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Brand and Price: Key Signals when Opening a Franchise Outlet

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This paper focuses on the choice of franchise by a potential franchisee, opening an outlet for the first time. The aim is to analyze the relationship between two signals—brand equity and price—sent by the franchisor, and the choice of franchise. Signaling theory provides the method to analyze this relationship. Using data panel methodology, we conclude that brand equity, up-front franchise fees, and initial investment are the signals taken into account by Spanish franchisees when starting up franchise stores between 2002 and 2008.

KEYWORDS entrepreneurship, franchisee, brand, signaling theory, GMM.

INTRODUCTION

Franchising is a means of starting and developing new ventures and organizational structures, while providing a channel for introducing new products or services to the market (Torikka, 2011). Franchisees seek ways to improve and promote their businesses—creating new ideas, proposing new products—through innovation and adaptation of their businesses (Bradach, 1997). Franchisees' entrepreneurial behavior encourages formal interaction with other franchisees within the

franchise system, enabling competitiveness and enhancing knowledge creation (Dada et al., 2012).

Widespread interest in franchising is unsurprising owing to its relevance to the economy. In Spain, the number of franchise establishments grew from 48,388 in 2002 to 69,081 in 2008. These establishments belonged to 1,012 franchise chains in 2002 and 968 in 2008. Also, franchising accounts for 10.7% of the 566,782 retail outlets in the country (Annual Trade Survey by the Spanish National Statistics Institute, 2011), and turnover from retail franchising represents 8.4% of the total turnover from all retail activity.

The aim of the present study is to analyze the relationship between specific quality signals sent to the market by franchisors who are seeking franchisees and the choice of a franchise brand by those who wish to open a franchise outlet.

We present several hypotheses, which we test using information collected from a database of 819 franchise chains operating across three sectors—retailing, services, and accommodation and food service activities—in Spain between 2002 and 2008. A dynamic signaling model helps achieve this objective by using panel data methodology. This methodology makes it possible to analyze the franchised outlets for the period during which information signaling was revealing information on the quality of the franchise chains to the potential franchisees. The Generalized Method of Moments (GMM), controlling for unobservable heterogeneity and endogeneity, yields results from the estimates of the model. These results show that brand and price of the franchise chain—predominantly up-front franchise fees and initial investment—are the signals potential franchisees consider when starting up a business under a franchise agreement.

This paper has six sections. Following the introduction, the second section discusses the research problem and presents the hypotheses stemming from signaling theory. The third section explains the methodology and measurement of variables, and the fourth section describes the empirical model used. The fifth section presents the discussion of results and the sixth section sets out the conclusions, managerial implications of the findings and limitations of the study.

THE CHOICE OF A FRANCHISE CHAIN BY A POTENTIAL FRANCHISEE

This study examines how Spanish franchisees choose a franchise chain when they want to start an outlet to offer a product or service to consumers. The franchise system allows potential franchisees to conduct their business activity through a consolidated business model with a recognized brand, thereby reducing brand development and commercialization costs, as well as operating risk (Liang et al. 2013). Nonetheless, potential franchisees prefer franchise chains with a certain degree of quality; specifically, chains with a proven, successful business concept (Fernández & Melián 2005), along with other signals such as brand recognition (Weaven & Frazer 2006) and price (Wu, 1999). Therefore, aside from the obvious relevance of signals for franchisees, franchisors also have an interest in discovering which signals influence franchisees' choices because franchisees play an essential role in the success of a franchise. Thus, the following question arises: how do potential franchisees learn about the quality of franchise chains? The economics literature presents signaling theory as a method that potential franchisees can leverage to understand franchise quality (Dant & Kaufmann 2003). Signaling theory can solve this problem by examining the information signals that influence potential franchisees' decisions when choosing a franchise chain. The signaling process works if the receiver is looking for a signal, or knows what information to look for, and if the chosen signal (or signals) is being interpreted as the signaler intends (Connelly et al., 2011).

The Brand of a Franchise Chain

The brand, whose role as a signal is rooted in the theory, stands out as the main value driver of businesses. A business with a recognized brand attracts a greater number of clients, entrepreneurs, and investors. Furthermore, a recognized brand differentiates a business from its competitors, accelerates growth, and lowers financial risk (Quek, 2011).

