistance to current franchisees is one of the best methods to promote the chain and to recruit prospective franchisees, who, because they are often inexperienced in running the business, need to acquire the appropriate knowledge. Franchisors may guide, motivate, and train prospects because the former succeed only if the latter also succeed (Maritz and Nieman, 2008). Therefore, franchisors should provide pre-opening support, such as initial training, site selection, and lease negotiations. They should also provide ongoing business assistance through joint advertising and coordinated marketing and sales programs. Most of the research analyzing franchisee satisfaction finds that satisfaction reflects the value of the initial support and business assistance. Satisfied franchisees help build the franchisor's reputation; the value of the chain can be transmitted not only via the media but by word-of-mouth by current franchisees (Roh and Yoon, 2009).

Although initial support services and business assistance are useful, they are also costly (Connely *et al*., 2011). Only profitable and successful franchise systems can afford to offer and maintain these services (Frazer and Winzar, 2005). Franchisees regard the franchisors' investment in their training and development as an indication of the franchisors' intentions and their recognition recognize that initial and ongoing support improves their skills in running successful businesses. Initial support and business assistance also increase satisfaction of current franchisees (Frazer and Winzar, 2005; Michael and Combs, 2008) and help attract potential franchisees (Altinay and Brooks, 2012). Franchisees tend to benefit more from a franchisor's initial assistance and knowledge than from a franchisor's ongoing support. Mature franchisees have also ready acquired sufficient knowledge to operate the business and thus need less franchisor support (Peterson and Dant, 1990; Dant and Gundlach, 1999). Therefore, we hypothesize that:

H1: Franchisors who signal that they offer initial and ongoing support services to their franchisees are more likely to increase the number of franchised units in their system.

Earnings claims

Information on future returns and the profitability of the franchise is essential for prospective franchisees who are deciding whether or not to purchase. Earnings claims statements are included in franchise disclosure documents [(FDD)/Uniform Franchise Offering Circular (UFOC) requirements.] In the broadest sense, earnings claims are defined as estimates or historical figures detailing the level of sales, expenses, and/or income that prospective franchisees can expect. Appropriate disclosures, a prerequisite for successful franchising, can serve as a selling tool (Sherman and Schaeffer, 2005). Based on signaling theory, only firms with a good market position, high-quality financial returns, and low business risks provide earnings disclosures (Michael, 2009). A franchisor who does not report earnings may be signaling that the brand is not very valuable (Weaven and Frazer, 2006).

To the best of our knowledge, no research considers earnings claims as a tool to recruit franchisees. Previous research shows that disclosing earnings claims may have a positive effect on franchisee satisfaction (Hing 1999) because it shows that the franchisor can manage its franchisees (Mayer and Davis, 1999; Searle *et al*., 2011). Additionally, the disclosure of earnings claims demonstrates that the franchisors pay attention to franchisee interests and indicates the quality of the business concept (Vincent and Kaufmann 1996; Michael 2009; Croonen and Brand, 2011). Disclosure also reflects transparency, which increases trustworthiness in the franchisor and reveals the quality of the franchise vis-à-vis its competitors. Therefore, we propose that disclosure of earnings claims enhances franchise attraction:

H2: Franchisors who disclose earnings claims are more likely to increase the number of franchised units in their system.

Multi-unit opportunities

Although franchisees are generally depicted as individuals who own and manage a single outlet, in most chains multi-unit franchising is a common practice (Kaufmann and Dant, 1996; Grewal *et al*., 2011). According to the S-D logic, a customer can create value by playing an active role at any stage of product creation (Vargo and Lusch, 2004; Grönroos, 2011). In our case, franchisees can participate in the expansion of the system. Weaven and Frazer (2006) suggest that franchisors attract two types of franchisees. The first wants to be a single-unit franchisee and the second wants to expand the brand name by owning additional units (sequential franchising). In the latter case, before joining the chain, the investors will inquire about the possibility of outlet expansion and running multiple units. Franchisees can use their knowledge of the system, as well as their knowledge about the region and its culture, to suggest locations of future units. This co-creation, whereby franchisors allow franchisee expansion by providing multi-unit opportunities, signals that the company is assertive and flexible, and that the business model does not require that the owner always be on-site. It also suggests that the company is motivated to increase its brand name visibility, both nationally and internationally (Alon *et al.,* 2012; Ni and Alon, 2010)

There are different types of expansion strategies depending on the franchisor's level of ownership and control. We differentiate among sub-franchising agreements, area development agreements, and the option offered to single-unit franchisees to open additional outlets. Sub-franchising, a type of multi-unit franchising, allows a franchisee to sub-franchise the concept to others, whereby the franchisee acts as both the agent for the franchisor and the principal for the others (Alon *et al.,* 2012). Sub-franchising increases administrative productivity because it reduces monitoring costs (Kaufman and Kim, 1995), but it also reduces control over the brand name, reputation, and the efforts and roles of the sub-franchisees. Franchise firms with high brand-name recognition should not sub-franchise (Roh and Andrew, 1999). International chains prefer owning outlets rather than sub-franchising (Chen, 2010; Combs *et al.,* 2004). Therefore, signaling a rejection of this option conveys an intention to protect the value of the brand name and the reputation rather than merely to achieve rapid expansion.

