

A Cross-Cultural Comparison of the Plural Forms in Franchise Networks: United States, France, and Brazil*

by Rajiv P. Dant, Rozenn Perrigot, and Gérard Cliquet

This paper explores the phenomenon of plural forms (i.e., the simultaneous coexistence of franchised and company-owned outlets, operationally, the proportion of company-owned units in franchise systems based on literature, in franchising across three countries from three continents, namely the United States, France, and Brazil in what is ostensibly the first cross-cultural comparison of its kind. Based on 2003 secondary data, we carry out a series of inferentially grounded analyses involving the plural forms phenomenon from an exploratory perspective. Though subsequently, comparative regression models are also evaluated using eight purported determinants of the use of the plural forms, the essential character of the paper remains essentially exploratory. The results show that the proportion of company-owned outlets is almost three times greater in France and Brazil as compared to the United States. We also found that in the U.S. sample, three of the eight predictors significantly predict the occurrence of plural forms (namely, average total required investment and cash liquidity requirement have a negative impact, and company age has a positive impact); the French model was not statistically significant, whereas in the Brazilian

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Rajiv P. Dant is the Helen Robson Walton Centennial Chair in Marketing Strategy at the University of Oklahoma.

Rozenn Perrigot is associate professor of marketing/retailing in the Graduate School of Business Administration (IGR-IAE) at the University of Rennes 1 and in the ESC Rennes School of Business in Rennes, France. She is also visiting professor at the International Franchise Academy, Beijing Normal University, Zhuhai Campus, China.

Gérard Cliquet is professor in the IGR-IAE School of Business Administration at the University of Rennes 1 in France.

Address correspondence to: Rajiv Dant, Price College of Business, Division of Marketing and Supply Chain Management, University of Oklahoma, 307 West Brooks, Norman, OK 73019-4001. Tel: (405)-325-4675. Fax: (405)-325-7688. E-mail: rdant@ou.edu.

sample, two predictors influence the plural forms phenomenon (i.e., total network size has a positive significant effect and incidence of internationalization has a significant negative impact).

Introduction

The intriguing issue of plural forms in franchising has received consistent research attention from franchising scholars ever since Harrigan (1984) introduced the concept of tapered integration to the strategy literature. Both conceptual writings (e.g., Dant, Kaufmann, and Paswan 1992; Bradach and Eccles 1989) and empirical articles (e.g., Dant and Kaufmann 2003; Lafontaine and Shaw 1999; Bradach 1997; Lafontaine and Kaufmann 1994) have attempted to expound on this relatively new notion of stable dual distribution. Much of this literature is based on theoretical perspectives derived from the North American experience.

Earlier accounts of franchising were driven by either support or refutation of the ownership redirection hypothesis (cf. Oxenfeldt and Kelly 1968), which envisioned nearly pure, fully company-owned systems for older, resource-flush franchise systems in the steady state, whereas the plural forms account of franchising recognizes the synergies to be derived from simultaneously maintaining a mix of both company-owned and franchised units in the system. In effect, then, the plural forms thesis (operationally, a collection of theoretical perspectives nested within the general concept of tapered organizations proposed by Dant, Paswan, and Kaufmann 1992; Bradach and Eccles 1989; Harrigan 1984) phenomenologically reconciles the theory with much of the contemporary franchising reality, where the plural form is widely used. Consequently, the plural forms thesis can legitimately be portrayed as the successor to the ownership

redirection thesis, which has been one of the main preoccupations of the franchising scholars for over 35 years. As with most nascent theories, considerable articulation of the framework remains to be accomplished both from grounded descriptive literature and empirical investigations. This paper is offered as a contribution to the empirically grounded cross-cultural description of the plural forms phenomenon.

The vast majority of previous investigations of plural form have all been single-country investigations. For instance, Lafontaine and Shaw (1999), Dant and Kaufmann (2003), and Ehrmann and Spranger (2004) focused their investigations within the U.S. market, whereas Cliquet (2000), López and Gonzales-Busto (2001), Windsperger (2004b), and Windsperger and Dant (2006) have investigated different European markets, while Frazer (2001) was focused on the Australian experience. The sole exception to this pattern is a recent exploratory analysis comparing French and Brazilian franchising case studies (Azevedo and Silva 2005), underscoring the need for mounting a data-driven cross-cultural investigation of the plural forms phenomenon such as being attempted in the present paper.

As explained by Bradach (1998), the plural form model within a franchising context is aimed at meeting four managerial challenges related to (1) spatial expansion; (2) brand protection; (3) reaction against competition; and (4) service and/or product concept evolution. It was first empirically defined within a franchising context through an exploratory research carried out in the U.S. restaurant industry (Bradach 1997). Several

articles on this phenomenon have attempted to compare plural forms or tapered integration with other theoretical approaches such as the signaling theory (cf. Gallini and Lutz 1992) and the resource-based theory (cf. Dant and Kaufmann 2003), or the property rights and transaction cost theories (Windspurger and Dant 2006; Windspurger 2004a, 2004b), or the theory of incentives and the agency theory (Chaudey and Fadario 2004). Other related articles have focused on particular elements of the larger nomological network surrounding the plural forms phenomenon such as innovation (Cliquet and Nguyen 2004; Lewin-Solomons 1999), the organizational learning process (Sørensen and Sørensen 2001), or the royalty rate (Pénard, Raynaud, and Saussier 2003). Ehrmann and Spranger (2004) have attempted to examine the cost reduction, quality enhancement, growth stimulation, and optimized risk control related to the plural forms whereas Cliquet (2000) has sought to examine the advantages and drawbacks associated with plural form networks within the context of hotels industry, the bakery sector, and retail cosmetics distribution in France.

As noted earlier, this emergent literature base is being developed using a series of single-country studies set in Australia, Austria, France, Germany, Spain, and most importantly in the United States. But as far as we know, there is no attempt to empirically compare the plural forms phenomenon across countries with the sole exception of the recent exploratory comparative case studies by Azevedo and Silva (2005) discussed earlier. This paper aims to empirically compare the plural form phenomenon across Brazil, France, and the United States and to test some variables likely to explain the observed differences. The potential contributions of such an undertaking are easy to state. From a theoretical perspective, it is only through such cross-cultural empirical investigations that we get a genuine sense

of the generalizability of our theories and their boundary conditions. Managerially, the franchisors must adapt to their local cultural imperatives and business practices if they are to succeed cross-culturally. And it is comparative analyses such as these that alert the managers to the cross-cultural idiosyncrasies.

Literature Review

The literature review attempted in the succeeding discussion aims at selecting variables for our empirical analyses. Two key constraints related to these variables had to be managed for such an enterprise. First, these variables had to be available in the extant secondary data sources utilized. Second, for consistency reasons, these variables had to be present in all three databases for their retention. In other words, we followed the principle of least common denominator in the retention of the variables utilized for developing the database for our empirical analyses. In the process of culling these variables, we also utilize this opportunity to inform the interested reader about the broad-based literature related to this topic, recognizing at the onset that the selected variables utilized in the present investigation are necessarily a small subset of the former due to the constraints of the variables being available in the extant secondary data sources. That said, the accumulated literature base on plural forms phenomenon is impressive considering its relative recent vintage, that is, the plural forms concept has been studied in detail for only a handful of years (albeit often in an exploratory manner), and we already see the emergence of four categories of models related to this phenomenon. These are as follows:

- (1) Econometric models drawn from economics based research.
- (2) Channel management models drawn from accounting data.
- (3) Models of rupture in the franchise process.

