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## RISK-SHARING AS A LONG-TERM MOTIVATION TO FRANCHISE: ROLE OF FRANCHISING EXPERIENCE

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**ABSTRACT.** This study aimed to examine a long-term motivation for franchising by considering the influence of experience franchisors gain through conducting the franchising strategy. The study mainly investigates the moderating effect of franchising experience on the relationship between three main motivations for franchising (derived from agency theory, resource scarcity theory, and risk-sharing theory) and firms' degree of franchising in the restaurant context. Dynamic panel data model was employed and the findings suggest that not only do restaurant companies' franchising experience positively affect firms' degree of franchising, but also that those experiences positively moderate the relationship between risk-sharing motivation and the degree of franchising. The findings lead to theoretical and practical implications and suggestions for future research.

### INTRODUCTION

Franchising is an attractive strategy for many different types of businesses by offering opportunities for growth for both of franchisors and franchisees (Combs & Ketchen, 2003; Fladmoe-Lindquist, 1996). The agency theory (i.e., reducing agency costs), resource scarcity theory (i.e., using franchisees' resources), and/or risk-sharing theory (i.e., sharing risk with franchisees) can explain motivations for franchisors to adopt a franchising strategy (Brickley & Dark, 1987; Combs, Ketchen, Shook, & Short, 2011; Hsu, Jang, & Canter, 2010; Roh, 2002). However, previous studies have focused on the motivations with a static view and have not considered the possibilities that the importance of each motivation can change depending on other business conditions affecting firms, such as experience from franchising. A thorough review on the previous literature indicates that no study empirically investigated the effect of franchising experience on franchisors' propensity to franchise and also on the relation between the motivations and

the propensity to franchise from franchisors' perspective. We used dynamic panel data model (i.e., time-series data analysis combined with panel data estimation) to offer empirical evidence that franchising experience positively motivates franchisors to increase the degree of franchising and positively affects the effect of risk-sharing motivation on the degree of franchising.

Popularity of franchising in the business contexts reflects many scholars' research that identify the key reasons for franchising's emergence and continued implementation for more than decades (Combs et al., 2011; Dant & Kaufmann, 2003; Dant, Paswan, & Kaufmann, 1996; Hunt, 1973; Lafontaine, 1992). However, previous studies assumed that motivations for franchisors to franchise would affect franchising's implementation with the same magnitude regardless of firms' different experiences with the strategy. Little consideration has been given to the effect of the franchising experiences on motivations for increasing or continuing the franchising strategy. Specifically, some factors may more dominantly

motivate firms to franchise at the initial stage than at the later stage, whereas other factors may motivate firms to continue or increase the level of franchising as firms gain experience with the strategy. On the basis of established theoretical backgrounds of the motivations for franchising, this study examines the role of franchising experience on those motivations.

We examined the restaurant industry because of its acceptance as a representative industry of the franchising strategy (Combs, Ketchen, & Hoover, 2004; Michael & Combs, 2008; Srinivasan, 2006). According to Anwer (2011), among the several industries, which use franchising as a primary strategy, the restaurant industry ranks at the top encompassing 196 franchisors and 102,420 operated franchisees. Considering the results of Anwer's (2011) study, the restaurant industry becomes significant and influential for describing, characterizing, and explaining the nature of franchising firms. Moreover, the restaurant industry presents some industry-specific characteristics that likely influence the franchising strategy. Therefore, the restaurant setting offers a unique opportunity to investigate a dynamic perspective of franchising motivations, which, in turn, provides better understanding of the continuing effectiveness of the franchising system.

Three features of restaurant firms characterize motivations for franchising: (a) restaurant firms are generally small or mid-sized (Hsu et al., 2010); (b) the restaurant industry is characteristically risky (Slattery & Olsen, 1984) and the assumption is that restaurant managers are risk-averse in general; and (c) centralizing production systems and ensuring essential on-site customer service is difficult for restaurant firms (Safon & Escriba-Esteve, 2011). Considering these characteristics of the restaurant industry, the agency theory, the resource scarcity theory, and risk-sharing theory appear to effectively explain restaurant firms' motivations to franchise. According to the agency theory, monitoring costs play an important role as a major cost driver in the restaurant business (Brickley & Dark, 1987; Hsu et al., 2010) because the coinfluence of production and consumption and the importance of service for

on-site customers force restaurant firms to use on-site managers through an entire network. This involves significant costs for monitoring hired managers throughout geographically dispersed locations; therefore, reducing agency costs can be a critical motivation for franchising among restaurant firms. The resource scarcity theory suggests that small- and mid-sized firms are more likely to have few financial resources needed to expand business. Acquiring franchisees' capital can be another important motivation for franchising for firms experiencing resource scarcity (Lafontaine & Kaufmann, 1994). Last, high risk, a characteristic of the restaurant industry, provides a strong motivation to franchise (Hsu et al., 2010; Roh, 2002) because firms can share risks with franchisees, creating an attractive motivation for the risk-averse restaurant managers. These three motivations provide reasons for restaurant firms' heavy reliance on the franchising strategy more so than any other industries.

