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## Financial Aspects of Franchise Contracts: An Agency Perspective

By Luis Vázquez

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# Financial Aspects of Franchise Contracts: An Agency Perspective

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**Abstract.** This article provides evidence on the determinants of the compensation arrangements used in franchise relationships. While the empirical literature has studied two of these compensation arrangements – the royalty rate and the up-front franchise fee – this work expands the analysis to another important source of revenues for franchisors: the sales of inputs to franchisees at prices greater than marginal costs. Consistent with predictions suggested by agency theory, the compensation arrangements studied appear to function as substitutes. The results also reveal that the value of the services provided by franchisors to franchisees strongly affects the compensation arrangements studied, so a capital goal of these arrangements is to recover the costs of the services offered by franchisors.

**Key words:** agency theory, franchising, up-front fee, royalty rate, ongoing variable payment, contract.

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## **I. Introduction**

The conventional franchise contract is an arrangement whereby the franchisee compensates the franchisor for the right to use the latter's trademark in a certain location for a determined time period. The franchise contract includes several compensation provisions. These usually consist of three parts. The franchisee pays an initial franchise fee, an ongoing royalty – usually a percentage of sales – and purchases inputs from the franchisor at prices greater than marginal costs.

In the franchising field, there is limited prior empirical work on the determinants of compensation arrangements. Lafontaine (1992) found evidence that provides mixed support for the two-sided moral hazard model to explain the pecuniary terms of franchise contracts – royalty rates and up-front fees.<sup>2</sup> Lafontaine (1992) and Lafontaine and Shaw (1999) also found that, despite contrary predictions from theory, there is not a trade-off between initial franchise fees and royalty rates.

The empirical literature has studied only two of the compensation devices used in business format franchising: the royalty rate and the up-front franchise fee. These compensation mechanisms are especially important for the franchisor since these instruments make up over 50 percent of the franchisor's total profit (Stern and El-Ansary, 1988).

But franchisors also have another important source of revenue. It is the wholesale price they can charge for goods transferred to the franchisees. Franchisors can require franchisees to purchase some inputs from them. When franchisees operate under a fixed-proportion

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<sup>2</sup> Similar results were obtained by Sen (1993), Rao and Srinivasan (1995), Wimmer and Garen (1997), Lafontaine and Shaw (1999) and Brickley (2002).

technology, franchisor sales to franchisees at prices greater than marginal costs are equivalent to royalties on sales. Although these purchases – voluntary or required – are valued at less than 10 percent of the franchisees' sales in most business format franchise sectors (Lafontaine, 1992), they produce about 50% of the franchisor's total profit (Stern and El-Ansary, 1988). Unfortunately, no article in the literature has studied the value of franchisor sales to franchisees as a dependent variable when researching compensation arrangements in business format franchising. This weakness raises doubts about the results obtained. Therefore, much more work is needed in this area before one can draw more definitive conclusions.

The contribution of this work is threefold. First, it provides a comprehensive explanation for compensation provisions in franchise contracts drawing on the agency theory. The economic literature has studied mainly two of these compensation arrangements – the royalty rate and the up-front franchise fee. This article expands the analysis to another important source of revenues for franchisors, the sales of inputs to franchisees at prices greater than marginal costs. The results provide support for both the optimal allocation of risk and double-sided moral hazard explanations for franchise contracts. It was found that, as the amount of risk rises, the initial franchise fee decreases and the ongoing variable payment – the sum of both the royalty rate and the profit obtained by the franchisor in sales to franchisees – increases. It was also observed that the more important the franchisee effort and the harder it is to monitor this effort, the higher the up-front fee and the lower the ongoing variable payment. Moreover, I find that the more important the franchisor effort and the harder it is to monitor this effort, the lower the initial franchise fee and the greater the ongoing variable payment.

Second, the results reveal that the value of both initial and ongoing services provided by franchisors to franchisees strongly affects the compensation arrangements studied. On the one hand, the more valuable the continuous services provided by franchisors, the greater the ongoing variable payment. On the other hand, the value of the franchisor's initial services alone explains 68% of the variation in the up-front fee, which implies that the main goal of the initial franchise fee is to recover the franchisor costs in locating, selecting and training new franchisees.

Third, it shows that compensation arrangements constitute a system of interdependent elements. The results reveal the existence of substitutabilities between the compensation mechanisms studied, which supports one of the main predictions suggested by agency theory (Rubin, 1978), namely that the initial franchise fee should be inversely related to the ongoing variable payment.