Brand recognition plays an important role in the franchisor-franchisee relationship (Samu et al., 2012). Potential franchisees seek franchise chains that have achieved widespread brand recognition (Zikmund & D'Amico, 2002) because such recognition provides information about the chain's success, acting as a signal that franchisors can leverage to franchise their establishments. In addition, a franchise's brand equity may prove crucial when building relationships with consumers. Furthermore, perceived brand equity in the eyes of franchisees is important for creating commitment within the franchise's distribution channel (Davis & Mentzer, 2008).

Previous research employs numerous different indirect indicators of a chain's brand equity, as discussed below. Among the available indirect indicators of this factor is the total number of outlets of the franchise chain (Alon et al. 2010; Barthélemy, 2008). Chains with a greater total number of establishments are more attractive to potential franchisees because they present a lower risk of failure (Bordonaba et al., 2011) and have better visibility owing to a more prominent presence in the marketplace. This presence creates brand familiarity and recognition, leads to economies of scale, and creates barriers to entry for new competitors (Michael, 2003). Therefore, brand could be a signal of the unobservable quality of the franchise chain, which may provide significant value to potential franchisees because such a signal helps reduce the costs of searching for information about prospective franchise chains (Rubin, 1978).

H1. A potential franchisee's choice of a franchise chain positively relates to the franchise's brand equity.

Pricing Policy of a Franchise Chain: Up-front Franchise Fees, Royalties and Initial Investment

Price is a quality measure of a franchise (Wu, 1999) for potential franchisees, who, rationally, infer better franchise quality from higher prices. Thus, potential franchisees who lack information from other signals about the quality of the franchise will be prepared to pay more to enter into a franchise agreement. In keeping with the above, potential franchisees, uninformed about the quality of franchises from other signals, will pay a greater amount for a franchise agreement if this price includes information about quality attributes or the value of the chain that the franchisee finds attractive. In franchising, up-front franchise fees, royalties and initial investment are the three components of the financial outlay undertaken by the franchisee. Therefore, franchisors may design and apply their pricing strategies depending on these three components (Shane et al., 2006).

Up-front Franchise Fees

Previous research shows that up-front franchise fees seek to increase and even out the value of the franchise's intangible assets (Rodríguez et al, 2011; Lafontaine & Shaw, 2005). When franchisors set up franchise businesses, it is likely that their brands provide unproven know-how to

future franchisees who show an interest in the brand. Under these circumstances, a franchisor who demands low up-front franchise fees will attract many franchisees. The converse is also true: high up-front franchise fees will probably attract fewer takers because potential franchisees are unprepared to pay such high up-front franchise fees for a business concept they have been unable to test (Alon, 2001). Among young franchise chains—commonly defined in the entrepreneurship literature as having less than three years' activity—that have less brand recognition and market presence, demanding lower up-front franchise fees leads to a greater number of potential franchisees who are interested in entering into an agreement with the chain (Sen, 1993).

> H2a: A negative relationship exists between the choice by a potential franchisee of a young franchise chain and up-front franchise fees.

Up-front franchise fees, however, change over time to match brand equity with the recognition the brand is receiving in the market (Bacus et al., 1993). Once a franchisor's business concept is successful, the franchisor must adapt his or her pricing policy for up-front franchise fees because the value of maintaining a pricing strategy of low up-front franchise fees diminishes. Therefore, the negative relationship put forward in H2a becomes less pronounced. Thus, a chain operating for several years in the market begins to create information about its value, thus boosting its brand recognition. This recognition makes it easier to attract potential franchisees, thereby allowing franchisors to demand higher up-front franchise fees (Shane et al, 2006).

> H2b: Once franchises have been operating for some time, the relationship between franchise choice and up-front franchise fees becomes positive.

Royalties

Royalties represent a signal of the quality of a franchise that the franchisor sends to the market. Agarwal & Lal (1995) analyze the reasons why franchisors demand large royalties, finding the magnitude of royalty rates to be a signal of the business' superiority. The size of the royalty rate is a credible signal of the quality of a franchise because this rate gives potential franchisees an indication of the number of services provided and the value of these services (Shane et al., 2006).

Therefore, royalties constitute an important signal for individuals looking to invest in a franchise chain. Potential franchisees are unable to justify the royalties that a franchise demands if they do not know the value of the chain. Small royalty rates signal a smaller number of services offered and/or that these services provide little value, owing to either the low quality of the chain or its short track record of operations (Shane et al, 2006). Signaling theory implies that royalty rates are, primarily, a signal of the brand equity of chains that have been operating for some time in the market, and, additionally, provide an insight into the expansion process of franchises that have been operating in the market for less time (Pénard et al., 2003). Potential franchisees who choose franchises with small royalty rates are therefore opting for chains that offer services of little value or chains that have been operative for a short period. Thus, Sen (1993) claims that royalty rates share a negative relationship with the number of franchised outlets of a chain.