- (4) Models founded on spatial considerations drawn from management sciences, or management and marketing, or even geography.

The first category of econometric models relies on regression analyses and econometric techniques using databases. These are purely statistical studies aimed at proving various hypotheses culled from theories such as the agency theory (e.g., Shane 1998a), or founded on the study of certain concepts such as the importance of the brand name (e.g., Lafontaine and Shaw 1999), or the elements of the marketing mix such as price (Lafontaine 1998) or advertising (Michael 1999). The dependent variable in these models is generally the proportion of franchised and company-owned units. They tend to be global models of store network study. The second category of channel management models has been initiated by Kaufmann, Gordon, and Owers (2000) and relies on the notions of accounting and economic value analysis. The third type of modeling the plurality of forms uses the study of ruptures in the franchise process (Frazer 2001). The recent nature of these two last categories of models does not allow in-depth development as only one reported investigation has hitherto occurred for each (i.e., Frazer 2001; Kaufmann, Gordon, and Owers 2000). Finally, the fourth category of model studies particular aspects of the management of store networks (e.g., innovation [cf. Sørensen and Sørensen 2001] or location [cf. Ghosh and Craig 1991]).

Econometric Models

Most of the econometric research linked to plural forms has been carried out in the United States so far. The modeling efforts related to the relative proportion of franchisee activity compared to that of company-owned units started in the mid-1980s. Based on a rather simplistic first model (O'Hara and Thomas 1986),

Thomas, O'Hara, and Musgrave (1990) developed a model with the ratio of per unit sales in company-owned outlets and the per unit sales in franchisee-operated outlets as the dependent variable and a series of predictor variables. The main conclusion of the model, evaluated using 10 sectors of activity over a 10-year period, was that when there are too many company-owned units, losses are noticed. This seemingly invalidated the life-cycle argument implied in the resource constraints perspective espoused by the ownership redirection thesis, which argued that larger, older, and hence more resource flush franchisors will repurchase their successful franchisee-operated units during the maturity stage of the organizational life cycle (Oxenfeldt and Kelly 1968).

Many of these investigations have resulted in nonsignificant, inconclusive, and/or inconsistent findings. For example, a related longitudinal data analysis of franchise networks belonging to the same 10 sectors over a 10-year period demonstrated that only franchisee sales explain the percentage of company-owned units (Thomas, O'Hara, and Musgrave 1990). The implication is that it would not be in the interest of the franchisor to internalize and/or increase the percentage of company-owned units because its rate of return otherwise would be inferior to that of its franchisees. This may explain the behavior of certain franchisors that cherry-pick and own the larger, more profitable units and let the smaller marginal ones be run by the franchisees, an implication consistent with the ownership redirection thesis (Oxenfeldt and Kelly 1968) but contradictory to the conclusion reached by Thomas, O'Hara, and Musgrave (1990). Research on salary levels seems to confirm this latter tendency insofar as the salaries of employees in company-owned units are higher and increase more rapidly than their counterparts in franchises (Krueger 1991). More recent studies have shown that the

proportion of franchises in retail trade is positively connected to the size and geographic expansion and negatively associated with the rate of growth and the size of investment but not system age or royalty rates (Ehrmann and Spranger 2005a; Alon 2001).

Turning to more managerially oriented literature, we note the econometrically oriented papers of Brown (1998), Lafontaine (1992), and Lafontaine and Shaw (1999). Using the transaction cost theory, Brown (1998) shows that firms lean toward a long-term equilibrium between the proportions of franchised units and company-owned units. Firms apparently use a more efficient system of internal promotions in order to motivate the employees of company-owned units and leave it up to the franchisees to motivate their own employees who would otherwise be inevitably disadvantaged with contracts founded on performance. These kinds of contracts imply high monitoring costs for the operator. Using multi-sector data, Lafontaine (1992) demonstrated that the proportion of franchisee-operated units rises with the geographic dispersion, the rate of growth, and the age of the network. In addition, she explores the determinants of the rate of repurchase of the franchisee contracts by the franchisor and notes that the econometric estimations better explain the proportion of franchised units than the terms of the franchise contracts. However, the proportion of franchised units decreases with the average sales and the capital invested per store.

Lafontaine and Shaw (2005) carry out a longitudinal analysis of 3,625 North American franchised chains from 1980 to 1997. Using data on creation date of the system, the number of years of franchising experience, and annual data on the number of company-owned units versus franchised units, the authors report noticing a stabilization pattern after about eight years of franchise experience as the systems tend to maintain an

average between 10 and 20 percent of their units as company-owned units regardless of the sector, the network size or the rate of growth. However, large differentials were found across firms and across sectors in terms of aspiration levels of company-owned outlets. For example, the targeted company-owned proportion in the restaurant industry is around 20 percent, which is far higher than that of construction and maintenance services (5 percent) or of car repair sectors (10 percent). Moreover, networks offering services have a higher proportion of franchisee-operated units as compared to product-based networks.

While controlling for the effects due to sector, size, and age, Shane (1998a) proves that young franchise networks are more likely to survive if they are structured to save agency costs (i.e., by not using the practices of passive ownership and master franchising). In another intriguing investigation, Shane (1998b) uses the analysis of a database of American franchisors from 1991 to 1994 to show that the characteristics of the franchisors have curvilinear effects on the distribution of franchised and company-owned units within the plural form networks, whereas the agency theory hitherto had confirmed that these effects were linear (Lafontaine and Kaufmann 1994; Lafontaine 1991). These characteristics involve geographic dispersion, royalty rates, network growth rate, network size, right of entry, and sum of initial investment.

Some recent studies have more closely concentrated on the effects of certain elements of the marketing mix such as price or advertising. Lafontaine (1998) studies price dispersion in the fast-food chains of two American cities: Detroit and Pittsburgh. She shows that network operators do not look for price uniformity even in company-owned units, and that plural form networks have the highest degree of dispersion but that the price dispersion is higher in a pure franchised network than

in a pure company-owned network. The results also suggest that fast-food network operators lose the control of their pricing system to a greater extent when the network is franchised than when it is company owned. Hence, a positive relationship is demonstrated between royalty rates and price dispersion.

Michael (1999), on the other hand, asks a very operational question: do franchise networks do enough advertising? In order to respond to this question, the author uses data from two sectors—the restaurant industry and the hotel industry—while controlling variables such as network size, life cycle phase, geographic dispersion, market segment, alcohol sales, resources availability, and quality. The data reveal that advertising costs diminish with a rising rate of franchised units. This tends to show the existence of opportunistic behavior from both the franchisors and the franchisees within a strongly franchised network. The author therefore advises the use of tools other than advertising to assure differentiation and competitive advantage within franchised networks. However, this problem requires different resolutions based on the development stage of the chain. At the very beginning of the chain life cycle, the agency theory can explain the phenomenon mentioned earlier. But once the chain is established, it can focus more on profitability by opening more company-owned units according to the resource-based theory in order to maintain a more effective control (Castrogiovanni, Combs, and Justis 2006) and then better manage the way advertising budget is spread over the network.