This work utilizes a data source that includes a broad variety of information about a representative sample of franchise networks. The high level of data disaggregation improves the estimation of the factors that according to the theory affect the compensation arrangements.

The article is organized as follows. In the next section, I present the theoretical determinants of the compensation arrangements used in franchise contracts and derive testable implications from the theory. Section 3 contains a description of the data used in the empirical analyses. Section 4 presents the methodology used and discusses the empirical results, while Section 5 summarizes and concludes.

## II. Determinants of compensation arrangements

Simple agency theory tells us that the division between an up-front fee and an ongoing payment – in the form of royalties and/or high input prices – will depend on three factors: inefficient risk allocation and franchisee's and franchisor's moral hazard. The value of the services provided by the franchisors is also used in the literature as a determinant of the extent of both ongoing variable payments and initial franchise fees (Sen, 1993; Rao and Srinivasan, 1995).

### 1. INEFFICIENT RISK ALLOCATION

Agency theory has emphasized that increases in the risk aversion of the agents in relation to that of the principal and in exogenous uncertainty make powerful incentives more costly. Therefore, assuming that the franchisor is less risk averse than the franchisees,<sup>3</sup> it was hypothesized that:

*Hypothesis 1a:* The ongoing variable payment will increase as the amount of risk rises.

*Hypothesis 1b:* The initial franchise fee decreases as the amount of risk increases.

### 2. FRANCHISEE MORAL HAZARD

In the conventional agency model, optimal incentive intensity increases with the marginal productivity of agent effort. Moreover, the principal may spend resources to

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<sup>3</sup> Although Martin (1988) makes the opposite assumption, most of the literature (i.e., Brickley and Dark, 1987; Lafontaine, 1992; Norton, 1988) assumes that franchisors are less risk averse than franchisees. Moreover, some franchisors in my sample are relatively large corporations and most franchisees are family-owned firms often ill diversified. It may thus be inferred that franchisees are relatively more risk-averse than franchisors.

estimate agents' efforts directly or motivate them by linking their pay to the outcomes obtained. I therefore expect that:

*Hypothesis 2a:* The ongoing variable payment will be lower the more important the franchisee effort and the harder it is to monitor this effort.

*Hypothesis 2b:* The initial franchise fee will be higher the more important the franchisee effort and the harder it is to monitor this effort.

### 3. FRANCHISOR MORAL HAZARD

The effort exerted by the franchisor is very important for the success of a franchise chain. Franchisees expect their franchisors to exert effort towards maintaining the value of the trademark under which they operate, as well as screening and policing other franchisees in the chain. Given that this behavior is not easily assessed by the franchisees, there is moral hazard on both sides, the franchisee's and the franchisor's.

In this context of double-sided moral hazard, Rubin (1978) stated that sharing occurs as a result of both parties' need for incentives. Lal (1990) developed this argument formally. In his model, the ongoing variable payment is the element of the contract that gives the franchisor an ongoing interest in the success of the franchisees. Hence, I conjecture that:

*Hypothesis 3a:* The ongoing variable payment will be larger the more important the franchisor effort and the harder it is to monitor this effort.

*Hypothesis 3b:* The up-front franchise fee will be lower the more important the franchisor effort and the harder it is to monitor this effort.

#### 4. VALUE OF THE SERVICES PROVIDED BY FRANCHISORS

Franchisors provide both initial and continuous services to franchisees. Initial services such as those related to locating, selecting and training are available to the new franchisees before their stores are operational. But franchisees also use other continuous services provided by the franchisor after their businesses become operational, such as ongoing training and marketing campaigns. I therefore expect that:

*Hypothesis 4a:* Both the initial franchise fee and the ongoing variable payment will be higher the more valuable the services provided by the franchisor after the outlet becomes operational.

*Hypothesis 4b:* Both the initial franchise fee and the ongoing variable payment will be higher the more valuable the services provided by the franchisor before the outlet becomes operational.

