

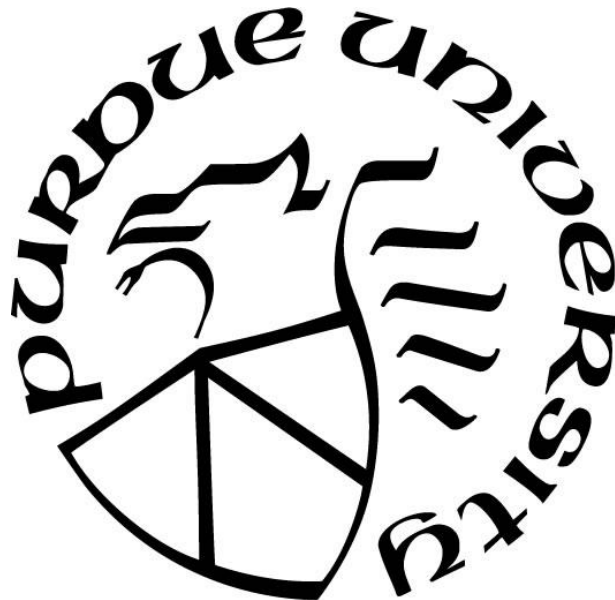
**CONTRACT DESIGN IN INTER-ORGANIZATIONAL  
RELATIONSHIPS: EVIDENCE FROM THE U.S. FRANCHISE  
SYSTEMS**

by  
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**A Dissertation**

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*This dissertation is dedicated to my parents and sisters.*

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## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	viii
LIST OF FIGURES .....	ix
ABSTRACT .....	x
CHAPTER 1. INTRODUCTION .....	1
CHAPTER 2. AN ASYMMETRIC VIEW OF FRANCHISE CONTRACTS.....	12
2.1 Introduction.....	12
2.2 Theory and Hypotheses.....	15
2.2.1 Beyond an “Add-on” Rationale of Contractual Governance.....	16
2.2.2 The Nature of Franchise Relationships.....	18
2.2.2.1 Franchisor’s Transaction-specific Assets .....	20
2.2.2.2 Franchisee’s Transaction-specific Assets .....	23
2.3 Methods.....	27
2.3.1 Empirical Context and Sample Description .....	27
2.3.2 Variables and Measurement .....	28
2.3.2.1 Dependent Variable .....	28
2.3.2.2 Independent Variables .....	30
2.3.2.3 Control Variables.....	31
2.4 Results .....	35
2.4.1 Aggregate Analysis.....	35
2.4.2 Disaggregate Analysis .....	39
2.4.3 Supplemental Analysis .....	44
2.5 Discussion.....	46
2.5.1 Theoretical Implications .....	47
2.5.2 Managerial Implications .....	48
2.5.3 Limitations and Future Research.....	49
CHAPTER 3. THE ORIGINS OF COMPLEX DISPUTE RESOLUTION PROVISIONS .....	52

	Page
3.1 Introduction.....	52
3.2 Theory and Hypotheses.....	56
3.2.1 Design of Dispute Resolution Provisions .....	56
3.2.2 Complex Dispute Resolution Provisions in Franchise Contracts .....	58
3.2.2.1 Main Effects of Transaction-Specific Investments.....	59
3.2.2.2 The Moderating Role of Contract Duration.....	64
3.3 Methods.....	70
3.3.1 Data.....	70
3.3.2 Variables and Measurement .....	71
3.3.2.1 Dependent Variable .....	71
3.3.2.2 Independent Variables .....	72
3.3.2.3 Control Variables.....	73
3.4 Results.....	76
3.4.1 Post Hoc Analyses .....	83
3.5 Discussion.....	92
CHAPTER 4. THE ROLE OF CEO EXPERIENCE IN CONTRACT DESIGN .....	97
4.1 Introduction.....	97
4.1 Theory and Hypotheses.....	101
4.1.1 Contract Design in Franchising .....	101
4.1.2 The Role of the Decision-Maker in Contract Design .....	104
4.1.3 Upper Echelon Perspective: The Role of the CEO's Experience.....	105
4.1.3.1 Effects of Franchisor CEOs' Franchising Experience.....	107
4.1.3.2 Effects of Franchisor CEO's Restaurant Experience .....	111
4.1.3.3 Moderating Effects of Tapered Integration on Franchisor CEO's Franchising Experience .....	113
4.1.3.4 Moderating Effects of Tapered Integration on Franchisor CEO's Restaurant Experience.....	117
4.2 Methods.....	119
4.2.1 Data and Sample .....	119
4.2.2 Variables and Measurement .....	121

	Page
4.2.2.1 Dependent Variable .....	121
4.2.2.2 Independent Variables .....	123
4.2.2.3 Moderating and Control Variables .....	123
4.3 Results.....	128
4.3.1 Supplement Analyses.....	136
4.4 Discussion.....	141
CHAPTER 5. CONCLUSION.....	145
5.1 Future Extensions.....	147
REFERENCES .....	152
VITA.....	174

## LIST OF TABLES

	Page
Table 2.1 Descriptive Statistics and Correlations .....	36
Table 2.2 Aggregate Analysis: Ordered Logit Regression and Tobit Regression Results	38
Table 2.3 Contractual Dimensions: Promax Factor Pattern.....	41
Table 2.4 Disaggregate Analysis: Seemingly Unrelated Regression.....	43
Table 2.5 Post Hoc Disaggregate Analysis: Multivariate Probit Regression .....	45
Table 3.1 Descriptive Statistics and Correlations .....	77
Table 3.2 Main Effects on the Presence of Complex Dispute Resolution Provisions from Logit Model .....	78
Table 3.3 IV Probit Estimation .....	87
Table 3.4 Examples of Dispute Resolution Provisions in Franchise Contracts.....	89
Table 3.5 Supplement Tests from Ordered Logit Model .....	91
Table 4.1 Descriptive Statistics and Correlations .....	129
Table 4.2 OLS Estimation of the Design of Monetary Contractual Terms .....	131
Table 4.3 OLS and Probit Estimations of the Design of Non-Monetary Contractual Terms .....	132
Table 4.4 IV Estimation of Joint Determination of Contract Terms .....	138



## LIST OF FIGURES

	Page
Figure 3.1 Decomposing the Interaction Effects .....	81
Figure 3.2 The Marginal Effect and Significance of the True Interaction Terms .....	82
Figure 4.1 Decomposing Interaction Effects on Monetary Contract Terms.....	134
Figure 4.2 Decomposing Interaction Effects on Non-Monetary Contract Terms .....	135

## ABSTRACT

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Title: Contract Design in Inter-Organizational Relationships: Evidence from the U.S. Franchise Systems.

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This dissertation develops three essays about contract design in interfirm partnerships. Specifically, I develop the first essay, drawing on an asymmetric view of transactions, to understand the effects of asymmetric exchange hazards borne by different parties on contract design at a dyadic level. In the second essay, drawing from the logic of transaction cost economics and research on the “shadow of the future,” I develop hypotheses regarding the interplay between a firm’s transaction-specific factors and the predetermined contract duration that affect the need for complex dispute resolution provisions. In the third essay, going beyond the economic theoretical explanations regarding incentive alignment and safeguard mechanisms of contract design, I further examine how the CEO’s career experience may influence the contract design. The main empirical part of my dissertation relies on data from contracts and disclosed documents in franchise relationships in the U.S. restaurant industry. Taken together, the theoretical arguments and research settings in this dissertation contribute to a better understanding of contracting between firms.

## CHAPTER 1. INTRODUCTION

Remarkable and rapid changes in the competitive environment of business have increasingly driven firms to build and develop collaborative relationships with external organizations for achieving competitive advantage (Dyer, 1997; Parmigiani & Rivera-Santos, 2011). Contract design is one of the most important decisions when firms partner with external organizations to exchange products, services, and knowledge. Recent years have witnessed increased scholarly interests in the management literature in understanding the contractual foundation of interfirm relationships (Schepker, Oh, Martynov, & Poppo, 2014; Schilke & Lumineau, 2016). Economic exchanges undertaken by individuals who are rational and would live up to the expectations of the parties involved would eliminate the need for a contract (Ring, 2006). However, in most relationships, economic actors have only partially overlapping interests and are influenced both by bounded rationality and self-interest (Das & Teng, 1996). Considering problems such as misunderstandings of roles and responsibilities, opportunistic behaviors, or changing market and technological conditions that frequently occur (Williamson, 1985), contracts play crucial role in managing interorganizational relationships (Argyres, Bercovitz, & Mayer, 2007; Lumineau & Malhotra, 2011; Reuer & Ariño, 2007).

By carefully delineating rights and responsibilities, interorganizational contracts allow parties to minimize deviant behavior (Salbu, 1997) and support a common understanding of what objectives partners want to pursue and how they plan to achieve these objectives (Ryall & Sampson, 2009). Contracts are also important legal documents that provide for more effective third-party enforcement (Mayer, 2006). As contracts have significant bearing on collaboration performance and firm relationships (Anderson &

Dekker, 2005; Gong, Shenkar, Luo, & Nyaw, 2007; Srinivasan & Brush, 2006), an understanding about the antecedents of contract design is central to developing collaborative strategies. The bulk of extant contract research examines the effect of firm characteristics or transaction attributes on contract design through an economic lens. Drawing upon transaction cost (Williamson, 1975, 1985), property right (Alchian & Demsetz, 1973; Coase, 1960), and agency theories (Jensen & Meckling, 1976), most of existing contract studies address how contracts are designed to mitigate ex ante and ex post hazards through incentive alignment or safeguarding. Although these works have contributed to our understanding on the determinants of contract design (see Schepker, Oh, Martynov, & Poppo, 2014 and Weber, Mayer, & Wu, 2009 for reviews), I observe three important research gaps in the literature.

First, extant contract research often examines contract design via a broad approach, considering the contract length or its number of provisions (e.g., Parkhe, 1993; Poppo & Zenger, 2002). Studies that examine contract complexity commonly suggest that the more provisions included in the contract, the more complex the contract is (e.g., Parkhe, 1993; Reuer & Ariño, 2007). The underlying assumption in this stream of research is that more complex contracts can better safeguard parties' interests when parties face greater exchange hazards. However, the logic of transaction cost economics (TCE) is that while particular hazards can be mitigated by including specific safeguards, including safeguards irrelevant to the current exchange may increase unnecessary costs that may adversely impact relationship performance (Joskow, 1988; Williamson, 1985). This presents an important opportunity to advance the current contract literature: not only the quantity of contractual provisions but also the quality of contractual provisions matters. Without

consideration about the quality of contractual provisions, scholars might erroneously conclude that the effects of particular factors on contract design are equivalent across contractual terms. However, only particular safeguards to the party's interest may address specific hazards imposed on that party in the relationship. As parties in a relationship often face different types of exchange hazards and have interests in different aspects of contracts, an examination of how these different types of exchange hazards may affect contract design at the dyadic level is therefore relevant and crucial. In addition, as most extant contract literature emphasizes safeguards via the inclusion of contractual elements, the underlying assumption of this rationale is that parties may renege by "taking advantage of the unspecified or unenforceable elements of the contractual relationship" (Klein, 1980, p. 356). However, assigning specific contractual provisions to the relationship might involve a trade-off between the exchange hazards on both sides; including specific contractual provisions may mitigate the risk of opportunistic behaviors on the one hand, while the inclusion of these provisions may simultaneously intensify hold-up problems on the other (Klein, Crawford, & Alchian, 1978; Williamson, 1975). Therefore, considering the double-edged role of contractual provisions and the alternative options that parties can employ to safeguard their respective interests might enhance our understanding of the antecedents of contract design.

Along similar lines, while recent contract research has started to recognize the multidimensional feature of contracts and consider the distinct functions of contracts (e.g., Bercovitz & Tyler, 2014; Malhotra & Lumineau, 2011; Reuer & Ariño, 2007), the nuance within specific contractual provisions has received relatively little attention to date in the strategy field (see Ariño, Reuer, Mayer, & Jané, 2014; Weber, Mayer, & Macher, 2011,

for exceptions). Following the argument by TCE that particular contractual provisions can be used to mitigate specific hazards, an elaborative understanding on interfirm contracting can be improved by investigating the effects on the design of individual contractual provisions or the different classes of contracts.

Second, as contractual governance and relational governance co-exist and characterize most business relationships, the interplay of contractual and relational governance in interorganizational relationships has been a topic of considerable ongoing debate in the management field (Bradach, 1997; Poppo & Zenger, 2002; see Cao & Lumineau, 2015, for a review). Although this growing interest is encouraging, we currently do not have a complete theoretical explanation for how contract design is associated with the self-enforcement of each party, which presents opportunities to advance contract theory in two broad respects. First, extant work tends to focus on the backward-thinking perspective of relational governance (e.g., trust, relational norms, etc.), suggesting that repeated exchanges with partners may affect contract design (e.g., Luo, 2002). However, the expectations of continuity, as one important aspect of relational governance indicated in the influential work of Poppo and Zenger (2002), have received relatively little attention in contract literature. Second, while a few scholars have begun to make compelling arguments to advance our understanding of how the forward-thinking perspective of relational governance (i.e., the shadow of the future) might influence contract design (e.g., Reuer & Ariño, 2007), they tend to treat the expectation of continuity and transaction characteristics as the independent accounts for contract design. The independent accounts of contract design are problematic because an emerging empirical literature suggests that greater expectation of continuity may be associated with the transaction-specific

investments by parties (Poppo, Zhou, & Ryu, 2008). Accordingly, two important questions remain unanswered: how transaction-specific investments by parties at the dyadic level might affect parties' value being placed on the future interactions, and how the interplay between transaction-specific investments by parties and the predetermined duration of collaborations might influence contract design.

Third, the current literature has paid most attention to how the exchange hazards or interest alignment concerns affect contract design. The focus of these studies is on the antecedents of contract design at the firm level (see Macher & Richman, 2008; Schepker et al., 2014, for reviews). However, as contracts are drafted by individuals, and thus are likely to be affected by individual characteristics, it is surprising that the role of individuals in contract design has received relatively less scholarly attention. While a few studies have started to investigate the influence of individuals on contract design (e.g., Argyres & Mayer, 2007; Bercovitz & Tyler, 2014), they mostly emphasize the influence of individuals' occupation on contract design. As organizational outcomes are typically affected by the activities conducted by individuals with some discretion over their behaviors (Thompson, 1967), the lack of an understanding about the background characteristics of individuals who have influence on contract design may limit our understanding of the antecedents of contract design.

In this dissertation, I develop three essays using the context of franchise relationships involving two main exchange parties—franchisor versus franchisees. While the gross domestic product (GDP) and the employment growth of the franchise sector continue to outpace the growth of the GDP and the growth of employment in all business, economy-wide, in the U.S. respectively (IHS Economics, 2016), franchise, as a hybrid

form of organization (Williamson, 1991), remains prone to many challenges to realize benefits from interfirm collaborations (Michael, 2002). Like many other interorganizational relationships, franchise faces challenges in organizing cooperation and coordination among its constituents. As franchisor and franchisees commit different types of investment in franchise relationships, the study context enables me to address the research questions about how different types of exchange hazards imposed on parties affect contract design on the dyadic level. Furthermore, as some firms rely on franchising to grow, detailed background information about the franchisor CEO who is in charge of franchise growth also provides foundation for studying the role of individuals in contract design.

The objective of this dissertation is to go beyond the conventional approach to contract design and to provide important new insights into how contracts are strategically designed. More specifically, in the first essay (Chapter 2), I introduce an asymmetric view of contractual design, suggesting that a relative perspective on contract complexity may provide a more nuanced explanation of the discriminating alignment between distinct transaction attributes and contractual design. With the focus on overall contract complexity at the transaction level, prior research has implicitly focused on the absolute level—that is, the total number of the contractual provisions included (e.g., Parkhe, 1993; Poppo & Zenger, 2002). However, focusing on the absolute level of contract complexity may not reflect how firms use contracts to mitigate hazards on the dyadic level. TCE suggests that particular safeguards can mitigate specific hazards (Williamson, 1985). Accordingly, including safeguards that are irrelevant to the specific hazards may adversely increase transaction costs. Even worse, including specific contractual provisions may not only mitigate the risk of opportunistic behaviors on the one hand but also simultaneously



intensify hold-up problems on the other (Arruñada et al., 2001; Klein, Crawford, & Alchian, 1978). In turn, including safeguards that are in favor of the partner may exacerbate the specific hazards imposed by the opportunistic partner. In this regard, in Essay 1 (Chapter 2), I highlight the theoretical importance of the relative perspective of contract design by identifying differences in the contractual provisions that favor one party or the other and by disentangling the specific contractual concerns of each party. In particular, I suggest that firms may safeguard their interests either by including more provisions in their favor or by eliminating provisions that may give rise to their partners' opportunistic behaviors, depending on the extent of exchange hazards borne by the parties in the relationship.

Essay 1 (Chapter 2) confirms that the vulnerable party in a relationship prefers relatively greater levels of contract complexity in order to protect its interests against hazards. In particular, the findings suggest that the vulnerable party may have a proclivity to enhance its relative level of contractual complexity by reducing the contractual provisions in favor of the threatening party, rather than by increasing the contractual provisions in its favor. Essay 1 (Chapter 2) contributes to the interfirm contract literature by theorizing and corroborating that the selective exclusion of contractual provisions can serve as an alternative way to safeguard the threat of exchange hazards in an interfirm relationship. Unlike the conventional view that only considers the benefits of more complex contracts to mitigate hazards, my arguments offer a novel and more complete perspective on the effects of transaction attributes on contract design by introducing an asymmetric view of contract design.

