PLURAL FORM AND PERFORMANCE:
SOME PRELIMINARY FINDINGS FROM US FRANCHISING NETWORKS
IN THE HOTEL AND RESTAURANT SECTORS

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ABSTRACT

Plural form networks, i.e. networks in which franchised units and company-owned units coexist, is now a common choice of most of the franchisors, whatever the industry in which they have their activities and whatever the country in which they have their operations. Many authors have contributed to better understand this particular organizational form, and highlighted its advantages in terms of network management. But, so far, the superiority of the plural form has been very rarely demonstrated in terms of performance, even if authors such as Combs et al. (2004a) and Watson et al. (2005) have nevertheless insisted on the need for research focusing on performance in franchising. The purpose of the present paper is therefore to explore the influence of the plural form on network performance. The empirical study deals with 123 US networks from the restaurant and hotel industries. The findings show that large networks having a high percentage of company-owned units and expanding outside their domestic market perform better than the other networks.

KEY WORDS

Franchising, plural form, performance, US, restaurant and hotel industries.
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1. INTRODUCTION

Plural form networks, i.e. networks in which franchised units and company-owned units coexist, is now a common choice of most of the franchisors, whatever the industry in which they have their activities and whatever the country in which they have their operations. Some authors have contributed to better understand this particular organizational form, either conceptually (Bradach and Eccles, 1989; Dant et al., 1992), or empirically (Bradach, 1997; 1998; Cliquet, 2000; Dant and Kaufmann, 2003; Lafontaine and Kaufmann, 1994; Lafontaine and Shaw, 1999; 2005). Many advantages of the plural form have therefore been highlighted in the literature in terms of network development, concept uniformity, local reaction to threats or opportunities, and concept adaptation to changes (Bradach, 1997; 1998) or in terms of costs, growth, quality and risk management (Ehrmann and Spranger, 2004). To sum up, these advantages have mainly concerned the network management.

But, so far, the superiority of the plural form has been very rarely demonstrated in terms of performance, even if authors such as Combs et al. (2004a) and Watson et al. (2005) have nevertheless insisted on the need for research focusing on performance in franchising. Two recent papers dealing with franchising networks performance, and more specifically plural form networks efficiency in the French hotel industry can be mentioned. On the one hand, Botti et al. (2009) implemented the DEA methodology in the French hotel industry but their findings were not significant. On the other hand, Perrigot et al. (2009) assumed that the set of
variables chosen by these previous authors, including for instance the territory coverage, were not relevant enough, and therefore proposed a new set of variables which leads to significant results in favor of the plural form. In these two research papers, the sample of franchising networks was very limited in terms of industry (hotel industry) and in terms of number of networks under investigation.

The purpose of the present paper is therefore to explore the potential advantages provided by the plural form, in terms of performance, on a larger sample of networks from the restaurant and hotel industries and in another market than the French one: the US one.

Several indicators have been used in the literature to measure the performance of retail and services networks: survival (Lafontaine and Shaw, 1999; Shane, 1996; Shane and Foo, 1999; Perrigot, 2008), productivity (Achabal et al., 1984; Bultez and Parsons, 1998; Sparks, 2005), efficiency (Yoo et al., 1998; Botti et al., 2009; Perrigot et al., 2009), etc.

This paper contributes to enrich the literature on plural form in the franchising networks, highlighting another advantage of this specific organizational form, in terms of performance. It also contributes to enlarge the literature on hospitality management and franchising. Indeed, many authors have explored specific aspects of franchising in the particular case of hotels networks and/or restaurants networks (Bradach, 1997 ; 1998 ; Combs et al., 2004b; Kalnins et Mayer, 2004 ; Kalnins et Lafontaine, 2004 ; Botti et al., 2009 ; Perrigot et al., 2009).

The paper is organized as follows. The literature on the advantages of the plural form and franchising networks performance is reviewed in Section 2. The research methodology is described in Section 3. The results of the empirical study are successively presented and discussed in Sections 4 and 5.
2. LITERATURE REVIEW

In this section, the literatures on plural form in franchising networks and also performance in the franchising sector are successively reviewed.