Accompanying the three motivations to franchise, the present study introduces a new factor—franchising experience—to investigate varying importance of motivations to franchise at different stages of business over time. Although all motivations require careful consideration during examination of franchising implementation, overall, the importance of each motivation may differ according to the level of experience with franchising. This study argues that building experience offers franchisors insight for interacting with franchisees and for best use of the strategy for franchisors' business models. Therefore, the accrued knowledge of the franchising strategy can influence individual firm's motivations for franchising. Therefore, the main purpose of this study is to empirically test (a) main effect of franchising experience on franchising implementation and (b) the moderating effect of franchising experience on the relation between three motivations for franchising (i.e., reducing agency costs, using others' capital, and sharing risk) and franchising implementation: How the magnitude of the effect of each motivation on franchisors' franchising implementation changes according to differing degrees of experiences with

franchising. This insight affords researchers' comprehension of firms' strategic movements in the real world by broadening static views to dynamic investigation of motivations for franchising. The study also contributes to the understanding of the consequences of franchising experiences on the decisions for establishing a mix of ownerships (i.e., company-owned and franchised outlets).

The remainder of this study provides an overview of extant literature to identify known motivations for franchising, and explains the methodology to examine (a) the effect of franchising experiences on the firms' propensity to franchise and (b) the moderating effect of that experience on the relation between motivations for franchising and the degree of franchising. Results and conclusion and discussions conclude the study.

## LITERATURE REVIEW

### Theoretical Background of Motivations for Franchising

Agency theory (Jensen & Meckling, 1976) is one of the most used theories (Brickley & Dark, 1987; Lafontaine, 1992; Rubin, 1978; Shane, 1998) and has the supports of numerous empirical results (e.g., Brickley & Dark, 1987; Brickley, Dark, & Weisbach, 1991; Hsu et al., 2010) that describe the franchising strategy on the basis of the relation between franchisor and franchisee. According to the theory, the agency problem arises from the conflicts of interests between firms (principals) and managers (agents). Because of the fixed compensation for managers, difficulty arises for firms' attempts to induce managers' best efforts, and consequently firms expend monitoring costs to ensure managers operate in the firms' interest. This agency problem is likely to be more serious for restaurants since consumption and production are inseparable and on-site service is critical for successful business (Carman & Langeard, 1980; Safon & Escriba-Esteve, 2011). However, franchising contracts can help firms overcome this problem because franchisees and firms have common interests in efficiently managing oper-

ations: Franchisees' income is a direct result of efficient management and determines earnings from operations. Thus, the motivation exists for firms to franchise, reducing the monitoring cost through contracts with independent owners.

Resource scarcity theory also illuminates incentives to franchise. Franchisors obtain resources from franchisees as a return for allowing them to use its trademark and service trade. Further franchisors use that resource to expand business when other sources, a shortage of resources such as capital and knowledge of the specific local area, are restrictions (Hunt, 1973; Norton, 1995; Oxenfeldt & Thompson, 1968). In other words, franchisees offer capital in the form of franchising fees and royalties and also provide not only physical assets but also localized knowledge valuable for successful operations (Lafontaine & Kaufmann, 1994). These tangible and intangible assets allow franchisors to accelerate growth, reserve cash, and gain specific knowledge for future growth (McGuire & Staelin, 1983; Minkler, 1992; Norton, 1988; Shane, 1998). This arrangement represents a significant advantage for restaurant firms whose businesses are relatively small. Because smaller firms are more likely to lack resources to achieve the desired growth (Hoover, Ketchen, & Combs, 2003; Hsu et al., 2010; Oxenfeldt & Kelly, 1969), franchising offers restaurant firms opportunities to access resources for growth.

Another perspective suggesting motivation to franchise is the risk-sharing theory. Firms are likely to decide to franchise outlets located in the regions of expected higher risks to business or where future performance is difficult to forecast. This strategy shares risks with franchisees (Combs & Castrogiovanni, 1994; Martin, 1988). Also, relatively stable income received from franchising fees and royalties mitigates franchisors' risks by reducing fluctuations in cash flow. In addition, according to the Slattery and Olsen (1984), the restaurant industry has the reputation of vulnerability to volatile markets, characterizing that particular industry as unstable and risky. This unstable business environment may influence restaurant franchisors to be risk-averse; therefore, sharing risks with franchisees could represent

an important motivation (Hsu et al., 2010; Roh, 2002).

These theories (i.e., agency theory, resource scarcity theory, and risk-sharing theory) provide a comprehensive description of the nature of franchising and clarification of its important role and its popularity. Various groups of scholars have tested and supported the motivations; however, previous research has maintained only a stationary view. Specifically, studies did not consider the possibility that some incentives to franchise may become more or less attractive as franchisors gain experiences by conducting the strategy. Extending the research to establish long-term motivations clarifies changes in motivations' importance at different stages of the franchising experience. The short- and long-term motivations to franchise may not be the same because a firm's achievement of benefit from using franchising (e.g., acquiring franchisees' resources) may decline in importance, while another or other benefits from franchising may become more important as experience increases. Therefore, investigating the dynamic motivations to franchise from a long-term point of view is a worthy endeavor.

### **Franchising Experience and its Moderating Effect**

From an organizational learning perspective, franchising experience likely plays a significant role in deciding the direction of firms' strategic movement including whether to continue or enlarge the degree of franchising in the mix of ownerships. Arguably, operational experience is an important source of competitive advantages to organizations, arising from building a knowledge-base (Henderson, 1979; Ingram & Baum, 1997). Ingram and Baum (1997) found that franchisors are superior learners because they efficiently share knowledge generated from experience throughout franchised outlets. These results also implies that franchisors benefit from interactions with franchisees and that experience can provide beneficial forum through feedback to the franchisor for improving its business model. Thus, the accumulated knowledge from fran-

chising experiences may encourage firms to increase the degree of franchising. Accordingly, the present study hypothesizes a positive effect of franchising experience on the degree of franchising.