#### 5. INTERDEPENDENCIES BETWEEN COMPENSATION DEVICES

It might be argued that the franchise contract is a system of interdependent choices, so that not only are the elements of the contract likely to respond to the same factors, but the rise of one element – for example, the ongoing variable payment – may either increase or decrease the use of another element – for example, the initial franchise fee.<sup>4</sup>

In the context of a double-sided moral hazard model, Rubin (1978) argues that the initial franchise fee is the difference between the present value of the profits of an outlet and the wages of the managers in charge of that outlet. Therefore, given that the initial fees serve

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<sup>4</sup> On this issue, see Athey and Stern (1998) for theoretical arguments; and Brickley (1999) and Arruñada, Garicano and Vázquez (2001) for some empirical work on franchise contracts.



to extract downstream rents, a decrease in the ongoing variable payment should increase the initial franchise fee. Hence:

*Hypothesis 5:* The ongoing variable payment and the initial franchise fee will function as substitute devices.

Table 1 shows the signs of the expected effects of the depicted factors on the compensation devices studied.

(Insert Table 1 about here)

### **III. The data**

The empirical setting for testing the aforementioned hypotheses is the franchise sector in Spain. The data set was collected in 2001 and stems from two sources: the Spanish Register of Franchisors<sup>5</sup> and the questionnaires completed by a sample of franchisors.

The complete population of franchise chains operating in Spain at the end of 2000 was obtained from the Register of Franchisors. After various preliminary steps in questionnaire development, including in-depth interviews with franchisors, the final version of the questionnaire was pretested with 15 franchisors. Questionnaires were then sent to all members of the population—619 franchise chains—and a supplemental telephone survey was carried

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<sup>5</sup> Spanish Royal Decree no. 2,485/1998 requires firms that want to franchise in Spain to be entered in the Register of Franchisors. The data each franchisor must facilitate to this Register include, among others, the up-front fee and the royalty rates, the length of the contract, the average investment per outlet, the date of creation of the franchisor, the date when the franchisor began to franchise, and the number of company-owned and franchised outlets in Spain.

out asking that the questionnaires be completed. Finally, 145 usable responses were obtained. Table 2 contains the number of chains in each of the business format franchising sectors.

(Insert Table 2 about here)

To test for a potential response bias in the sample of franchise chains, the sectors represented in the sample were compared to the population. The sample and population did not appear to differ by sectors. To further test for non-response bias, early-returned questionnaires were compared to late returned questionnaires on several variables: respondent position, company size and sector. Analyses indicated that no significant mean differences existed between early and late respondents. Thus, there was no evidence of obvious response bias in the sample.

## 1. DEPENDENT VARIABLES

I used two measures to estimate the level of compensation arrangements: the initial franchise fee and the ongoing variable payment.

Most of the chains in the sample charge all franchisees a single initial franchise fee. For the remaining chains, I calculated the average between the maximum and minimum up-front fees applied by each network, assuming that this average up-front fee represents the mean franchisee.<sup>6</sup>

The ongoing variable payment is the sum of two parts. The first component is the total percentage of sales paid by franchisee to franchisor (royalty rate), including advertising fees.<sup>7</sup>

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<sup>6</sup> Similar results hold when these chains are excluded.

<sup>7</sup> As in other studies (for example, Lafontaine, 1992; Sen, 1993; Lafontaine and Shaw, 1999; Brickley, 2002), I use the sum of the two kinds of variable fees as the actual royalty rate

In most of the sample chains, franchisors charge all franchisees a single percentage. When franchisors vary the royalties across franchisees by charging a sliding rate based on the level of sales, I calculated the average between the maximum and minimum royalties applied by each chain, assuming that this average royalty represents the mean franchisee.<sup>8</sup> When the chains use a fixed-rent contract, the royalty rate is treated as zero.<sup>9</sup> The second component of the ongoing variable payment estimates the profit obtained by the franchisor *in* sales to franchisees, and it is calculated by multiplying the average profit margin in franchisor sales to franchisees by the percentage of the sales of inputs from franchisor to franchisees on franchisee sales.

## 2. INDEPENDENT VARIABLES

Given the difficulty of measuring the inefficient risk allocation, the franchisee's and franchisor's moral hazard, and the value of the services provided by franchisors, I have used many variables to proxy for these factors.

*Inefficient Risk Allocation.* Two proxies were used for the risk borne by franchisees. First, the variation in sales per outlet in the sector of each franchise chain in the period 1998-2001. Given that I could not obtain public information on the sales volatility of all sectors, I calculated the sales volatility for each sector as the mean of the sales volatilities (in the period 1998-2001) of the sample chains of that sector. Other works have used a similar variable in

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because franchisees have few ways of knowing whether their payments are used for advertising.