There are other options for franchisees to use their knowledge and motivation to benefit both their own interests and those of the chain. Franchise chains can offer agreements for area development (where a new franchisee is given the right to open multiple outlets within a specified area) or for owning more outlets (sequential multi-unit franchisees, where additional units are granted to the franchisee one by one). The area development process is subject to adverse selection problems (Kaufmann and Dant, 1996), which in turn might increase termination activity. Offering area development agreements implies that an entrepreneur will become part of the chain by owning two or more units but will also have the right to sell to franchisees. This allows rapid expansion but since that entrepreneur is not necessarily an incumbent franchisee, there is a risk related to the extent of his knowledge about management of the units. But if this expansion right is restricted to only “good” franchisees, the franchisees will be motivated to run the units efficiently in order to obtain additional units (Bradach, 1995; Kauffmann and Lafontaine, 1994). The right to open an additional unit should be positively valued by franchisees. Therefore, offering additional outlets to incumbents, rather than offering only single-unit franchisees, may be the best way to attract active and at the same time to protect the brand name, and the reputation, and to maintain the long-term sustainability of the chain. This in turn may curb chain expansion. Following previous research, we hypothesize that:

H3: Franchisors who signal that sub-franchising is acceptable are less likely to increase the number of franchised units in their system.

H4: Franchisors who offer area development agreements are less likely to attract franchisees.

H5: Franchisors who allow incumbent franchisees to add new outlets are more likely to increase the number of franchised units in their systems.

Passive ownership

When franchisors demonstrate trustworthiness and high-quality operating systems and other intangible assets through credible commitments, they attract potential franchisees (Shane and Spell 1998). One such commitment is related to control of the franchised unit.

By choosing franchising over company-owned outlets, franchisees become owner-operators instead of employees with a fixed compensation. When outlets are owned by passive investors who hire managers to run the units, there are no residual claimant benefits. Passive franchising is related to sub-franchising (Shane and Spell, 1998) and allows for rapid growth of the chain (Clarkin and Rosa, 2005). Research suggests that less passive ownership results in fewer franchise failures (Frazer and Winzar, 2005; Michael and Combs, 2008; Vazquez, 2009) since a lack of control over the management of the unit leads to a higher likelihood of free-riding and underinvestment (Shane and Spell, 1998). This positive influence on franchisee survival occurs because owning the outlet implies a higher involvement in day-to-day business activities which in turn positively affects franchisee satisfaction and improves chain-wide performance. Nearly 75 percent of franchises prohibit or discourage passive ownership of their outlets (Clarkin *et al.,* 2002). This sends a signal to the market that purchasing a franchise involves not only a financial transaction between a buyer and seller but also requires that the franchisee have good management skills (Clarkin and Swavely, 2006). Signaling restrictions on passive ownership shows that franchisors, caring about the chain's future profitability, insist that the franchisees remain in charge of business operations. Such restrictions on passive ownership can be considered a control mechanism to sustain the stability of the network, the survival of the franchise unit, and to attract prospective franchisees. Thus, we hypothesize:

H6: Franchisors who signal a passive-ownership restriction are more likely to increase the number of franchised units in their system.

Additional cues

Research that looks at the attraction of franchisees under signaling theory also looks at other aspects that signal value and influence the decision of prospective franchisees. These include the franchisor's years of experience, the number of units in the chain, and the financial aspects of the chain.

Experience in franchising is a common variable because firms engaged in franchising for a longer period have better knowledge about the market and about how to manage the chain. Franchisee perceptions of the benefits of franchising are based on the proven concept and system. Brand recognition by consumers and the franchisor's market longevity are the primary reasons to choose a franchise system (Shane *et al*., 2006; Roh and Yoon, 2009).

The number of units in the chain provides two types of important information: the level of investment of the owner via *company-owned units*, which represents the level of the franchisor's trust in the business, and the *number of franchised units*, which represents the number of franchisees who decided to invest. This signals the positive reputation of the franchise and the profitability of the business. The number of current users or consumers reflects the success of the product or service.

In addition to the above-mentioned variables, *financial restrictions* are also relevant to franchise expansion (Polo-Redondo *et al*., 2011; Shane *et al*., 2006) since fees and royalties can act as self-selection instruments or as barriers to expansion of the system. This part of the franchise contract may be a source of conflict between the franchisors and the franchisees since the amount the franchisees pay for the franchise will affect his/her profits (Scott, 1995). Research has shown that in the restaurant industry there is a positive relationship between royalty rates and franchisee income, suggesting that royalty rates are a signal of profitability (Michael, 1999, 2009). This is confirmed by the positive relationship between royalty rates and chain expansion (Polo-Redondo *et al*., 2011) Pricing signaling, usually related to product quality, is used as a signal of reputation (Koistinen and Järvinen, 2009).

Methodology

Data

To test our hypotheses we use an unbalanced panel of 2,474 U.S. franchise systems operating between 1994 and 2008. The source for our data is *Bond's Franchising Report*,[1] an annual publication that identifies and provides information about all franchise systems in operation during the previous year. These data have been used in other recent research projects on franchising (e.g., Alon *et al.,* 2012).

Measures

Dependent variable

System growth is usually measured by the number of units in the business (the total of number of franchised and company-owned units) (Blair and Lafontaine, 2005; Shane *et al*., 2006), but because we seek to measure the capacity of the chain to attract franchisees, our dependent variable is the *number of franchised units*, calculated as the natural logarithm of the number of franchised outlets in the system during the year of observation.