In the second essay (Chapter 3), I examine what considerations determine the inclusion of complex dispute resolution provisions—that is, mediation, arbitration, and

both types of dispute resolution procedures—in the governance structure of inter-organizational relationships. Drawing on transaction cost economics logic together with the literature on the shadow of the future, I argue that the use of complex dispute resolution provisions in inter-organizational relationships is driven by the expectation of the partner's unwillingness to cooperate in resolving disputes *ex post*. The conventional view has been that the transaction characteristics and the shadow of the future are independent accounts for interfirm cooperation and governance design, assuming that firms would need more safeguards when they commit greater transaction-specific investments to the relationship or when the expected future interaction with the partner is limited (e.g., Heide & Miner, 1992; Lumineau & Oxley, 2012; Reuer & Ariño, 2007). On the one hand, TCE logic advances a rationale about how transaction-specific characteristics may affect governance design while downplaying the role of continuity expectations in determining governance choices. On the other hand, the literature on the shadow of the future indicates that the expectation of future interactions will affect cooperative intention. However, this literature does not take into account that as the different parties have different transaction-specific commitments to the relationship—and thus face different exchange hazards—parties' value placed on the expected future interaction may change with how they value the transaction-specific investment committed by one another. The results in Essay 2 (Chapter 3) suggest that the two streams of research complement each other, and the simultaneous consideration of the findings provides a more complete and comprehensive understanding on how interfirm dispute resolutions are foreseen and addressed in contract design stage.

Essay 2 (Chapter 3) also extends the literature on dispute resolution procedures in the management field by focusing on the determinants of dispute resolution provisions

before dispute arises. Extant management research on dispute resolution has investigated how the transaction characteristics and nature of the dispute may affect the choice of dispute resolution procedures (Dant & Schul, 1992; Lumineau & Oxley, 2012), how contract design may affect dispute resolution approaches and outcomes (Lumineau & Malhotra, 2011), and how the dispute resolution approaches relate to partnership success (Mohr & Spekman, 1994). Essay 2 (Chapter 3) contributes to this stream of literature by highlighting the advantages that parties can only achieve through the commitment to dispute resolution provisions *ex ante* but that can hardly be obtained through the exercise of dispute resolution procedures *ex post*.

In the third essay (Chapter 4), I aim to complement the existing literature that has been mainly interested in economic theoretical explanations of contract design at firm level and that has paid little attention to the role of individuals in contract design. Specifically, drawing upon the upper echelon perspective, I claim that the franchisor CEO's different types of career experience may affect contract design by influencing the CEO's cognitive schema and personal penchants. Essay 3 (Chapter 4) corresponds to the recent scholarly attention to the additional perspectives going beyond economic theoretical explanation to understand interfirm contract design (Schepker et al., 2014; Weber et al., 2009). While few existing examples of contract research have started to focus on the role of individuals in contract design, these studies emphasize the effects of individuals' occupation on contract design (e.g., Argyres, Bercovitz, & Mayer, 2007; Bercovitz & Tyler, 2014). Essay 3 (Chapter 4) contributes to this stream of research by maintaining that contracting capabilities may not only reside in different kinds of employees as argued by prior contract

research, but also hinge on the depth and content of experience of the most powerful employee (i.e., the CEO) within a firm.

Essay 3 (Chapter 4) also extends existing research that perceives contract design as an outcome of the experiential learning process (Mayer & Argyres, 2004; Vanneste & Puranam, 2010). While these studies suggested that contract design is largely influenced by actual problems experienced rather than potential problems foreseen, their focus is on the impact of partnership experience at the firm level. Few studies have considered the influence of individual experience on contract design. The third essay therefore complements the research stream on the experiential learning of contract design by emphasizing the role of an executive's experience at the individual level. I indicate that an investigation on the background characteristics of individuals who oversee contract design can provide a more nuanced understanding of contract design.

In summary, this dissertation investigates the effects of asymmetric transaction attributes, contingent effects of transaction attributes, and effects of individual background characteristics on contract design in franchise relationships. I draw on insights from the transaction cost economics and the contract literature to shed new light on the “paring down” aspects of contract design. Beginning with the TCE logic, joined with the asymmetric view of transaction and contracts, I argue and show that contract provisions can be distinguished according to their nature in favor of the focal firm or the partners, and as a consequence, firms can protect against potential hazards not only by including contractual provisions in favor of themselves but also by excluding contractual provisions in favor of the partner. I also draw insights from the legal literature and the research on the “shadow of the future” to argue that parties' commitment to the relationship may affect their value being placed

on the future interaction, thereby influencing their cooperative intention in resolving disputes *ex post* and the need for complex dispute resolution provisions *ex ante*. Additionally, this dissertation suggests that the experience of individuals (e.g., CEOs) who oversee contract design may affect contract design because different levels and types of career experience can influence individuals' cognitive schema and attention toward different aspects of the business. The theories and findings in the three studies could help enrich our understandings of contract design in inter-organizational relationships, as well as provide important implications for the broader stream of studies on inter-organizational governance.

## CHAPTER 2. AN ASYMMETRIC VIEW OF FRANCHISE CONTRACTS

### 2.1 Introduction

The supreme art of war is to subdue the enemy without fighting.

—Sun Tzu

Contracts are important instruments that govern interorganizational relationships (Argyres & Mayer, 2007; Poppo & Zhou, 2014; Reuer & Ariño, 2007). The choice of contractual governance structure is one of the most important decisions that firms make in their collaborative relationships (Li, Eden, Hitt, & Ireland, 2008). Backed by legal authority, contracts are written agreements that specify the conditions for a transaction between parties (Lyons & Mehta, 1997). Recent reviews of the literature on interorganizational contracts (Macher & Richman, 2008; Schepker, Oh, Martynov, & Poppo, 2014) observe that research on contractual design mostly draws on transaction cost economics (TCE). In line with this focus on TCE, scholars have traditionally used the transaction as the unit of analysis when examining contractual governance. In particular, many articles have studied how transactional attributes influence contractual design, with the view that the more provisions a contract includes, the more complex it is (e.g., Anderson & Dekker, 2005; Reuer & Ariño, 2007; Ryall & Sampson, 2009).

In this study, I depart from this stream of research to propose an asymmetric approach to contractual design. I argue that a focus on the transaction as the unit of analysis overlooks the fact that contractual design is a decision associated with the various parties involved in the transaction. Although interorganizational relationships involve, by definition, at least two parties who contribute different inputs and face different exchange hazards, prior research has largely failed to analyze how these parties' distinct concerns

may affect contractual design. In a dyadic relationship, there is no logical reason to assume that each party has the same stakes and faces the same types of risk (Contractor & Reuer, 2014). Because parties are subject to different exchange hazards, they are likely to value different aspects of contracts differently. I thus suggest that contractual design is likely to be influenced by the distinct interests of the different parties. While prior work has paid little attention to linking distinct transactional attributes to the distinct aspects of contracts that are of varying interest to parties, my asymmetric approach to contractual design leads to a more nuanced explanation of the discriminating alignment between distinct transaction attributes and contractual design. I therefore contribute to research on contractual governance by providing novel theoretical predictions about the antecedents of contractual design (Contractor & Reuer, 2014; Schepker et al., 2014).

Furthermore, as I disentangle the competing stakes of different parties in a transaction, my analysis leads me to distinguish between the absolute and relative perspectives of contract design. With its focus on overall contractual complexity at the transactional level, prior research has implicitly focused on the absolute level; that is, the total number of the contractual provisions included (e.g., Anderson & Dekker, 2005; Parkhe, 1993; Poppo & Zenger, 2002). I extend the research on contractual design by disentangling the specific contractual concerns of each party and identifying differences in the contractual provisions that favor one party or the other—and the theoretical importance of the relative perspective of contract design. As contracts include provisions that are specifically relevant to different parties' stakes and interests, I argue that simply examining the absolute level of contractual complexity may be inadequate to explain the factors underlying contractual design and the extent to which partner firms impose exchange

hazards to each other. Specifically, in this paper, I consider the selective exclusion of contractual provisions as an alternative way to control the threat of exchange hazards in an interfirm relationship. I maintain that when facing exchange hazards, firms have two main options to constrain the risk posed by an opportunistic partner. First, firms can strengthen their protection by designing more complex contracts, which is what has typically been argued in prior TCE-based contractual research (e.g., Luo, 2002; Reuer & Ariño, 2007). Second, a largely unexplored option exists pursuant to which a specific party can increase its relative level of contractual complexity by either increasing the level of contractual provisions in its favor while keeping its partner's constant or by reducing its partner's favorable contractual provisions while keeping its own level constant. To highlight the nuance difference in the implications brought by my asymmetric approach of contract design versus those by the conventional approach, I conduct both aggregate analysis and disaggregate analysis at the distinct contractual dimension level and the provision level.

To test the theoretical model, I collected data on franchise relationships in the U.S. restaurant industry. The findings indicate that franchisors' and franchisees' respective transaction-specific attributes differentially influence the design of the franchise contract. Specifically, the findings reveal that when the franchisor has greater transaction-specific assets, the franchisor's contractual complexity tends to be greater than the franchisees': the franchisor safeguards its stakes not only by increasing the contractual provisions in its favor but also by minimizing the contractual provisions in favor of franchisees. By contrast, when franchisees have greater transaction-specific assets, the contractual provisions in favor of the franchisor tend to be reduced, but there is no significant change in contractual provisions in favor of franchisees.



In sum, the purpose of this study is to advance our understanding of the influences of contractual design in interorganizational relationships. To achieve this goal, I build on transaction cost theory, leveraging its key insight that asset specificity significantly affects contractual governance mechanisms. I then advance research on interorganizational contracting by proposing an asymmetric approach to analyzing contractual design.

## 2.2 Theory and Hypotheses

Strategy research has devoted much attention on applying transaction cost theory to examine contractual design in managing interorganizational relationships (for reviews, see Macher & Richman, 2008; Schepker et al., 2014). Transaction cost economics highlights a discriminating match between transaction attributes and alternate governance mechanisms aiming to minimize the transaction costs (Williamson, 1979, 1985). Based on the logic of cost minimization (Joskow, 1987, 1988), research on contracts suggests that more contractual provisions will be called for as the level of exchange hazards and appropriation concerns increases with specific transaction attributes (Williamson, 2002), whereas contracts tend to be less complex<sup>1</sup> when exchange hazards are unlikely or the potential loss from exchange hazards is less important. Following this rationale, previous studies on contract design highlight the safeguarding purpose of contracts by explaining that firms institute *ex ante* governance mechanisms to help mitigate opportunism and minimize transaction costs (Barthélemy & Quélin, 2006; Lumineau & Malhotra, 2011).

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<sup>1</sup> In line with TCE (Williamson, 1979, p. 238-239; 1991; 2002, p. 441) and recent studies on interorganizational contracting (e.g., Barthélemy & Quélin, 2006; Hagedoorn & Hesen, 2009; Malhotra & Lumineau, 2011; Poppo & Zhou, 2014; Reuer & Ariño, 2007; Reuer & Devarakonda, 2016), I focus on the notion of contractual complexity defined as the number of provisions used in the contract.

Complex contracts can limit the risks associated with opportunistic behaviors by specifying responsibilities and contingencies in the exchange (Argyres, Bercovitz, & Mayer, 2007; Poppo & Zenger, 2002), describing desired behaviors and exchange outcomes (Lerner & Merges, 1998), and delineating sanctions and penalties for non-compliance (Parkhe, 1993; Ryall & Sampson, 2009). As such, prior research tends to center on the *absolute* level of contractual complexity, suggesting that when facing exchange hazards, firms bolster their protection by designing more complex contracts (e.g., Anderson & Dekker, 2005; Mesquita & Brush, 2008; Reuer & Ariño, 2007). However, focusing on these “add-on” aspects of contractual complexity may result in overlooking certain important features of contracts.

#### 2.2.1 Beyond an “Add-on” Rationale of Contractual Governance

The add-on rationale of contractual protection is based on the assumption that transacting parties have incentives to renege on the transaction by “taking advantage of the unspecified or unenforceable elements of the contractual relationship” (Klein, 1980, p. 356). However, the assumption that unspecified or unenforceable elements of contracts are always the source of hold-up problems may be too simplistic. Unspecified elements of contracts in an inter-organizational relationship may have strategic implications. In particular, although specifying details in specific contractual provisions may mitigate the risk of opportunistic behaviors on the one hand, the inclusion of these provisions may simultaneously intensify hold-up problems on the other (Arruñada et al., 2001; Klein, Crawford, & Alchian, 1978; Williamson, 1975). For example, the detailed termination provision that enables the focal firm to end the relationship when the partner infringes certain duties may simultaneously raise the risk of the focal firm’s hold-up hazards.

Imposing the threat of termination upon the partner, the focal firm may opportunistically require the partner to make an additional investment to sustain the relationship. In this regard, assigning contractual provisions in favor of one party to a relationship always involves a trade-off between the exchange hazards on both sides. Accordingly, when faced with the exchange hazards, the focal firm can either fortify contractual provisions in its own favor or eliminate contractual provisions in favor of its partner. While the former approach is in line with the traditional “add-on” rationale, the latter approach has received little scholarly attention.

Including more firm-favored contractual provisions in the face of exchange hazards follows the TCE logic that firms bolster their protection by designing more complex contracts. While prior work has observed that transacting parties may deliberately leave gaps in their long-term contracts in order to create flexibility (Macneil, 1980), I suggest that transacting parties may eliminate contractual provisions for the other three reasons that enable firms to prevent opportunism and to minimize transaction costs. First, as the focal firm commits greater transaction-specific investments to the relationship, the partner, compared to the focal firm, is less concerned about exchange hazards (i.e., the focal firm faces greater hold-up problems than the partner) and thus demands less for the contractual protection. Second, removing partner-favored provisions may promote cooperation. Reducing the partner-favored contractual provisions can constitute a safeguard in the form of “good” hostage, which is valued more highly by the partner than the focal firm (Williamson, 1983). Finally, reducing contractual provisions in favor of the opportunistic partner can directly eliminate the source of cheating.

Thus, in contrast to the traditional TCE approach, I suggest that the absolute level of contractual complexity may be reduced when the risk of exchange hazards increases because firms can increase their protection by reducing those provisions in their partner's favor. I therefore argue that a focus on the *absolute* level of contractual complexity may mask the fact that different parties have different interests in designing contracts, whereas the analysis of the *relative* perspective of contractual design between the parties has important implications for the extent to which partners impose exchange hazards on each other. Next, I develop the theory and hypotheses on contractual design in the context of franchise relationships.

### 2.2.2 The Nature of Franchise Relationships

Franchising is a long-term collaborative relationship between a franchisor and one or more franchisee(s). The franchisor grants to its franchisee(s) the privilege to use its unique business concept and provides franchisees assistance in establishing and operating the franchised outlets. In return, franchisees pay fees and invest time and effort to develop the outlet. Franchising offers an ideal setting to explore how contractual design is influenced by the exchange hazards specific to various parties because it is an organizational form tightly governed by formal contracts (Brill, 1994), in which the exchange hazards clearly differ between the franchisor's and the franchisee's side.<sup>2</sup>

The intertwined investments from franchisors and franchisees and their (only) partially overlapping interests in the relationship make both counterparties subject to the

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<sup>2</sup> Prior research has noted the role of franchising as an organizational form that aligns the incentives between the franchise system and its franchised outlets to ease the financial and managerial constraints on growth (see Combs, Michael, & Castrogiovanni, 2004; and Lafontaine & Slade, 2007 for reviews). However, the continued prevalence of exchange hazards within the franchise relationship (Michael, 2002; Pizanti & Lerner, 2003) indicates that the structure of franchising does not in and of itself completely eliminate all of the interest misalignment problems.

other's opportunism (Bhattacharyya & Lafontaine, 1995; Lafontaine, 1992a; Michael & Bercovitz, 2009). On the one hand, by exploiting its position as information intermediary (El Akremi, Mignonac, & Perrigot, 2010; Kalnins & Mayer, 2004; Knott, 2003), the franchisor may impose exchange hazards on franchisees by opportunistically non-renewing or terminating the franchised outlets (Argyres & Bercovitz, 2015). The franchisor may also opportunistically engage in behavior at the expense of franchisees' interests by deliberately placing outlet nearby to encroach franchisees' sales or exerting less effort to monitor franchisees, which would negatively affect the franchise system's competitive position (Lafontaine, 1992a; Scott, 1995). Furthermore, the franchisor may deliberately raise the royalty rate, lease payment, or sales quota that requires franchisees to meet to keep the outlet. The franchisor may opportunistically ask franchisees to make additional renovation or advertising expenditure that is not necessarily relevant to franchisees' success (Brickley, Misra, & Van Horn, 2006). In this regard, franchisees put their stakes at risk by depending on the franchisor's efforts. On the other hand, franchisees may free ride on the franchisor and/or on other franchisees in the same franchise system by failing to follow company procedures in terms of product or service quality, by overcharging customers, by shirking in the workplace, or by deliberately withholding local information at the expense of the overarching system (Dant & Nasr, 1998; Szulanski & Jensen, 2006). As the proper use of the franchisor's know-how in local operations is difficult to monitor (Barthélemy, 2008; Jankowski & Previs, 2004; Kidwell, Nygaard, & Silkoset, 2007), the franchisor also puts its stake at risk by depending on franchisee efforts (Brickley & Dark, 1987; Michael, 2002).