2.1. Franchising and plural form

Plural form refers to the coexistence of franchised units and company-owned units within the same network for the purpose of performing similar tasks (Bradach and Eccles, 1989). This specific organizational form has attracted the attention of several researchers interested in franchising topics. Plural form has been examined within a number of established theoretical approaches and frameworks, such as signaling (Gallini and Lutz, 1992), resource-based (Dant and Kaufmann, 2003), property rights and transaction costs (Windsperger, 2004a, 2004b; Windsperger and Dant, 2006) and agency theory (Chaudey and Fadario, 2004).

In perhaps one of the most influential research on plural form, Bradach (1997, 1998) investigated plural form through an in-depth exploratory study of five U.S. fast food networks. Findings revealed that plural form within a franchising network seeks to meet a number of managerial challenges, including spatial expansion by adding new units, brand protection by maintaining concept uniformity, local reaction to threats or opportunities, and service and/or product concept evolution with the need to adapt the concept to changes.

Bradach described several processes emerging within a plural form network that assist the franchisor in overcoming the four challenges. There is, for instance, an additive process during the network development as the franchisor exhibits its know-how through company-owned units and thus attracts new franchisees. A socialization process also exists, whereby franchisor personnel become a potential source of new franchisees. Plural form can stimulate a mutual learning process as well, which serves to facilitate the generation, testing, selection and implementation of new ideas.
Building on Bradach’s work, Ehrmann and Spranger (2004) identified four major groups of drivers for plural form: cost, growth, quality and risk. First of all, cost aspects are considered as a motivation for the franchisor to apply plural form. In applying agency theory, Ehrmann and Spranger (2004) explained that mixing franchised units with company-owned units enables the franchisor to reduce costly behavioral uncertainty tied to information asymmetries. Franchisees and managers of company-owned units are characterized by distinct attitudes and motivations. As Brickley and Dark (1987) asserted, the costs of monitoring, free-riding and inefficient investments decrease when the franchisor is able to choose the organizational form, i.e. either franchising or ownership, and this effect depends on location specifics. Furthermore, plural form displays advantages as far as information costs are concerned. Minkler (1992) explained that franchisees are more highly motivated to collect, report and use local information on customers, on competitors, etc. than managers of company-owned units. According to this author, plural form enables optimizing efforts to seek and utilize local knowledge by identifying franchised units where information gathering is necessary, costly and critical to unit success. At the same time, the franchisor is conscious of the importance of opening company-owned units near franchised units in order to transfer and benefit from the information collected.

Secondly, growth aspects are also considered as a motivational factor for the franchisor to rely upon plural form. Rapid growth is a key to network success. Franchisors need to build a highly-visible and valuable brand name within a relatively short period of time by opening as many units as possible in various locations (Ehrmann and Spranger, 2004). Network growth often slows due to financial and human capital resource shortages. Choosing the plural form contributes to overcoming these resource constraints while increasing strategic flexibility (Cliquet, 2000). Franchisors can quickly expand their network thanks to both the financial (Caves and Murphy, 1976; Mathewson and Winter, 1985) and managerial (Thompson, 1994)
inputs of franchisees. In addition, franchisors have the possibility to open company-owned units at highly-visible locations, beyond the financial reach of franchisees. They can also maintain strategic flexibility by keeping the operations of some company-owned units in-house so as to enable retaining control over part of the business (Oxenfeldt and Kelly, 1968-69; Caves and Murphy, 1976; Norton, 1988).

The third driver for plural form is quality. First, plural form allows coping with unfavorable informational asymmetries by communicating internal franchisor information to franchisees (Gallini and Lutz, 1992). When employing the plural form, a showcase effect becomes apparent, thus enhancing franchisor ability to attract new franchisees through demonstrating the personal, financial and professional investment capacity in their own networks (Cliquet, 2000). According to Lewin-Solomons (1999), greater franchisor involvement in company operations reflects greater overlap between network management interests and franchisee interests. Plural form favors innovation and accelerates internal changes (Bradach, 1997, 1998; Lewin-Solomons, 1999; Cliquet and Nguyen, 2004). The coexistence of franchised units and company-owned units within the same network stimulates both exploration and operations, while serving to improve network innovation performance. Franchisees are more heavily oriented towards exploration because of their entrepreneurial skills and knowledge of the local market, whereas managers of company-owned units mainly concentrate on system operations. Sorensen and Sørensen (2001) indicated the existence of an organizational learning process within the plural form network. In addition, plural form allows creating a more competitive inter-network climate thanks to a potential benchmark set up between franchised units and company-owned units (Bradach, 1997). Company-owned units may serve as a data source and partner in an effort to benchmark franchisee performance. This benchmarking process may be considered in terms of not just financial performance, but also
unit cleanliness, customer friendliness, employee turnover, etc. Plural form thus leads to network excellence by means of this beneficial inter-network competition.