<sup>8</sup> Similar results were obtained when these chains were excluded from the sample.

<sup>9</sup> The removal of these chains from the sample does not qualitatively affect the results.

order to estimate the risk borne by franchisees.<sup>10</sup> It was assumed that the more volatile the sales per outlet in a chain, the greater the risk borne by their franchisees.

Second, the average proportion of outlets discontinued annually in each chain in the period 1998-2000. For each year, this proportion was calculated as the ratio between the discontinued outlets in each network and the number of outlets of this network at the beginning of that year.<sup>11</sup> It was assumed that the higher the proportion of discontinued outlets in each chain, the greater the risk borne by its franchisees.

*Franchisee Moral Hazard.* In order to measure the franchisee moral hazard, I estimated the importance of the franchisee effort and the costs of monitoring such effort by the franchisor.

The importance of the franchisee effort was proxied by the average number of employees per outlet in each chain in the period 1998-2000. It was assumed that when this number rises, the franchisee has more responsibility. Given that humans can shirk, monitoring costs will rise with an increasing number of employees. The higher the number of employees per outlet, the higher will be the role of the franchisee in monitoring the workforce.

The cost of monitoring franchisee behavior was estimated through the number of Spanish regions in which each franchisor had established stores at the end of 2000. This proxy variable estimates the costs of sending a franchisor employee to each outlet to verify the

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<sup>10</sup> See, for instance, Martin (1988), Norton (1988) and Lafontaine (1992).

<sup>11</sup> A similar variable was used by Lafontaine (1992), but her data were measured at sectoral level. A sectoral measure might not be representative of each franchise chain in that sector. For example, the proportion of outlets discontinued by Burger King cannot be a reliable indicator for somebody considering taking up a franchise in a small fast-food chain.

accomplishment of franchisee obligations. It was assumed that when the number of regions in which each chain had established stores rises, the cost of monitoring franchisee behavior will increase.

*Franchisor Moral Hazard.* To measure franchisor moral hazard, I estimated the importance of the franchisor's effort and how easy it is for the franchisees to control franchisor moral hazard.

The importance of franchisor effort is estimated by the value of the trade name of each chain, proxied by the number of outlets in each franchise network at the end of 2000.<sup>12</sup> It was assumed that franchisors with stronger brand names have more responsibility and require more effort because of the increased need for involvement in maintaining and policing brand-name quality (Rubin, 1978).

In order to measure how easy it is for the franchisees to control franchisor moral hazard, a dummy was used which takes a value of 1 if there is a franchisee council in the chain and 0 otherwise. Many chains have councils of franchisees elected by their peers who meet regularly with managers of the franchisor. Their main functions are (a) to represent franchisees with regard to the franchisor when discussing everything from functional

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<sup>12</sup> I take Network size (number of outlets per chain) as exogenous in examining the size of both Initial franchise fee and Ongoing variable payment. Other factors, such as R&D expenses, are important determinants of network size. I tested for endogeneity of Network size using the percentage of chain sales spent on R&D by each franchisor in the period 1998-2000 as an instrument for the same sample used in the regressions reported in Tables 4 and 5. The result of the Durbin-Wu-Hausman test gives no evidence of endogeneity or inconsistency in the ordinary least squares (OLS) estimates.

strategies to specific challenges facing the organization, and (b) to ensure that franchisors apply control mechanisms in a fair, non-discriminating way.<sup>13</sup>

*Value of the Services Provided by Franchisors.* I estimated the value of franchisor services before and after the outlets are operational through three proxies. In order to proxy the value of the initial services, the average franchisor costs in locating, selecting and training new franchisees was used.<sup>14</sup> To measure the value of the continuous services, I took the percentages of chain sales spent on advertising and training franchisees' employees by each franchisor in the period 1998-2000.

*Control Variable.* The age of each chain in 2000 was used as the control variable.

Descriptive statistics of the sample chains are shown in Table 3.

(Insert Table 3 about here)

#### **IV. Methodology and results**

Given the nature of the two dependent variables, a Tobit regression model was used to consider the lower-limit censoring. The models were also estimated using ordinary least squares and similar results were found. I generated instrumental values of both endogenous variables: up-front fee and ongoing variable payment. These values are predicted values obtained by regressing each endogenous variable on all exogenous variables in the model. Tables 4 and 5 show the results obtained.