While franchise contracts can be viewed as a governance mechanism between franchisors and franchisees by which each party agrees to abide (Klein, 1995), franchisors and franchisees, who are subject to different exchange hazards (deriving from different transaction-specific assets), are likely to approach contractual design in different ways. To complement the extant franchise contract research (e.g., Bercovitz, 1999; Lafontaine, 1992b), this study explores the alternative contracting strategies that can keep firms from opportunistic behaviors. In the sections that follow, I address the aforementioned research gaps by developing the theoretical arguments regarding how parties' transaction-specific assets may influence contractual dimensions that are relevant to different parties' interests in the franchise context. I specifically examine how the different parties' transaction-specific assets influence the *relative* level of contractual complexity in favor of the franchisor versus franchisees.

#### 2.2.2.1 Franchisor's Transaction-specific Assets

Transaction-specific assets, by definition, are difficult to be redeployed for any other purpose and make the focal firm vulnerable to termination by its partner, as a result (Dyer, 1997; Poppo & Zenger, 2002; Reuer & Ariño, 2007). The typical franchisor's transaction-specific assets include system-specific know-how and business practices (Hall, 1993; Klein & Leffler, 1981). These transaction-specific assets cover know-how in site selection, outlet layout, recruitment and training, resource sourcing, product development, pricing, and advertising (Jell-Ojobor & Windsperger, 2014; Mumdzhev & Windsperger, 2011). Precisely because this transaction-specific know-how is costly to redeploy or of little value when applied to other franchise relationships, a franchisor with greater transaction-specific know-how is vulnerable to franchisees' opportunistic behaviors (e.g., Joskow, 1988;

Masten, 1984; Williamson, 1975). For example, a franchisor that trains its franchisees to make and sell specific franchise products or services may have to make additional retraining investment when its franchisee relationships end. The franchisor may also have to handle complaints from other franchisees or customers if the products or services from one franchised outlet deviate from the expected quality that is suggested in the training session or is required of franchisees in general.

The franchisor's considerable investment in transaction-specific know-how also highlights the importance of compliance with the franchise business concept for the entire system's competitive advantage (Bradach, 1997; Caves & Murphy, 1976; Kaufmann & Eroglu, 1999). As the franchisor's transaction-specific know-how becomes more important for the franchise performance, franchisees have greater incentive to free ride on the franchisor's know-how for their own interests. In this regard, a franchisor with transaction-specific assets is more likely to institute bonding mechanisms, such as non-compete provisions (Bercovitz, 1999) or area development provisions (Brickley, 1999), to prevent franchisees from deploying transaction-specific know-how for any purpose outside of the franchise relationship. Despite these bonding mechanisms, franchisees will continue to have opportunities over time to free ride on the franchisor's transaction-specific assets by deviating from company procedures, reducing product or service quality, shirking in the workplace, overcharging customers, or withholding information (Brickley & Dark, 1987; Gassenheimer, Baucus, & Baucus, 1996).

As designing contractual provisions in favor of one party may also intensify the hold-up hazards experienced by that party (Arruñada et al., 2001; Klein et al., 1978; Williamson, 1975), franchisors have at least two options to mitigate risk associated with

franchisees' opportunistic behaviors. First, the franchisor can include specific provisions in its favor to mitigate the likelihood of opportunism or to create opportunities to redeploy its assets. For example, a contractual provision requiring franchisees to participate in an advertising cooperative may help mitigate free-riding hazards. To reduce potential losses associated with investments in specific assets, the franchisor can also include a contractual provision that allows it to establish outlets using different trademarks. Second, the franchisor can address exchange hazards by eliminating contractual provisions in favor of franchisees. For example, a contractual provision allowing franchisees to block the addition of new outlets operated by other franchisees within an exclusive domain or a contractual provision allowing franchisees to purchase additional outlets in its vicinity may protect franchisees' sunk investments from the franchisor's subsequent hold-up (Mathewson & Winter, 1984; Rubin, 1978).<sup>3</sup> Exercising rights under these territorial protection provisions may be valuable to franchisees, particularly when the threat of the franchisor's hold-up hazards is severe. However, as greater franchisor transaction-specific assets are at risk when they are associated with a greater threat of franchisee hold-up hazards, such territorial provisions may in fact aggravate the likelihood of franchisee opportunism when there are no upward constraints on franchisee efforts (Mathewson & Winter, 1994).<sup>4</sup> The consequences of franchisee opportunism may increase as these territorial protections enhance the share of the residual claim to the franchisee.<sup>5</sup> Hence, excluding territorial

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<sup>3</sup> While granting exclusive territories for incumbent outlets is often considered anticompetitive (Blair & Lafontaine, 2002; Dutta, Heide, & Bergen, 1999), the use of territorial protection provisions to address encroachment problems has become common business practice and has even been formally instituted in the state franchise statutes of Hawaii, Indiana, Iowa, Minnesota, and Washington (Blair & Lafontaine, 2002).

<sup>4</sup> The upward constraints on a firm's effort may include placing floors on prices that the firm can charge and fixing minimum quantities to be sold or minimum inventories to be maintained (Mathewson & Winter, 1994).

<sup>5</sup> Contractor and Ra (2002) and Woolthuis, Hillebrand, and Nooteboom (2005) distinguish the consequences of opportunism from the likelihood of opportunism. Opportunism will be a threat only when both the consequences and the likelihood of opportunism are significant (Shah & Swaminathan, 2008).



protection provisions may discourage franchisees from free riding on other players in the system (i.e., the franchisor and other franchisees) because it is not free from nearby competitive pressures (Ingram & Baum, 1997; Kalnins, 2003). The interplay of these two options suggests a relatively more complex contract in favor of the franchisor than franchisees will result when the franchisor has greater transaction-specific assets.

Put together, as the potential for value loss increases with greater franchisor transaction-specific assets, the franchisor is incentivized to safeguard against the risks of opportunism. In turn, the franchisor is motivated to draft a contract with additional franchisor-favoring contractual provisions or with fewer franchisee-favoring contractual provisions to protect its interests, resulting in a contract with relatively more complexity in the franchisor's favor than in franchisees' favor. Therefore, I posit the following hypotheses:

*Hypothesis 1a: The contract will be relatively more in favor of the franchisor than franchisees when the franchisor has greater transaction-specific assets.*

*Hypothesis 1b: Franchisee-favored contractual provisions will decrease as the franchisor's transaction-specific assets increase.*

*Hypothesis 1c: Franchisor-favored contractual provisions will increase with the level of the franchisor's transaction-specific assets.*

#### 2.2.2.2 Franchisee's Transaction-specific Assets

Concurrently, franchisees also face particular challenges deriving from their investments that are specific to the relationship. A franchisee's transaction-specific assets

typically refer to physical assets, such as furniture, outlet design, and equipment that are difficult to redeploy for any other purpose (Mellewigt, Ehrmann, & Decker, 2011). As franchisors typically specify beforehand what furniture and decoration are acceptable in the store and how and where to position these assets, the franchisee's up-front investments tend to be specific to a particular outlet concept and can thus hardly be used in the event that the relationship is non-renewed or terminated (Combs & Ketchen, 1999).

The presence of exchange hazards on the franchisee side is not uncommon (Lafontaine, 1992a; Scott, 1995; Sen, 1993). The hold-up problems related to transaction-specific assets derive not only from the difficulties in redeploying assets for any other purpose (Dyer, 1997; Poppo & Zenger, 2002) but also from the likelihood of the partner's non-renewal or termination (Klein, 1980; Telser, 1980; Williamson, 1983). For example, franchisors may reduce their efforts to maintain system quality after selling out all of the outlets. Franchisors may deliberately raise royalty fee or require franchisees to make additional advertising or renovation expenditure to keep the franchise (Brickley et al., 2006). Franchisors may also opportunistically non-renew outlets upon the expiration of the contract or terminate the relationship before the contract expires to reap the benefits of the goodwill generated by the franchisee in the local market (Argyres & Bercovitz, 2015). Furthermore, because franchisees' physical assets (including leases) specific to a particular outlet concept are less valuable once the contract is terminated or non-renewed, franchisors can acquire those assets at fire-sale prices, resulting in large losses to franchisees. In this regard, franchisees' transaction-specific assets may expose them to high exchange hazards, incentivizing them to safeguard their interests contractually.

If the relationship is opportunistically discontinued, franchisees may lose assets' non-salvageable transaction-specific value (e.g., investment in brand-specific marketing or equipment that is impossible or difficult to redeploy) and even its full value (e.g., the value of a franchisee's establishment constructed on the land leased from the franchisor) (Rubin, 1990). Franchisees also bear the economic loss from future income streams generated by such transaction-specific assets if the relationship is terminated before the contract expires (e.g., restaurant traffic generated by its investment in an online reservation system) (Klein, 1995).<sup>6</sup> In turn, to enhance their ability to reap the returns on their up-front investment and to restrain franchisors from appropriating rents, franchisees prefer contracts with more provisions in their favor and fewer provisions in franchisors' favor.

There are two contracting approaches that allow franchisees to enhance their ability to reap returns on transaction-specific assets and to restrain franchisors' subsequent hold-ups. First, more provisions in favor of franchisees can be drafted in the contract. For example, having exclusive territory rights or outlet rights of first refusal can help franchisees to mitigate the risks associated with franchisors' encroachment or other franchisees' free-riding (Kalnins, 2004). These rights can also help them benefit from economies of scale in operation and marketing (Blair & Lafontaine, 2002). Second, some contractual provisions in favor of the franchisor that may cause hold-up problems can be reduced in the contract. For instance, by eliminating a franchisor's right to establish outlets with different trademarks in its vicinity, franchisees are less likely to be at risk of encroachment problems or to the franchisor's shirking. The interplay of these two options

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<sup>6</sup> Klein (1995, p. 26) has suggested, "it is the future return earned on these [franchisees'] specific productive assets that assures franchisee performance, not the fact that the franchisees have made the specific investments."

suggests a relatively less complex contract in favor of the franchisor when franchisees have greater transaction-specific assets.

Notably, when franchisees make substantial investments in transaction-specific assets, it can credibly signal their commitment not to act opportunistically because of the large losses that they face in the event of contract termination (Anderson & Weitz, 1992; Sertsios, 2015). As large up-front investments can signal franchisees' quality and incentivize them to perform well so that they can recoup their substantial initial investment, franchisors can expect that franchisees will act in line with the franchise's interests and abide by "supracontract norms" guaranteeing the rights of both parties (Buchanan, 1992, p. 67). In this event, in turn, franchisors will not be particularly incentivized to design complex contracts in their favor because they will have confidence in franchisees' intentions and value franchisees' input. Instead, the franchisor may design a contract with relatively less complexity in its favor, either by decreasing franchisor-favored provisions or by increasing franchisee-favored provisions. In sum, I posit the following hypotheses:

*Hypothesis 2a: The contract will be relatively less in favor of the franchisor than franchisees when franchisees have greater transaction-specific assets.*

*Hypothesis 2b: Franchisee-favored contractual provisions will increase as the franchisees' transaction-specific assets increase.*

*Hypothesis 2c: Franchisor-favored contractual provisions will decrease with the level of franchisees' transaction-specific assets.*

## 2.3 Methods

### 2.3.1 Empirical Context and Sample Description

I collected data on franchise systems from Franchise Disclosure Documents (FDDs). Franchises operating in the U.S. are regulated primarily by the Federal Trade Commission (FTC). The FTC prescribes the disclosure document format and requires all franchisors to disclose relevant information about their franchise operations to prospective franchisees no later than two weeks before any binding documents are signed. Franchisors are requested to provide information on twenty-three items, such as management structure, franchise history, legal status, fee schedules, data on existing franchises, or any obligations or rights of the franchisor and the franchisee, and to attach their franchise agreement to the FDD.<sup>7</sup> A typical FDD is approximately 250 pages. The franchise system must be registered with the target state to sell franchises there. Considering data accessibility and the popularity of franchising activities, I rely on data collected from the California Department of Business Oversight. California has digitalized FDDs and provides them for public download through its Self-Service DOCQNET Portal, which was launched in June 2014.

In this study, I focus on the restaurant industry.<sup>8</sup> Focusing on a single industry allows me to control for market demand and specific industrial technology (Michael, 2000). My

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<sup>7</sup> FDDs also provide rich information that is relevant to the franchise relationship, such as the tables of contents of confidential operations manuals, financial statements, franchisee lists, multi-state addenda, and other agreements.

<sup>8</sup> I include quick service/take-out (fast food), restaurant/family style, and other types of restaurants such as donuts/cookies/bagels, ice-cream/yogurt, coffee and specialty-food groups following *Bond's Franchise Guide* and *Bond's Source Book of Franchise Opportunities*, which are important data sources for franchise research (Lafontaine, 1995). The restaurant industry is the largest franchising industry: the three main food franchise sectors (i.e., quick service restaurants, table/full service restaurants, or retail food) represent 57 percent of all franchise industry employees in the U.S. (Food Franchise Industry Report, 2014). According to the 2015 *Franchise Help Industry Report*, there are over 200,000 fast food restaurant outlets and approximately 65,000 pizza franchises in the United States.

sample includes 136 franchise systems with FDDs in force during 2014-2015.<sup>9</sup> The franchise systems in the sample were headquartered in different states. The three primary states in which the franchise systems are headquartered include California (36%), Florida (11%), and Texas (10%). Most franchise systems in my sample are in traditional restaurant market segments: 51 percent are in the quick service/take out (fast food) segment and 37 percent are family style restaurants. The franchise systems in the sample vary in size: 39 percent have 10 or fewer outlets; 30 percent have between 10 and 50 outlets; 12 percent have between 50 and 100 outlets; 17 percent have between 100 and 500 outlets; and 1 percent operate more than 500 outlets. The franchise systems in the sample also feature different franchised outlet growth rates: 45 percent have positive franchised outlet expansion rates; 35 percent maintain a stable number of franchised outlets; and 20 percent have reduced the number of franchised outlets.

## 2.3.2 Variables and Measurement

### 2.3.2.1 Dependent Variable

Most variables in this study are either stated explicitly in the FDD or derived from the franchise contract. The dependent variable is the *Relative level of contractual complexity* in favor of the franchisor versus franchisees. Franchise contracts include a set of provisions that define the commencement, termination, and ongoing operations of franchise relations (Leblebici & Shalley, 1996). As I attempt to investigate how the parties'

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<sup>9</sup> One feature of my data is that the agreements present no variance between franchisees within the same franchise system. In California, franchise systems with \$5 million minimum net worth or with more than twenty-five franchisees are qualified for filing an exemption, requesting not to submit their FDDs. In this regard, my sample of franchise systems avoids potential biases toward larger and better-established firms, which are frequent biases when using published survey data (Lafontaine, 1995). In survey studies, larger and better-established firms are more likely to be targeted and their information is easier to access. The use of FDDs as official archival documents also allows me to avoid the social undesirability problems associated with survey work (Krumpal, 2013).

transaction-specific assets influence the design of the franchise contract, I am particularly interested in contractual provisions that involve franchisor/franchisee conflicts of interest.

I use four contractual provisions in this study. Two provisions (franchisor trademark extension rights and franchisor advertising control rights) capture franchisor-favored term content, while two other provisions (franchisee exclusive territory rights and franchisee outlet rights of first refusal) capture franchisee-favored term content. I choose to look specifically at these four provisions for two reasons. First, these four provisions mainly involve territorial and advertising issues. Prior studies have highlighted these two issues as central concerns when frictions between franchisors and franchisees arise (e.g., Barkoff & Garner, 1994; Blair & Lafontaine, 2005; Dant & Berger, 1993; Porter & Renforth, 1978). On the one hand, franchisors are incentivized to have more outlets and control over regional advertising. On the other hand, franchisees may suspect the effectiveness and fairness of any advertising guided by a cooperative plan.<sup>10</sup> The four provisions in question are therefore used to mitigate potential territorial and advertising hazards from one another but are simultaneously likely to intensify hold-up problems faced by the focal party. Second, in franchise contracts, many provisions are relatively standardized and commonly present across contracts, reflecting their boilerplate nature. My initial reviews of the franchise contracts show that these four provisions vary significantly across contracts, which provides further evidence that they are pertinent in the restaurant franchise industry and are relevant to my research question. To calculate the dependent variable—the relative level of contractual complexity in favor of the franchisor versus franchisees—I calculate the

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<sup>10</sup> With greater system expansion and brand visibility, franchisors can reap the returns from their brand investment and benefit from economies of marketing. In comparison, franchisees prefer less competition in their vicinity to obtain a higher share of the residual claims.

difference between the number of franchisor-favored and franchisee-favored provisions and divide this value by one plus the sum of franchisor-favored and franchisee-favored provisions:<sup>11</sup>

$$\text{Relative contractual complexity} = \frac{(\sum_{r=1}^2 X_r - \sum_{e=1}^2 X_e)}{1 + (\sum_{r=1}^2 X_r + \sum_{e=1}^2 X_e)} \quad (1)$$

where  $X_r$  equals 1 if the  $r$ th franchisor-favored provision was employed and zero otherwise. Similarly,  $X_e$  equals 1 if the  $e$ th franchisee-favored provision was employed and zero otherwise. The ratio ranges from -0.67 (i.e., the contract is mostly in favor of franchisees) to 0.67 (i.e., the contract is mostly in favor of the franchisor). As this is a continuous measure with a limited range of values, I employ a Tobit estimation.

### 2.3.2.2 Independent Variables

In this study, I analyze how the relative level of contractual complexity is influenced by the degree of transaction-specific assets invested in by each party in franchise relationships. I measure *Franchisor's transaction-specific assets* by assessing the in-class and on-the-job training hours the franchisor commits to the franchise system. As with previous work using training days in transferring business practices to evaluate franchisors' transaction-specific investments (e.g., Hussain et al., 2013; Mumdzhev & Windsperger, 2011), I calculate franchisors' transaction-specific assets by taking an average of in-class training hours and on-the-job training hours before the outlet opens.