Channel Management Model Based on Accounting Data

Kaufmann, Gordon, and Owers (2000) developed a model based on the hypothesis that certain operators seek for maximizing the long-term economic value of their firm, whereas others prefer maximizing the accounting value and thus

the net revenue. The “maximizers” of accounting value, solely interested in the efficiency of capital, will be more likely to opt for company-owned management, whereas the “maximizers” of economic value, conscious of the impact of the agency costs, will tend to lean toward franchised units. The “maximizers” of accounting value are able to become “maximizers” of economic value by franchising their units after having initially bought them back. The case in point referred to the memorable change in the strategy of *PepsiCo*, which decided to franchise its *Pizza Hut* units in the 1990s after having bought them back in the 1980s (Rudnitsky 1995).

Models of Rupture in the Franchise Process

Frazer (2001) proposes a model to explain the rupture (i.e., discontinuation or dissolution of the franchise relationship) in the franchise process. Two reasons are advanced: the lack of franchisor support and the life cycle phase of the chain. Using structural equations modeling, the author attempts to link these two variables with the rupture and the following two principal forms: conflict and company-owned conversion (or even reselling or closing, even if these solutions are to be avoided in order not to compromise the public image of the trade-name). The results, based on Australian data, show that the lack of franchisor support was not a significant reason for rupture. However, the life cycle phase is a significant reason for the rupture of the franchise process and especially at the end of the network development phase.

Models Based on Management Science, Management, Marketing, or Geography

A series of marketing variables is used to explain the proportion of company-owned units (i.e., the rigidity of the marketing concept, the marketing concept

improvement, and/or innovation, the territory coverage, and the existence of services in the definition of the concept) (Cliquet, Pénard, and Saussier 2003). Spatial variables are developed as well, but mainly for strictly franchised chains (Kaufmann, Donthu, and Brooks 2000; Ghosh and Craig 1991; Kaufmann and Rangan 1990).

All the previous research papers mentioned earlier appear to stress the advantages provided by mixing both the franchisee operated and company ownership arrangement within the same network. Indeed, plural forms seem to enhance the synergies and result in an increase in the network performance, even if additional costs can be induced by the higher complexity associated with plural forms (Ehrmann and Spranger 2005b), a double management organization, etc. A direct test of these synergistic payoffs was recently reported by Dant and Kaufmann (2003), where the authors pitted the competing explanations of the resource constraints view and the signaling theory view in an empirical setting involving the fast-food franchisors in the United States.

Hence, in the present investigation based on the foregoing review of the literature, and combined with the availability of data, we have chosen to include the following eight variables in the analysis:

- (1) Company age
- (2) Total network size
- (3) The average total investment required
- (4) The average franchise fee
- (5) The average ongoing royalty fee rate
- (6) The cash liquidity requirement
- (7) The incidence of internationalization
- (8) Sectoral differences

Table 1 summarizes the literature anchoring associated with the selected variables.

Methodology and Results

Data

As evident from the paper's title, three countries were chosen to compare the use of the plural form in franchising networks, namely the United States, Brazil, and France. Three primary reasons guided this selection of countries. First, franchising form of retailing is thriving in all three countries and many service and product retailing companies use franchising to develop and expand their retailing business in these countries. Second, these three countries can be considered as having the most dynamic economies in their respective continents. Finally, this selection also allows us to provide a data-based discussion to the recent exploratory analysis by Azevedo and Silva (2005) focused on comparing the French and Brazilian franchising. The U.S. data are included to provide a baseline to these findings. According to the figures available from the *World Franchise Council* and the *European Franchising Federation*, the following profile of the franchising industry emerges. In the United States, there are over 1,500 operating franchising chains or networks that represent more than 760,000 franchisees and almost 18 million employees (or about 23 employees per franchise outlet). The Brazilian market is comprised of about 900 franchisors and 19,000 plus franchisees, employing over 500,000 employees (or about 26 employees per outlet). Finally, France boasts about 765 franchise networks involving nearly 35,000 franchisees, employing about 400,000 workers (or about 11 workers per outlet).

Though the chosen countries share the commonality of well-diffused franchising sectors in the economy, they are obviously heterogeneous in other ways. They do, however, represent the largest countries in three separate continents but vary dramatically in terms of their land mass or area and the geographic

density of franchising. From the figures provided by the *World Bank Group*, we can conclude that there is, on an average, a franchise outlet every 12.63 km² in the United States, every 15.76 km² in France, and every 447.37 km² in Brazil. Even in terms of populations, the three countries vary dramatically, and based on the *World Bank* data as far as the density of franchising is concerned, there is a franchise outlet for every 382.63 inhabitants in the United States, the corresponding numbers for France and Brazil being 1,708.57 and 9,294.74 inhabitants, respectively. Hence, clearly, franchising seems to have penetrated the U.S. markets most deeply, followed by France and Brazil in that order.

As regards the data sources, the U.S. data were taken from the *Entrepreneur's Annual Franchise 500* (2004) ranking and represent figures related to the year 2003. The Brazilian data were culled from the *2004 Guide of Opportunities in Franchising* published by the *Institute of Franchising* and again correspond to the situation in 2003. Finally, the French data were recorded from the *2004 Franchising Directory* published by the *French Federation of Franchising*. These figures relate to the year 2003 as well. We are, of course, conscious of the limitations of these secondary data sources. Specifically, two main limitations are noteworthy. First, none of the directories provide an exhaustive listing of franchised networks within their countries because the published data are based on franchisors responding to the surveys utilized for creating these directories; moreover, we are unable to confidently estimate response rates associated with these three national surveys. Second, given its survey-based nature, we can surmise that the sample probably overrepresents networks in development phase in that being included in these directories allows such developing networks to broadcast their networks to prospective potential franchisees. In sum, it is pos-

sible that networks that have stopped their expansion plans are not as well represented in the data set. And yet these databases remain the best secondary sources of data in the countries involved. The foregoing analysis is based on a database comprised of 471 U.S. franchise systems, 457 French systems, and 468 Brazilian chains.

Descriptive Analyses

Table 2 summarizes the descriptive properties of the comparative data utilized in this study across the three countries despite some missing data (e.g., year of franchising network creation and total network size or the term of franchise agreement in the case of Brazil) or incomplete data (e.g., company age in France was available for only 109 out of the total 457 French systems; similarly, cash liquidity requirements were not universally available in any country). Probably the most striking data patterns concern the number of franchised units (i.e., about eight times larger in the United States than in France and in Brazil) while the occurrence of plural forms (operationalized as proportion of units operated as company-owned outlets based on literature [cf. Dant and Kaufmann 2003; Bradach 1997]) is dramatically lower at about 10 percent in the United States as compared to about 35 percent in France and in Brazil.