H2c: A negative relationship exists between the choice by a potential franchisee of a young franchise chain and royalties.

Some scholars find a positive relationship between number of franchised establishments and royalty rates (Michael, 1999). Certainly, a franchisee entering into a franchise agreement for the first time will be unaware of the quality of franchise chains and will face difficulties in justifying their royalty rates. Signaling theory states, however, that companies with high quality products are more likely to reveal information about their products. Therefore, chains that have been operating for longer are continually consolidating their business concept in the marketplace and incorporating new services, thereby increasing the royalty rates they demand from future franchisees.

If franchisees favorably assess the assistance that franchisors offer, franchisees' confidence in their franchisors increases (Chiou et al., 2004). Thus, the service quality that the franchisor offers to the franchisee has a positive impact on the quality of their relationship. Therefore, if the royalty rates reflect the differentiation of the franchised product (Michael, 2009) and the value of the business concept, royalties act as a credible signal of the quality of a franchise, helping attract potential entrepreneurs (Shane et al, 2006).

H2d: Once franchises have been operating for some time, the positive relationship between franchise choice and royalties strengthens.

Initial Investment

Grace & Weaven (2011) demonstrate a positive association between a franchisee's perception of risk of investment in a franchise chain and the performance of the chain. This relationship influences future investment, provided the quality of the franchise's performance meets the franchisee's expectations, and the franchisee is able to recover his initial investment. A reduction in the risk of the initial investment will boost the franchisee's satisfaction with his current franchise relationship.

Adopting arguments from signaling theory, Gallini & Wright (1990) assert that a high degree of initial investment may dissuade risk-averse potential franchisees, whereas a small initial investment may attract potential franchisees reluctant to commit to large initial outlays without first tasting success. In light of the above, and given that the decision of whether to open a franchise outlet is taken by the franchisee, franchise chains that demand large amounts of initial investment will be able to open fewer franchised outlets than chains that demand a smaller initial investment (Alon, 2001).

> H2e: A negative relationship exists between the choice by a potential franchisee of a franchise chain and the initial investment demanded by the franchisor.

Initial investment equates to the payment of all expenses that franchisees must pay when initiating their economic activity in their franchised establishments. These expenses may include equipping the franchise outlet and paying opening fees. Initial investment therefore forms part of the total price the franchisee has to pay. Nonetheless, because it is a signal that does not provide information about the quality of the franchise chain, it does not vary over time. Initial investment is, however, a signal that informs about the franchisee's risk in the sense that it relates to the redemption period of the business.

METHODOLOGY AND MEASUREMENT OF VARIABLES

Sample Data

The franchise directory of the Spanish Association of Franchises and the franchise directory of Tormo and Associates Consultants yield the data for a sample of 819 franchises. To avoid the influence of two key economic events—Spain's adoption of the Euro and the arrival of the current global economic crisis to Spain—that could create a bias in the results, the reference period under study is 2002 to 2008.

The reference period extends across seven years because the use of panel methodology carries with it an additional restriction to control for the problems of unobservable heterogeneity and endogeneity. Thus, although the sample is an unbalanced panel, information is available for each franchise for at least four consecutive years during the reference period.

Among the noteworthy characteristics of the chains that make up the sample are those that relate to time the franchise has been operative and the sector to which it belongs. In terms of the time the franchise has been operative, of all chains in the sample, 27% were born as franchises and have been operative for an average of 14 years. The remaining 73% of chains comprises businesses that became franchises after operating in the market under a different contractual model and businesses that were born as franchises but that later adopted a different contractual model—just 33 chains fall into this category. Businesses from the first group had been operative for 22 years without becoming franchises, given that some of these businesses have been operative for 50 years. The second group consists of businesses that had been operative as franchises for around 15 years until they changed their contractual model at some point during this study's reference period.

There is an uneven distribution of franchise chains by sector across the 59 sectors. Thus, each sector has a different weight of influence in the analysis. Table 1 provides the distribution of the number of franchise chains and number of observations from the sample by sectors (services, retailing, and accommodation and food service activities). We chose to regroup the 59 sectors into three broader sectors to avoid listing all 59 sectors.