Hypothesis 1: Franchising experience has a positive influence on the degree of franchising.

Suggested by the agency theory, reducing agency costs arising from monitoring hired managers in dispersed outlets is an accepted motivation for franchisors (Brickley & Dark, 1987; Hsu et al., 2010). In addition, when firms decide whether to franchise or own new outlets, franchising is the more likely choice, if they are more experienced with franchising. Reducing monitoring costs through franchising becomes easier for experienced firms who have access to the skills or know-how for managing franchising systems. Franchisors become familiar with methods of communication with franchisees, and the experience from franchising improves internal efficiency (Ingram & Baum, 1997). Franchisors gain awareness of the benefits reducing monitoring costs and gain facility controlling the relations with franchisees. Therefore, this study proposes a positive moderating effect of franchising experience on the relation between the motivation from the agency theory and the proportion of franchised outlets to company-owned outlets.

Hypothesis 2: Franchising experience positively moderates the influence of motivation derived from the agency theory on the degree of franchising.

Firms' motivations to franchise also arise from the franchisor's need for capital (Caves & Murphy, 1976; Dant & Kaufmann, 2003; Kaufmann & Lafontaine, 1994; Norton, 1988; Oxenfeldt & Kelly, 1969), as attested to by significant support by practitioners in the real world. Franchising practitioners reported that the single main reason for adopting franchising is to conserve or acquire capital, and at the same time, to attempt to expand an effective distribution network as quickly as possible

(McGuire, 1971). The implication of that report is that this motivation represents a particularly effective strategy for small- to mid-sized restaurant firms. However, after firms grow sufficiently through franchising, reaching beneficial economies of scale and establishing resources and knowledge, this motivation may become less attractive to those firms than during the initial stage of the franchising cycle. Thus, the present study expects that as franchisors gain experience with franchising strategy, the significance of the motivation, according to the resource scarcity theory (i.e., capital constraint), may decline. On the basis of this rationale, this study argues that the impact of the motivation from the resource scarcity theory on the proportion of franchised outlets to company-owned outlets decreases, as firms gain franchising experience.

Hypothesis 3: Franchising experience negatively moderates the influence of motivation derived from the resource-scarcity theory on the degree of franchising.

Sharing risk is an essential motivation for the restaurant industry because the industry is characteristically risky from highly volatile firm performance. This riskiness may cause managers to be more risk-averse, thus prompting firms to rely heavily on risk-sharing strategies (Combs & Castrogiovanni, 1994; Hsu et al., 2010; Roh, 2002). Although firms cannot change or mitigate the level of the industry's risks created by macroeconomics, companies can attempt to stabilize income and consequently minimize the effect of risks by implementing franchising. As firms learn more about franchising (i.e., more experienced), enjoying business stability may become expected. Time is necessary for realizing the consequences of franchising with respect to sharing risks, indicating that the dimension of time is a significant component of the risk sharing perspective. For franchisors, who gain experience, becoming less vulnerable to the industry's conditions may be a benefit difficult to ignore or decline. Addressing the time dimension issue, this study hypothesizes that firms' experience from franchising increases the

importance of the motivation derived from the risk-sharing theory.

Hypothesis 4: Franchising experience positively moderates the influence of motivation derived from the risk sharing theory on the degree of franchising.

## METHOD

### Data

This study collected data from (a) firm annual reports (10K) from the U.S. Securities and Exchange Commission, (b) COMPUSTAT database, and (c) U.S. Bureau of Labor Statistics for consumer price index's data. From 10Ks, collection of the number of outlets operated by franchisees and the firms' total number of outlets allows calculation of the degree of franchising. From the COMPUSTAT database, information from U.S. publicly traded restaurants' financial statements allows measuring various variables by providing financial data, such as total assets, total revenues, and liabilities. This study uses consumer price index data to adjust a firm's total revenues for inflation. The sample includes publicly traded U.S. restaurant companies based on the standard industrial classification code of 5812. The range of sampling period is 1991 to 2012 because franchising data prior to 1990 is scarce. The study identified outliers based on the criteria of an absolute value for a studentized-residual of 3 (Kutner, Nachtsheim, Neter, & Li, 2005). After excluding outliers, the sample size is 449 observations of 64 firms.

### Dependent Variable: The Degree of Franchising

To measure the proportion of a firm's franchises, this study focuses on the proportion of franchising properties, which constitutes the franchisor's number of total properties (Hsu & Jang, 2009). The rationale of using the proportion of franchising properties to total properties is consideration of a firm's strategic movement in terms of physical expansion through franchising (Sullivan, 1994).

Interpretation of the ratio of properties offers a direct indication of a firm's strategic activity through franchising.

### Independent Variables

**Monitoring Costs.** Previous literature relates monitoring costs to geographic dispersion (Brickley & Dark, 1987; Hsu et al., 2010). Specifically, wide geographic dispersion involves increased monitoring costs, such as travel expenses and monitoring personnel. If firms operate the dispersed outlets, therefore they are more likely to franchise the outlets (Carney & Gedajlovic, 1991; Hsu et al., 2010). Consequently, the number of states in which firms have outlets is the proxy for the monitoring costs.