Table 3 provides the details of the sectors represented in the data set. The sectors shown in Table 3, subsequently subcategorized into (1) product and retail sector, and (2) service sector for inferential analysis (Table 4), show some interesting patterns. We separated product and retail sector from service sector (i.e., hotels and restaurants, services like hairdressers) because the latter needs more control and training (e.g., for restaurant chains; cf. Bradach [1998]) and hence represents an a priori expectation of a higher proportion of

Table 2
**Descriptive Statistics for the Main Features of the U.S.,
 French, and Bazilian Networks^a**

Variables	Country	N	Mean	Standard Deviation
Company Age (in Years)	United States	471	25.87	17.04
	France	109	29.10	25.57
	Brazil	455	17.88	16.55
	Total	1035	22.70	18.43
Age of the Franchising Network ^b	United States	471	17.46	11.91
	France	453	13.41	13.73
	Brazil	NA	NA	NA
	Total	924	15.48	12.98
Number of Domestic Franchised Units	United States	469	479.94	1275.11
	France	453	57.43	115.74
	Brazil	435	65.67	190.16
	Total	1357	206.10	785.39
Number of Domestic Company-Owned Units	United States	469	76.52	493.54
	France	454	26.77	56.85
	Brazil	423	8.61	28.86
	Total	1346	38.40	294.85
Total (Domestic + Overseas) Network Size ^b	United States	471	762.46	2558.68
	France	457	140.20	585.67
	Brazil	NA	NA	NA
	Total	928	456.02	1893.40
Incidence of Internationalization (0 = No, 1 = Yes)	United States	471	0.69	0.46
	France	456	0.48	0.50
	Brazil	452	0.20	0.40
	Total	1379	0.46	0.50
Average Total Investment Required ('000s of Dollars)	United States	471	625.91	2714.71
	France	371	246.29	516.50
	Brazil	415	44.13	127.31
	Total	1257	321.79	1703.97
Average Franchise Fee ('000s of Dollars)	United States	471	28.66	29.63
	France	457	13.66	13.55
	Brazil	405	7.29	6.28
	Total	1333	17.01	21.57
Average Ongoing Royalty Fee Rate (in Percent)	United States	471	4.88	3.07
	France	341	4.10	4.02
	Brazil	336	7.89	7.99
	Total	1148	5.53	5.45
Cash Liquidity Requirement ('000s of Dollars)	United States	381	102.40	140.21
	France	290	98.46	117.20
	Brazil	386	8.80	15.71
	Total	1057	67.14	113.51
Extent of Existing Plural Form (in Percent) ^c	United States	467	9.45	18.80
	France	442	36.17	33.31
	Brazil	422	34.68	32.85
	Total	1331	26.32	31.43
Term of Franchise Agreement (in Years) ^b	United States	434	11.41	5.18
	France	428	5.79	2.38
	Brazil	NA	NA	NA
	Total	862	8.62	4.92

^aAll information refers to the year 2003.

^bSignificantly different from each other in independent sample t-tests ($p < .0001$).

^cOperationalized as proportion of units operated as company-owned outlets.

Table 3
Sectors across Countries

Sector Descriptions	Combined Frequencies		United States		France		Brazil	
	Counts	Percentages	Counts	Percentages	Counts	Percentages	Counts	Percentages
Specialized Food (e.g., Bakeries)	125	8.95	50	10.62	33	7.22	42	8.97
Nonspecialized Food (e.g., Supermarkets)	19	1.36	3	0.64	11	2.41	5	1.07
Retail for Individual Consumption (e.g., Clothes, Shoes)	165	11.82	7	1.49	87	19.04	71	15.17
Retail for Home Consumption (e.g., Furniture)	88	6.30	12	2.55	50	10.94	26	5.56
Other Specialized Retail Shops (e.g., Flowers House (e.g., House Equipment)	202	14.47	63	13.38	88	19.26	51	10.90
Total Product and Retail Sector	647	46.35	160	33.97	284	62.14	203	43.38
Services (e.g., Hairdressers)	528	37.82	217	46.07	111	24.29	200	42.74
Hotels and Restaurants	221	15.83	94	19.96	62	13.57	65	13.89
Total Service Sector	749	53.65	311	66.03	173	37.86	265	56.62
Total Number of Systems	1396	100	471	100	457	100	468	100

Table 4
ANOVA Results: Extent of Existing Plural Forms^a across Services versus Product and Retail Sectors

Country	Products and Retail versus Services	Counts ^b	Percentages	Mean ^c	Standard Deviation ^d	Notes
United States	Service Sector	308	65.95	9.34	18.60	An inspection of the means shows that the U.S. mean is lower than that of France and Brazil. This is corroborated by Scheffe's test result noted below.
	Product and Retail Sector	159	34.05	9.67	19.24	
	Total	467	100	9.45	18.80	
France	Service Sector	167	37.78	28.97	32.19	An inspection of the means also shows that the service sector means are consistently lower than the product and retail sector, an inference supported by the significant ANOVA effect.
	Product and Retail Sector	275	62.22	40.54	33.28	
Brazil	Total	442	100	36.17	33.31	
	Service Sector	235	55.69	31.79	32.27	
Total	Product and Retail Sector	187	44.31	38.30	33.30	
	Total	422	100	34.68	32.85	
ANOVA Results	Service Sector	710	53.34	21.39	29.13	Scheffe's Post Hoc Test ^d
	Product and Retail Sector	621	46.66	31.96	32.99	
Effect of	Total	1331	100	26.32	31.43	Power (1- β)
Country				<i>p</i> -Value		0.999
Sector						0.966
Country \times Sector						0.719
				<i>F</i> (<i>df</i>)		
				109.326(2, 1325)		
				14.311(1, 1325)		
				4.025(2, 1325)		

^aOperationalized as proportion of company-owned units within the network.

^bThese counts do not correspond to the raw counts shown in Table 2 because of the listwise deletion rule invoked in ANOVA run.

^cThe descriptive statistics refer to the extent of existing plural form systems.

^dScheffe's multiple pair comparisons were not possible for Sector Effect because it is a dichotomy.

company-owned units. As Table 3 shows, the United States and Brazil have more service sector chains as compared to product and retail sector chains, a trend reversed in the case of France. This can be explained either by a less developed networking process in the service sector in France or by the degree of concentration within the product sector and retail versus the service sector or possibly a combination of these two possibilities. There are some noteworthy trends within sectors as well. For instance, specialty retail shops (e.g., florists) dominate the product and retail chains, followed by individual consumption retail franchises (e.g., clothes, shoes), with specialized food franchises (e.g., bakeries) bringing in the third rank. Country-specific differences also persist within these latter rankings (cf. Table 3). Within the service sector, specialty service franchises (e.g., hairdressers) dominate over the hotels and restaurants counts in combined frequencies as well as country-specific frequencies. Concerning the internationalization process, we find that 68.74 percent of the U.S. chains operate internationally (only 31.26 percent are domestic-only chains) (cf. Table 5). In contrast, the break-up of international versus domestic-only chains in France is 47.85–52.15 percent; the corresponding numbers for Brazil are 20–80 percent.

As already noted earlier, certain data points in Table 2 were not available from all three countries. Most notably, Brazilian database did not include information about (1) the age of the franchising network, thus precluding a comparative analysis of years of business experience prior to the start of franchising; (2) the number of franchised units operating outside Brazil, thereby rendering a comparison of total network size (domestic plus overseas) impossible; and (3) the length of the term of franchise contracts, again rendering the analogous three-country comparison moot.

Inferential Analysis

The inferential comparisons across the three countries are carried out using the MANOVA (Table 6). MANOVA is useful when there are multiple metrically scaled criterion variables (i.e., seven in our case, namely [1] company age; [2] total network size in domestic markets [created by adding the number of domestic franchised units and the number of domestic company-owned units; cf. Table 2]; [3] average total investment required; [4] average franchise fee; [5] average ongoing royalty fee rate; [6] cash liquidity requirement; and [7] the extent of plural form) and one categorical predictor variable (i.e., the three countries) (Green 1978).