I evaluate *Franchisee's transaction-specific assets* by considering the level of assets in which franchisees are required to invest in the system, bonding them to the franchise

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<sup>11</sup> I use an unweighted measure of contractual provisions because there are no grounded theoretical reasons for assigning different weights to particular provisions (Lui & Ngo, 2004). In fact, prior studies found a very high correlation between weighted and unweighted measures of contractual complexity (e.g.,  $\beta = 0.96$ ,  $p < 0.01$  in Barthélemy & Quélin, 2006, p. 1785) and found the results for a weighted analysis consistent with an unweighted approach (e.g., Bercovitz & Tyler, 2014; Malhotra & Lumineau, 2011; Reuer & Ariño, 2007).



contract (Bradach, 1997; Windsperger, 2004). Franchisees' transaction-specific assets include furnishings, equipment, and unique store design that can no longer be exploited by the franchisee following termination (Combs & Ketchen, 1999). I therefore assess franchisee's transaction-specific assets by calculating the natural log of franchisees' average up-front investments excluding the initial fee (Hussain et al., 2013; Mumdzhev & Windsperger, 2011). I use a logarithmic value to adjust for decreasing returns to scale and to correct for the normal distribution of the measure.

#### 2.3.2.3 Control Variables

To strengthen the empirical tests, I control for the *Contract duration* of the franchise relationship. Prior studies have shown that long contract duration allows franchisees time to recoup their investment with little fear of opportunistic termination (Brickley et al., 2006), whereas short contract duration offers franchisors a credible termination threat to address suspected free-riding hazards from franchisees (Joskow, 1987; Klein, 1980; Williamson, 1985).

I control for *Franchise Age* because age may reflect the franchisor's bargaining power. As franchisors are typically both managerially and financially constrained in their early years (Oxenfeldt & Kelly, 1969), their bargaining power is relatively low in their early years. Shane (1998) also noted that franchise systems fail less frequently as they age. In this regard, franchise age may influence franchisor's bargaining power in determining contractual design. Since franchisors may learn how to design contracts over time, franchise age may also relate to franchisors' contract design capabilities (Argyres & Mayer, 2007; Mayer & Argyres, 2004). Franchise age is measured by the log of the number of years since the franchisor began franchising (Barthélemy, 2008). Moreover, as the size of

a franchise system may reflect the bargaining power of the franchisor and the coordination complexity of the system, I also control for *System size* by calculating the number of outlets operating in the past three years and taking an average for each system (Barthélemy, 2008; Sorenson & Sørensen, 2001). I log the variable to account for decreasing returns to scale.

The proportion of states in which a chain operates provides the measure of *Geographic expansion*, which accounts for the effects of environmental heterogeneity on contractual design. As the franchisor expands to various regions, heterogeneous cultures and regulative environments may require governance mechanisms to help the franchise adapt to the local market conditions (Kaufman & Eroglu, 1999; Minkler, 1992). The variable *Tapered integration* (owning some units while franchising others) is also considered by measuring the proportion of units owned by the franchisor. Prior research has found evidence of the relationships between the proportion of company-owned outlets and the franchisor's brand name (Minkler & Park, 1994), as well as the franchisor's bargaining power (Michael, 2000), which may affect contractual design. To avoid short-term fluctuations in the sale of franchises that may cause the proportion of company-owned outlets to deviate from desired levels, I use an unweighted average of this figure over the recent three years.

Furthermore, I control for *Outlet density* to account for the influence of monitoring costs on contractual design (Brickley & Dark, 1987; Lafontaine, 1992a; Lafontaine & Shaw, 2005). I predict that asymmetric monitoring costs between franchisors and franchisees will make the contractual design more likely to favor a certain party. By contrast, more symmetric monitoring costs between the parties will make the contractual provisions more balanced. To measure outlet density, I consider the number of states in

which the system operates and the number of outlets in each state. On the one hand, I use the number of states in which the system operates to operationalize franchisor monitoring cost (Lafontaine, 1992a; Lafontaine & Shaw, 2005; Scott, 1995). Given the limited capacity to manage and monitor franchise units, it is more difficult for franchisors to monitor outlet operations when the franchise system operates in several states. The free-riding hazards from franchisees are also heightened as the geographical density of units and the spillover potential increase (Bercovitz, 2004). I use the total number of outlets in each state to operationalize franchisees' monitoring cost. When there are more outlets in the market, franchisees can more easily compare different outlets and assess the franchisor's behavior accordingly. I use the Herfindahl index to operationalize *outlet density*:

$$\text{Outlet density} = \sum_{i=1}^{51} n_i * \left(\frac{n_i}{N}\right)^2 \quad (2)$$

where  $n_i$  counts the total number of outlets in the  $i$ th state and  $N$  is the total number of outlets in the franchise system. The lower the value of this variable, the higher the monitoring costs for both franchisor and franchisees. Therefore, the monitoring costs between franchisor and franchisees are close to one another when the value is relatively high or low. By contrast, franchisor and franchisees have asymmetric monitoring costs when the value is moderate.

As previous studies typically view franchisees as the less powerful party in the franchise relationship, I control for *Franchisee uncertainty* by calculating the number of outlets terminated or non-renewed by the franchisor over the most recent three years. This is a conservative measure because the avenues franchisor may take to expel a franchisee from the franchise system are limited to these two avenues: termination and non-renewal

(Argyres & Bercovitz, 2015). Furthermore, prior studies suggest that the level of uncertainty is associated with the proportion of outlets discontinued (e.g., Lafontaine, 1992a; Lafontaine & Bhattacharyya, 1995). An unexpectedly dissolved relationship brings uncertainty, particularly to a party who expected a continuing relationship. If most outlet discontinuation results from franchisor termination or non-renewal, franchisees who have devoted their assets to the relationship thus bear relatively high risk of uncertainty.

The variable *Brand advertisement* was constructed to control for the influence of brand name capital on contractual design. Brand name capital has been emphasized, in particular, as a proxy for free-riding hazards in the literature on efficient franchise contracting, although it is difficult to assess the value of a brand name except by means of surveys (e.g., Barthélemy, 2008; Brown, Dev, & Lee, 2000). To construct a more objective measure, I instead evaluate the variable by discounting the value of the system's advertising expenditures over the last three years (see Argyres & Bercovitz, 2015 for a similar approach). Advertising expenditure data were drawn from the *AD\$penders* database.

Finally, as market segments may differ in the degree of requirements they impose to establish a new outlet, the degree to which they offer opportunities for expansion, their formalization levels in transmitting know-how to franchisees, and know-how intensity (Barthélemy, 2008; Sorenson & Sørensen, 2001; Zeithaml, Parasuraman, & Berry, 1985), I also control for *Market segment* effects.<sup>12</sup>

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<sup>12</sup> I group restaurant systems into three categories based on the type of service provided: quick service/take-out (fast food), restaurant/family style, and other specialty restaurants, including donuts/cookies/bagels, ice cream/yogurt, coffee and specialty, and prepared food outlets in retail hosts or shopping malls.

## 2.4 Results

### 2.4.1 Aggregate Analysis

Table 2.1 reports the means, standard deviations, and correlations between the dependent, independent, and control variables.<sup>13</sup> Variance inflation factors (VIFs) associated with each independent variable ranged from 1.17 to 4.73, which are well below the rule-of-thumb cutoff of 10, indicating that multicollinearity problem in the analyses is not serious (Meyers, Gamst, & Guarino, 2006).

To provide a comparison to the main model, I first treated the dependent variable as *Absolute level of contractual complexity*, calculating the sum of the number of franchisor-favored provisions and the number of franchisee-favored provisions in the contract. The summation ranges from zero to four. As this variable is discrete rather than continuous, the specification reliant on this dependent variable was therefore estimated using an ordered logit model (see Lerner & Merges, 1998; Mellewig, Madhok, & Weibel, 2007; and Reuer & Ariño, 2007, for a similar approach).<sup>14</sup> I then conduct an aggregate analysis of *Relative contractual complexity* in favor of the franchisor versus franchisees by assessing the difference between the number of franchisor-favored provisions and the number of franchisee-favored provisions, weighted by the total of franchisor-favored provisions and franchisee-favored provisions in the contract (see equation 1).

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<sup>13</sup> Considering the loss of information experienced by dichotomizing *p* values and the lack of consideration of the relative seriousness of making a Type I and Type II error (Aguinis et al., 2010; Bettis et al., 2016; Cumming, 2014), I report precise *p* values obtained in the models to enable scholars and practitioners to decide for themselves whether the findings should be considered statistically significant.

<sup>14</sup> As the absolute level of contractual complexity is a non-negative, count-based dependent variable, I also ran an additional robustness test that estimated the models with a negative binomial model (Greene, 2003). The results are qualitatively similar.

Table 2.1 Descriptive Statistics and Correlations

Variables	Mean	S. D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Relative level of contractual complexity	0.27	0.36	1										
2. Contractual duration	10.37	4.15	<b>0.23</b>	1									
3. Franchise age (Ln)	1.73	1.08	-0.11	<b>0.24</b>	1								
4. System size (Ln)	2.93	1.68	0.07	<b>0.27</b>	<b>0.67</b>	1							
5. Geographic expansion	0.28	0.57	0.05	<b>0.18</b>	<b>0.35</b>	<b>0.60</b>	1						
6. Tapered integration	1.57	4.28	0.11	0.04	-0.12	0.05	-0.12	1					
7. Outlet density (Ln)	1.72	1.19	-0.05	0.05	<b>0.43</b>	<b>0.53</b>	-0.02	<b>0.19</b>	1				
8. Franchisee uncertainty	0.06	0.14	0.01	-0.09	0.05	0.13	0.09	-0.09	0.00	1			
9. Level of brand advertisement	7.38	5.57	-0.07	<b>0.22</b>	<b>0.44</b>	<b>0.48</b>	<b>0.20</b>	-0.02	<b>0.30</b>	0.00	1		
10. Franchisor transaction-specific assets	4.34	0.73	<b>0.20</b>	<b>0.48</b>	<b>0.33</b>	<b>0.27</b>	<b>0.21</b>	0.06	<b>0.19</b>	0.02	<b>0.45</b>	1	
11. Franchisee transaction-specific assets	13.02	0.75	0.13	<b>0.55</b>	<b>0.20</b>	<b>0.20</b>	<b>0.18</b>	0.15	0.01	<b>-0.24</b>	<b>0.30</b>	<b>0.49</b>	1

Note:  $N=136$ . Correlations significant at  $p < 0.05$  appear in bold.

The results for the aggregate analysis are reported in Table 2.2 (Models 1 to 4). Because the range of values for the main dependent variable *Relative level of contractual complexity* is limited, ordinary least squares estimates are likely to be biased (Kennedy, 2008). I therefore perform a Tobit estimation to test the influence of franchisor's and franchisee's transaction-specific assets on contractual design in franchise relationships.

Models 1 and 2 examine the effects of control and of independent variables on the absolute level of contractual complexity. These two models are used as a comparison point to the main tests (Models 3 & 4), which investigate the antecedents of the relative level of contractual complexity. Model 3 serves as a baseline model that includes only control variables. The main study's variables (i.e., the franchisor's transaction-specific assets and the franchisee's transaction-specific assets) are entered in Model 4. Hypothesis 1a is supported, as the results show that the franchisor's transaction-specific assets had a positive and significant impact on contractual design in favor of the franchisor ( $\beta = 0.15$ ,  $p = 0.01$ ). In comparison, the results indicate no significant relationship between a franchisee's transaction-specific assets and franchise contract design in favor of the franchisor ( $\beta = -0.00$ ,  $p = 0.94$ ). Hence, Hypothesis 2a is not supported. Compared to the findings in the main test, the results in Models 1 and 2 do not show significant evidence supporting the traditional argument that transaction-specific assets might affect the absolute level of contractual complexity. Taken as a whole, the results from the aggregate analysis support Hypothesis 1a, but not Hypothesis 2a. Furthermore, the results also indicate that, in comparison to the absolute level of contractual complexity, the relative level of contractual complexity may reflect more nuanced connections between distinct transaction attributes and contractual aspects that are specific to different parties' interest.

Table 2.2 Aggregate Analysis: Ordered Logit Regression and Tobit Regression Results

Variables	Aggregate analyses			
	Absolute level of contractual complexity		Relative level of contractual complexity in favor of the franchisor vs. franchisees	
	Model (1)	Model (2)	Model (3)	Model (4)
Intercept	Incl.	Incl.	0.12 (0.09)	-0.29 (0.62)
Contract duration	0.03 (0.05)	0.07 (0.05)	0.02*** (0.01)	0.01 (0.01)
Franchise age (ln)	-0.39 <sup>†</sup> (0.24)	-0.34 (0.24)	-0.08** (0.04)	-0.09** (0.04)
System size (ln)	0.21 (0.23)	0.18 (0.23)	0.06* (0.04)	0.09** (0.04)
Geographic expansion	0.43 (0.44)	0.55 (0.45)	-0.03 (0.08)	-0.08 (0.08)
Tapered integration	0.02 (0.04)	0.03 (0.04)	0.01 (0.01)	0.00 (0.01)
Outlet density (ln)	-0.20 (0.22)	-0.18 (0.22)	-0.03 (0.03)	-0.05 (0.03)
Franchisee uncertainty	0.84 (1.21)	0.84 (1.30)	0.05 (0.21)	-0.01 (0.21)
Level of brand advertisement	-0.05 (0.04)	-0.03 (0.04)	-0.01 (0.01)	-0.01** (0.01)
Market segment—family restaurant	0.41 (0.39)	0.60 (0.43)	-0.04 (0.07)	-0.08 (0.07)
Market segment—donut/bagel/coffee/ice cream/yogurt/specialty	-0.53 (0.62)	-0.52 (0.62)	-0.02 (0.10)	-0.04 (0.10)
Franchisor transaction-specific assets		-0.54 (0.36)		0.15*** (0.05)
Franchisee transaction-specific assets		-0.11 (0.36)		-0.00 (0.05)
Log likelihood $L(\beta)$	-125.54	-124.08	-44.27	-40.17
$\chi^2$	14.27	17.18	18.03*	26.23***
$-2[L(\beta_1) - L(\beta_2)] \sim \chi^2$		2.91		8.20**

Note:  $N=136$ . Standards errors are in parentheses. Ordered logit model is used to estimate the absolute level of contractual complexity as the dependent variable (Models 1 and 2), while Tobit model is performed to estimate the relative level of contractual complexity as the dependent variable (Models 3 and 4).

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .



### 2.4.2 Disaggregate Analysis

In addition to using Tobit estimations to predict relative contractual complexity, I conducted additional analyses aimed at studying the impact of the franchisor's and the franchisee's transaction-specific assets on distinct dimensions of franchise contracts. Recent studies suggest that contracts may be multidimensional and that each dimension may have specific antecedents (Malhotra & Lumineau, 2011; Reuer & Ariño, 2007; Vanneste & Puranam, 2010). Although prior research has identified provisions based on different functions or value chain activities in the franchise context (e.g., Arruñada et al., 2001; Mumdzhev & Windsperger, 2011), to my knowledge, previous research does not provide specific guidelines for distinguishing contractual provisions that pertain to a specific party. As I am particularly concerned about the link between parties' specific transactional attributes and their relative contractual complexity, I therefore conducted an exploratory factor analysis (EFA) to ascertain whether contractual provisions refer to separate dimensions that are specific to different parties' interests in the franchise context.

Table 2.3 presents the results of a principal components factor analysis with an oblique rotation.<sup>15</sup> The two factors appear to serve as qualitatively different mechanisms of contractual governance in franchise relationships. Provisions loading highly on the

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<sup>15</sup> Given the dichotomous nature of the four contractual provisions I examined, I first computed the estimates of the tetrachoric correlation coefficients among the provisions (Schumacker & Beyerlein, 2000). Based on the tetrachoric correlation matrix, I performed a principal components factor analysis with an oblique rotation. I used an oblique promax rotation because I expected the resultant components to be correlated (Hair et al., 2006). Factors are retained if their corresponding eigenvalues exceed one. Together, the two retained factors explained 69.95 percent of the variance in the data. The factor analysis yields a good solution, with loadings generally greater than 0.5, with provisions typically loading on a single factor and with no significant cross-loadings. Thus, communalities mostly exceeded 0.5 except for outlet rights of first refusal—which has a communality of 0.36, suggesting that the two factors capture a significant portion of the variance in each of the four provisions.

first factor are related to the franchisee's territory exclusivity privileges and outlet rights of first refusal. These provisions involve franchisees' primary concerns in the relationship—control in operations and opportunities to reap returns on investment. I therefore label this factor '*franchisee-favored provisions*.' Notably, the franchisor's advertising right has a relatively large negative loading on the first factor, implying that the first factor also differentiates provisions by different functions (i.e., territory protection vs. advertising control). By contrast, the second factor is specifically concerned with the franchisor's discretion in developing trademarks. I therefore label this factor '*franchisor-favored provisions*.' The findings relating to these two factors from the factor analysis are consistent with the notion developed in the franchise literature that protection and discretion are primary concerns of franchisees and franchisors in the relationship.

I use the factor scores with an emphasis on franchisee-favored and franchisor-favored provisions as the two dependent variables in the disaggregate analysis. I expect that the two dependent variables have several common antecedents, some of which might not be captured by the control variables and that might generate correlated disturbances. Therefore, instead of a simple regression analysis, I conduct a seemingly unrelated regression analysis (SUR), which enables me to estimate the two dependent variables while considering these correlated disturbances simultaneously (Zellner, 1962). From a theoretical perspective, modeling the interdependencies between these two factors echoes recent research arguing that contractual dimensions are jointly determined (Argyres et al., 2007; Bercovitz & Tyler, 2014).