**Resource Scarcity.** To test the motivation derived from the resource scarcity theory, this study uses credit rating as a proxy for constraints to capital resources. From the franchisor's perspective, one important reason to franchise is to gain capital from franchisees to expand the business, overall. Firms that do not have a credit rating are more likely to have difficulty expanding because of limited access to financing debt compared with firms with credit ratings (Faulkender & Petersen, 2006). In this sense, this study assigns a variable of 1 to firm without a credit rating (indicating a firm with scarce resources) and assigns a variable of 0 to a firm that has a credit rating.

**Firm Risk (Risk).** Following Roh (2002) and Hanson (1992), this study uses variances in operating cash flow in a 3-year window to measure risk and to test the effect of risk on the degree of franchising. According to Brick, Frierman, and Kim (1998), a lower variance in a cash flow can signal a distinction between higher valued firms from lower valued firms. This identification could arise from a lower variance in cash flow representing a firm's stable operation, which relates to underlying risk.

**Franchising Experience (EXP).** The study uses the number of years in the period after a firm initiated a franchising strategy as a proxy for franchising experience. As prior previous literature suggested, if a firm does not clearly state the time of initiating a franchising strategy,

this study uses the company's age as a proxy for experience (e.g., Combs, Ketchen, & Hoover, 2004). Recently, an increasing number of studies on organizational learning have incorporated the aspect of time in models because building experience consists of improvement and progression over time (Hernes & Irgens, 2013; Lervik, Fahy, & Easterby-Smith, 2010). The studies argued that to fully understand the dynamics of building experience, consideration of time as a dimension of the learning process is necessary (Berends & Antonacopoulou, 2014).

### Control Variables

A significant effect on firm operational activities as well as a positive effect on firm performance derives for a firm's size. The hospitality literature considers total revenue, including franchising fees, to be a more appropriate measure of a franchising firm's size (Lee, Singal, & Kang, 2013). A firm's performance can also be an important internal factor in the strategic decision-making process (Ketchen & Palmer, 1999). Tobin's  $q$  is a commonly acknowledged measure of firm performance (Wernerfelt & Montgomery, 1988), and this study adopted a one-year lagged Tobin's  $q$  as a proxy for performance, based on the rationale that at least 1 year is necessary for performance to influence strategic decision making.

### Model

The purpose of developing the model is to investigate the moderating effect of franchising experience on the relation between motivations for franchising as derived from three theories (i.e., agency theory, resource scarcity theory, and risk sharing theory) and firms' degree of franchising. The expectation is that firms' gaining experience with a franchising strategy causes the magnitude of each motivation's effect on the degree of franchising to change. Before examining the moderating effect of franchising experience, the main effect of franchising experience on the degree of franchising (i.e., Hypothesis 1) assessed with the basic model, precedes analysis for remaining three interactions (i.e., Hypotheses 2–4). Evaluation of the primary interests of this

study is according to the main model. The empirical models are as follows:

Basic model:

$$DOF = \alpha_0 + \alpha_1 States + \alpha_2 CR + \alpha_3 V(OCF) + \alpha_4 EXP + \alpha_{5-6} Control\ variables + \varepsilon \quad (1)$$

Main model:

$$DOF = \beta_0 + \beta_1 States + \beta_2 CR + \beta_3 V(OCF) + \beta_4 EXP + \beta_5 States * EXP + \beta_6 CR * EXP + \beta_7 V(OCF) * EXP + \beta_{8-9} Control\ variables + \varepsilon \quad (2)$$

where *DOF* represents the degree of franchising; *States* represents the number of states where each firm operates outlets, as a proxy for monitoring costs derived from the agency theory; *CR* represents whether a firm has a credit rating, as a proxy for resource scarcity derived from the resource scarcity theory; *V(OCF)* represents variance of a firm's operating cash flow, as a proxy for business risk derived from the risk sharing theory; *EXP* represents the number of years a firm has operated with a franchising strategy, as a proxy for franchising experience. Two control variables are firm size and 1-year lagged Tobin's *q*.

In the process of selecting the suitable method for specification, this study conducted three tests. Because the analysis uses a panel dataset, structured with time and firm dimensions, panel data estimation is employed (e.g., fixed- or random-effects model) over the pooled ordinary least squares to avoid biased estimates that possibly result from the unobserved heterogeneity (Green, 2008). Conducting the Hausman test, according to the null hypothesis that efficient random-effects estimation is as consistent as fixed-effects estimation (Green, 2008) produced results recommending random-effects model for both the basic and main models (for the basic model,  $\chi^2 = 4.29$ ,  $p = .5079$ ; for the main model,  $\chi^2 = 9.85$ ,  $p = .1974$ ). To check the necessity of considering specific firm- or time-effects

in the random-effects estimation, the study conducted a second test, the Breusch and Pagan Lagrange multiplier test (Breusch & Pagan, 1980). Nonsignificant results for time-specific effects ( $\chi^2 = 2.74$  for the basic model and  $\chi^2 = 2.53$  for the main model) and significant results for firm-specific effects ( $\chi^2 = 2136.41$  for the basic model and  $\chi^2 = 1975.23$  for the main model) suggested that one-way random-effects models by firm are appropriate for both the basic and the main models. Third, the Wooldridge test determined embedded serial correlation in both of the basic and main models ( $\chi^2 = 75.91$  for the basic model, and  $\chi^2 = 71.93$  for the main model), and the results guided the autoregressive model that controls serial correlations and corrects biased standard errors (Wooldridge, 2002). On the basis of the results of the three tests, the first-order autoregressive (AR[1]) one-way random-effects model is the choice for analysis of both the basic and main models.