Lastly, risk aspects are also seen as a motivation for franchisors to choose plural form, by implementing a network-wide risk management system. According to Martin (1988) and Chaudhuri et al. (2001), every location features specific risks regarding the expected profitability profile based on locational characteristics. As a consequence, plural form enables the franchisor to optimize the notion of risk by directly operating units whose level of risk remains acceptable and by franchising the other units deemed attractive from a portfolio and brand image perspective.

This brief literature review on plural form enables to point out the numerous advantages of the coexistence of franchised units and company-owned units within a same network. These advantages are considered in terms of network management.

2.2. Franchising and performance

But, so far, the advantages of the plural form have been rarely highlighted in terms of network performance, even if authors such as Combs et al. (2004a) and Watson et al. (2005) have nevertheless underlined the need for research focusing on performance in franchising.

In franchising research, many authors have been interested in performance but mainly at the unit level, for instance comparing the performance of franchised units to this of non-franchised units. For instance, Anderson et al. (1998) compared the efficiency of 184 unaffiliated real estate brokerage firms and 92 affiliated ones. They concluded that both franchised and non-franchised firms were operating relatively inefficiently. Yoo et al. (1998) showed the superiority of franchised outlets compared to non-franchised ones in the refreshment place industry through a DEA method. Morey and Dittman (1995) studied 54

Internal benchmarking is relevant within a same network. It provides the franchisors with managerial recommendations useful to point out their best units and improve the performance of the least performing units. But, external benchmarking is also of interest to compare the performance of several networks in a same industry, and to examine the variables that influence the network performance.

Botti et al. (2009) implemented the DEA methodology to examine the efficiency of plural form networks in the French hotel industry. Nevertheless, their findings were not significant. The set of variables chosen by these authors, including for instance the territory coverage, were not relevant enough. Perrigot et al. (2009) also focused on a sample of French hotels networks using the DEA methodology. They concluded that plural form networks were more efficient than predominantly franchised networks. In these two papers, the focus was only on a small sample of hotels networks in France (less than twenty).
The main research hypothesis of this present paper is therefore:

\[ H1: \text{The plural form positively influences the network performance.} \]

Other research hypotheses to be tested as well in this paper are:

\[ H2: \text{The network size positively influences the network performance.} \]

\[ H3: \text{The network age positively influences the network performance.} \]

\[ H4: \text{The experience before franchising positively influences the network performance} \]

\[ H5: \text{The network internationalization positively influences the network performance.} \]

\[ H6: \text{The industry has an influence on the network performance.} \]

3. METHODOLOGY

3.1. Data

Several data sources are used to test the research hypotheses. On the one hand, 2007 *Top 200 Franchise Systems* published by *Franchise Times Magazine* (www.franchise-times.com) provides information about 200 US networks, such as industries, the amount of worldwide sales in million dollars, the number of units in the domestic market, the total number of units, the percentage of the units that are franchised, etc. On the other hand, 2008 *Annual Franchise 500* published by *Entrepreneur Magazine* provides additional information such as company age, network age, etc. The two better represented industries in the *Top 200 Franchise Systems* list are the restaurant industry and the hotel industry. That is the reason why the focus is made on the networks belonging to these two industries, in this paper. The final sample therefore includes 123 networks: 82 networks in the restaurant industry and 41 networks in the hotel industry.
3.2. Methodology

Descriptive statistics and models of linear regression are used to test the research hypotheses and examine the influence of the plural form, the internationalization, the size, etc. on the network performance.

3.3. Variables

“Performance” (PERF) is measured through the amount of worldwide sales in million dollars. As mentioned previously, there are several ways to measure performance. The variable “total sales” is often used to measure the performance at the network level (Botti et al., 2009; Perrigot et al., 2009) or at the unit level (Kosova et al., 2008). “Plural form rate” (PFR) is measured through the percentage of company-owned units within the networks.