Table 2.3 Contractual Dimensions: Promax Factor Pattern

Provision	Franchisee- favored provisions (factor 1)	Franchisor- favored provisions (factor 2)	Communalities
1. Franchisor's trademark extension right	0.17	<b>0.97</b>	0.91
2. Franchisee's territory exclusive right	<b>0.61</b>	-0.44	0.66
3. Franchisor's advertising right	<b>-0.91</b>	-0.29	0.82
4. Franchisee's outlet first refusal right	<b>0.58</b>	-0.09	0.36
Eigenvalue	1.59	1.15	
Percent of variance	39.03	30.92	
Cumulative percent of variance	39.03	69.95	

Note: bold print indicates the largest factor loading for each contractual provis:

I present the results of the seemingly unrelated regressions in Table 2.4 (Models 5 to 8). Models 5 and 7 serve as baseline models that include only the effects of the control variables on the two dependent variables (i.e., franchisee-favored provisions and franchisor-favored provisions), and Models 6 and 8 augment these baseline models with the main effects. The results show that franchisors' transaction-specific assets and franchisees' transaction-specific assets have different influences on the relative contractual complexity. Franchisors' transaction-specific assets have a negative and significant effect on the franchisee-favored provisions ( $\beta = -0.14, p = 0.01$ ) and a positive and modestly significant effect on the complexity of the franchisor-favored provisions ( $\beta = 0.09, p = 0.08$ ). By contrast, franchisees' transaction-specific assets have a negative and significant effect on the complexity of the franchisor-favored provisions ( $\beta = -0.13, p = 0.02$ ) but have an insignificant effect on the complexity of the franchisee-favored provisions ( $\beta = -0.06, p = 0.29$ ). Notably, franchisors' transaction-specific assets promote the relative contractual complexity in favor of the franchisor not only by reducing franchisee-favored provisions but also by increasing franchisor-favored provisions. By contrast, rather than increasing franchisee-favored provisions, franchisees' transaction-specific assets reduce the relative contractual complexity in favor of the franchisor by decreasing franchisor-favored provisions in the system. The fair validity of the pre-specified theoretical model is shown by the fact that the set of independent variables and control variables explains 20% and 13% of the variance in the two aspects of the contractual design, respectively (i.e., franchisee-favored provisions and franchisor-favored provisions). Taken together, the results from the disaggregate analysis support Hypotheses 1b, 1c, and 2c but not 2b.

Table 2.4 Disaggregate Analysis: Seemingly Unrelated Regression

Variables	Disaggregate analysis			
	Franchisee-favored provisions		Franchisor-favored provisions	
	Model (5)	Model (6)	Model (7)	Model (8)
Intercept	-0.13 (0.10)	0.99 (0.63)	-0.07 (0.10)	1.17 (0.63)
Contract duration	-0.03*** (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.00 (0.01)
Franchise age (ln)	0.08** (0.04)	0.09** (0.04)	-0.04 (0.04)	-0.05 (0.04)
System size (ln)	-0.05 (0.04)	-0.07* (0.04)	0.06 (0.08)	0.07* (0.04)
Geographic expansion	-0.00 (0.08)	0.05 (0.08)	-0.07 (0.08)	-0.08 (0.08)
Tapered integration	-0.00 (0.01)	-0.00 (0.01)	0.01 (0.01)	0.01 (0.01)
Outlet density (ln)	0.02 (0.04)	0.03 (0.03)	-0.03 (0.04)	-0.04 (0.03)
Franchisee uncertainty	-0.11 (0.21)	-0.12 (0.22)	-0.13 (0.21)	-0.30 (0.22)
Level of brand advertisement	0.01 (0.01)	0.02*** (0.01)	0.00 (0.01)	0.00 (0.01)
Market segment—family restaurant	0.02 (0.07)	0.08 (0.07)	-0.06 (0.07)	-0.03 (0.07)
Market segment— donut/bagel/coffee/ice cream/yogurt/specialty	0.07 (0.10)	0.10 (0.10)	0.14 (0.10)	0.15 (0.10)
Franchisor transaction-specific assets		-0.14*** (0.05)		0.09* (0.05)
Franchisee transaction-specific assets		-0.06 (0.05)		-0.13** (0.05)
R-squared	0.13	0.19	0.08	0.13
R-square difference		0.06		0.04
$\chi^2$	21.81**	33.73***	13.03	20.81*

Note:  $N=136$ . Standards errors are in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

### 2.4.3 Supplemental Analysis

In designing the dependent variables in the main aggregate and disaggregate tests, I include all related contractual provisions to construct the absolute level of contractual complexity (the summation approach), the relative level of contractual complexity (the ratio approach), and the distinct contractual dimensions specific to different parties' interests (the factor scores approach). For all these variables, I assign equal weight to each contractual provision. Although this is a reasonable default when there are no grounded reasons for assigning different weights to particular provisions (see footnote 11), I conducted robustness tests to explore the effects of each party's transaction-specific assets on *individual* contractual provisions. By examining the effect on individual provisions, I might mitigate the concern that the results found in the main tests might be artifact-driven by a few—rather than all—contractual provisions.

As the choice of each contractual provision is dichotomous and there are multiple binary dependent variables that may occur simultaneously, I apply a multivariate probit model, which is appropriate when disturbances across equations are allowed to be correlated after accounting for the influence of the explanatory variables in the model (Greene, 2003). I present the results of the multivariate probit model in Table 2.5 (Models 9 to 12). Here, the multivariate probit model includes four equations. To assess the assumption that the disturbances are uncorrelated, I conduct the likelihood ratio (LR) test for the correlation of error terms in the model. The corresponding results show that the assumption can be rejected, confirming that the use of a multivariate probit model is more appropriate than estimating four independent binary probit models. The results for the multivariate probit analysis are consistent overall with my initial approach in the main

Table 2.5 Post Hoc Disaggregate Analysis: Multivariate Probit Regression

Variables	Disaggregate analysis			
	Franchisor trademark extension right Model (9)	Franchisee territory exclusive right Model (10)	Franchisor advertising control right Model (11)	Franchisee outlet first refusal right Model (12)
Intercept	6.32*** (1.92)	2.34** (1.08)	-4.97*** (1.79)	-2.14 (5.15)
Contract duration	0.02 (0.03)	0.05 (0.03)	0.15*** (0.01)	-0.01 (0.03)
Franchise age (ln)	-0.19* (0.10)	0.41*** (0.11)	-0.44*** (0.14)	-0.04 (0.16)
System size (ln)	0.22 (0.18)	-0.71*** (0.21)	0.16* (0.08)	0.02 (0.13)
Geographic expansion	-0.07 (0.44)	0.75*** (0.09)	0.47*** (0.12)	0.20 (0.29)
Tapered integration	0.05*** (0.01)	-0.20 (0.20)	-0.02 (0.04)	0.01 (0.03)
Outlet density (ln)	-0.19* (0.11)	0.32** (0.13)	-0.05 (0.10)	-0.14 (0.21)
Franchisee uncertainty	-1.08*** (0.28)	1.22 (1.02)	1.20 (1.13)	-0.42 (0.59)
Level of brand advertisement	0.01 (0.03)	0.11*** (0.01)	-0.09*** (0.01)	-0.01 (0.03)
Franchisor transaction- specific assets	0.18 (0.48)	-0.96*** (0.18)	0.34*** (0.05)	-0.27* (0.15)
Franchisee transaction- specific assets	-0.65*** (0.22)	0.01 (0.14)	0.28* (0.16)	0.18 (0.42)
Log pseudolikelihood ratio			-208.90	
Likelihood ratio test of rhos ( $\chi^2$ )			12.00*	

Note:  $N=136$ . Standards errors are in parentheses. In multivariate probit model, std. err. is adjusted for 3 clusters in market segment.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

tests. The results indicate that franchisees' transaction-specific assets negatively affect the propensity that franchisors' trademark extension rights are included in the contract ( $\beta = -0.65, p = 0.00$ ). The results also show that franchisors' transaction-specific assets negatively affect the propensity that franchisees' exclusive territorial rights and franchisees' outlet rights of first refusal are included in the contract ( $\beta = -0.96, p = 0.00$ ;  $\beta = -0.27, p = 0.09$ , respectively). I also found in Model 11 that both franchisors' transaction-specific assets and franchisees' transaction-specific assets positively affect the propensity that franchisors' rights to control advertising is included in the contract ( $\beta = 0.34, p = 0.00$ ;  $\beta = 0.28, p = 0.07$ ).

## 2.5 Discussion

In this paper, I sought to extend previous research on the influence of transactional attributes on contractual design in interorganizational relationships. Although prior work has recognized the distinct stakes and risks borne by each party in interorganizational relationships, the link between the distinct stakes borne by each party and the distinct aspects of contractual design has not been emphasized. My study therefore provides a more nuanced understanding of contractual design in the context of franchising.

Following those who have revealed evidence regarding the relation between exchange hazards and contractual governance (Poppo & Zenger, 2002; Reuer & Ariño, 2007), I found that the higher the franchisor's transaction-specific assets, the relatively more contractual provisions there were in favor of the franchisor versus franchisees. Specifically, the disaggregate analysis showed that the higher franchisor's transaction-specific assets, the fewer franchisee-favored provisions and the more franchisor-favored



provisions were included in the contract. The higher a franchisee's transaction-specific assets, the fewer franchisor-favored provisions were included, although higher franchisee transaction-specific assets do not have a significant effect on the franchisee-favored provisions in the franchise contract. These findings suggest that the vulnerable party prefers relatively greater levels of contractual complexity. However, the vulnerable party may have a proclivity to enhance its relative level of contractual complexity by reducing the contractual provisions in favor of the threatening party rather than increasing the contractual provisions in its favor.

### 2.5.1 Theoretical Implications

Following recent scholarly appeals for more-detailed examination of actual contract specifics (Contractor & Reuer, 2014; Schepker et al., 2014), my detailed analysis of franchise contracts has important implications for the governance of interorganizational collaborations (Reuer et al., 2016). Specifically, my asymmetric approach represents an important departure from the traditional practice of regressing exchange hazards in a transaction on the *absolute* level of contractual complexity (Poppo & Zenger, 2002; Reuer & Ariño, 2007). In particular, I show that contracts include provisions that may be specific to each party's concerns. Current research has largely overlooked the fact that different parties may weigh various contractual functions differently, as they bear different risks and stakes in the relationship. Categorizing the contractual dimensions via factor analysis allowed me to observe the relative change in contractual complexity within each contractual dimension (i.e., the dimension concerned with franchisee interests and the dimension concerned with franchisor interests).

In addition, my study of the *relative* level of contractual complexity departs from prior work (e.g., Parkhe, 1993; Reuer & Ariño, 2007; Schilke & Cook, 2015) by suggesting how firms may aim to maximize their contractual protection relative to their partner's while simultaneously limiting contractual complexity. As such, my findings highlight the conflicting demands associated with contracting—contracts safeguard parties' interests but are also costly to draft, enforce, and monitor (Bernheim & Whinston, 1998; Williamson, 1985). Specifically, the findings highlight the alternative ways of addressing potential hazards in contractual relationships. When facing exchange hazards, I suggest that firms have two main options to constrain opportunism. First, they can “raise their shield” by drafting detailed contracts to guard against opportunistic behaviors, to set clear expectations for behavior, and/or to provide a blueprint for collaboration (Lumineau & Malhotra, 2011; Luo, 2002; Macneil, 1980). Second, firms can “raise their sword” or “disarm their partner's sword” by making the contractual provisions in favor of their partner deliberately simple (Bernheim & Whinston, 1998; Williamson, 1985). Although both raising their shield and raising their sword to take away the counterparty's protection protect the focal firms from hazards, disarming the counterparty may be less costly and more controllable, as firms cannot delineate all contingencies that may arise beforehand (Malhotra & Murnighan, 2002; Simon, 1961). In line with this reasoning, the results in this study suggest that parties prefer disarming their counterpart when facing potential exchange hazards.

### 2.5.2 Managerial Implications

As the Chinese military strategist and philosopher Sun Tzu suggested in the introductory quote, the art of managing hazards in relationships may lie in mitigating

conflicts of interest without costly battles between the parties. The current investigation offers implications for franchise or alliance managers who are in charge of mitigating exchange risks. In particular, I provide practical insights into the managerial challenge of structuring partnerships when possible contractual provisions abound (Ariño & Reuer, 2004). The findings highlight the alternative ways of addressing potential hazards in contractual relationships. First, firms can “raise their shield” by drafting detailed contracts to guard against opportunistic behaviors, to set clear expectations for behavior, and/or to provide a blueprint for collaboration (Lumineau & Malhotra, 2011; Macneil, 1980). Second, firms can “raise their sword” or “disarm their partner’s sword” by making the contractual provisions in favor of their partner deliberately simple (Bernheim & Whinston, 1998; Williamson, 1985). Although both raising their shield and raising their sword to take away the counterparty’s protection protect the focal firms from hazards, disarming the counterparty may be less costly and more controllable, as firms cannot delineate all contingencies that may arise beforehand (Malhotra & Murnighan, 2002; Simon, 1961). My results also imply that a negative change in the contractual complexity of one dimension (e.g., of *franchisor-favored provisions*) is not necessarily equivalent to a positive change of contractual complexity of another dimension (e.g., of *franchisee-favored provisions*) and vice versa.

### 2.5.3 Limitations and Future Research

Given the nature of my sample, this study is empirically focused on franchises in the restaurant industry in the U.S. The business format and the stable technology featured by my sample, although similar to many other industries (e.g., the hotel industry, convenience store industry, etc.), may limit the generalizability of my findings for

franchises with different business formats (such as the automobile dealership industry) and/or industries with rapidly developing and uncertain technologies (e.g., bio-pharmaceutical R&D alliances). I thus invite further studies to analyze the possible influences of the institutional, technological, legal, and cultural contexts on the way these contracts are developed.

Future research might also further connect this study with recent work into the different contractual functions (Malhotra & Lumineau, 2011; Ryall & Sampson, 2009). For instance, it would be particularly interesting to determine whether the interests and concerns of specific parties emphasize driving the control or coordination function of contracts and/or the respective strengths of control and coordination provisions for each party. In addition, future research might extend my approach by finding other methods of evaluating the level of contractual complexity within each contractual dimension. For example, although the findings suggest a reduction of the counterparty's contractual complexity (i.e., the *number* of contractual provisions) in face of high exchange hazards, future work can explore whether the vulnerable party might increase the *length* of individual provisions specific to the focal firm when facing exchange hazards. Given the increasing importance of relational ties between firms (Cao & Lumineau, 2015; Faems et al., 2008), I also hope that my study stimulates further research to illuminate the impact of asymmetric transaction attributes between firms on the relative level of relational governance.

In sum, my research provides important new insights into how contracts are designed and underscores the need to extend beyond a broad approach to contractual design to consider the distinct antecedents of contracts in dyadic relationships. I believe

that until more models integrating asymmetric approaches to transaction attributes and interorganizational governance are carefully crafted and empirically explored, scholars' understanding of interorganizational relationships will remain limited.

## CHAPTER 3. THE ORIGINS OF COMPLEX DISPUTE RESOLUTION PROVISIONS

### 3.1 Introduction

Conflict is inevitable, but combat is optional.

— Max Lucade

Disputes are frequent in inter-organizational relationships (Das & Teng, 2000; Park & Ungson, 2001). As dispute resolutions are key to the success and stability of inter-organizational relationships (Lumineau & Malhotra, 2011; Mohr & Spekman, 1994), it is important to know more about how firms deal with disputes. While public courts are typically perceived as the “default” approach to address disputes (Drahozal & Hylton, 2003; Hylton, 2005), management and law studies have highlighted the advantages of private dispute resolution procedures over litigation (e.g., Crocker & Masten, 1991; Macneil, 1978, 1985).

These private dispute resolution procedures, also known as alternative dispute resolution (ADR) procedures, include settlement via mediation, arbitration, and a mix of mediation and arbitration. The advantages of these ADR procedures include the arbitrator’s and mediator’s industry expertise (Bonn, 1972; Johnson, McMillan, & Woodruff, 2002), the favorable speed and fees relative to the litigation process (Brett, Barsness, & Goldberg, 1996; Drahozal, 2008; Ury et al., 1988), the reduced risks of out-of-control juries and large class actions (Eisenberg & Hill, 2003; Ware, 2006), the effectiveness in preserving existing business relationships (Potter, 1990), and the flexibility in mediation and arbitration processes (Bernstein, 2001; Leeson, 2008). While parties can simply decide which procedures to refer to and mutually benefit from the advantages of these procedures *after*

disputes arise, some contracts explicitly delineate complex dispute resolution provisions that include a number of external fora ex ante (e.g., mediation, arbitration, and both), requiring both parties to refer disputes they might fail to resolve bilaterally to specific ADR procedures.<sup>16</sup> In particular, prior studies have shown that interfirm contracts do not systematically include required mediation or arbitration procedures (i.e., ADR) in dispute resolution provisions ex ante (Drahozal & Hylton, 2003; Eisenberg & Miller, 2007). These observations lead to a research question: What factors cause parties to resort to ADR procedures in the contract *before* disputes arise?

In this paper, I examine the ex-ante decision of referring possible disputes to ADR in franchise contracts. In order to unpack the factors that drive the franchisor to institute complex dispute resolution provisions in contracts, I build on transaction cost economics logic with respect to the influence of transactional characteristics on governance design, and I use the key insight from the literature on the “shadow of the future” that the expectation of future interactions affects cooperation. Anticipating the potential for noncooperation from partners, firms rely on governance mechanisms such as contracts to mitigate the risk of opportunism and to promote cooperation (Williamson, 1985). However, since parties commit different transaction-specific investments to the relationship, their value placed on the expected future interaction may change with how they value the transaction-specific investment committed by one another. The main rationale behind the literature on the shadow of the future proposes that the expectation of future interactions constitutes a credible capacity for retaliation if opportunism occurs (Axelrod, 1984; Telser,

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<sup>16</sup> Referring disputes to court proceedings is often the “default” option when there are no alternative dispute resolution procedures specified in contracts in advance. While parties may choose to refer disputes to alternative dispute resolution procedures ex post, there is no contractual obligation for the parties to do so.