## RESULTS

### Summary of Descriptive Analysis

Table 1 summarizes the descriptive statistics of franchisors' data during the period of 1991 to 2012. After collecting data based on the SIC code, 5812, the study excludes firms having never implemented franchising and observations for the years firms did not operate a franchising strategy even if currently they do. Deleting outliers, identified the absolute value of studentized residual of 3, resulting in 449 observations of 64 firms. The mean of proportion of franchised outlets to total outlets is 49.5%, indicating that almost half of sampled U.S. operations have been managed by franchisees during sample period. The minimum degree of franchising is 0.7%, which is the proportion of Rare Hospitality International in 1998, and the maximum is 100%, which is the proportion of Wendy's between 1998 and 2001. Firms have operations in approximately 30 states, and the mean of franchising experience is 23.6 years. Among the dataset of 64 firms, 45 firms (364 observations) do not



**TABLE 1.** Descriptive Statistics

Variable	<i>M</i>	<i>SD</i>	Minimum	Maximum
DOF	0.4948	0.2981	0.007	1
States	29.87	14.863	1	52
V(OCF)	602.115	6354.9	0.00009	121,168
EXP	23.6	16.734	1	77
Firm size	5.91	1.2166	2.8265	8.7498
Tobin's <i>q</i>	0.3418	0.5166	-0.709	3.494
ln(Tobin's <i>q</i> )	0.236	0.336	-1.234	1.503
Credit rating (indicator variable)	1	(364 observation; 45 firms with no credit rating)		
	0	(85 observation; 19 firms with credit rating)		
Sample size	449	(64 firms)		

Note. *DOF* represents the degree of franchising, franchising revenue divided by firm total revenue; *states* represents the number of states where a firm has its operation; *V(OCF)* represents variance of operating cash flow; *EXP* represents franchising experience, measured by the number of years franchising operating; *FS* represents firm size, measured by log (total revenue).

have credit ratings for the entire sampling period.

Table 2 summarizes Pearson correlation among the variables. The dependent variable (*DOF*) has significant linear relations with the number of states, franchising experience (*EXP*), and firm size (*FS*), and a significant association with a firm's existent or nonexistent credit rating (*CR*). Among the relations, the correlation between *FS* and *DOF* is  $-0.0956$ , which indicates a negative relation between the two variables. The correlations between independent and control variables does not seem to be extremely high, which indicates that the problem of multicollinearity may not exist in the data analysis.

### Result of Panel Data Estimation

The results of the panel data estimation appear in Table 3. As addressed earlier in the

Model section, first-order autoregressive (*AR*[1]) one-way random-effects estimation for the two models (i.e., the basic model in Panel A and the main model in Panel B) is according to the results of Hausman test, Lagrange multiplier test, and Wooldridge test. Both models conclude significant  $\chi^2$  values (e.g., 52.20 for the basic model and 60.93 for the main model) at the level of .01, which suggests overall significance for the models.

Panel A of Table 3 contains the results of the basic model, which tests the main effect of franchising experience and three variables (i.e., *States*, *CR*, and *V(OCF)*), derived from three theoretical backgrounds (i.e., agency theory, resource scarcity, and risk sharing theory). The results demonstrate the positive effects of the number of *States* (*States*) and the franchising experience (*EXP*) on the degree of franchising (*DOF*) at the significance level of .01 for *States*

**TABLE 2.** Pearson Correlation Analysis

	1	2	3	4	5	6	7
1 DOF	1						
2 States	0.3904**	1					
3 V(OCF)	0.0808	0.1119*	1				
4 EXP	0.1941**	0.2103**	0.0881	1			
5 FS	-0.0956*	0.6391**	0.0620	0.3133**	1		
6 Q	0.0472	0.1774**	-0.0233	0.2686**	0.2992**	1	
7 CR	0.1049*	0.255**	-0.0145	0.3219**	0.4324**	0.3804**	1

Note. *DOF* represents the degree of franchising, franchising revenue divided by firm total revenue; *states* represents the number of states where a firm has its operations; *V(OCF)* represents variance of operating cash flow; *EXP* represents franchising experience, measured by the number of years franchising operating; *FS* represents firm size, measured by log (total revenue); *Q* represents Tobin's *q*; *CR* represents an indicator variable assigned 1 if the firm does not have a credit rating, and 0 otherwise.

\* $p < .05$ ; \*\* $p < .01$ .

TABLE 3. Results of Main Analysis: Autoregressive One-Way Random Effects

Dependent variable: DOF	Panel A (basic model)		Panel B (main model)	
	Coefficient	z	Coefficient	z
States	0.0056**	5.27	0.0072**	4.30
CR	-0.0076	-0.49	0.0015	0.04
V(OCF)	-0.0000336	-0.9	-0.000026*	-2.30
EXP	0.0028*	2.13	0.0042*	2.08
FS	-0.0584**	-5.12	-0.0773**	-5.77
Tobin's <i>q</i>	-0.0025	-0.15	0.0013	0.08
States × EXP			-0.000045	-0.89
CR × EXP			0.0035	0.39
V(OCF) × EXP			0.0000616*	2.28
$\chi^2$		52.20**		60.93**
Adjusted $R^2$		0.3799		0.3550

Note. DOF represents the degree of franchising, franchising revenue divided by firm total revenue; States represents the number of states where a firm has its operations; CR represents credit ratings, a dummy variable, assigned 1 if a firm does not have a credit rating, otherwise 0; V(OCF) represents business risk, measured by variance of a firm's operating cash flow; EXP represents franchising experience, measured by the number of years how long a firm has been operated franchising strategy; FS represents firm size, measured by log (total revenue).