Table 1.
Distribution of the sample by sector

	Nº of sectors	Nº of franchise chains	% of franchise chains	Nº of observations	% of observations
Services	22	136	16,61	831	15,53
Retailing	31	369	45,05	2242	41,92

Accommodation and food service activities	6	314	38,34	2276	42,55
Total	59	819	100,00	5349	100,00

Variables: Description and measurement

The dependent variable choice of franchise chain by a potential franchisee [TADOit] refers to the ex post decision of the franchisee when deciding to open a franchise outlet of a franchise chain operating in Spain. Franchisees with more than one franchise unit from the same chain and franchisee–investors do not appear in the sample because we want to consider the potential franchisee as an entrepreneur. We measured choice of franchise chain as the percentage of new franchised outlets opened by a potential franchisee who wishes to set up a business for the first time in the year t (Alon, 2001).

Among the independent variables are brand equity and the variables that refer to the pricing policy of the franchise chain: up-front franchise fees, royalties, and initial investment. We measured the variable brand equity [ET] using a proxy, namely the total number of outlet of the franchising chain [Perales & Vazquez, 2003], as already commented in Section 2.1. Very little literature relates these pricing policy variables to signaling theory. We measured up-front franchisee fee [DE] as the average amount in Euros that a potential franchisee must pay as a single initial payment to the franchisor in the year t (Kaufmann and Dant, 2001). To measured royalties [RYT], we used the percentage of annual sales that the franchisees must pay to the franchisor (Kaufmann & Dant, 2001). We measured initial investment [INVI] by subtracting the up-front franchise fees from the amount the franchisor demands (Rodríguez et al., 2011).

We used the control variables such as time and sector to explain the choice of franchise chain by potential franchisees (Shane et al., 2006). Gallini & Lutz (1992) report that franchise quality changes over time and claim that time is necessary for a franchise chain to attain a certain degree of quality and is yet more important for franchisees' credibility. In addition, the variable, time controls for the effects of macroeconomic variables on franchise choice. To distribute the effects of time, we control the years in the reference period with seven dummy variables (i.e., one for each year), taking 2002 as the base year. The dummy variable took the value 1 for the year in question and 0 otherwise. Similarly, we control the effects of the sector using three dummy

variables; one for each of the sectors studied (Perrigot, 2006). The use of dummies accumulated for both control variables (time and sector) avoids problems of collinearity. Finally, the inclusion of the control variable, time of a chain operating as a franchise, allowed us to create the interaction [DE*LNG] and [RYT*LNG] that included all the main effects of time that a franchise has been operative on the value of the fees and the royalties (Windsperger & Dant, 2006).

Empirical Model: Specification and Estimation

The results in Table 1 imply the need to perform logarithmic transformations of these variables.

Table 2.
Descriptive Statistics for the Sample

Variable	Mean	S.D.	Min.	Max.
TEADO	0.1	0.03	0	0.08
ET	66.2	171.01	1	2204
DE	13,527.6	13,427.17	0	300,000
RYT	0.1	0.04	0	0.60
INVI	105,442	106,252	0	961,620
LNG	10.7	8.74	0	90

In addition to the univariate analysis, we also carried out bivariate analysis. Table 2 shows that all variables have variance inflation factors (VIFs) of less than 10.0, and that none of the tolerance values indicates that collinearity explains more than 10% of the variance of any independent variable.

Table 3.
Variance inflation factor (VIF) and tolerance (1/VIF) measures

Variable	VIF	1/VIF
ET	1.08	0.93
DE	4.29	0.23
RYT	5.60	0.18
INVI	1.30	0.77
Mean VIF	3.86	

Specification of the Model

The linear regression model designed to estimate the relationship between brand and price as signals sent by the franchisor, and the choice of franchise by the franchisee is the following:

$$TEADOit=ά n+ά 1[lnETit]ά 2[DEit]+ά 3[LNGit]+ά 4[DE*LNGi]-ά 5[RYTit]+ά 6[RYT*LNGit]–ά 7[INVIit]+ηi+dt +si +vit, \quad (1)$$

Where i is the franchise chain and t is the year. The Generalized Method of Moments (GMM) provides the means to estimate the model. Panel data methodology allows us to assume that the distribution of the observations are not independent of time, while controlling for unobservable heterogeneity and correcting any possible endogeneity between the dependent and independent variables (Shane et al., 2006).

GMM Estimation of the Proposed Model

Table 3 presents the results of the GMM estimation (conducted using Stata 11.0) of the linear model in equation (1). This model is a dynamic linear model because of the inclusion of the lagged variable [TEADO_1] (i.e., the dependent variable [TEADO] with a lag of one period) as an explanatory variable. We include this lagged variable because of the potential influence of the choice of franchise by a potential franchisee in one year on his choice in the following year (Heil & Robertson, 1991).