1980). Accordingly, if the expected future interaction is highly valued, parties will have more incentive to cooperate in resolving disputes and thus reduce the need for complex dispute resolution provisions. I thus highlight that the design of complex dispute resolution provisions in contracts hinges not only upon the risk of opportunism derived from transaction-specific investments, but also upon how parties value the future interaction on the dyadic level.

My contribution is twofold. First, my work is one of the first to integrate the theoretical logics of transaction cost economics and the shadow of the future and apply them to explain how a contract is designed. Contrary to the extant literature that treats the transaction characteristics and the shadow of the future as independent accounts for cooperation (e.g., Heide & Miner, 1992; Lumineau & Oxley, 2012) and governance design (e.g., Reuer & Arino, 2007), I present an alternative account that the transaction characteristics and the shadow of the future are necessarily intertwined as the origin of inter-organizational cooperation and governance design. This integration provides one of the first clear articulations of two distinct but interrelated mechanisms through which transaction-specific investments by exchange parties affect contract design: transaction-specific investments may influence contract design not only by invoking safeguarding concerns but also by resorting to the concerns about the expected return from future interaction with the partner. Transaction-specific investments by a firm may raise its hold-up concern. However, it is possible that the firm's transaction-specific investments are also valued by the partner in the long run. As such, the expectation for the future interaction might constitute the "shadow of the future" for the partner to promote its cooperation and reduce its opportunism, thereby reducing the focal firm's need for safeguarding. Examining



these intertwined mechanisms can provide a more accurate assessment of how interfirm contracts are designed.

This study also contributes to the interfirm dispute resolution literature by highlighting the advantages that parties can only achieve through the commitment to dispute resolution provisions *ex ante* but cannot be obtained through the exercise of dispute resolution procedures *ex post*. Extant literature on dispute resolutions (e.g., Eisenberg & Hill, 2003; Ury, Brett, & Goldberg, 1988) has long emphasized the comparison between legal proceedings and ADR, explicating the advantages and disadvantages of different dispute resolution procedures. In particular, management research on dispute resolution has investigated how contract design may affect dispute resolution approaches and outcomes (Lumineau & Malhotra, 2011), how the transaction characteristics and nature of the dispute may affect the choice of dispute resolution procedures (Dant & Schul, 1992; Lumineau & Oxley, 2012), and how the dispute resolution approaches relate to partnership success (Mohr & Spekman, 1994). However, the distinction between the design of required procedures *before* disputes arise and the actual use of the procedures *after* disputes occur has received little attention to date. As there is no reason to assume that parties would have similar interests in resolving disputes once the dispute arises, simply referring to the advantages/disadvantages of different dispute resolution procedures might not adequately provide a full picture of how firms govern their partnership since the formation stage of interfirm collaborations. Compared to studies focusing on the choice of dispute resolution procedures *after* disputes arise, I instead examine the contracting decision in dispute resolution provisions for possible disputes.

In sum, the purpose of this study is to advance our understanding of the determinants of the design of dispute resolution provisions in interorganizational relationships. To test the theoretical model, I collected data on franchise relationships in the U.S. restaurant industry. The findings suggest that transaction-specific investments by the franchisor *versus* franchisees will affect the design of dispute resolution provisions, contingent on the length of the contract duration. The findings reveal that when the franchisor commits greater brand name capital in the relationship, the complex dispute resolution provisions are more likely to be present in franchise contracts no matter the length of the contract duration. By contrast, when franchisees are required to commit greater input to comply with system specifications, complex dispute resolution provisions are more likely to be present when the contract duration is longer. In the following sections, I present the theoretical background for the study and develop the hypotheses.

## 3.2 Theory and Hypotheses

### 3.2.1 Design of Dispute Resolution Provisions

Firms rely on interfirm governance mechanisms to mitigate possible disputes and to promote cooperation (Lusch & Brown, 1996; Ring & Van de Ven, 1992). One such governance mechanism is to design contractual governance to control and coordinate the relationship (Luo, 2002; Poppo & Zenger, 2002; Williamson, 1985). While prior research has shown how the contractual governance structure influences the occurrence of disputes (e.g., Gundlach & Achrol, 1993) and how the contractual governance structure has implications for the adoption of different dispute resolution approaches (Lumineau & Malhotra, 2011), the design of dispute resolution provisions, to my knowledge, has received little scholarly attention in the management field.

In this paper, I investigate the factors that drive the franchisor to include complex dispute resolution provisions in contracts. The study of the design of complex dispute resolution provisions is a critical step to understand cooperative behaviors *before* disputes arise and the cooperative orientation *after* disputes arise. First, dispute resolution provisions specifying how the transacting parties will identify and resolve possible disputes can serve as a governance mechanism in response to anticipated hazards and unforeseen contingencies (Anderson & Dekker, 2005; Ryall & Sampson, 2009). As the dispute resolution provisions commit parties to specific procedure(s) when disputes arise, they can reduce the uncertainty about the counterpart's behavior when the relationship becomes sour. Since parties usually hold incomplete information about their future position when disputes arise, they typically have more incentives to agree on the dispute resolution procedures before disputes arise (Hay & Spier, 1997). Second, since dispute resolution provisions delineate the procedures that parties are required to follow when disputes arise, they also allow parties to foresee the possible outcomes of the dispute, which may improve parties' behaviors and intentions in the relationship (Shavell, 1995). Furthermore, because dispute resolution provisions create information revelation mechanisms, they enable a firm to screen and sort among potential partners based on private information about partners' propensity to perform contractual obligations and future dispute resolution behaviors (Kapeliuk & Klement, 2013).<sup>17</sup>

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<sup>17</sup> The use of complex dispute resolution provisions in contracts may reflect parties' commitment to "working it out" once a dispute occurs (Lumineau & Oxley, 2012). As dispute resolution provisions delineate the dispute resolution procedures that the parties are required to follow when they cannot resolve the dispute bilaterally, well-specified dispute resolution provisions have direct impact on the likelihood of litigation ex post (Eisenberg & Miller, 2007; Lumineau & Oxley, 2012). The accumulated private ordering costs before litigation may reduce parties' incentives to litigate (Shavell, 1995). As the asymmetric information problems are likely to be mitigated in the course of arbitration or mediation procedures, there are also fewer information rents that parties can benefit from via litigation ex post (Bebchuk, 1984).

### 3.2.2 Complex Dispute Resolution Provisions in Franchise Contracts

By definition, *complex* dispute resolution provisions refer to dispute resolution provisions that require parties to refer disputes to at least one ADR forum (i.e., mediation and arbitration), except in the case of trials in the event of disputes. Transaction cost economics (TCE) logic advances the rationale about how exchange hazards may affect contractual governance design (Williamson, 1985, 1996). Based on TCE logic, because drafting, enforcing, and monitoring contracts are costly, parties will design complex contracts only when the risk of opportunism is salient (Joskow, 1987, 1988). By contrast, less complex contracts are desirable when the parties seek to develop and leverage mutual trust and cooperative norms (Macaulay, 1963; Malhotra & Murnighan, 2002).

While ADR enables parties to obtain more nuanced dispute outcomes that foster the realignment of interests between disputing parties (Drahozal & Hylton, 2003), complex dispute resolution provisions may reduce firms' strategic flexibility, as the ex-ante commitment to specific ADR procedures may forsake access to litigation. As mediators and arbitrators tend to settle disputes in compromising and conciliatory approaches and as it is difficult to appeal when using arbitration in disputes, complex dispute resolution provisions may also engender opportunism (Drahozal & Ware, 2010; Stipnowitch & Lamare, 2013). Considering that ADR is not always superior to litigation (Blackman & McNeill, 1998; Noyes, 2007) and that ex ante complex dispute resolution provisions may reduce flexibility and engender opportunism, parties may have conflicts of interest in the various dispute resolution procedures. Without specific provisions in contracts that require the parties to refer disputes to specific procedure(s) once the dispute arises, the defending party can always refuse to engage in ADR (Shavell, 1995). Thus, if a specific ADR

procedure is present in the contract *before* disputes arise, it is reasonable to infer that one party prefers ADR, while the other party may prefer litigation or be indifferent regarding a preference between ADR and litigation. Accordingly, the asymmetric interests in cooperatively resolving disputes *ex post* have critical implications for the design of dispute resolution provisions *ex ante*. Combined with the efficiency logic of TCE, I posit that complex dispute resolution provisions are particularly rewarding and required when the focal firm is subject to greater stakes in the relationship if the partner is unwilling to cooperate in dispute resolutions.

In the sections that follow, I first develop the theoretical arguments regarding how the parties' stakes derived from transaction-specific investments may affect the design of complex dispute resolution provisions in the franchise context. Next, I theorize about how the threats of non-renewal and termination have implications for a party's willingness to cooperatively resolve disputes *ex post*—and thus for the inclusion of complex dispute resolution provisions *ex ante*.

### 3.2.2.1 Main Effects of Transaction-Specific Investments

Business format franchising is a long-term collaborative relationship between a franchisor and one or more franchisee. The franchisor grants to its franchisee(s) the privilege to use its trademarked brand name and its unique business concept. In return, franchisees pay fees and invest time and effort to develop and operate the outlet. The intertwined investments committed by the franchisor and the franchisee make both counterparties subject to exchange hazards on each side (Bhattacharyya & Lafontaine, 1995; Michael & Bercovitz, 2009). In what follows, I theoretically explore how the

franchisor's brand name capital and the franchisee's input-specific investments affect the design of dispute resolution provisions in franchise contracts.

***Brand name capital.*** Transaction-specific investments, by definition, are difficult to redeploy for other purposes, making the focal firm vulnerable to the unexpected ending of a relationship (Dyer, 1997; Poppo & Zenger, 2002). A typical franchisor's transaction-specific investments include the brand name capital for the franchise system (Klein, 1980; Klein & Leffler, 1981) that "provide[s] useful information to customers and generally indicate[s] that sellers' prices are justified by the product's quality level" (Norton, 1988, p. 108). Since franchisees have no incentives to account for the profits of the franchise system as a whole, prior studies have pinpointed the risk of opportunism by franchisees through free riding on the brand name and trademark (Brickley & Dark, 1987; Rubin, 1978). By providing a lower-quality product or service, franchisees can lower their own costs while continuing to take advantage of the franchisor's trademarked brand name. As the franchisor commits greater investments in its brand name capital, the franchisee's scope for opportunism is enlarged. In turn, the franchisee's incentive to voluntarily adopt alternative dispute resolution procedures decreases, and thus the franchisor cannot rely upon *voluntary* participation from the franchisee in specific dispute resolution procedures. Instead, complex dispute resolution provisions that accentuate the importance of sanctions for defection are desirable.

Complex dispute resolution provisions are also demanded when the franchisor is significantly vulnerable to disputes. As disputes typically implicate the activities or practices of one of the parties but not the other (Priest & Klein, 1984), greater investment in brand name capital makes the franchisor more vulnerable to disputes. Compared to

private procedures, court proceedings may cause unfavorable publicity about disputes (Schmitz, 2006). When disputes are submitted to court, whether the franchisor is a plaintiff or a defendant, the franchisor's brand name may be damaged, and greater brand name capital may exacerbate the transmission of a negative image. In particular, resorting to court proceedings may put the franchisor under the threat of a flood of copycat claims when a big damage award is adjudicated (Dunham, 2003). There is also uncertainty about the decision rules or legal standards that will be applied by the judge or jury (Bebchuk, 1984). As the franchisor with very important brand name capital becomes more vulnerable to disputes, the threat of adjudication for franchisees becomes low and the franchisor is more involved in dispute resolutions (Dant & Monroe, 1987; Thibaut & Kelley, 1959). Accordingly, the franchisor has more incentives to design complex dispute resolution provisions that allow it to control the way in which disputes are resolved (Elangovan, 1995).

Furthermore, a franchisor with greater brand name capital also has incentives to design complex dispute resolution provisions because of the desire for partnership continuity with good franchisees. Filing a suit against franchisee(s) may deviate from the franchisor's spirit of developing the franchise system, as the publicity of disputes may affect the establishment of the franchise brand name and the perseverance of relationships with extant or prospective franchisees. Since brand name capital reflects the franchisor's great concerns with developing the brand name of the system (Barthélemy, 2008), a franchisor with greater brand name capital has more incentives to design complex dispute resolution provisions to preserve relationships (Dunham, 2003).

Overall, considering the high likelihood of franchisee opportunism, the vulnerability to disputes, and the desire for partnership continuity with good franchisees,

franchisors with greater brand name capital have incentives to design more complex dispute resolution provisions ex ante. Thus, I propose the following hypothesis:

*Hypothesis 1. The likelihood that complex dispute resolution provisions will be present in a franchise contract will increase when the franchisor commits greater brand name capital to the franchise system.*

***Input specification.*** To mitigate the potential for franchisee opportunism at the expense of the franchisor, the franchisor usually includes a guideline in disclosed documents requiring the franchisee to purchase specific inputs that comply with a pre-determined input specification and sourcing policy (Klein & Saft, 1985; Michael, 2000).<sup>18</sup> These specified franchisee investments typically refer to physical assets, such as trademarked product materials, outlet design, or equipment, which can be difficult to redeploy for any other purpose after the relationship is discontinued (Combs & Ketchen, 1999b; Mellewigt, Ehrmann, & Decker, 2011).

Franchisees' investments that comply with the input specification can serve as a "hostage" that credibly signals that the franchisee will act in good faith (Williamson, 1983). Accepting to follow greater input specification may signal the franchisee's desire to invest in an enduring relationship (Dyer & Singh, 1998).<sup>19</sup> Hence, greater input specification in a franchise system can reduce the franchisor's concern about the franchisee's unwillingness to cooperate on franchise operations, including dispute resolutions.

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<sup>18</sup> To reduce costs and enhance profitability, franchisees often have incentives to put forth less than full effort with respect to quality while simultaneously taking advantage of the investments in quality by the franchisor. Such investments may affect the consumption experience represented by the franchise brand name owned by the franchisor (Rubin, 1978; Shane, 1996).

<sup>19</sup> A stream of research has indicated that investments in specialized assets may signal parties' good-faith intentions, and thus, parties with specialized assets are less likely to act opportunistically and are more likely to commit to the relationship (Anderson & Weitz, 1992; Heide & Minder, 1992).



Greater input-specified investments also indicate the interdependence between the franchisor and franchisees. Exchange partners are assumed to be much more likely to cooperate if they are interdependent (Emerson, 1962; Pfeffer & Salancik, 1978; Williamson, 1975). Michael and Combs (2008), for instance, found that a commonality of interests does exist between the franchisor and franchisees and that the franchisor's policies are designed to avoid adverse selection and moral hazards in the relationship, reducing franchisee failure. As Klein (1995, p. 26) suggested, "It is the future return earned on these [franchisees'] specific productive assets that assures franchisee performance, not the fact that the franchisees have made the specific investments"; thus, greater input-specified assets can ensure the future return earned on franchisees' transaction-specific investments by allowing the franchisor to effectively monitor individual franchisees who are likely to attempt to secure a free ride on the franchisor and the other franchisees in the system (Lafontaine & Raynaud, 2002). As input specification reflects the franchisor's commitment to maintain system quality and the franchisees' reliance on system quality, the interdependence between the franchisor and franchisees may promote both parties' cooperation in resolving disputes and thus reduce the need for ex ante complex dispute resolution provisions.

Furthermore, the cost of transferring the idiosyncratic knowledge about the dispute to the third parties may be significant (Galanter, 1981; Williamson, 1991). Prior studies have indicated that the efficacy of public courts in adjudication hinges on the judge's ability to assess disputes (Greif, 2005; Williamson, 1985). As public judges are perceived as less equipped than mediators and arbitrators to consider evidence concerning business trends, trade customs, or the quality of outputs (Bonn, 1972; Sternlight & Resnik, 2005), greater

specified input investments in the initial agreement play an important role in reducing the constraints of judicial proceedings in verifying facts and handling technical issues involved in franchise disputes. Neutral third parties, including public judges, mediators, or arbitrators, can use the pre-determined specification and sourcing policy as guidance regarding the partners' intent when disputes emerge (Harrison, 2004; Sampson, 2004). As greater input specification may reduce the concern about the third parties' expertise in judging disputes, the scope for opportunism on both sides narrows. In turn, the need for complex dispute resolution provisions decreases.

Considering that the hostage effect, the interdependence between the franchisor and franchisees, and the better information revelation caused by franchisees' transaction-specific investments may promote the parties' willingness to cooperate in resolving dispute voluntarily, greater input specification in a franchise system reduces the need for instituting complex dispute resolution procedures *ex ante*. Therefore, I propose the following hypothesis:

*Hypothesis 2. The likelihood that complex dispute resolution provisions will be present in a franchise contract will decrease when franchisees' commitment to the input specification of the franchise system is greater.*

### 3.2.2.2 The Moderating Role of Contract Duration

The hold-up problems related to transaction-specific assets are derived not only from the difficulties in redeploying assets for any other purpose (Dyer, 1997; Poppo & Zenger, 2002), but also from the likelihood of non-renewal or premature termination by the partner (Klein, 1980; Telser, 1980; Williamson, 1983). In Hypotheses 1 and 2, I mainly

focused on how the difficulties in redeploying transaction-specific assets for any other purpose may affect contract design—specifically, the design of dispute resolution provisions. I extend this line of inquiry to study the effect of the threat of non-renewal and termination on the partner’s willingness to cooperatively resolve disputes. For this purpose, I introduce a contingent logic, explaining how the threat of non-renewal and termination by the franchisor *together with* the different parties’ transaction-specific investments affect the design of dispute resolution provisions. I argue that while the contracting choices in a partnership may reflect the parties’ transaction-specific attributes as predicted by contract research drawing upon a TCE rationale (Poppo & Zenger, 2002; Reuer & Ariño, 2007), the nature of those transaction-specific attributes may influence different parties’ perceptions of the current relationship and expectations for future interactions.