(Insert Table 4 about here)

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<sup>13</sup> These councils also provide legal assistance to franchisees in their conflicts and allow them to achieve economies of scale in the acquisition of some inputs.

<sup>14</sup> Similar variables were used by Dnes (1992), Sen (1993) and Bercovitz (2000).

(Insert Table 5 about here)

The empirical evidence obtained on hypotheses *1a* and *1b* relating to risk allocation presents some ambiguity. On the one hand, the parameters estimated for the average proportion of discontinued outlets apparently support the hypotheses. On the other hand, however, the results are not those predicted for sectoral sales variation.

The coefficients estimated for the average proportion of discontinued outlets in each chain strongly support hypotheses *1a* and *1b*. This variable is positively and significantly related to the ongoing variable payment, and negatively and significantly related to the initial franchise fee. Hence, it appears that when exogenous risk rises, the intensity of incentives decreases.<sup>15</sup>

However, the results of the sectoral variation of sales are never significantly different from zero, which may imply that this variable is not a good indicator of the exogenous risk. This evidence suggests that sectoral sales variability may be proxying for monitoring costs instead of exogenous risk, probably because the cost of observing franchisees' effort is higher in volatile environments.

The results observed also support hypotheses *2a* and *2b* relating to franchisee moral hazard. The parameters estimated for the proxies of (*a*) the importance of the franchisee effort, and (*b*) the costs of monitoring such effort by franchisors, show the predicted signs and are significant.

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<sup>15</sup> Lafontaine (1992) used a similar variable to proxy exogenous risk, but she did not observe a significant effect on either royalty rate or franchise fee. Different results may be due to the different levels of aggregation of the data used. While the data used by Lafontaine are aggregated at the sectoral level, the data used in this study are aggregated at chain level.

With regard to the effect of the importance of franchisee effort on compensation arrangements, the coefficients estimated for the average number of employees per outlet support hypotheses 2a and 2b. As predicted, that variable is negatively and significantly related to the ongoing variable payment, and positively and significantly related to the initial franchise fee. Therefore, it appears that the franchisee is given stronger incentives as the relative importance of his effort increases.<sup>16</sup> With respect to the costs of franchisors' monitoring franchisees' behavior, the parameters estimated for geographical dispersion have the predicted signs and are significant, which supports the notion that increases in this variable raise the costs of monitoring franchisees behavior.

I also found partial support for hypotheses 3a and 3b relating to franchisor moral hazard. Most of the coefficients estimated for the proxies of (a) the importance of the franchisor effort, and (b) the costs of monitoring this effort by franchisees, show the predicted signs and are significant.

In relation to the effect of the importance of franchisor effort on compensation provisions, the parameters estimated for network size partially support hypotheses 3a and 3b. As predicted, this variable is negatively and significantly related to the up-front fee and positively related to the ongoing variable payment. These results may indicate that the compensation arrangements are chosen to give incentives to the franchisors.

With respect to the costs of franchisees' monitoring franchisors' behavior, also consistent with hypotheses 3a and 3b, all parameters estimated for the franchise council have the predicted

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<sup>16</sup> The existing empirical literature also supports the hypothesis that the marginal product of the franchisee's effort affects the intensity of incentives at outlet level (see, for example, Lafontaine, 1992; Sen, 1993; Rao and Srinivasan, 1995; Wimmer and Garen, 1997; Bercovitz, 2000).



signs and one of them is significant. These results may indicate that the use of franchise councils allows franchisees to control franchisor moral hazard.<sup>17</sup>

The parameters estimated for both advertising and training expenses partially support hypotheses *4a* and *4b*. As predicted, these variables are positively and significantly related to the ongoing variable payment, which may hint that the more valuable the continuous services offered by franchisors, the greater the continuous compensations received from franchisees. But results also show that there is not a significant relationship between the magnitude of the initial franchise fee and both advertising and training expenses.

In relation to hypothesis *4b*, I find the coefficient of franchisor set-up expenses is positively and significantly related to the up-front fee. This result implies that the initial franchise fee may, indeed, enable the franchisor to recoup the costs derived from the openings of new franchisees. As Table 5 shows in equation 1, franchisor set-up expenses alone explain 68% of the variation in the initial franchisee fee, so it seems that the main purpose of the initial franchise fee is to recoup those franchisor costs in locating, selecting and training new franchisees. However, franchisor set-up expenses are not significantly related to the ongoing variable payment.