The overall test for differences in MANOVA across the predictor groups, a generalization of the univariate *F*-ratio, is based on statistics like Pillai's Trace or Wilks's Lambda that are convertible into equivalent multivariate *F*-ratios. If MANOVA indicates overall group differences, further analysis to determine the source of these group differences becomes appropriate, traditionally by ANOVA for each criterion variable (Cooley and Lohnes 1971). Similarly, when ANOVA suggests significant differences, multiple paired comparisons can be mounted using tests like Tukey's HSD, Bonferroni's inequalities, and Duncan's or Scheffe's tests. Among these Scheffe's is considered the most conservative and rigorous. The important thing to note is that all these procedures contain the experiment-wise Type I error rate to a prespecified level, usually 0.05 levels, and therefore safeguard against the alarming inflation in the error rate that would occur if a series of *t*-tests were mounted in lieu of the MANOVA–ANOVA–multiple paired comparisons routine.

In the case of the three variables where Brazilian data were missing, the analysis was reduced to a two-group comparison. Hence, independent sample

Table 5
ANOVA Results: Extent of Existing Plural Forms^a across Domestic versus International Chains

Country	Domestic versus International Chains	Counts ^b	Percentages	Mean ^c	Standard Deviation ^c	Notes
United States	Domestic-Only Chain	146	31.26	10.47	18.56	An inspection of the means shows that the U.S. mean is lower than that of France and Brazil. This is corroborated by Scheffe's test result noted below.
	International Chain	321	68.74	8.99	18.92	
	Total	467	100	9.45	18.80	
France	Domestic-Only Chain	230	52.15	36.78	35.45	An inspection of the means also shows that the International Chain means are consistently lower than the Domestic-Only Chain means, an inference supported by the significant ANOVA effect shown below.
	International Chain	211	47.85	35.46	30.95	
	Total	441	100	36.14	33.34	
Brazil	Domestic-Only Chain	328	80.00	36.60	32.85	An inspection of the means also shows that the International Chain means are consistently lower than the Domestic-Only Chain means, an inference supported by the significant ANOVA effect shown below.
	International Chain	82	20.00	23.52	27.79	
	Total	410	100	33.99	32.30	
Total	Domestic-Only Chain	704	53.41	31.24	33.10	An inference supported by the significant ANOVA effect shown below.
	International Chain	614	46.59	20.03	27.65	
	Total	1318	100	26.02	31.18	
ANOVA Results						
Effect of				<i>p</i> -Value	Power (1- β)	Scheffe's Post Hoc Test ^d
Country			<i>F</i> _(df)	.000	0.999	U.S. mean is different and lower than
Domestic versus International			94.921 _(1, 1312)	.003	0.966	that of France and Brazil, which are
Country \times Domestic/International			4.193 _(2, 1312)	.015	0.719	alike.

^aOperationalized as proportion of company-owned units within the network.

^bThese counts do not correspond to the raw counts shown in Table 2 because of the listwise deletion rule invoked in ANOVA run.

^cThe descriptive statistics refer to the extent of existing plural form systems.

^dScheffe's multiple pair comparisons were not possible for Domestic versus International Chain Effect because it is a dichotomy.

Table 6
Results of MANOVA, ANOVA, and Scheffe's Paired Comparisons on Country Effects^a

Variables	Country	N	Mean	Standard Deviation (SD)	$F_{(df=2, 687)}$	p-Value	Power (1-β)	Scheffe's Paired Comparisons (1-β)
Company Age (in years)	United States	378	25.54	15.93	15.63	.000	0.999	United States and France Significantly Higher than Brazil
	France	77	26.75	19.99				
	Brazil	235	17.99	18.61				
Total Network Size in the Domestic Market	Total	690	23.10	17.72	12.57	.000	0.997	France and Brazil Significantly Lower than United States
	United States	378	517.20	1568.82				
	France	77	130.74	149.18				
Average Total Investment Required ('000s of Dollars)	Brazil	235	52.73	156.81	30.74	.000	0.999	United States and France Significantly Higher than Brazil
	Total	690	315.89	1186.25				
	United States	378	334.59	609.12				
Average Franchise Fee ('000s of Dollars)	France	77	268.38	242.70	152.28	.000	0.999	Each Country Is Significantly Different: United States > France > Brazil
	Brazil	235	37.56	31.82				
	Total	690	226.04	478.16				
Average Ongoing Royalty Fee Rate (in Percent)	United States	378	28.92	18.11	23.29	.000	0.999	United States and France Significantly Lower than Brazil
	France	77	19.93	14.47				
	Brazil	235	7.47	6.82				
Cash Liquidity Requirement ('000s of Dollars)	Total	690	20.61	17.75	61.41	.000	0.999	United States and France Significantly Higher than Brazil
	United States	378	5.02	2.79				
	France	77	4.58	3.78				
Extent of Existing Plural Form (in Percent) ^b	Brazil	235	7.68	7.53	87.46	.000	0.999	France and Brazil Significantly Higher than United States
	Total	690	5.87	5.17				
	United States	378	103.00	140.59				
Multivariate Results (MANOVA) Summary	France	77	109.38	73.67	36.56	.000	0.999	Significant <i>Manovova Justified Running ANOVAs</i>
	Brazil	235	8.56	15.92				
	Total	690	71.55	116.43				
Pillai's Trace	United States	378	9.57	18.69	43.76	.000	0.999	
	France	77	29.83	29.29				
	Brazil	235	36.72	32.60				
Wilks's Lambda	Total	690	21.08	28.48	51.33	.000	0.999	
	United States	378	5.02	2.79				
	France	77	4.58	3.78				
Hotelling's Trace	France	77	19.93	14.47	36.56	.000	0.999	
	Brazil	235	7.47	6.82				
	Total	690	20.61	17.75				
Hotelling's Trace	United States	378	5.02	2.79	43.76	.000	0.999	
	France	77	4.58	3.78				
	Brazil	235	7.68	7.53				
Hotelling's Trace	Total	690	5.87	5.17	51.33	.000	0.999	
	United States	378	103.00	140.59				
	France	77	4.58	3.78				

Multivariate Results (MANOVA) Summary
Pillai's Trace 0.55 converted to $F_{(df=14, 1364)} \rightarrow$
Wilks's Lambda 0.48 converted to $F_{(df=14, 1362)} \rightarrow$
Hotelling's Trace 1.06 converted to $F_{(df=14, 1360)} \rightarrow$

^aAll information refers to the year 2003. The means and SDs differ from those presented in Table 1 because of the experiment-wise deletion of missing cases employed in MANOVA-ANOVA runs (i.e., these estimates are based on reduced N sizes).

^bExtent of existing plural form is operationalized as proportion of company-owned units within the network.

t-tests were carried out for these variables. The results of these tests are flagged in Table 2 with footnote b. In all three cases, there were significant differences ($p < .0001$) between the United States versus France. Hence, as we can see in Table 2, the U.S. franchise networks had significantly more experience before starting their franchising activities than the French ones by about four years. The U.S. franchise networks (counting both domestic and overseas units) are significantly larger than their French counterparts (U.S. mean = 762.46 units versus French mean = 140.20 units). Finally, U.S. franchise chains provide a significantly longer term of franchise contract (mean of 11.41 years) as compared to the French chains whose average contract length was 5.79 years.