Table 4.
Estimates of the proposed model

Variable	Estimate I	Estimate II	Estimate III
TEADO_1	-0.519***	-0.490***	-0.490***
	(0.000)	(0.000)	(0.000)
LNET	0.018***	0.021***	0.021***
	(0.000)	(0.000)	(0.000)
DE	-1.550***	-8.350***	-8.350***
	(0.000)	(0.000)	(0.000)
DE*LNG	1.030***	4.150***	4.150***
	(0.000)	(0.000)	(0.000)
RYT	-0.463	-0.011	-0.011
	(0.021)	(0.948)	(0.948)
RYT*LNG	0.020	-0.014	-0.014
	(0.068)	(0.175)	(0.175)

INVI	-7.420 ***	-5.100 ***	-5.100 ***
	(0.000)	(0.000)	(0.000)
LNG	-0.004 ***	-0.064	-0.064
	(0.000)	(0.590)	(0.590)
V. Temp	----------	Eliminated 2/7	Eliminated 2/7
Z1	325.42(8)	342.91(8)	342.91(8)
	(0.000)	(0.000)	(0.000)
Z2	----------	19.46(5)	19.46(5)
		(0.000)	(0.000)
m1	-2.08	-1.48	-1.48
	(0.038)	(0.140)	(0.140)
m2	-1.15	-1.31	-1.31
	(0.248)	(0.191)	(0.191)
Hansen	101.37	85.97	85.97
	(0.023)	(0.109)	(0.109)
Observ.	652	652	652
Chains	163	163	163

We made three estimates of the same model (I, II, and III). Estimate I refers to the model describe in equation (1), taking into account only the individual effect, [ηi], and the random effect, [vit]. Estimate II refers to the model described in equation (1), taking into account the effects of estimate I, plus the temporal effect of the time dummy variables [dt]. Estimate III refers to the model described in equation (1), taking into account the same effects as in estimates I and II, plus the sector effect of the sector dummy variables [si]. Finally, we used Hansen's J statistic (over-identification test of all instruments) to test the possibility of poor specification of the model. This statistic tests the validity of the instruments used by indicating the correlation between the instruments and the error term (p=1). The m2 statistic, developed by Arellano & Bond (1991), checks the lack of second-order serial correlation in the first-difference residuals. The Wald tests (Z1 and Z2) verified the joint significance of the reported coefficients, and the time dummies, respectively.

Discussion of the Results

The comparison of the results of estimates I and II (see Table 3) reveals that the inclusion of the time dummies in estimate II improves the validity of the instruments (see the Hansen J-statistic in both cases),

and confirms that the model is free from second-order serial correlation problems (see the m2 statistic in both cases). The GMM with the added sector effect (estimate III) neither improves nor worsens the results from estimate II. Estimate II, which accounts for macroeconomic effects by including time dummies, offers an improvement on the coefficients of some variables in estimate I. We stress the importance of considering such macroeconomic effects in the decision-making process of the franchisees, with panel data methodology performing better in this situation than other methods. Therefore, the macroeconomic variables represented by the time dummies seem to influence positively not only the model specification, but also the signal brand and the up-front franchise fees as part of the signal price. On the other hand, controlling for sector is unnecessary because this variable seems to be irrelevant in potential franchisees' choice of franchise. Results in Table 3 corroborate the hypothesis linking the choice of franchise to brand equity [H1] in all three estimations of the model (1).

For the variables pertaining to price, without taking into account the interaction variables, the three estimates corroborate hypothesis H2a, which posits a negative relationship between up-front franchise fees and choice of a franchise chain. The results fail to provide evidence for H2c, which posits a negative relationship between franchise choice and the royalties demanded by the franchise.

For the interaction variables (hypotheses H2b and H2d), hypothesis H2b is corroborated: when a franchise has been operating in the Spanish market (DE*LNG) for a long period, the relationship between franchise choice and up-front franchise fees becomes positive. However, evidence is lacking in support of H2d, which states that when a franchise has been operating in the Spanish market (RYT*LNG) for a long period, the relationship between franchise choice and royalties strengthens.

Results corroborate hypothesis H2e, thereby implying that the choice by a potential franchisee of a franchise chain operating in Spain is negatively related to the initial investment demanded by the franchisor. Finally, franchise decisions taken in the previous year seem to have a negative effect on the current choice of franchise by franchisees.