Thus, the findings appear to show that franchisors recoup the costs of the initial services via up-front fees, and the costs of continuous services through royalties or input sales to franchisees.

Finally, the findings provide support for hypothesis 5: initial franchise fees are negatively and significantly related to the ongoing variable payments. These findings support one of the

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<sup>17</sup> An alternative interpretation suggests that the existence of a council is a measure of the need to monitor due to high returns to franchisor efforts. Under this view, franchisees only set up councils if it matters a lot whether the franchisor shirks. I thank an anonymous referee for this interpretation.

main predictions suggested by theoretical models of franchising, namely that up-front fees and the ongoing variable payments should be inversely related. In other words, most franchisors use both instruments as substitutes.

## **V. Conclusions**

This work extends the empirical literature on incentive contracts by providing evidence on the determinants of compensation arrangements in franchise contracts. The results support both the optimal allocation of risk and the double-sided moral hazard explanations for those compensation arrangements. Many of the findings obtained are consistent with those of the earlier literature.<sup>18</sup> However, this work goes beyond this to show the existence of substitutabilities between the compensation arrangements analyzed.

In this respect, assuming a competitive market for franchisees, most agency models of franchise contracting assume that the royalty rate is chosen first, depending on both incentive and risk issues, and the up-front fee should extract all downstream rents left by the royalty rate. Thus the initial franchise fee should be inversely related to the royalty rate.

Most works have not found a strong negative cross-sectional correlation between the initial franchise fees and royalty rates.<sup>19</sup> Owing to the lack of results consistent with the negative relation predicted by theory, some authors have interpreted that compensation arrangements are not established in a way that extracts downstream rents in franchise

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<sup>18</sup> See, for instance, Lafontaine (1992), Sen (1993), Wimmer and Garen (1997) and Lafontaine and Shaw (1999).

<sup>19</sup> See, for instance, Rao and Srinivasan (1995), Wimmer and Garen (1997), and Lafontaine and Shaw (1999). However, Sen (1993) found partial support for the hypothesis that initial fees serve to extract downstream rents.

networks.<sup>20</sup> But the failure to observe the negative predicted relation may be due to the fact that no article in the literature has studied the value of franchisor sales to franchisees as a dependent variable when researching compensation arrangements in business format franchising. Although these purchases are valued at less than 10 percent of the franchisees' sales in most business format franchise sectors (Lafontaine, 1992), they produce about 50% of the franchisor's total profit (Stern and El-Ansary, 1988). Moreover, franchisors may adjust their initial franchise fees not only to recover future rents, but mainly to recoup the costs they incur in setting up new franchisees – franchisor set-up costs explain around 68% of the variation in the up-front fee.

To complete the findings obtained in this work, future research in franchising literature should analyze the choice of compensation arrangements in a richer contracting setting, studying the interaction between these kinds of arrangements and other non-pecuniary clauses used in franchise contracts.

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<sup>20</sup> See, for example, Lafontaine and Shaw (1999).

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Table 1. Signs of the expected effects of the factors on the compensation devices

	<i>Initial franchise fee</i>	<i>Ongoing variable payment</i>
Risk	+	-
Importance of franchisee effort	-	+
Costs of monitoring franchisee effort	-	+
Importance of franchisor effort	+	-
Costs of monitoring franchisor effort	+	-
Services provided after the outlet becomes operational	+	+
Services provided before the outlet becomes operational	+	+
Instrumented initial franchise fee		-
Instrumented ongoing variable payment	-	

Table 2. Distribution of sample chains by sector

<i>Sector</i>	<i>Number</i>	<i>Sample %</i>
Adventure	1	0.69
Automobile services	6	4.13
Beauty and personal hygiene	4	2.75
Cafés & ice-cream	4	2.75
Ceramic surfaces	1	0.69
Cleaning-interior restoration	1	0.69
Clothing-fashion	16	11.03
Computers	4	2.75
Consulting firms	6	4.13
Cosmetics	5	3.45
Drugstore	3	2.06
Dry-cleaning	6	4.13
Food and bakery	3	2.06
Furniture and decoration	4	2.75
Hairdressers	1	0.69
Herbalist's	2	1.38
Jewelry and costume jewelry	3	2.06
Leisure	2	1.38
Lingerie and notions	3	2.06
Office-stationer's	2	1.38
Personalized editions	3	2.06
Photography	1	0.69
Printing and signs	2	1.38
Real estate agencies	5	3.45
Restaurants	19	13.10
Specialized products	3	2.06
Specialized services	7	4.83
Specialized shops	6	4.13
Sports	2	1.38



Teaching	6	4.13
Telephone stores	2	1.38
Textiles	2	1.38
Transport services	3	2.06
Travel	4	2.75
Vending	3	2.06
<hr/>		
Total	145	
<hr/>		

<sup>a</sup> The sample consist of 145 business format franchising networks from 2000.