As can be seen from the Table 6 results, MANOVA was highly significant ($p \leq .0001$) and accompanied by very high statistical power (i.e., $1-\beta$). Cohen (1977) recommends a power level of 0.80 as a benchmark to aspire for; hence, the achieved power level of 0.999 related to the MANOVA results significantly bolsters the statistical conclusion validity of our findings. As the MANOVA was significant, we proceeded with the seven univariate ANOVA analyses, one for each criterion variable, with the three countries again as the predictor variable (Table 6). Again, we found statistical support for differences across the countries (i.e., like the MANOVA, all seven ANOVAs were statistically significant [$p \leq .0001$] and accompanied by statistical power of 0.99). The seven significant ANOVAs allowed to mount seven sets of Scheffe's multiple comparison tests to discern exactly which countries' means were statistically different from each other. The substantive conclusions of Scheffe's tests are also summarized in Table 6, which must be interpreted in conjunction with the means reported in Table 6. Incidentally, the alternative approach of carrying out three sets of

independent sample t-tests associated for each of the seven criterion variables would have compounded the experiment-wise Type I error rate to 0.14 each, whereas Scheffe's multiple paired comparisons afford us the inference at the experiment-wise error rate of 0.05, the traditionally desired p -value associated with inferential statistics.

It must be noted that we encountered a serious attrition in the sample sizes used in Table 6 ($N = 690$) as compared to the total sample sizes observed in Table 2. This has occurred because like most multivariate analytical procedures, the MANOVA-ANOVA-paired comparisons routine utilizes a listwise deletion of items (i.e., only cases that have nonmissing data on all the variables involved are retained). Since the raw counts for systems belonging to each of the countries were United States ($N = 471$), France ($N = 457$), and Brazil ($N = 468$) for a grand total of $N = 1396$, the sample size attrition was the greatest for France (Table 4 $N = 77$ as compared with $N = 457$ for an 83.15 percent attrition rate), followed by Brazil (Table 4 $N = 235$ as compared with $N = 468$ for a 49.79 percent attrition rate); the attrition rate was the lowest for the United States (Table 4 $N = 378$ as compared with $N = 471$ for a 19.75 percent attrition rate). To ascertain that the Table 6 retained sample of $N = 690$ was indeed representative of the parent samples, we mounted a series of one-sample t-tests where we compared the means of Table 6 (e.g., company age in the United States at 25.54) with the corresponding Table 2 values (i.e., 25.87) where the latter were used as the point estimates of the population means. In all cases, the tests were nonsignificant at the 0.05 level. In other words, the retained samples were representative of their larger samples shown in Table 3.

Scheffe's paired comparisons show the following significant patterns (cf. Table 6):

- U.S. and French systems are older than their Brazilian counterparts.
- French and Brazilian networks are smaller than the U.S. systems.
- U.S. and French systems require a higher total investment from their franchisees than the Brazilian systems.
- As regards the franchise fee, each country mean was significantly different from the other two, the emergent pattern being the United States requiring the highest average fee (\$28,920.00) followed by France (\$19,930.00) and Brazil (\$7,470.00), in that order.
- U.S. and French systems charge a lower percentage of ongoing royalty fee rates than their Brazilian counterparts.
- U.S. and French networks impose a higher level of cash liquidity requirement on their franchisees than the Brazilian systems.
- French and Brazilian networks exhibit a higher plural form rate (respectively, 29.83 and 36.72 percent) than the U.S. systems (9.57 percent).

Note that three of the seven variables just given are monetary in nature and have been converted from their original currencies (i.e., euro for France and real for Brazil) to the U.S. dollars for standardization reasons using the prevalent exchange rates in 2003 (i.e., euro = 1.132 dollar and dollar = 3.075 real (<http://www.federalreserve.gov/releases/H10/hist/>)). It is well-known in cross-cultural research circles that such currency conversions do not necessarily reflect the purchasing power parity of the currencies within their domestic markets. Some Organization of Economic Cooperation and Development accounts (e.g., <http://www.oecd.org/newsEvents/>) would suggest that euros are overvalued relative to their exchange rate with U.S. dollars whereas Brazilian real is undervalued

relative to its exchange rate with U.S. dollar. The familiar problem from establishing valid and generalizable purchasing power parity is the differences associated with establishing a uniform basket of consumption items. This remains an intractable problem associated with any cross-cultural research that involve comparisons based on currency conversions.

In Tables 4 and 5, we examine the plural form phenomenon across dichotomies of (1) incidence of internationalization (Table 5) and (2) product and retail versus service sectors (Table 4). Both these variables were dummy coded: (1) 0 = no for chains that did not have overseas business and 1 = yes for chains that did have an international presence; cf. Table 2) and (2) 0 = product and retail sector networks and 1 = service sector systems; cf. Table 3). These two criterion variables could not be integrated with Table 6 because they violated the metric data assumption of MANOVA-ANOVA-multiple comparisons routine. Hence, they are analyzed separately as predictors of the plural form phenomenon together with country effects.

Once again we see inferential support for both effects in terms of significance criteria and statistical power. The country effects on the extent of plural forms observed in Table 5 (p -value $\leq .0001$, $1-\beta = 0.999$) and Table 4 (p -value $\leq .0001$, $1-\beta = 0.999$) of course merely corroborate the earlier parallel findings reported in Table 6. The new information comes from the domestic versus international chain effect (Table 5; p -value $\leq .003$, $1-\beta = 0.966$) and the sector effect (Table 4; p -value $\leq .0001$, $1-\beta = 0.966$). The follow-up inspection of the means suggest the following:

- The extent of plural forms occurring in international chains is consistently lower than domestic-only chains.

- The extent of plural forms occurring in service sector chains is consistently lower than product and retail sector chains.

A Modest Modeling Effort

In keeping with the stated goals of this paper, so far we have only discussed the descriptive aspects of the plural forms phenomenon. In Table 7, we present a set of regression results tentatively aimed at understanding the underlying reasons for the occurrence of the plural form phenomenon in a similar fashion as Cliquet, Pénard, and Saussier (2003) and Ehrmann and Spranger (2004) attempted to explain plural form organization within retail and service chains. Hopefully, this analysis will serve as a first step toward developing a research framework for cross-cultural international franchising. We carry out the estimation using the same set of variables shown in Tables 4–6 as predictors of the plural form phenomenon, our dependent variable. Hence, the estimated regression model is

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \varepsilon,$$

where

Y = Extent of Existing Plural Form (operationally, proportion of company-owned units)

X_1 = Company Age;

X_2 = Total Network Size in the Domestic Market;

X_3 = Average Total Investment Required in '000s of Dollars;

X_4 = Average Franchise Fee in '000s of Dollars;

X_5 = Average Ongoing Royalty Fee Rate in percent;

X_6 = Cash Liquidity Requirement in '000s of Dollars;

X_7 = Incidence of Internationalization; and

X_8 = Sectoral Differences: Products and Retail versus Services.

The model was evaluated using data from each country, singly, as well as on a combined sample.