Independent variables

To measure *initial support services*, we use the services offered by the franchisor, such as days of training, site selection support, lease negotiation, and financial assistance. Business assistance is measured by advertising cooperation. Training is measured by the number of days of the training period. Other services are included as dummy variables.

[1] See http://worldfranchising.com/ for more information about the agency collecting the data. It also publishes an annual list of franchises in print form.

These variables have also been used in previous research (Frazer and Winzar, 2005; Michael and Combs, 2008).

Earnings claims disclosure, included in the model, uses a dummy variable that takes the value 1 or 0 depending on whether or not the franchisor provides earnings claims.

As for multi-unit opportunities, all three variables are dummies (Ni and Alon, 2010). *Sub-franchising* considers whether this alternative is allowed in the contract; the variable takes a value of 1 if the franchisor allows a sub-franchising agreement, and 0 if not. Similarly, *area development agreement* takes the value of 1 if the franchisor provides allows this type of expansion alternative, and 0 if not. *Adding new outlets* takes the value of 1 if the franchisor allows such an expansion strategy, and 0 if not.

Franchisors may allow, discourage, or prohibit *passive ownership*. Therefore, we created three dummy variables, one for each of the three alternatives. To avoid multicollinearity problems, one is excluded from the model and is used as a base to compare the probability of increasing franchisee attraction compared to the other two options.

We measure the *franchising experience* as the number of years since the firm began franchising and include the number *of company-owned units*, measured as the natural logarithm of the number of company-owned outlets in the system during the year of observation.

Financial restrictions are measured by the royalty rates, franchise fees, and franchisees' initial investment as proxies, in line with prior research (e.g., Lafontaine 1993; Shane *et al*., 2006). We measure *royalty rates* as the percentage of sales that franchisees must pay to the franchisor in the year of observation. If the franchise system reported a range of royalty rates, we calculate the average rate. *Franchise fees* are measured as the portion of the franchisor's compensation that comes in the form of an upfront fee. If the franchisor reported a range of fees, we use the mean of these values. *Franchisees' initial investment* is the amount of startup funds required to open an outlet in the year of observation. If the franchisor reported a range of investment values, we use the mean of these values.

In order to control for the effect of economic cycles, we first incorporated the value of the change in *GDP* based on information on the website of the Bureau of Economic Analysis (www.bea.gov). We include *dummy years* that control for economic issues other than GDP.

Model

Selection correction

Because the failure of a new franchise system precludes its ability to attract franchisees regardless of its strategic actions, we control for franchisor failure in our regression models to predict the number of franchised units. We include a selection correction control in our empirical analysis to mitigate biases that may result if unobserved factors influence both the attraction of new franchisees and the termination of franchise operations (Greene, 2000).The inclusion of a *selection-correction control* variable eliminates an important form of an omitted variable bias that can create inconsistent estimates of predictor variables. To create this selection-correction variable (Inverse Mills Ratio), included as a control in the model that predicts a franchisee's attraction, we use Lee's (1983) generalization of a Heckman selection-correction model[2].

Model for the number of franchised units

Previous research that infers the effects from static cross-sectional analyses has methodological limitations, especially the confounding of firm *unobserved heterogeneity.* We propose static panel estimators to explore the determinants of the number of franchised units. A fixed effects estimation method is used in longitudinal panel analyses, which allows us to correlate the unobserved individual effects with the included variables. We test the model by estimating the System Generalized Method of Moments model (System GMM), proposed by Arellano and Bover (1995) and fully developed by Blundell and Bond (1998).

We represent the regression model on the number of franchised units as:

$$
\begin{aligned}
Ln(franchised\ units)_{it} \\
&= \alpha_{it} + \beta_1 \ln\,(franchised\ units)_{it-1} + \beta_2 X_{it} + \beta_3 Y_{it} + \beta_5 Y_{it-1} \\
&+ \beta_6 GDP_t + \beta_7 Mills + \beta_8 d(years) \quad + \varphi_{it}
\end{aligned}
$$

[2] In this correction, probabilities for termination of a franchise system are used to generate a sample correction variable lambda (Lee, 1983). Following Shane *et al*. (2006), who explain this methodology in detail, we model the hazard of termination as a function of a dummy variable that takes the value of 1 if the franchisor is headquartered in a state governed by franchising regulations, and 0 otherwise.

where X_{it} includes the exogenous explanatory variables (in-training and all dummy variables: site, cooperation in advertising, financial support, lease negotiation, earnings claims, sub-franchising, an area development agreement, additional outlets, not allowing passive ownership, and discouraging passive ownership,). Y_{it} includes variables that are not strictly exogenous, such as experience, number of units, investment costs, franchise fees, and royalty rates. Due to the estimation of the System GMM and the need for lagged variables, our final simple consists of 1,029 firms.

Tables 1 and 2 show the descriptive statistics and the correlation matrix of the main variables, distinguishing the categorical variables from the continuous variables. Most of the franchisors provide cooperation in advertising, site assistance, and lease negotiation, and more than half provide financial assistance. All these variables constitute the initial and ongoing support variables. As previous research (Vincent and Kaufmann 1996; Michael, 2009) shows, a small proportion of franchisors provide earnings claims and allow sub-franchising. Franchisors prefer to discourage passive ownership, with 27 percent directly prohibiting it. There are no problems of multicollinearity among the continuous variables.