\* $p < .05$ ; \*\* $p < .01$ .

and 0.05 for EXP. The positive coefficient of EXP provides evidence for support of Hypothesis 1 at the 5% significance level.

Panel B of Table 3 displays the results of the main model which includes the interaction between franchising experience (EXP) with States, CR, and V(OCF) and the control variables. In the main model, the coefficient of V(OCF) is negative and significant at a 5% level while coefficients of States and EXP are significantly positive. However, notably important is that these coefficients do not represent the main effect. When interaction terms are present in the model (i.e., States × EXP, CR × EXP, and V(OCF) × EXP in the case of this study), coefficients of those noninteraction terms (i.e., States, CR V(OCF), and EXP) only represent a slope of one variable of the interactions when holding the other variable of the interaction to zero (Friedrich, 1982). As Friedrich (1982) stated, such coefficients have little value, because often related situations are not economically feasible or meaningful. For testing the hypotheses regarding moderating effects (i.e., Hypotheses 2–4) testing, Hypothesis 4 only gains support from the evidence that franchising experience (EXP) has a positive moderating effect on the relationship between variance of operating

cash flow (V(OCF)) and the degree of franchising (DOF) at the significance level of 0.05. Nonsignificant results of the interaction effects (i.e., States × EXP and CR × EXP) suggest that Hypothesis 2 and 3 do not have supported at the significance level of 0.05.

## CONCLUSIONS AND DISCUSSION

This study investigates the changes in importance of motivations for franchising over time as firms gain experience with a franchising strategy. The examination considers the moderating effect of experience with franchising on the relations between each of three well-known franchising motivations, derived from the agency theory, resource scarcity theory, and risk-sharing theory, and the firm's degree of franchising. Experience can explain the details of firms' franchising motivations because the knowledge and know-how that firms build through operating franchises can influence firm's implementation of franchising.

Conducting first-order autoregressive (AR [1]) one-way random-effects analysis examines the main and the moderating effect of franchising experience, measured by the number of years firms initiated franchising strategies. Since franchising experience closely

relates to the time dimension and other variables form a panel dataset, a critical consideration is simultaneous examination of panel and time-series data analysis to prevent unobserved heterogeneity and serial correlation. The models used in this study are expected to alleviate the potential estimation issues, and produce unbiased and consistent results.

This study, first, proposes a positive effect of franchising experience on firms' degree of franchising, and findings support that hypothesis. The results demonstrate that the longer firms' involvement in franchising strategies, the more likely an increase in the proportion of franchised outlets to the total outlets will increase. On the basis of the results, the study suggests that as firms gain familiarity with franchising strategies through experience, motivation to expand through franchising strategies tends to increase, rather than to grow through owned outlets. Specifically, management through a franchising strategy offers opportunities for franchisors to build knowledge, such as appropriate interaction with franchisees and also gain know-hows for maximizing benefit from franchising to improve overall business performance. Experienced firms are more familiar with the strategy, providing a motive for enlarging business by using franchising. Thus, it is important to note that franchising experience becomes another significant motivation for increasing the use of the strategy.

Second, the study's results identify the moderating effect of franchising experience on motivation to franchise. The significant and positive interaction between franchising experience and risk-sharing motivation (Hypothesis 4) provides evidence that franchising experience positively moderates the impact of risk-sharing motivation on firms' propensity to franchise. Risk-sharing through franchising, arguably, becomes more important as firms gain familiarity with the strategy. Once firms initiate franchising, they tend to increase the degree of franchising when facing increased risks in business. The results suggest that experience from franchising educates franchisors regarding the significant importance of the risk-sharing from the strategy.

Conversely, the nonsignificant interactions between experience and the other two motivations, derived from the agency theory and the resource scarcity theory, indicate that experience from franchising has no influence on the relations between these motivations and the degree of franchising. The positive and significant coefficient of the number of states in the basic model (Panel A of Table 3) indicates that reducing agency costs is a critical motivation for franchisors, and that motivation does not change as the franchisors gain familiarity with the strategy (i.e., the nonsignificant moderating effect of franchising experience for this motivation; Panel B of Table 3). The nonsignificant results regarding the resource scarcity motivation (Panel A and Panel B) suggest that firms' motivation to franchise to attain resources outside of the firms is nonexistent and that motivation remains unchanged despite firms' increased experience with franchising.

The present study contributes to the franchising literature by incorporating the time-dimension into traditional views of motivations for franchising. Specifically, the study offers the opportunity to understand the importance of experience from franchising with respect to long-run motivations to institute franchising strategies. Although risk-sharing has had consideration in previous literature (Combs & Castrogiovanni, 1994; Hsu et al., 2010; Roh, 2002), empirical support for this motivation has remained undiscovered despite rigorous statistical analyses. Findings of the present study illuminate this issue: The static view for this motivation is not appropriate, but the dynamic perspective is valuable when considering the risk-sharing motivation to franchise. The dynamic view demonstrates that risk-sharing significantly motivates franchisors to expand business through franchising strategies; Although the main effect of risk-sharing on the degree of franchising was not found in the present study, when considering a long-term perspective, the moderating effect of franchising experience guides the conclusion that the risk-sharing motivation becomes stronger and significant over the long-term as a result of

familiarity with franchising. These results provide an empirical support for the proposition of Martin and Justis (1993) that franchising is an efficient long-term strategy.