As can be seen from Table 7, the model results differ significantly across countries. First, we note that the France model is statistically insignificant, underscoring the need for mounting such comparative analyses. The U.S. and Brazil models yielded overall significant results but display modest explanatory power (i.e., the R^2 values were 12.3 and 7.2 percent, respectively) and a small smattering of significant β coefficients (in the U.S. sample, three of eight predictors were significant at $p \leq .05$ whereas in the case of Brazil, only two coefficients were statistically significant). It is interesting to note that the significant predictors differ between the U.S. and the Brazilian sample. In the U.S. sample, Company Age had a positive significant effect on plural form phenomenon, whereas the Average Total Investment Required in '000s of Dollars and Cash Liquidity Requirement in '000s of Dollars had significant negative impacts. In the Brazilian sample, Total Network Size in the Domestic Market had a positive effect while the Incidence of Internationalization negatively impacted the plural form rate.

Some of the substantive interpretation of these effects is not easy. We begin with a discussion of theoretically consistent results. Company Age's positive effect in the U.S. sample can be attributed to firms learning over time the positive payoffs of plural forms (see Dant, Paswan, and Kaufmann (1992) for a discussion of these). This positive pattern persists with Total Network Size in the Domestic Market for presumably the same reasons in the Brazilian sample (i.e., as firms mature as evidenced by age and size, they learn to appreciate the positive benefits associated with plural forms). Similarly, the negative affect of Average Total Investment Required in '000s of Dollars in the U.S. sample can be

Table 7
Regression Results: A Modeling Attempt

Criterion Variables	Overall Model ¹	United States ²	France ³	Brazil ⁴
Company Age	-0.014*	0.112**	0.250**	-0.070*
Total Network Size in the Domestic Market	-0.045*	0.007*	-0.149*	0.166***
Average Total Investment Required in '000s of Dollars	-0.160****	-0.185****	-0.004*	-0.001*
Average Franchise Fee in '000s of Dollars	-0.206****	-0.058*	-0.092*	0.036*
Average Ongoing Royalty Fee Rate in %	-0.006*	0.077*	0.041*	-0.101*
Cash Liquidity Requirement in '000s of Dollars	-0.287****	-0.424****	0.246*	0.039*
Incidence of Internationalization ²	-0.162****	-0.042*	-0.021*	-0.137***
Sectoral Differences: Services versus Products and Retail ³	-0.126****	-0.013*	-0.107*	-0.084*
$F_{(df)}$	12.853 _(8,838)	7.613 _(8,369)	1.665 _(8,74)	3.782 _(8,280)
Adjusted R^2	10.1	12.3	6.1	7.2
Model p -Value	≤.001	≤.001	=.121	≤.001
Dependent Variable: Plural Form Rate (i.e., Operationalized as Proportion of Company-Owned Units within the Network)				

^aStandardized Regression β Coefficients; **** p -value $\leq .005$; *** p -value $\leq .01$; ** p -value $\leq .05$; * p -value $> .05$.

^bCoded 0, 1: No = 0, Yes = 1.

^cCoded 0, 1: Services = 0, Products and Retail = 1.

rationalized in terms of resource constraints arguments (i.e., as the costs of setting up an outlet rise, franchisors will abstain from opening company-owned outlets and actively seek franchisee partners; cf. Dant and Kaufmann (2003); the same reasoning appears to hold for the Cash Liquidity Requirement in '000s of Dollars in the U.S. sample, whose effect is also negative. The negative effect of Incidence of Internationalization in the Brazilian sample seemingly contravenes the unfamiliarity with markets and control arguments (i.e., when confronted by new, foreign markets, franchisors prefer to grow with company-owned outlets for reasons of control). Instead, it gives credence to the manifestly observed phenomenon of franchisors often expanding overseas by developing master-franchisee and area development strategies in those markets for ease of entry reasons into those overseas markets. It appears then, at least in the Brazilian sample, that franchise networks appear to trade off issues of control for the expediency factors. Interestingly, the latter results complement the Table 5 findings that the mean plural form scores were consistently lower for international chains as compared to domestic-only chains showing the relatively lower rate of company-owned outlets (and hence a higher proportion of franchised outlets) in the international chains.

Turning to the overall model of combined samples, we again find a significant regression model ($p \leq .001$) with a modest explanatory power (i.e., $R^2 = 10.1$ percent); however, with five of the eight coefficients significant at $p \leq .005$ (see Table 7). Interestingly, the effects of Company Size and Total Network Size in the Domestic Market are no longer significant, presumably due to the presence of more powerful alternative effects. However, some of the perplexities persist. Average Total Investment Required in '000s of Dollars and Cash

Liquidity Requirement in '000s of Dollars continue to have significant negative effects as before, making a resource constraints explanation more credible and confident. In addition, we now find another negative effect presumably bolstering the support for the resource constraints premise: that of Average Franchise Fee in '000s of Dollars. As in the case of the Brazilian sample, the negative significant effect of Incidence of Internationalization is again evident and continues to be enigmatic (but see the preceding discussion about this effect together with the support from Table 5 findings). This effect allows us to infer that the preference for expediency over control reasons is not unique to the Brazilian sample.

Finally, we find a significant negative effect of Sectoral Differences: Services versus Products and Retail sectors, which suggests that more service sector franchise systems opt for higher levels of company ownership than the product and retail sector systems. The direction of this effect can be understood given that services are more difficult to manage and are characterized by intangibility, inseparability of production and consumption, heterogeneity or nonstandardization (due to inseparability), and perishability (Zeithaml, Parasuraman, and Berry 1985). Also, given that services are said to require more quality control, supplier credibility, and adaptability (Kotler 1999), one would expect the franchisors to more directly control the service sector outlets through company ownership and consequently for the regression coefficient to have an expected negative signage. However, the earlier-mentioned reasoning contradicts the premise that the more risk-prone franchisees are expected to be more directly and more completely invested in their operations (because presumably all their investments are at risk), and therefore more readily willing to provide the personal touch so essential to the success of service franchises like

hairdressers, restaurants, and hotels. This unsupported alternative argument is couched in the agency theoretic argument that portrays managers of company-owned outlets as less motivated and given to shirking behavior. Notably, the regression findings are not consistent with the results presented in Table 4 that show lower levels of company ownership in service sector networks as opposed to product and retail sector systems in apparent support for the agency theoretic argument noted earlier (Lafontaine and Shaw 1999). It appears that the argument of a higher proportion of company-owned units to better control and train franchisees in service chains can be tackled by a more careful location strategy of these wholly owned units.