<INSERT TABLE 1 HERE>

<INSERT TABLE 2 HERE>

Results

Table 3 presents our results. Model C.1 introduces the variables widely used in previous research and the lagged number of franchised units, whereas Model C.2 adds the explanatory variables[3]. Our results suggest that the lagged number of franchised units has a positive and significant influence on the current number of franchised units, with a coefficient that is highly stable in the two estimations. This means that *the number of franchised units* in the previous period positively influences current performance, a result that justifies the use of the GMM estimator in this part of our analysis. Based on the first model, we find that experience, franchised units, and company-owned units have a positive effect on attracting prospective franchisees, whereas financial restrictions have a non-significant effect.

<INSERT TABLE 3 HERE>

In testing the proposed hypotheses, we find that only training and financial assistance have a positive influence on attracting franchisees, whereas cooperation in advertising, lease negotiation, and site selection are not significant. Thus, H1 is only partially confirmed.

We argue that disclosing earnings claims have a positive influence on the number of franchised units in the chain, but our results indicate a non-significant relationship, leading to a rejection of H2. In terms of multi-unit opportunities, contrary to expectation, permission to use sub-franchising has a positive and significant influence on system growth, thus

[3] Table 3 also reports the significant m1 and insignificant m2 serial correlation statistics, indicating that there is no second-order correlation in the level of the residuals. The Sargan and Hansen tests are also reported and their non-significance validates the robustness of our estimations and the suitability of our instrumental variables.

H3 is not supported. Offering area development agreements has a negative impact on the attraction of new partners, consistent with H4. However, signaling the possibility that current franchisees can add new outlets to the system does not have a significant effect on the attraction of prospective franchisees, and hence H5 is not supported.

Franchisors must also consider whether or not to allow passive ownership. We proposed that not allowing or discouraging passive ownership, as opposed to allowing passive ownership, would have a positive effect on the number of franchised units. The results show that the coefficients of both variables are positive and significant, in support of H6.

Discussion

Empirical testing of the model suggests that some signaling devices help to attract franchisees. According to the S-D logic, these services represent how franchisors and franchisees create value for the network for both parties as well as for prospective franchisees. A decision to invest in the franchise chain is based on the signals the franchisor provides about the quality of the chain. Based on signaling theory, we propose different signals or cues that represent the potential value of the chain. Our results suggest that prospective franchisees place more value on those chains where the franchisors provide more training and financial assistance, restrictions on passive ownership, and prohibit area development agreements. Sub-franchising may be considered a signal of the quality of the chain, or reveal the operational flexibility that is desired by franchisees. Franchisees also take into account the number of owned and franchised units and the franchise experience.

Our study reports that key operational elements, such as training and financial assistance, are valuable services for prospective franchisees. In line with previous research, quality signaling is a costly endeavor (Connelly *et al*., 2011; Grace and Weaven, 2011). By offering financial assistance, franchisors indicate confidence in the chain and their vested interest in the success of the franchised outlets. Such efforts should contribute to chain growth. These results are consistent with previous studies that highlight the critical role of training, a service considered important for franchisors and franchisees in terms of contributing to chain growth (Altinay and Brookes, 2012). These services enable the creation of reciprocal value and generate value for the entire network.

Signaling theory suggests that earnings claims may be a quality signal (Michael, 2009). Disclosing this information is a way for franchising firms to differentiate themselves from the competition and to provide transparency and trustworthiness about the business system, which lowers the franchisee's investment risks (Grace and Weaven, 2009; Croonen and Brand, 2011) and ultimately attracts new franchisees. However, because American franchisors are not required by law to provide earnings claims, a majority do not disclose them to prospective franchisees. On the one hand, incumbent franchisees view this type of information as a signal of transparency which increases their level of trust and hence contributes to their satisfaction. On the other hand, consistent with previous research, our results show that earning claims disclosures have no effect on the market (Michael, 2009). Making such a disclosure does not offer a point of differentiation for prospective franchisees. Michael (2009) shows that prospective franchisees may invest in a system even when a franchisor does not disclose earnings information. This could be because prospective franchisees do not trust the information provided by the franchisor, or because the information provided is not relevant or appropriate for making a final decision about whether to invest in the system. Consequently, we report that franchisees do not regard earnings claims disclosures as a signal of business quality.

According to the S-D logic, the customer creates value by taking an active part in any phase of product creation (Vargo and Lusch, 2004; Grönroos, 2011). In our case, franchisees play an active role in the expansion of the system. They may suggest the best location for new establishments because they are better acquainted with their regions better than the franchisors. This co-creation is also available if franchisors allow sub-franchising but restrict area development agreements. It is worth noting that studies of signaling sub-franchising are not common (Michael, 2009). Only a small percentage of franchisors choose to sub-franchise since it is costly to control and to manage sub-franchises as well as to decide when to offer this opportunity. Contrary to our expectation, the sub-franchising agreement variable is positively valued by prospective franchisees, who regard it as a relevant signal about the chain. This may be because it is commonly used for international expansion and prospective franchisees view it as a signal of an assertive and flexible management that has a positive attitude about opening outlets outside of the United States, as confirmed by Ni and Alon (2010). However, offering area development agreements is not regarded as a value signal by prospective franchisees. In fact, we find that the use of area development agreements limits growth, possibly because, while sub-franchising is interpreted as an option for international expansion, area development agreements may be associated with passive ownership. The area developer must hire employee-managers to run the business in a specified area, but the area developer is not allowed to sub-franchise (Teegen, 2000). Further research should examine franchisee views of this strategy. Franchisors who allow adding new outlets, however, do not attract new, perhaps because most chains provide this right to incumbents as well. In this case, prospective franchisees do not receive preferential treatment.