This study contributes to business contexts by providing practitioners with several practical implications. The finding that risk-sharing becomes a significant motivation for franchisors as gaining more franchising experiences provides franchisees or prospected franchisees with valuable insight which cannot be underestimated. The results suggest that great familiarity with the franchising strategy causes franchisors to be more likely to minimize business risk by sharing risks with franchisees. The contracts with franchisors may include terms and conditions reflecting the goal. Thus, franchisees must carefully review agreements for greater responsibility arising from business activities, especially in risky environments. In the same vein, it could be helpful for government agencies (e.g., Federal Trade Commission) or legislators who try to prevent anticompetitive business practices to recognize that franchisees can be unfairly treated regarding this situation and to consider legal options available for franchisees. The findings offer information for investors and analysts in the financial markets. It can be implied that as franchisors become more experienced the franchising strategy, they may become more knowledgeable that franchising strategy possibly reduces their business risk. That is, more experienced franchisors are likely to understand and be more confident that implementing the franchising strategy can mitigate their business risk. They may consider the franchising strategy as one of the risk management practices. Significantly, a firm's commitment to the franchising, based on the length of time franchisors have used the strategy to mitigate risks, is a valuable benchmark for investors and analysts seeking additions to portfolios.

#### LIMITATIONS AND SUGGESTED FUTURE RESEARCH

The study has limitations: First, to choose a proxy for experience with franchising, this study

counts the number of years that franchisors implemented the strategy inducing the aspect of time and demonstrating the value of established knowledge (e.g., Hernes, & Irgens, 2013; Lervik, Fahy, & Easterby-Smith, 2010). However, just considering the period of franchising may not fully reflect or represent the degree of experience with franchising for each firm because the speed and quality of learning can differ. Future studies may attempt to develop another proxy that can provide more a representative measuring from franchising. Second, identifying clearly a year for initial implementation year, this study, following previous literature, used the company's age as a proxy for gaining franchising experience (Combs et al., 2004). Despite the basis from prior studies, potential errors in measurement exist and future studies should improve upon measurement of franchising experience seeking more information. Last, a caution is necessary when generalizing this study's findings to other industries because findings of this study may be specific to the restaurant industry. A replication of the present study's method in different industries that practice franchising would increase external validity of this study's findings.

#### REFERENCES

- Anwer, S. T. (2011). Franchising: Category issues, changing dynamics and competitiveness. *International Journal of Commerce and Management*, 21(3), 241–255.
- Berends, H., & Antonacopoulou, E. (2014). Time and organizational learning: A review and agenda for future research. *International Journal of Management Reviews*, 16(4), 437–453. doi:10.1111/ijmr.12029
- Breusch, T., & Pagan, A. (1980). The LM test and its application to model specification in econometrics. *Review of Economic Studies*, 47, 239–253.
- Brick, I. E., Frierman, M., & Kim, Y. K. (1998). Asymmetric information concerning the variance of cash flows: The capital structure choice. *International Economic Review*, 39, 745–761.

- Brickly, J. A., & Dark, F. H. (1987). The choice of organizational form the case of franchising. *Journal of Financial Economics*, 18(2), 401–420.
- Brickley, J. A., Dark, F. H., & Weisbach, M. S. (1991). An agency perspective on franchising. *Financial Management*, 20, 27–35.
- Carman, J. M., & Langeard, E. (1980). Growth strategies for service firms. *Strategic Management Journal*, 1(1), 7–22.
- Carney, M., & Gedajlovic, C. (1991). Vertical integration in franchise system: Agency theory and resources explanations. *Strategic Management Journal*, 12(8), 607–629.
- Caves, R. E., & Murphy, II, W. F. (1976). Franchising: Firms, markets and intangible assets. *Southern Economic Journal*, 42, 572–586.
- Combs, J. G., & Castrogiovanni, G. J. (1994). Franchiser strategy: A proposed model and empirical test of franchise versus company ownership. *Journal of Small Business Management*, 32, 37–48.
- Combs, J. G., & Ketchen, D. J. (2003). Why do firms use franchising as an entrepreneurial strategy?: A meta-analysis. *Journal of Management*, 29(3), 443–465.
- Combs, J. G., Ketchen, D. J., & Hoover, V. L. (2004). A strategic groups approach to the franchising-performance relationship. *Journal of Business Venturing*, 19(6), 877–897.
- Combs, J. G., Ketchen, D. J., Shook, C. L., & Short, J. C. (2011). Antecedents and consequences of franchising: Past accomplishments and future challenges. *Journal of Management*, 37(1), 99–126.
- Dant, R. P., & Kaufmann, P. J. (2003). Structural and strategic dynamics in franchising. *Journal of Retailing*, 79(2), 63–75.
- Dant, R. P., Paswan, A. K., & Kaufmann, P. J. (1996). What we know about ownership redirection in franchising: A meta-analysis. *Journal of Retailing*, 72(4), 429–444.
- Faulkender, M., & Petersen, M. A. (2006). Does the source of capital affect capital structure? *Review of Financial Studies*, 19(1), 45–79.
- Fladmoe-Lindquist, K. (1996). International franchising: Capabilities and development. *Journal of Business Venturing*, 11(5), 419–438.
- Friedrich, R. J. (1982). In defense of multiplicative terms in multiple regression equations. *American Journal of Political Science*, 26, 797–833.
- Greene, W. H. (2008). *Econometric analysis*. Upper Saddle River, NJ: Prentice-Hall.
- Hanson, L. (1992). *Effects of tapered integration and industry location on the performance of franchise chain: Some empirical findings from the restaurant, optical and video store sectors*. Doctoral dissertation, University of California, Irvine.
- Henderson, B. D. (1979). *Henderson on corporate strategy*. Cambridge, MA: Harper-Collins College Division.
- Hernes, T., & Irgens, E. J. (2013). Keeping things mindfully on track: Organizational learning under continuity. *Management Learning*, 44(3), 253–266.
- Hoover, V. L., Ketchen, D. J. Jr., & Combs, J. G. (2003). Why restaurant firms franchise: An analysis of two possible explanations. *The Cornell Hotel and Restaurant Administration Quarterly*, 44(1), 9–16.
- Hsu, L.-T., & Jang, S. (2009). Effects of restaurant franchising: Does an optional franchise proportion exist? *International Journal of Hospitality Management*, 28(2), 204–211.
- Hsu, L.-T., Jang, S., & Canter, D. (2010). Factors affecting franchise decisions in the restaurant industry. *Journal of Hospitality & Tourism Research*, 34(4), 440–454.
- Hunt, S. D. (1973). The trend toward company-operated units in franchised chains. *Journal of Retailing*, 49(2), 3–12.
- Ingram, P., & Baum, J. A. C. (1997). Opportunity and constraint: Organizations' learning from the operating and competitive experience of industries. *Strategic Journal*, 18(S1), 75–98.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305–360.
- Kaufmann, P. J., & Lafontaine, F. (1994). Costs of control: The source of economic rents for