Drawing upon game-theoretical logic, a stream of literature advances that an expectation of continued interaction is necessary to promote cooperation (Axelrod, 1984; Parkhe, 1993). The shadow of the future exists, as the expectation of future interactions constitutes a credible capacity for retaliation if opportunism occurs (Axelrod, 1984; Telser, 1980). Accordingly, when a sufficient shadow of the future exists, the benefits of behaving in a cooperative manner outweigh its costs. Based on this rationale, many studies have explored how the shadow of the future may affect inter-organizational cooperation and governance choices (e.g., Heide & Miner, 1992; Poppo et al., 2008; Reuer & Ariño, 2007).<sup>20</sup> Nevertheless, few studies, to my knowledge, have paid attention to the conditions

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<sup>20</sup> Heide and Miner (1992) theorized that anticipated future interactions and the frequency of contact will positively affect the level of joint cooperation between firms. Poppo et al. (2008) highlighted that anticipated future interactions may play both mediating and moderating roles in affecting the relationship between firms’ prior history and trust. Reuer and Ariño (2007) argued that the presence of time bounds on alliance agreements will affect both the contracting costs and exchange hazards, and will thus influence alliance contractual complexity.

under which the shadow of the future has a significant effect on cooperative intentions ex post and the need for governance design ex ante. In particular, prior work tends to overlook the possible influence of transaction-specific attributes by the distinct parties on the expectation of future interactions at a dyadic level. Since “the stability of reciprocal acts of cooperation depends critically on sufficient value being placed on future returns and on the expected time horizon for future exchange” (Axelrod, 1984, p. 124; Poppo et al., 2008, p. 41), the different sources of transaction-specific investments, which are associated with value being placed on future returns, are likely to affect the partners’ cooperative intent—and thus the demand for structuring governance ex ante. In this paper, I therefore focus on the conditions under which *franchisees* have relatively high expectations for continuity, and thus the self-enforcing mechanism would reduce the need for complex dispute resolution provisions. In the sections that follow, I discuss in detail how the different sources of transaction-specific investments and the determined time-horizon of the relationship may *jointly* influence the need for structuring complex dispute resolution provisions ex ante.

***Moderating effect of contract duration and brand name capital.*** Contract duration has implication for the parties’ expectation of future interactions because the length of the contract duration may determine the likelihood and the types of retaliation for a defection in the current period. For instance, in a long time-horizon relationship, franchisees are subject to a sufficient shadow of the future, as they bear the economic loss from future income streams generated by brand name capital if the relationship is terminated before the long-term contract expires (Klein, 1995). The self-enforcing mechanism is particularly strong when franchisees place great value on continuity (Axelrod, 1984), which is largely

associated with greater brand name capital committed by franchisors.<sup>21</sup> In turn, the threat of termination by the franchisor is particularly salient for the franchisee, and thus the franchisor has greater leverage to incentivize franchisees to voluntarily cooperate in resolving disputes. In line with the argument by Klein and Leffler (1981), I therefore maintain that the threat of termination, together with the existence of a flow of quasi-rents, would encourage franchisees to cooperate in resolving disputes and thus reduce the need for complex dispute resolution provisions.

By contrast, the shorter the contract duration, the more likely the franchisor will face these non-cooperative behaviors from franchisees because there is not a sufficient shadow of the future for franchisees.<sup>22</sup> Since brand name capital is mainly committed by franchisors, franchisees are free from losing these investments' non-salvageable transaction-specific value or even their full value if the relationship is not renewed or discontinued. Franchisees who are uncertain about the continuity of the relationship after the current short-term contract would have incentives to enhance their profitability at the expense of franchisors. In this regard, franchisees' benefits from acting in a non-cooperative manner may outweigh the costs when franchisors commit greater brand name capital in a short time-horizon relationship. In such a case, commitment to complex dispute resolution provisions *ex ante* is needed.

In sum, the longer the contract duration, together with the greater the brand name capital committed by the franchisor, the more salient the shadow of the future for the

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<sup>21</sup> The self-enforcing mechanism emphasized in the literature indicated that the potential gains from cooperation in the long term can provide a safeguard against opportunistic behaviors (Telser, 1980).

<sup>22</sup> As franchisors invest greater brand-name capital, they face greater exchange hazards that come in the form of unauthorized use of confidential information and trade secrets after the relationship ends (Argyres & Bercovitz, 2015). The sunk investment in brand-name capital also puts franchisors under the risk of franchisee opportunistic behaviors, such as shirking or deviating from the system-wide business format (Brickley & Dark, 1987; Kidwell, Nygaard, & Silkoset, 2007).

franchisee, as the franchisor can retaliate for a defection by terminating the contract in the current period. In turn, the need for complex dispute resolution provisions is lessened, as franchisees are expected to cooperate in resolving disputes *voluntarily*. Hence, I propose the following hypothesis:

*Hypothesis 3. The length of the contract duration will dampen the positive effect of the franchisor's commitment to brand name capital on the likelihood that complex dispute resolution provisions will be present in a franchise contract.*

***Moderating effect of contract duration and input specification.*** In comparison, contract duration may have different implications for franchisees when franchisees themselves commit greater transaction-specific investments to the relationship. While substantial transaction-specific investments committed by franchisees can serve as a bonding mechanism that credibly signals franchisees' commitment to act in good faith (Anderson & Weitz, 1992; Klein & Leffler, 1981; Sertsios, 2015), franchisees' incentive to cooperate in dispute resolutions may vary with the length of time horizons of relationships as the value of transaction-specific investments changes over time.

On the one hand, when the contract duration is short, greater input specification may make the expectation of future interactions by franchisees higher, thus giving the franchisees more incentives to cooperate rather than defect at present. Because franchisee investments are typically specific to a particular franchisor, a shorter-term contract may put the franchisee under the "hold-up" threat of non-renewal (Klein, Crawford & Alchian, 1978; Williamson, 1975). As it typically takes as long as three years for franchise

businesses to realize a normal return on the initial investments (Brickley, Misra, & Van Horn, 2006), franchisees devoting greater transaction-specific investments to the relationship particularly face hold-up threats when they have signed a short-term contract. The greater the value of these specific franchisee investments and the shorter the contract duration, the greater the franchisor's leverage to incentivize franchisees to cooperate in resolving disputes.

On the other hand, when the contract duration is long, the hold-up threats caused by the loss from non-renewal are less salient for franchisees, and this reduces the franchisor's leverage to incentivize franchisees to actively cooperate. Longer-term contracts allow franchisees to recoup their investments with sufficient time and also protect franchisees from the franchisor's opportunism by fixing leasing payments, sales requirements, royalty rates, and so forth for a long period (Brickley et al., 2006). Longer contract duration that exceeds what is required by franchisees to recoup their investments also allows franchisees to "keep their costs below market levels and thereby enhance their profitability at the franchisor's expense" (Argyres & Bercovitz, 2015, p. 817). In this situation, franchisees have less incentive to act in good faith and thus are less likely to cooperate in resolving disputes *ex post*.

Overall, I expect that the hostage effect, the interdependence between the franchisor and franchisees, and the better information revelation caused by franchisees' compliance with the input specification (the rationale in Hypothesis 2) may be diluted as the contract duration increases. Therefore, I propose the following hypotheses:

*Hypothesis 4. The length of the contract duration will dampen the negative effect of the franchisee's commitment to the input specification on the likelihood that complex dispute resolution provisions will be present in a franchise contract.*

### 3.3 Methods

#### 3.3.1 Data

I built a unique dataset based on the Franchise Disclosure Documents (FDDs) archived in the California Department of Business Oversight. Regulated by the Federal Trade Commission (FTC), franchises operating in the U.S. are required to register with the target state to sell franchises there. The FTC prescribes the disclosure document format and requests that the franchisor provide information on twenty-three items, such as management structure, franchise history, legal status, fee schedules, and data on existing franchises, and attach their franchise agreement to the FDD.<sup>23</sup> A typical FDD is approximately 250 pages. Considering data accessibility and the popularity of franchising activities, I specifically collected detailed data on franchises registered in the California state.

My sample includes the 139 franchise systems with FDDs in force during 2014 or 2015.<sup>24</sup> I focus on the restaurant industry.<sup>25</sup> Most franchise systems in my sample are in

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<sup>23</sup> Franchisors generally offer a standardized franchise agreement to all prospective franchisees at a point in time (Bhattacharyya & Lafontaine, 1995; Brickley, 1999).

<sup>24</sup> The cross-sectional analysis is appropriate, as prior studies have shown that franchise contracts remain relatively static over time and that franchise systems' characteristics, such as the size of the required investment, tend to evolve relatively slowly (Brickley et al., 2006; Lafontaine & Shaw, 1999; Seaton, 2003).

<sup>25</sup> I include quick service/take-out (fast food), restaurant/family style, and other types of restaurants, such as donuts/cookies/bagels, ice cream/yogurt, coffee and specialty-food groups, following Bond's Franchise Guide and Bond's Source Book of Franchise Opportunities, which are important data sources for franchise research (Lafontaine, 1995; Sen, 1993). The restaurant industry is the largest franchising industry in the U.S. The three main food franchise sectors (i.e., quick service, full service, and retail food) account for 57 percent



traditional restaurant market segments: 51 percent are in the quick service/take-out (fast food) segment, and 39 percent are family-style restaurants. The franchise systems in my sample are headquartered in different states. The three primary states in which the franchise systems are headquartered include California (35%), Florida (12%), and Texas (10%). The franchise systems in my sample also vary in size: 39 percent have 10 or fewer outlets; 30 percent have between 10 and 50 outlets; 12 percent have between 50 and 100 outlets; 18 percent have between 100 and 500 outlets; and 1 percent operates more than 500 outlets. Furthermore, the franchise systems in my sample feature different franchised outlet growth rates: 41 percent have positive franchised outlet expansion rates; 37 percent maintain a stable number of franchised outlets; and 21 percent have reduced the number of franchised outlets in the previous year.

### 3.3.2 Variables and Measurement

#### 3.3.2.1 Dependent Variable

To assess the dependent variable *Presence of complex dispute resolution provisions*, I first examine whether there is distinction between different dispute resolution procedures included in the provision. Based on the tests for combining dependent categories using the Stata command *lrcomb*, I found that the three outcomes of dispute resolution provisions, including only mediation, only arbitration, and both mediation and arbitration, are indistinguishable with respect to the variables in the model.<sup>26</sup> As a consequence, I combine

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of all franchise industry employees (Food Franchise Industry Report, 2014). According to the 2015 Franchise Help Industry Report, there are over 200,000 fast-food restaurant outlets and approximately 65,000 pizza franchises in the United States.

<sup>26</sup> The likelihood-ratio (LR) tests for combining alternatives examine whether the null hypothesis that alternatives can be collapsed can be rejected. The results for the model show that the null hypotheses for the combination of alternatives between no procedure in dispute resolution provisions (i.e., reliance on voluntary dispute resolutions) and only mediation in provisions ( $\chi^2 = 22.44, p = 0.05$ ), no procedure in dispute resolution provisions and only arbitration in provisions ( $\chi^2 = 33.09, p = 0.00$ ), and no procedure in dispute resolution provisions and both mediation and arbitration in provisions ( $\chi^2 = 32.23, p = 0.00$ ) are rejected, indicating that

these three categories for the dependent variable to obtain more efficient estimates. The dependent variable is therefore a dummy variable that assumes a value of 1 if at least one specific alternative dispute resolution procedure (i.e., mediation, arbitration, or both mediation and arbitration) is specified in the franchise agreement and zero otherwise.<sup>27</sup>

### 3.3.2.2 Independent Variables

**Brand name capital.** Brand name capital has been emphasized, in particular, as a proxy for free-riding hazards in the literature on efficient franchise contracting, although it is difficult to assess the value of a brand name except by means of surveys. While prior work has relied on survey approach to assess brand name capital (e.g., Barthélemy, 2008; Brown, Dev, & Lee, 2000; Combs & Ketchen, 1999a), the measurement derived from surveys may be subject to social desirability problems (Krumpal, 2013). I instead construct a more objective measure, evaluating brand name capital by discounting the value of the franchisor's advertising expenditures over the last three years (see Argyres & Bercovitz, 2015, for a similar approach).<sup>28</sup> The advertising expenditure data were drawn from the *ADSpender* database.

**Input specification.** Franchisees' up-front investments include furnishings, equipment, and unique store design that mostly can no longer be exploited by the franchisee following termination (Combs & Ketchen, 1999b). To assess the franchisee's transaction-

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“no procedure in dispute resolution provisions” is a category distinguishable from the provisions that include at least one ADR procedure. By contrast, the results show that the null hypotheses for the combination of alternatives between different ADR procedures cannot be rejected ( $\chi^2 = 19.71, p = 0.10$ ;  $\chi^2 = 12.50, p = 0.49$ ;  $\chi^2 = 12.65, p = 0.22$ , for different combinations of alternatives, respectively), indicating that combining these three categories enables me to obtain more efficient estimates.

<sup>27</sup> About 83 percent of the observations have an outcome equal to one (i.e., complex dispute resolution provisions).

<sup>28</sup> Following the historic cost method for the valuation of intangible assets, the brand name capital for year  $t$  is calculated as  $\text{Brand name capital}(t) = \text{advertising expenditures}(t) + 0.9 * \text{advertising expenditures}(t-1) + 0.9 * 0.9 * \text{advertising expenditures}(t-2)$ .

specific assets, I first calculate franchisees' average up-front investments excluding the initial fee, which is an adjusted measure of the common proxy used to assess outlet size in prior research (Hussain et al., 2013; Mumdzhev & Windsperger, 2011). As the portion of up-front expenditures is not highly relationship specific, I specifically assess franchisees' transaction-specific assets. I did so by taking into account the proportion of total investments that were required to comply with predetermined specifications. To evaluate the input specification, I therefore multiplied the adjusted franchisees' average up-front investments by the percentage of the required input purchase, and I took the natural log of the obtained value. I use a logarithmic value to adjust for decreasing returns to scale and to correct for the normal distribution of the measure.

***Contract duration.*** In this paper, I infer that when the franchisor commits greater brand name capital, the franchisor is more vulnerable to franchisees' non-cooperation under a short contract duration. By contrast, when franchisees are required to commit greater inputs to comply with the pre-determined specification, the franchisor is more vulnerable to franchisees' non-cooperation under a long contract duration. I count the length of the contract duration in years.<sup>29</sup>

### 3.3.2.3 Control Variables

To strengthen the empirical tests, I include a variety of control variables that might affect the design of dispute resolution provisions. First, I add *Franchise age* to control for the relative bargaining power between the franchisor and franchisees and for the

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<sup>29</sup> Due to business conventions in the restaurant franchise industry, franchises typically adopt five-year multiples. The distribution of contract duration in the sample shows that 91 percent of the sample firms choose contract durations of 5, 10, 15, or 20 years. About 20 percent of the contracts have longer than a 10-year duration, 19 percent of the contracts have less than a 10-year duration, and 61 percent of the contracts have a 10-year duration.

contracting capabilities of the franchise system. As franchisors are typically both managerially and financially constrained in their early years, their bargaining power is relatively low then (Oxenfeldt & Kelly, 1969). Franchisors may also learn how to design contracts over time, so franchise age may be related to franchisors' contract design capabilities (Argyres & Mayer, 2007; Mayer & Argyres, 2004). Franchise age is measured by the log of the number of years since the franchisor began franchising (Barthélemy, 2008). Second, I enter *Taper integration*, measuring the proportion of units owned by the franchisor. Prior research has found that a relationship exists between the proportion of company-owned outlets and both the franchisor's brand name (Minkler & Park, 1994) and the franchisor's bargaining power (Michael, 2000), which may affect contractual design. I use an unweighted average of this figure over the last three years to constrain the effects of short-term fluctuations in the sale of franchises (Michael, 2000). Third, I include a measure of *Geographic expansion* to account for the effects of environmental heterogeneity on contractual design (Kaufman & Eroglu, 1999; Minkler, 1992). The measure of geographic expansion is calculated by the number of states in which a franchise system operates. I use the natural log of this value to account for the potential decreasing marginal effects of the expansion. Fourth, I control for *Outlet density* to account for the influence of monitoring costs on contractual design (Brickley & Dark, 1987; Lafontaine & Shaw, 2005). To measure outlet density, I consider the number of states in which the system operates and the number of outlets in each state. I use the Herfindahl index to operationalize outlet density:

$$\text{Outlet density} = \sum_{i=1}^{51} n_i * \left(\frac{n_i}{N}\right)^2 \quad (1)$$

where  $n_i$  denotes the total number of outlets in the  $i$ th state and  $N$  is the total number of outlets in the franchise system.