Our findings indicate that restricting passive ownership can serve as a viable signal of a franchisors' firm value. Although incumbent franchisees enjoy system growth, the franchisors have to assure network quality and success. By restricting passive ownership, franchising firms send a clear message that they are serious about their business and want their franchisees to manage their own business operations. Our results suggest that prospective franchisees positively value this expansion strategy. Franchisors ultimately seek entrepreneurs who are operators rather than passive investors, and potential franchisees may consider a restriction of passive ownership to be an indication of the long–term viability of the chain (Vazquez, 2009).

Cues related to the cost or pricing of the franchise chain are not relevant. This contradicts previous research, not only in the context of franchising, but also in the context of consumer behavior, that suggests pricing signals are relevant for consumers (Koisten and Järvinen, 2009) and are even more important as a signal of quality than retailer reputation or other signals (Dawar and Parker, 1994; Grace and Weaven, 2011). In our study, important signals of quality are related to the number of franchised units, followed by experience and the number of company-owned units. These signals are broadly confirmed in the literature and are consistent with previous findings (Shane *et al*., 2006).

Our study makes several distinct contributions to the service marketing literature, especially franchising research, by revealing which value creating services and contractual arrangements for incumbent partners of the network are appreciated by prospective partners. Our research also contributes to signaling theory by providing evidence of signals franchisors can use to achieve differentiation in the market. We find that the more generous a franchisor is in offering value-enhancing services, such as financial assistance and training, the more likely is the chain to recruit new franchisees and to experience unit growth. The results indicate that not all elements that create value for incumbent franchisees can be used as quality signals to attract franchisees. For example, offering site selection assistance and lease negotiation services are not valuable for new franchisees. Franchisors thus need to manage the expectations of prospective franchisees about value-adding services.

Implications for managers and executives

For franchisors, a practical implication of our study is that quality signaling helps attract future franchisees. Based on services and contractual arrangements that increase the value of the franchise relationship with current franchisees, franchisors send quality signals that help franchisors create a competitive advantage in the marketplace. Franchisors must invest time and managerial attention to their current outlets to demonstrate quality and value. The quality of the system can be signaled through different support services.

Franchisors should offer initial support services to differentiate their firms from their competitors and to signal that they aim to take care of the whole system and the brand name, without a myopic emphasis on rapid expansion. To signal this concern, the franchisor can use the restrictions and controls on passive ownership and area developing agreements and sub-franchising to enter international markets. Instead of hiring managers to run the establishments in the system, franchisors should expand through owners/franchisees to reduce organizational uncertainty.

Franchising firms have to consider the cost of signaling methods as well as the relative impact of each method since not all signals are created equal. Executives should maintain close contact with potential franchisees by regularly asking, by distributing formal questionnaires, what tools and assistance prospective franchisees consider valuable. Franchisors should also consider the strength, frequency, and environment of the signal (Connelly *et al*., 2011).

This study has implications for prospective franchisees similar to those for the franchisors. Since prospective franchisees can choose from among numerous franchising chains, they should exercise due diligence in interpreting signals and evaluating the long-term viability of the chains. Our results conflict with information provided by consultants about including the financial requirements. Although potential franchisees used to demand unique information, we show how other cues help evaluate the quality of a system equally effectively. Potential franchisees must seek detailed information about the type of multi-unit ownership opportunities offered in order to understand how the franchisor’s concern about the whole system. This can help prospective franchisees make wise business decisions during periods of financial turbulence.

Limitations and future research

This study has several limitations. First, we recognize that signaling theory includes aspects such as signal duration, strength, and frequency (Connelly *et al*., 2011) that are not directly addressed in this study. We focus on quality signaling to demonstrate how providing support services helps to create value in a franchising chain, but we do not directly consider the duration and frequency of these signals.

Second, even though we report that financial assistance helps firm growth, we recognize that this variable is categorical and our data do not provide information about the amount of financial assistance. Similarly, we include a wide range of different support services, but we do not explore the quality of the services provided. Future studies should use metric variables to confirm the positive influence of financial assistance on firm growth and should include information about the quality of the services offered instead of categorical variables. Further research should determine whether the quality or the range of services offered is valued by prospective franchisees. We also do not include the number of states where the franchisor operates. As a franchisor expands throughout the United States or in foreign countries, offering financial assistance and training becomes more challenging for logistical reasons. Future studies could investigate which services fuel franchisors' international growth.

Third, the present study does not control for industry growth. As a result, it is possible that franchisors in high-growth industries may achieve systemic growth without incurring costly quality signaling efforts pertaining to relationship value. But firms in more competitive and mature industries may have to signal their quality by offering multiple services not only to maintain their growth rate but also to sustain an advantage over their competitors.