“Internationalization” (INT) is measured through the percentage of the units that are located outside the domestic market. “Network size” (SIZE) is measured through the number of units in the domestic market. “Network age” (AGE) is measured through the number of years since the company franchised its concept. “Experience before franchising” (EXP) is computed from the year of company creation and the year of company franchising. IND represents the industry (1 for restaurants networks and 2 for hotels networks). Descriptive statistics for these variables are displayed in Table 1. It is observed that, in average:

- the worldwide sales of the network are equal to 2247 millions dollars,
- the plural form rate is equal to 23,15%,
- the network size in the domestic market is equal to 1299 units,
- the network age is equal to 28 years,
- the experience before franchising is equal to ten years,
- the percentage of units outside the domestic market is equal to 15%

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERF</td>
<td>123</td>
<td>200</td>
<td>56800</td>
<td>2247,39</td>
<td>5538,693</td>
</tr>
<tr>
<td>PFR</td>
<td>123</td>
<td>0,00</td>
<td>0,76</td>
<td>0,2315</td>
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<tr>
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<td>9</td>
<td>20755</td>
<td>1299,45</td>
<td>2591,382</td>
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<tr>
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<td>82</td>
<td>2</td>
<td>81</td>
<td>28,20</td>
<td>15,919</td>
</tr>
<tr>
<td>EXP</td>
<td>82</td>
<td>0</td>
<td>61</td>
<td>10,18</td>
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</tr>
<tr>
<td>INT</td>
<td>123</td>
<td>0,00</td>
<td>0,89</td>
<td>0,1497</td>
<td>0,20383</td>
</tr>
</tbody>
</table>

*Table 1: Descriptive statistics for the whole sample of networks*

The plural form rate is distributed as displays in Figure 1.

![Figure 1: Distribution of the plural form rate](image)

Table 2 and 3 display the same descriptive statistics than Table 1, but respectively for the restaurants networks and for the hotels networks. Some differences between these two industries appear in these tables.
### Table 2: Descriptive statistics for the restaurants networks

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERF</td>
<td>82</td>
<td>200</td>
<td>56800</td>
<td>2483,57</td>
<td>6664,574</td>
</tr>
<tr>
<td>PFR</td>
<td>82</td>
<td>.00</td>
<td>.76</td>
<td>.2440</td>
<td>.22347</td>
</tr>
<tr>
<td>SIZE</td>
<td>82</td>
<td>48</td>
<td>20755</td>
<td>1709,01</td>
<td>3078,360</td>
</tr>
<tr>
<td>AGE</td>
<td>61</td>
<td>2</td>
<td>81</td>
<td>29,62</td>
<td>16,277</td>
</tr>
<tr>
<td>EXP</td>
<td>61</td>
<td>0</td>
<td>61</td>
<td>8,41</td>
<td>12,316</td>
</tr>
<tr>
<td>INT</td>
<td>82</td>
<td>.00</td>
<td>.89</td>
<td>.1267</td>
<td>.19555</td>
</tr>
</tbody>
</table>

### Table 3: Descriptive statistics for the hotels networks

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERF</td>
<td>41</td>
<td>238</td>
<td>7594</td>
<td>1775,02</td>
<td>1810,701</td>
</tr>
<tr>
<td>PFR</td>
<td>41</td>
<td>.00</td>
<td>.76</td>
<td>.2063</td>
<td>.26518</td>
</tr>
<tr>
<td>SIZE</td>
<td>41</td>
<td>9</td>
<td>1900</td>
<td>480,32</td>
<td>510,313</td>
</tr>
<tr>
<td>AGE</td>
<td>21</td>
<td>6</td>
<td>52</td>
<td>24,05</td>
<td>14,396</td>
</tr>
<tr>
<td>EXP</td>
<td>21</td>
<td>0</td>
<td>46</td>
<td>15,33</td>
<td>15,292</td>
</tr>
<tr>
<td>INT</td>
<td>41</td>
<td>.00</td>
<td>.81</td>
<td>.1956</td>
<td>.21456</td>
</tr>
</tbody>
</table>

4. RESULTS

The results of the linear regression models are shown in Table 4. In the model 1, I included only the control variables, whereas in the model 2, I added to these control variables the variable PFR in order to test the main hypothesis of this paper. The $R^2$ of models 1 and 2 are respectively equal to 50,1% and 53,7%. These $R^2$ are considered satisfactory. And, the addition of the variable PFR allows to improving the model. The variable PFR exerts a significant and positive impact on PERF at the 0.01 level. Networks with a higher percentage of company-owned units are more likely to have higher worldwide sales than networks with a smaller percentage of company-owned units. The research hypothesis H1. is therefore supported.