CONCLUSIONS AND MANAGERIAL IMPLICATIONS

Give the prominent role of franchising within the retail sector and today´s economy as a whole, the current study aims to analyze the

relationship between signals of quality sent to the market by franchisors and the choice of franchise chain by potential franchisees looking to open franchised outlet. The empirical study yields results that show that first-time franchisees operating in Spain between 2002 and 2008 decided to open their first franchise units depending on the information gleaned from brand presence and recognition. The brand is an easily observable signal owing to its recognition, which is a consequence of a franchise having a large number of franchise establishments. The perception among potential franchisees that brand is a good signal of quality may be due to the difficulty for franchisors to exaggerate the status of a brand because of the time and money required to build a brand with strong brand equity.

When choosing a franchise, potential franchisees also base their judgments on certain signals related to price such as up-front franchise fees and initial investment. These signals have an influence because they affect franchisees in the short term, whereas royalties only come into play once the franchisees have entered into an agreement with their chosen franchise.

The lack of influence of the sector dummy variable leads to the conclusion that the future franchisees do not compete for chains in the same sector. As a result, the quality of the chains in each sector follows a continuous distribution, without clear quality differences between different franchise chains within the same sector. This situation nullifies the effect of the sector as a signal (Cheong & Kim, 2004).

The negative influence of the franchisee's last choice of franchise chain when opening an establishment on his next decision leads to the following conclusions. First, the efficacy of a signal may receive an influence from historical signals. Second, franchises are operating in a saturated market, a result of the rapid expansion in Spanish franchise activity between 2002 and 2008. Therefore, the most recent franchise opening serves as a signal to future franchisees that the consumer market is steadily contracting or becoming increasingly saturated. If we had analyzed each sector independently, the research would perhaps have yielded different results as regards potential franchisees' behavior when choosing a franchise chain.

From the above conclusions, several managerial implications emerge. Results of the current study aid the decision-making of both franchisees and franchisors, thereby reducing their risk. First, franchisors know two information signals (i.e., brand and price) that reveal the quality of chains operating in the market. As a result, when seeking to franchise an establishment, they will choose the chain

depending on the information that these two signals transmit. Second, franchisors know that brand and price are two of the information signals that potential franchisees will be searching for, and should therefore send these signals to the market if they want franchisees to choose their franchise.

Equally interesting for franchisors is gaining knowledge of the signals that potential franchisees ignore. This knowledge allows franchisors to manage their information content effectively and efficiently to send pertinent signals to future franchisees.

Finally, when franchisors establish the up-front franchise fees and royalties, they presumably assess the total amount they want to receive from the franchisee over the course of the contract. Accordingly, they set a large sum for the up-front franchise fees and a small sum for royalties or vice versa, or some mix. As Spanish franchisees take into account the up-front franchise fees more than the royalties when choosing a franchise chain, franchisors should demand a large sum for the up-front franchise fees, provided the up-front franchise fees are indeed acting as a signal for potential franchisees.

Limitations and future research

This study has limitations that future research must address. Working with an unbalanced panel means using a random sample in the cross-sectional analysis. Examining signals from the franchisor without considering other signals such as environmental factors poses an additional problem. Furthermore, we only examine two signals (brand and price) without presenting any prior criteria, thereby excluding many other signals that may be of greater professional interest. In addition to including new signals in future research, it would also be of interest to examine personal motives behind franchise choice. (In this study, we controlled for such motivations by using panel data methodology to nullify their influence in franchise choice, given that this was the focus of our research.) Finally, the measure we used to analyze the two signals under study is another limitation of the study because of the range of alternatives presented in the literature. The use of other measures for these signals may have had a bearing on the findings of this study.

Aside from these limitations, future research should include other traits of the franchises operating in Spain that may signal information to potential franchisees, such as the consumer product satisfaction index, services offered by each franchise, or the number of services offered and

the period for which the franchise provides these services. It would also be of interest to include other qualitative elements related to potential franchisees that may influence their franchise choice such as taste, risk aversion, or entrepreneurial spirit. This line of research, however, would lead us to apply other estimators that do not control for the aforementioned factors. Finally, it would be interesting to compare the results of this research with those of studies in other countries to explore whether signals that Spanish potential franchisees consider have the same effect on non-Spanish potential franchisees' choice of franchise, or, conversely, if the effect is different. If such research shows this effect, we could analyze the influence of possible moderating variables such as culture on potential franchisees' choice of franchise.

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