Our study offers valuable general findings regarding franchising. However, as Michael (2009) suggests, some issues, such as disclosure of information, might generate different results and implications if the sample were to be divided by sectors. Future research should examine whether such differences exist._Furthermore, value is a personal perception and may vary from one customer to another as well as over the life cycle of the relationship between the firm and the customer (Blut et al., 2011). Therefore, future research should analyze the dynamic perceptions of value from the perspective of franchisees.

References

Alon, I., Ni, W. and Wang, Y. (2012), "Examining the determinants of hotel chain expansion through international franchising", *International Journal of Hospitality Management,* Vol. 31 No. 2, pp. 379-86.

Altinay, L. and Brookes, M. (2012), "Factors influencing relationship development in franchise partnerships", *Journal of Service Marketing*, Vol. 26 No. 4, pp. 278-92.

Arellano, M. and Bover, O. (1995), "Another look at the instrumental variable estimation of error-components models", *Journal of Econometrics*, Vol. 68 No. 1, pp. 29-51.

Ballantyne, D. and Varey, R. J. (2006), "Creating value-in-use through marketing interaction: the exchange logic of relating, communicating and knowing", *Marketing Theory*, Vol. 6 No. 3, pp. 335-48.

Blair, R.D. and Lafontaine, F. (2005), *The Economics of Franchising*, Cambridge University Press, New York, NY.

Blundell, R.W. and Bond, S.R. (1998), “Initial conditions and moment restrictions in dynamic panel data models”, *Journal of Econometrics*, Vol. 87 No. 1, pp.115-43.

Blut, M., Backhaus, C., Heussler, T., Woisetschläger, D.M., Evanschitzky, H. and Ahlert, D. (2011), “What to expect after the honeymoon: testing a lifecycle theory of franchise relationships”, *Journal of Retailing,* Vol. 87 No. 3, pp. 306-19.

Boksberger, P.E. and Melsen, L. (2011), “Perceived value: a critical examination of definitions, concepts and measures for the services industries”, *Journal of Services Marketing,* Vol25, No.3, pp.229-240.

Bordonaba-Juste, V., Lucia-Palacios, L. and Y. Polo-Redondo,Y. (2011) "An analysis of franchisor failure risk: evidence from Spain", *Journal of Business & Industrial Marketing*, Vol. 26, No. 6, pp.407 - 420

Bradach, J.L. (1995), “Chains within chains: The role of multi-unit franchisees”, in Kaufmann, P. and Dant, R. (Eds.), *Franchising: Contemporary Issues and Research*, Haworth Press, New York, pp. 65-82.

Bürkle, T. and Posselt, T. (2008), “Franchising as a plural system: a risk-based explanation”, *Journal of Retailing,* Vol. 84 No. 1, pp. 39-47.

Chen, H.H. (2010), “The explanations of agency theory on international multi-unit franchising in the Taiwanese marketplace”, *International Journal of Organizational Innovation,* Vol. 3 No.1, pp.53-71.

Clarkin, J.E. and Hasbrouck, R.B. (2002), "Predicting the winners of the Franchise 500", in Proceedings of the 16th Annual International Society of Franchising Conference, Orlando, FL.

Clarkin, J.E. and Rosa, P.J. (2005), "Entrepreneurial teams within franchise firms", *International Small Business Journal*, Vol. 23 No. 3, pp.303-32.

Clarkin, J.E. and Swavely, S.M. (2006), "The importance of personal characteristics in franchisee selection", *Journal of Retailing and Consumer Services*, Vol. 13 No. 2, pp. 133-42.

Combs, J. G., Michael, S. C. and Castrogiovanni, G. J. (2004), "Franchising: a review and avenues to greater theoretical diversity", *Journal of Management,* Vol.30 No. 6, pp. 907-31.

Connelly, B. L., Certo, S. T., Ireland, R. D. and Reutzel, C. R. (2011), "Signaling theory: a review and assessment", *Journal of Management*, Vol. 37 No. 1, pp. 39-67.

Croonen, E.P.M. and Brand, M.J. (2011), "What makes franchisees trust their franchisors?" paper presented at the EMNET 2011 conference.

Dant, R. P. and Gundlach, G. T. (1999), "The challenge of autonomy and dependence in franchised channels of distribution", *Journal of Business Venturing,* Vol. 14 No. 1, pp.35-67.

Dant R.P. and Kaufmann, P.J. (2003), "Structural and strategic dynamics in franchising", *Journal of Retailing*, Vol. 79 No. 2, pp. 63-75.

Dawar, N. and Parker, P. (1994), "Marketing universals: consumers' use of brand name, price, physical appearance and retailer reputation as signals of product quality", *Journal of Marketing*, Vol.58 No. 2, pp. 81-95.

Eggert, A. and Ulaga, W. (2002), "Customer-perceived value: a substitute for satisfaction in business markets?", Journal of Business & Industrial Marketing, Vol. 17 Nos 2/3, pp. 107-18.

Eisenhardt, K. M. (1989). "Agency theory: an assessment and review", *Academy of Management Review,* Vol.14 No. 1, pp. 57-74.

Frazer, L. and Winzar, H. (2005), "Exits and expectations: why disappointed franchisees leave", *Journal of Business Research*, Vol. 58 No. 11, pp. 1534-42.