As far as control variables are concerned, the variable SIZE has a significant and positive impact on PERF at the 0.01 level. Larger networks, in the domestic market, are more likely to
have higher worldwide sales than smaller ones. The research hypothesis H2. finds therefore support. Moreover, the variable INT has a significant and positive impact on PERF at the 0.01 level. The more the network is internationalized, the higher are the worldwide sales. The research hypothesis H5. is therefore supported. Nevertheless, the variables AGE, EXP and IND do not have any significant impact on PERF. Network age, experience before franchising and industry do not influence the worldwide sales. The research hypotheses H3., H4. and H6. are therefore not supported.

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFR</td>
<td>7284,298**</td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>1,332***</td>
<td>1,322***</td>
</tr>
<tr>
<td>AGE</td>
<td>-8,216</td>
<td>1,809</td>
</tr>
<tr>
<td>EXP</td>
<td>-11,808</td>
<td>-59,345</td>
</tr>
<tr>
<td>INT</td>
<td>8072,599**</td>
<td>9597,209***</td>
</tr>
<tr>
<td>IND</td>
<td>460,364</td>
<td>729,544</td>
</tr>
<tr>
<td>Constant</td>
<td>-1028,762</td>
<td>-2689,701</td>
</tr>
<tr>
<td>R²</td>
<td>0,501</td>
<td>0,537</td>
</tr>
<tr>
<td>ΔR²</td>
<td></td>
<td>0,36</td>
</tr>
<tr>
<td>F</td>
<td>15,250***</td>
<td>14,492***</td>
</tr>
</tbody>
</table>

Dependent variable: PERF
*: Significant at the 0.10 level
**: Significant at the 0.05 level
***: Significant at the 0.01 level

Table 4: Results of the linear regression models

5. DISCUSSION

5.1. Research contributions

In this paper, it is shown that large networks having a high percentage of company-owned units and expanding outside their domestic market perform better than the other networks. This paper therefore contributes to the literature on plural form. Indeed, many advantages have already been highlighted in the literature. They have often dealt with network
management (innovation, concept uniformity, network development, etc.). This research work underlines a new advantage of the plural form, in terms of network performance. The higher the percentage of company-owned units in the network, the higher is the network performance. It goes further than the recent papers of Botti et al. (2009) and Perrigot et al. (2009) with a much larger sample of networks, not only in the hotel industry but also in the restaurant industry, and in another market than France: the US. Moreover, this is a new contribution to the literature dealing with franchising in the hospitality sector. Indeed, franchising is very well developed in the restaurant and hotel industries whatever the countries. And, authors often focus their analyses on these specific industries in their franchising research. It also appears that the network size and the network internationalization have a significant and positive impact on the network performance.

In terms of managerial implications, this paper reinforces the interest for the franchisors of mixing both: franchised units and company-owned units within their network. Indeed, it increases the network performance, additionally to the fact that the company-owned units can serve as laboratories for testing the innovation and training the new franchisees.

5.2. Limits and tracks for future research

This paper presents several limits. First of all, this is a cross-sectional study. Working on several years could contribute to better understand the influence of the plural form and its evolution over years, on the network performance and its evolution over years. Secondly, only restaurants and hotels networks are included in the database. Other industries such as real estate, clothing, services for businesses, etc. could be investigated in order to generalize the results. It would also enable to enlarge the number of networks present in the database. Finally, other measures of performance could be taken into account: growth in terms of sales, growth in terms of number of units, etc. Indeed, “worldwide sales” is not enough to accurately
measure the real performance of the network. Several variables linked to performance could be used together in a DEA model for instance.

REFERENCES