Discussion and Conclusions

The foremost theme that emerges is one of significant differences across the three compared countries, which legitimizes the call for additional cross-cultural research motivated by emic perspectives (Berry 1969) rather than an etic mindset (Jahoda 1970). Briefly, the emic perspective seeks to understand each culture within its own context whereas the opposite is true for the etic framework, which advances cross-culturally generalizable theories (Dant and Barnes 1988). The very fact that the regression results vary dramatically across countries (i.e., the nonsignificance of the France model and the nonoverlapping predictors of the plural forms in the U.S. and Brazilian data sets) underscores this need. Many of the theoretical arguments advanced in the earlier discussion (e.g., resource constraints perspective, learning effect related to the benefits of the plural form, forfeiture of control in preference for expediency for international growth, agency theoretic arguments) were developed in the United States, and their emic applicability needs to be evaluated. We also find that plural forms are used almost

three times more in France and Brazil as compared to the United States (Tables 2 and 6). This disproportionately exists despite the fact that the density of franchising (based on area or population) is greater in the United States relative to France and Brazil. This suggests a need to parse out the history effects associated with the greater legislative and legal activity in the United States related to the ownership redirection hypothesis (cf. Dant, Paswan, and Kaufmann 1992; Oxenfeldt and Kelly 1968) and the differential applicability of agency theory and resource dependence theory premises cross-culturally. The history of franchising industry casts a much bigger shadow in the United States as compared to France; its history is the shortest in Brazil. An emic approach to understanding these country differences would need to accommodate the impact of the inexorable passage of time and the attendant legal developments on business practices in specific countries. For example, in France, the legal definition of franchising is restricted to what is called business format franchising in the United States (i.e., it does not include trade name franchises). This and other specific country differences could offer potential explanations for the differences observed across countries. We commend this task to future scholars. Our goal in the present paper was simply to showcase the systemic cross-cultural differences across the three countries.

We must also reiterate that our empirical evaluation was constrained by the nature of our databases in the selection of the predictor variables. In other words, even though our selected variables have ample literature anchoring (cf. Table 1), the reality is that we do not have a comprehensive set of predictors associated with any of the theoretical frameworks utilized in the literature associated with investigations of plural forms or the related ownership redirection phenomenon. We commend the

future scholars to carefully examine theoretical frameworks such as agency theory (Lafontaine 1992; Brickley and Dark 1987), transaction cost analysis (Manolis, Dahlstrom, and Nygaard 1995; Lafontaine and Kaufmann 1994), signaling theory (Dant and Kaufmann 2003), and property rights theory (Windsperger and Dant 2006) as potential frameworks for culling out theoretical variables purported to predict the plural forms, and to mount cross-cultural investigations *using primary data* so that they are not beholden to variables available in extant secondary data sources. Only then can the true inferences be made about the causal factors related to the occurrence of the plural forms phenomenon in franchising.

Within these limitations, some notable trends are worthy of discussion. As noted earlier, in the U.S. sample, we find a negative effect of Total Investment Required (X_3) and Cash Liquidity Requirement (X_6) on the proportion of company-owned units (Table 7). This seems to contradict the extant findings by Alon (2001) and Ehrmann and Spranger (2005a), who found the opposite effect. The effects discovered by Alon (2001) and Ehrmann and Spranger (2005a) are consistent with the signaling theory but contradict the resource constraints explanation of franchising (i.e., when the costs of setting up an outlet rise, franchisors will refrain from setting up company-owned outlets and seek franchisee partners). Our results, however, support the latter theoretical explanation; notably, this is a second empirical article that shows the superiority of the resource constraints argument over the signaling theory arguments, the first being Dant and Kaufmann (2003). The positive effect of Company Age (X_1) (Table 7) on proportion of company-owned units is also consistent with the ownership redirection hypothesis advanced by Oxenfeldt and Kelly (1968), which itself is nested within the resource

constraints rationale. It is interesting to note that in the Brazilian sample, the greater Network Size (X_2) seems to positively influence the proportion of company-owned units (Table 7), also in apparent support of the ownership redirection hypothesis and the resource constraints rationale.

The methodological contributions of this paper mainly deal with the comparative evaluation of the plural forms phenomenon in three different franchising markets. Indeed, as noted earlier, previous data-based empirical papers on plural form have all been single-country investigations. For instance, Lafontaine and Shaw (1999), Dant and Kaufmann (2003), and Ehrmann and Spranger (2004) focused their investigations within the U.S. market, whereas Cliquet (2000), López and Gonzàles-Busto (2001), Windsperger (2006), and Windsperger and Dant (2006) investigated different European markets, while Frazer (2001) was interested in the Australian market. To the best of our knowledge, then, the present research represents the first data-based cross-cultural investigation of the plural forms phenomenon. We believe that such comparative studies are extremely useful for developing the cross-cultural literature on franchising, especially as the franchise networks are becoming increasingly internationalized in their scope of operations. As noted earlier, we see this as merely the first exploratory step toward the development of comparative international franchising literature, and a multitude of legal, economic, and social issues need to be explored to develop this cross-cultural literature more fully.

As far as managerial implications are concerned, the franchisors must adapt their rate of company-owned units to the sector in which their chains belong. It seems more efficient to carry out quality control, ensure supplier credibility, and customized adaptability of services through the direct control afforded by

company-owned units as opposed to product and retail sector systems, where the offerings can be more easily standardized. However, the savvy manager is cautioned about the rival agency-theoretic arguments about the greater willingness of the franchisees to offer their customers more personalized services and the suspected shirking behavior of the managers of the company-owned units. At the very minimum, the franchisor is exhorted to develop incentive structures for these company managers so that their effort input is rewarded and the shirking behavior not prophesied by the agency theory does not occur.

Given the differential effects discovered in our regression results across countries, the most focused managerial advice has to necessarily be country specific. Still, overall, it is important to point out that more significant variables were directionally consistent with the resource constraints perspective (i.e., the negative effects of the Total Investment Required, the Franchise Fee, the Cash Liquidity Requirement) than other frameworks like the agency theory or the signaling theory. The implication is clear: more franchise systems seem to be focused on conserving their financial assets than worrying about franchisee monitoring issues (a la agency theory) or signaling quality and confidence in their systems (a la signaling theory) to the marketplace. This is especially noteworthy in that as previously speculatively noted in the discussion of data sources, our samples probably over-represent networks in development phase.

Despite its contributions, the paper suffers from three chief limitations. First, we only investigated three countries in this research, Brazil, France, and the United States, to explore the patterns of plural form. All three countries, despite their geographic separation into three continents, belong to Eurocentric cultures. Especially conspicuous by their absence in the research were countries

from Asia and Africa (e.g., Japan, China, India, Singapore, and South Africa). In effect, then, we are guilty of adopting somewhat of an etic orientation in our investigation. Other notable countries to include in such a comparative analysis would be Australia, Great Britain, Canada, and Spain, each of which has thriving franchising sectors in their economies.

A second limitation of this research stems from the nature of data employed and the resultant empirical methodology. The modest regression analysis notwithstanding, much of the paper was focused on descriptive statistics related to the plural forms phenomenon. In part, this has occurred due to the limitations of the secondary data available to us. What is really needed is a cross-cultural investigation of franchising spanning multiple countries based on primary data collection that permits one to get data on theoretically grounded constructs so that one can get a real glimpse into the motivations that foster or inhibit the use of plural forms in franchising. Other factors such as national entrepreneurial activity scores could be also taken into account in future investigations.

Finally, our tests did not include the all-important performance variable. As we know from articles like Holmberg and Morgan (2003), the whole subject of franchising performance (success versus failure) at the chain level is extremely controversial because a number of events such as franchisee turnover, seemingly signifying failure, have multiple alternative explanations. The interested reader is also referred to survival analysis-oriented articles like Lafontaine and Shaw (2005) and Shane (1998b) to fully understand this thorny issue. Our data are obviously limited to ongoing, presumably successful franchise chains.

Still, it is hoped that papers like this provide the descriptive materials necessary for the development of grounded theory that can then be subjected to rigorous causal analysis.

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