Table 3. Descriptive statistics

<i>Variable</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>Minimum</i>	<i>Maximum</i>	<i>N</i>
Initial franchise fee (000 €)	17.73	23.46	0.00	192.32	145
Ongoing variable payment (%)	7.94	8.96	4.82	20.52	145
Variation of sales	0.16	0.04	0.05	0.29	145
Average discontinued (%)	4.12	1.35	0.00	12.14	145
Average number of employees	6.28	3.29	2.13	21.30	145
Geographical dispersion	7.29	3.16	1.00	17.00	145
Network size	34.62	32.11	1.00	541.00	145
Franchise council	0.14	0.35	0.00	1.00	145
Franchisor set up expenses (000 €)	12.38	9.54	4.04	116.45	145
Advertising expenses (%)	3.12	2.24	0.00	8.16	145
Training expenses (%)	1.11	0.87	0.00	3.46	145
Network age	8.92	7.86	1.00	24.00	145

<sup>a</sup> The sample consists of 145 business format franchising networks from 2000.

Table 4. Tobit regressions explaining initial franchise fee and ongoing variable payment

<i>Independent Variables</i>	Initial franchise fee		Ongoing variable payment
	(1)	(2)	(3)
Initial franchise fee			-0.119 <sup>**</sup>
Ongoing variable payment		-0.796 <sup>**</sup>	
Variation of sales		-0.135	-0.157
Average discontinued		-2.128 <sup>**</sup>	0.122 <sup>*</sup>
Avg. number of employees		1.866 <sup>**</sup>	-0.156 <sup>**</sup>
Geographical dispersion		0.189 <sup>+</sup>	-0.138 <sup>**</sup>
Network size		-0.139 <sup>*</sup>	0.058 <sup>+</sup>
Franchise council		2.547 <sup>*</sup>	-0.002
Franchisor set up expenses	0.646 <sup>**</sup>	0.597 <sup>**</sup>	0.124
Advertising expenses		-2.016	0.420 <sup>**</sup>
Training expenses		-5.271	0.830 <sup>**</sup>
Network age		0.264	0.001
Constant	10.231 <sup>**</sup>	28.516 <sup>**</sup>	6.113 <sup>**</sup>
N	145	145	145

<sup>a</sup> Significance levels: <sup>\*\*</sup> P< .01; <sup>\*</sup> P< .05; <sup>+</sup> P< .10.

Table 5. OLS regressions explaining initial franchise fee and ongoing variable payment

<i>Independent Variables</i>	Initial franchise fee		Ongoing variable payment
	(1)	(2)	(3)
Initial franchise fee			-0.134 <sup>**</sup>
Ongoing variable payment		-0.854 <sup>**</sup>	
Variation of sales		-0.118	-0.143
Average discontinued		-2.011 <sup>**</sup>	0.139 <sup>*</sup>
Avg. number of employees		1.715 <sup>**</sup>	-0.171 <sup>**</sup>
Geographical dispersion		0.206 <sup>+</sup>	-0.123 <sup>**</sup>
Network size		-0.168 <sup>*</sup>	0.066 <sup>+</sup>
Franchise council		2.364 <sup>*</sup>	-0.002
Franchisor set up expenses	0.689 <sup>**</sup>	0.628 <sup>**</sup>	0.138
Advertising expenses		-2.352	0.456 <sup>**</sup>
Training expenses		-5.821	0.866 <sup>**</sup>
Network age		0.198	0.001
Constant	9.200 <sup>**</sup>	30.287 <sup>**</sup>	5.351 <sup>**</sup>
N	145	145	145
R <sup>2</sup>	0.67	0.81	0.16

<sup>a</sup> Significance levels: <sup>\*\*</sup> P< .01; <sup>\*</sup> P< .05; <sup>+</sup> P< .10.