- McDonald's franchisees. *Journal of Law and Economics*, 37, 417–453.
- Ketchen, D. J., & Palmer, T. B. (1999). Strategic responses to poor organizational performance: A test of competing perspectives. *Journal of Management*, 25(5), 683–706.
- Kutner, M., Nachtsheim, C., Neter, J., & Li, W. (2005). *Applied linear statistical models* (5<sup>th</sup> ed.). New York, NY: Irwin/McGraw Hill.
- Lafontaine, F. (1992). Agency theory and franchising: Some empirical results. *The Rand Journal of Economics*, 23, 263–283.
- Lafontaine, F., & Kaufmann, P. (1994). The evolution of ownership patterns in franchise systems. *Journal of Retailing*, 70(2), 97–113.
- Lee, S., Singal, M., & Kang, K. H. (2013). The corporate social responsibility—Financial performance link in the U.S. restaurant industry: Do economic conditions matter? *International Journal of Hospitality Management*, 32, 2–10.
- Lervik, J. E., Fahy, K. M., & Easterby-Smith, M. (2010). Temporal dynamics of situated learning in organizations. *Management Learning*, 41, 285–301.
- Martin, R. E. (1988). Franchising and risk management. *The American Economic Review*, 78(5), 954–968.
- Martin, R. E., & Justis, R. T. (1993). Franchising, liquidity constraint and entry. *Applied Economics*, 25(9), 1269–1277.
- McGuire, E. P. (1971). *Franchised distributors*. New York, NY: The Conference Board.
- McGuire, T. W., & Staelin, R. (1983). An industry equilibrium analysis of downstream vertical integration. *Marketing Science*, 2(2), 161–191.
- Michael, S. C., & Combs, J. G. (2008). Entrepreneurial failure: The case of franchisees. *Journal of Small Business Management*, 46(1), 73–90.
- Minkler, A. P. (1992). Why firms franchise: A search cost theory. *Journal of Institutional and Theoretical Economics*, 148(2), 240–259.
- Norton, S. W. (1988). An empirical look at franchising as an organizational form. *Journal of Business*, 61(2), 197–219.
- Norton, S. W. (1995). Is franchising a capital structure issue? *Journal of Corporate Finance*, 2(1), 75–101.
- Oxenfeldt, A. R., & Kelly, A. (1969). Will successful franchise system ultimately become wholly-owned chains? *Journal of Retailing*, 44(4), 69–83.
- Oxenfeldt, A. R., & Thompson, D. N. (1968). Franchising in perspective. *Journal of Retailing*, 44(4), 3–20.
- Roh, Y. S. (2002). Size growth rate and risk sharing as the determinants of propensity to franchise in chain restaurants. *International Journal of Hospitality Management*, 21(1), 43–56.
- Rubin, P. H. (1978). The theory of the firm and the structure of the franchise contract. *Journal of Law & Economics*, 21(1), 223–234.
- Safon, V., & Escriba-Esteve, A. (2011). Antecedents and consequences of external risk perception in franchising: evidence from the hospitality industry. *Service Business*, 5(3), 237–257.
- Shane, S. (1998). Explaining the distribution of franchised and company-owned outlets in franchise systems. *Journal of Management*, 24(6), 717–739.
- Slattery, P., & Olsen, M. (1984). Hospitality organizations and their environment. *International Journal of Hospitality Management*, 3(2), 55–61.
- Srinivasan, R. (2006). Dual distribution and intangible firm value: franchising in restaurant chains. *Journal of Marketing*, 70(3), 120–135.
- Sullivan, D. (1994). Measuring the degree of internationalization of a firm. *Journal of International Business Studies*, 25(2), 35–342.
- Wernerfelt, B., & Montgomery, C. A. (1988). Tobin's q and the importance of focus in firm performance. *American Economic Review*, 78(1), 246–250.
- Wooldridge, J. M. (2002). *Econometric analysis of cross-section and panel data*. Cambridge, MA: MIT Press.