Gallini, N. T. and Lutz, N.A. (1992), "Dual distribution and royalty fees in franchising", *Journal of Law, Economics and Organization*, Vol. 8 No.3, pp.471-501.

Gauzente, C. (2003). "Measuring franchisees' satisfaction: theoretical considerations and empirical testing", *International Journal of Retail and Distribution Management*, Vol. 31 No.10, pp. 508-17.

Grace, D. and Weaven, S. (2011), "An empirical analysis of franchisee value-in-use, investment risk and relational satisfaction", *Journal of Retailing,* Vol. 87 No.3, pp. 366-80.

Greene, W. H. (2000). *Econometric Analysis*, 4th ed., Prentice Hall, Upper Saddle River, NJ.

Grewal, D., Iyer, G.R., Javalgi, R.G. and Radulovich, L. (2011), "Franchise partnership and international expansion: a conceptual framework and research propositions", *Entrepreneurship Theory and Practice*, Vol. 35 No.3, pp. 533-57.

Grönroos, C. (2006), "Adopting a service logic for marketing", *Marketing Theory,* Vol. 6 No. 3, pp. 317-33.

Grönroos, C. (2011), "A service perspective on business relationships: the value creation, interaction and marketing interface", *Industrial Marketing Management,* Vol. 40 No. 2, pp. 240-47.

Grönroos, C. and Ravald, A. (2009), "Marketing and the logic of service: value facilitation, value creation and co-creation, and their marketing implications", working paper, No. 542, Hanken School of Economics.

Grünhagen, M., DiPietro, R.B., Stassen, R.E. and Frazer, L. (2008), "The effective delivery of franchisor services: a comparison of U.S. and German support practices for franchisees", *Journal of Marketing Channels,* Vol.15 No.4, pp. 315-35.

Grünhagen, M. and Dorsch, M.J. (2003), " Does the franchisor provide value to franchisees? Past, current, and future value assessments of two franchisee types", *Journal of Small Business Management*, Vol. 41 No.4, pp.366–384.

Guilloux, V., Gauzente, C., Kalika, M. and Dubost, N. (2004), "How France's potential franchisees reach their decisions: a comparison with franchisers' perceptions", *Journal of Small Business Management,* Vol.42 No. 2, pp.218-24.

Harmon, T.R. and Griffiths, M.A. (2008), "Franchisee perceived relationship value", *Journal of Business & Industrial Marketing*, Vol. 23 No. 4, pp. 256-63.

Herbig, P. (1996), "Market signalling: a review", *Management Decision*, Vol. 34 No. 1, pp. 35-45.

Hing, N. (1999), "Maximizing franchisee satisfaction in the restaurant sector", *Journal of Consumer Marketing*, Vol. 16 No. 5, pp.502-13.

Kaufmann, P. J. and Dant, R.P. (1996), "Multi-unit franchising: growth and management issues", *Journal of Business Venturing,* Vol. 11 No. 5, pp. 343-58.

Kaufmann, P. J. and Kim, S.H. (1995), "Master franchising and system growth rates", *Journal of Marketing Channels*, Vol.4 No.1/2, pp.49-64.

Kaufmann, P. J. and Lafontaine, F. (1994), "Costs of control: the source of economic rents for McDonald's franchisees", *Journal of Laws & Economics*, Vol. 37 No. 2, pp. 417-53.

Koistinen, K. and Järvinen, R. (2009), "Consumer observations on channel choices: competitive strategies in Finnish grocery retailing", *Journal of Retailing and Consumer Services*, Vol. 16 No. 4, pp. 260-70.

Lafontaine, F. (1993), "Contractual arrangements as signaling devices: evidence from franchising", *Journal of Law, Economics* & *Organization*, Vol. *9* No.2, pp. 256-89.

Lee, L.F. (1983), "Generalized econometric models with selectivity", *Econometrica*, Vol. 51 No. 2, pp. 507-12.

Lester, R. H., Certo, S. T., Dalton, C. M., Dalton, D. R. and Cannella, A. A. (2006), “Initial public offering investor valuations: an examination of top management team prestige and environmental uncertainty”, *Journal of Small Business Management,* Vol. 44 No. 1, pp. 1-26.

Lusch, R. F., Vargo, S. L. and O'Brien, M. (2007), “Competing through service: insights from service-dominant logic”, *Journal of Retailing*, Vol. 83 No. 1, pp. 5-18.

Maritz, A. and Nieman, G. (2008), “Implementation of service profit chain initiatives in a franchise system”, *Journal of Services Marketing*, Vol. 22 No.1, pp. 13-23.

Mayer, R.C. and Davis, J.H. (1999), “The effect of the performance appraisal system on trust for management: a field quasi-experiment”, *Journal of Applied Psychology*, Vol. 84 No.1, pp.123-36.

McDougall, G.H.G. and Levesque, T. (2000), “Customer satisfaction with services: putting perceived value into the equation”, *Journal of Services Marketing*, Vol. 14 No. 4/5, pp. 392-410.

Michael, S.C. (1999), “The elasticity of franchising”, *Small Business Economics,* Vol. 12 No. 4, pp. 313-20.

Michael, S.C. (2009), “Entrepreneurial signaling to attract resources: the case of franchising”, *Managerial and Decision Economics*, Vol.30 No. 6, pp. 405-22.

Michael, S. C. and Combs, J. G. (2008), “Entrepreneurial failure: the case of franchisees”, *Journal of Small Business Management,* Vol.46 No. 1, pp. 73-90.

Nelson, P. (1970), “Information and consumer behavior”, *Journal of Political Economy*, Vol.78 No. 2, pp. 311-29.

Ni, L. and Alon, I. (2010), “U.S.-based fast-food restaurants: factors influencing the international expansion of franchise systems”, *Journal of Marketing Channels*, Vol. 17 No.4, pp. 339-59.

Peterson, A. and Dant, R.P. (1990), “Perceived advantages of the franchise option from the franchisee perspective: empirical insights from a service franchise”, *Journal of Small Business Management*, Vol. 28 No. 3, pp. 46-61.

Polo-Redondo, T., Bordonaba-Juste, V. and Palacios, L.L. (2011), “Determinants of firm size in the franchise distribution system: empirical evidence from the Spanish market”, *European Journal of Marketing,* Vol. 45 No. 1/2, pp. 170-90.

Roh, E.Y. and Yoon, J-H. (2009), "Franchisor's ongoing support and franchisee's satisfaction: a case of ice cream franchising in Korea", *International Journal of Contemporary Hospitality Management*, Vol. 21 No. 1, pp. 85-99.

Roh, Y. S. and Andrew, W. P. (1999), “Motivations for sub-franchising in the restaurant industry: an empirical examination”, *Journal of Hospitality Financial Management*, Vol. 7 No. 1, pp. 59-75.

Scott, F.A., Jr. (1995), “Franchising vs. company ownership as a decision variable of the firm”, *Review of Industrial Organization*, Vol. 10 No. 1, pp. 69-81.

Searle, R., Hartog, D.N., Weibel, A., Gillespie, N., Six, F., Hatzakis, T. and Skinner, D. (2011), “Trust in the employer: the role of high-involvement work practices and procedural justice in European organizations”, *International Journal of Human Resource Management*, Vol. 22 No.5, pp.1069-92.

Shane, S., Shankar, V. and Aravindakshan, A. (2006), “The effects of new franchisor partnering strategies on franchise system size”, *Management Science*, Vol. 52 No.5, pp. 773-87.

Shane, S. and Spell, C. (1998), “Factors for new franchise success”, *Sloan Management Review*, Vol. 39 No. 3, pp. 43-50.

Sherman, A.J. and Schaeffer, A. J. (2005), “Preparing the UFOC for overseas franchisors”, *Franchising World*, Vol. 37 No. 5, pp. 62-65.

Sheth, J.N., Newman, B.I. and Gross, B.L. (1991), “Why we buy what we buy: a theory of consumption values”, *Journal of Business Research*, Vol. 22 No. 2, pp. 159-70.

Stiglitz, J. E. (2000), “The contributions of the economics of information to twentieth century economics”, *Quarterly Journal of Economics,* Vol. 115 No. 4, pp. 1441-78.

Stiglitz, J.E. (2002), “Information and the change in the paradigm in economics”, *American Economic Review,* Vol. 92 No.3, pp. 460-501.

Storbacka, K. and Lehtinen, J. R. (2001), *Customer Relationship Management.* McGraw-Hill, Singapore.

Suazo, M., Martínez, P.G. and Sandoval, R. (2009), “Creating psychological and legal contracts through human resource practices: a signaling theory perspective", *Human Resources Management Review,* Vol. 19 No. 2, pp. 154-66.

Teegen, H. (2000), "Examining strategic and economic development implications of globalising through franchising", *International Business Review*, Vol. 9 No. 4, pp. 497-521.

Tunnanen, M. (2002), "An ounce of prevention is worth a pound of cure: finding from National Franchisee (Dis)satisfaction Study", paper presented at the 15th Annual International Society of Franchising Conference, Las Vegas, NV.

Vargo, S.L. and Lusch, R.F. (2004), "Evolving to a new dominant logic for marketing", *Journal of Marketing*, Vol. 68 No. 1, pp. 1-17.

Vargo, S.L. and Lusch, R.F. (2008), "Service-dominant logic: Continuing the evolution", *Journal of the Academy of Marketing Science*, Vol. 36 No. 1, pp. 1-10.

Vázquez, L. (2009), "How passive ownership restrictions affect the rate of franchisee failure", *Service Industries Journal*, Vol. 29 No. 6, pp. 847-59.

Vincent, W.S. and Kaufmann, P.J. (1996), "Mandatory earnings disclosure: some comments and caveats", *Franchising Research: An International Journal,* Vol.1 No.3, pp.21-27.

Walter, A., Ritter, T. and Gemünden, H. G. (2001), "Value-creation in buyer–seller relationships: theoretical considerations and empirical results from a supplier's perspective", *Industrial Marketing Management*, Vol. 30 No. 4, pp. 365-77.

Weaven S. and Frazer, L. (2006), “Investment incentives for single and multiple unit franchisees”, *Qualitative Market Research*, Vol 9 No.3, pp. 225-42.

Zhang, Y. and Wiersema, M. F. (2009), “Stock market reaction to CEO certification: the signaling role of CEO background”, *Strategic Management Journal,* Vol.30 No. 7, pp. 693-710.