I control for *Historical litigation* to account for the effect of litigation incidence in previous years on the demand for complex dispute resolution provisions. Since every settlement of a significant franchisee claim that occurs after any suit or arbitration is required to be filed in the franchisor's disclosure document for ten years, according to the FTC Franchise Rule, a flood of copycats may follow the adverse settlement "precedent" (Dunham, 2003). I therefore count the number of suits filed in the disclosure document to capture the possible effect of historical litigation on the design of dispute resolution provisions. I also control for *Relative uncertainty* to account for the effect of unexpected relationship discontinuation in previous years on the demand for complex dispute resolution provisions. Following prior research, I evaluate the level of uncertainty through the proportion of outlets discontinued (e.g., Lafontaine, 1992a). An unexpectedly dissolved relation brings uncertainty, particularly to the party who anticipated a continuing relationship. To calculate the *Relative uncertainty* variable, I first deduct the number of termination and non-renewal cases in each year from the number of cease-and-transfer cases in each year.<sup>30</sup> The difference is then divided by the total number of franchised outlets in that year. An unweighted average of these annual ratio figures over the three years is finally taken to get the *Relative uncertainty* variable. Finally, I control for *Market segments* to capture differences in norms of ADR usage and the institutional changes over time

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<sup>30</sup> These are conservative measures since the avenues that franchisor may take to expel a franchisee from the franchise system are limited to the two avenues—termination and non-renewal. In contrast, the abandonment or "voluntary" exit by the franchisee and the transfer of outlets are generally initiated by franchisees (Argyres & Bercovitz, 2015). I do not account for the reacquisition of an outlet by the franchisor because the franchisor's willingness to acquire the outlet signals that the franchisor was exposed to little uncertainty.

across market segments (Stipanowich & Lamare, 2013). I group restaurant franchises into three categories based on the type of service provided.<sup>31</sup>

### 3.4 Results

Table 3.1 reports the means, standard deviations, and correlations between the dependent, independent, and control variables. Variance inflation factors (VIFs) associated with each independent variable range from 1.19 to 2.48, which are well below the rule-of-thumb cutoff of 10, indicating that multicollinearity problems in my analyses are not serious (Meyers, Gamst, & Guarino, 2006).

Because the dependent variable is dichotomous, I use a logit model. Table 3.2 shows the main effects from the logit regression. Model 1 serves as the baseline model, which includes the full set of control variables used for the analysis. Model 2 includes the brand name capital (committed by the franchisor) and input specification (committed by the franchisee) variables together, and Model 3 adds the contract duration variable. Model 4 is the complete model that includes all the control variables, the independent variables of interest, and the interaction terms between different relationship-specific assets devoted by different parties and contract duration. To deal with possible multicollinearity problems, I mean-center all variables prior to creating the interaction terms (Aiken & West, 1991).

The first hypothesis predicts that the use of complex dispute resolution provisions will be more likely when the franchisor commits greater brand name capital to the relationship. The results for Models 2 to 4 offer support for this prediction. I find that the

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<sup>31</sup> The three categories of restaurant franchises are quick service/take-out (fast food), restaurant/family style, and other specialty restaurants, including donuts/cookies/bagels, ice cream/yogurt, coffee and specialty, and prepared food outlets in retail hosts or shopping malls.

Table 3.1 Descriptive Statistics and Correlations

Variables	Mean	S.D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Presence of complex dispute resolution provisions	0.83	0.38	1.00									
2. Brand name capital	948337.40	3923640.00	0.04	1.00								
3. Input specification	292117.30	268191.00	0.14	<b>0.23</b>	1.00							
4. Contract duration	10.54	4.28	-0.14	<b>0.28</b>	<b>0.35</b>	1.00						
5. Franchise system age	8.62	9.35	<b>-0.31</b>	<b>0.22</b>	0.14	<b>0.22</b>	1.00					
6. Tapered integration	0.32	0.29	-0.01	-0.03	0.04	-0.05	<b>-0.31</b>	1.00				
7. Geographic expansion	8.63	10.21	<b>-0.26</b>	<b>0.29</b>	<b>0.22</b>	<b>0.31</b>	<b>0.40</b>	<b>-0.17</b>	1.00			
8. Outlet density	13.08	29.51	-0.03	0.04	-0.06	0.08	<b>0.26</b>	<b>-0.19</b>	-0.06	1.00		
9. Historical litigation	1.17	2.91	-0.01	0.09	<b>0.17</b>	<b>0.22</b>	0.09	-0.10	<b>0.24</b>	0.07	1.00	
10. Relative uncertainty	0.09	0.24	-0.05	0.00	0.04	0.08	<b>0.26</b>	<b>-0.30</b>	<b>0.19</b>	0.09	0.06	1.00

*N*=139. Correlations significant at  $p<0.05$  appear in bold.

Table 3.2 Main Effects on the Presence of Complex Dispute Resolution Provisions from Logit Model

Variables	Models			
	(1)	(2)	(3)	(4)
Brand name capital (ln)		0.10**	0.10**	0.13**
		(0.05)	(0.05)	(0.06)
Input specification (ln)		0.21	0.22	0.19
		(0.21)	(0.21)	(0.23)
Contract duration			-0.04	-0.05
			(0.06)	(0.07)
Brand name capital * contract duration				-0.02*
				(0.01)
Input specification * contract duration				0.23***
				(0.08)
Market segment —Family restaurant	0.36	0.12	0.21	0.47
	(0.53)	(0.55)	(0.57)	(0.62)
Market segment —Donut/Bagel/Coffee/Ice cream/Yogurt/Specialty	0.10	0.67	0.58	0.48
	(0.78)	(0.87)	(0.88)	(0.89)
Franchise age (ln)	-0.26	-0.31	-0.27	0.08
	(0.34)	(0.34)	(0.35)	(0.37)
Tapered integration (ln)	-0.30	-0.40**	-0.37*	-0.44*
	(0.19)	(0.20)	(0.21)	(0.23)
Geographic expansion (ln)	-0.71**	-0.88***	-0.86***	-1.22***
	(0.29)	(0.31)	(0.31)	(0.37)
Outlet density (ln)	-0.13	-0.26	-0.26	-0.41*
	(0.18)	(0.19)	(0.19)	(0.21)
Historical litigation (ln)	0.23	0.07	0.12	-0.17
	(0.37)	(0.40)	(0.41)	(0.43)
Relative uncertainty	0.16	0.27	0.33	0.57
	(1.03)	(1.08)	(1.10)	(1.15)
Constant	1.74***	1.86***	1.83***	1.84***
	(0.38)	(0.39)	(0.39)	(0.43)
$\chi^2$	15.48*	21.29**	21.72**	33.01***
Prob> $\chi^2$	0.05	0.02	0.03	0.00
Pseudo $R^2$	0.1211	0.1665	0.1698	0.2581

Note:  $N=139$ . Standards errors are in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .



greater the brand name capital, the higher the likelihood that complex dispute resolution provisions will be present in the contract ( $\beta = 0.10, p = 0.04$  in Model 2;  $\beta = 0.10, p = 0.04$  in Model 3; and  $\beta = 0.13, p = 0.02$  in Model 4).

The second hypothesis offers the prediction with regard to the relationship between input specification and the design of dispute resolution provisions. Hypothesis 2 does not receive support in Models 2 to 4. The results show that there is no direct and significant influence of franchisees' commitment to the relationship on the use of complex dispute-resolution provisions. In Model 4, the likelihood ratio test shows that the model is significantly improved when I test all independent variables of interest and the interaction terms simultaneously ( $\chi^2 = 11.29, p = 0.00$ ). Specifically, I find that the interaction of input specification and contract duration is positive and significant ( $\beta = 0.23, p = 0.00$ ). In addition, I also find that the interaction between brand name capital and contract duration is negative, as predicted, but only marginally significant ( $\beta = -0.02, p = 0.07$ ).

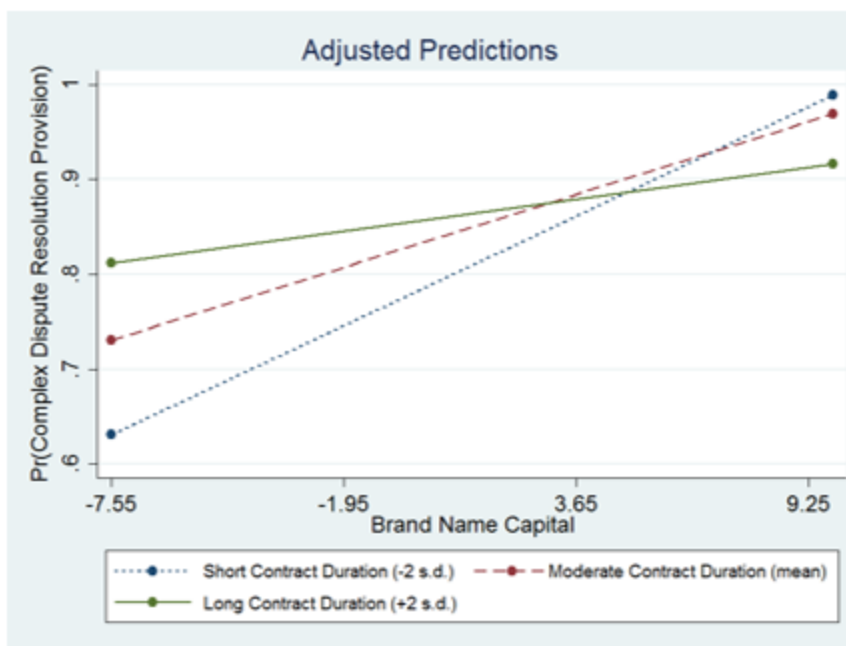
Before drawing any conclusions from the findings on the interaction effects, however, it is important to acknowledge that because I am relying on a nonlinear parametric estimation (logit model), a positive (negative) sign on an interaction term cannot indicate that there is always an enhancing (diminishing) relationship between variables. According to prior studies (Hoetker, 2007; Wiersema & Bowen, 2009), graphical analyses are recommended to provide a more nuanced understanding of the practical interaction effects. Hence, I first examine the two interaction effects using the mean values for all other variables and the vector of coefficients  $\beta$  estimated in the complete regression model (Model 4).

Figures 3.1 illustrate the impact of the main variables (brand name capital and input specification) on the use of complex dispute resolution provisions, contingent on three different levels of contract duration (two standard deviation below its mean value, its mean value, and two standard deviation above its mean value). Panel A in Figure 3.1 shows a modestly negative moderating effect of contract duration on the main effect of brand name capital, while Panel B in Figure 3.1 shows a significantly positive moderating effect of contract duration on the main effect of input specification, providing additional empirical support for my prediction in Hypothesis 4.

The statistical significance of the interaction effects in nonlinear models, however, is contingent on the values of all other variables, and the coefficients of the interaction terms in logit models may display different signs of influence for different observations (Hoetker, 2007; Wiersema & Bowen, 2009). Therefore, I further use the graphs recommended by Wiersema and Bowen (2009) to analyze the effects of the interaction terms. The results of this graphical approach not only facilitate interpretation but also allow me to demonstrate statistical and economic significance over different variable ranges. The marginal effects and significance level of the interaction terms throughout the observations can be observed by examining the left and right vertical axes, respectively, of Figure 3.2. The darker dots indicate the interaction term's marginal effect, whereas the lighter dots indicate its significance level.

For the interaction between *Brand name capital* and *Contract duration*, Panel A in Figure 3.2 illustrates that in most cases, the observations have a negative sign, but most of these observations are not significant at the 95 percent level. Thus, Hypothesis 3 cannot be

Panel A: Brand Name Capital \* Contract Duration



Panel B: Input Specification \* Contract Duration

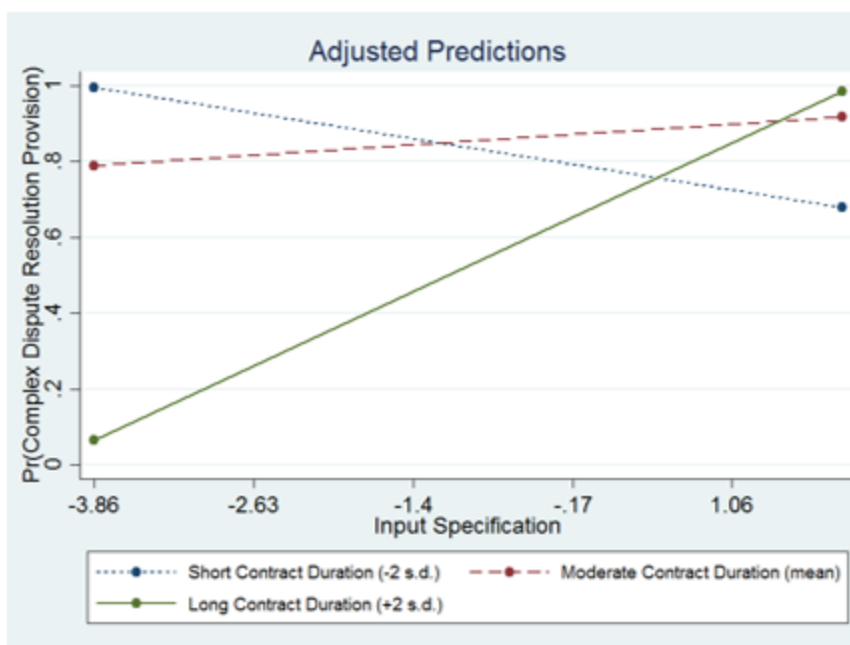
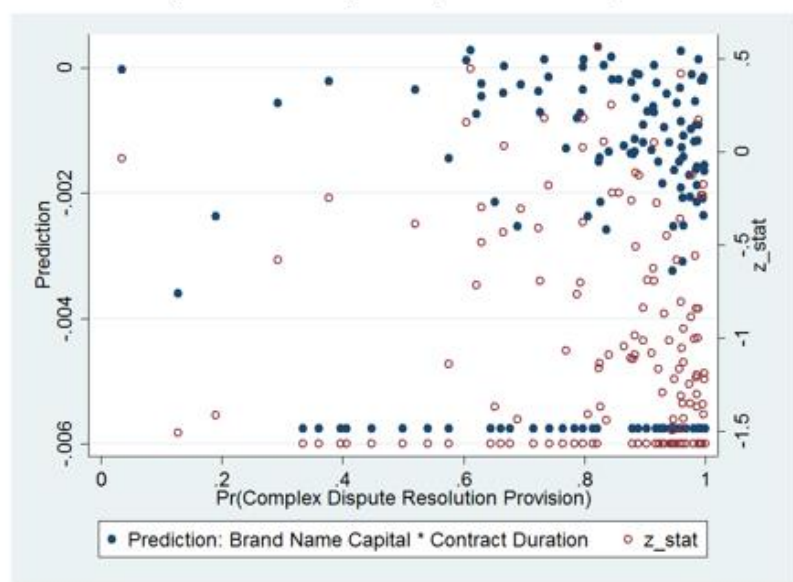


Figure 3.1 Decomposing the Interaction Effects

Panel A: True interaction effect of Contract Duration on the relationship between Brand Name Capital and the presence of complex dispute resolution provisions



Panel B: True interaction effect of Contract Duration on the relationship between Input Specification and the presence of complex dispute resolution provisions

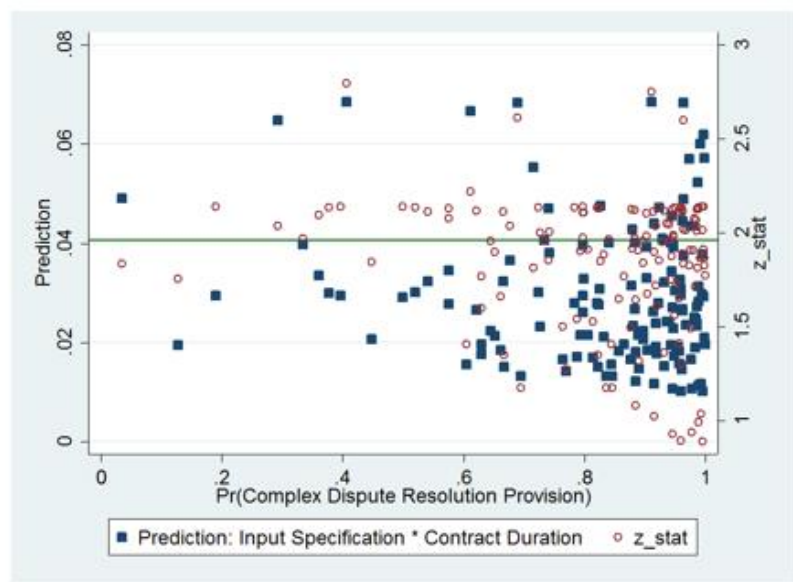


Figure 3.2 The Marginal Effect and Significance of the True Interaction Terms

supported. Although the sign and statistical significance of the *Brand name capital* variable leads me to conclude that when there is greater commitment by the franchisor, there is lower demand for complex dispute resolution provisions, the results show that there is no clear evidence supporting the interaction effect between brand name capital and contract duration. In contrast, the interaction between *Input specification* and *Contract duration*, shown in Panel B in Figure 3.2, indicates that for most of the observations, the marginal effect is positive and significant. Thus, Hypothesis 4 cannot be rejected, supporting the view that the interaction between contract duration and input commitment by franchisees increases the use for complex dispute resolution provisions.

#### 3.4.1 Post Hoc Analyses

I perform several supplement analyses to conduct robustness checks for the main results. First, I conduct robustness tests related to the construction of the measures for the variables of interest. In unreported regressions, I replaced *Input specification* with an alternative measure that accounted for particular franchisee expenditure categories with different weights (see Argyres & Bercovitz, 2015, for a similar approach). The use of different weights on various franchisee expenditure categories is intended to capture the extent that the expenditure is specific to the relationship.<sup>32</sup> I obtained qualitatively similar results when I use this alternative measure. Moreover, I found that the correlation between *Franchise age* and *Franchise system size* is relatively high (0.47). This is not surprising because older franchise systems tend to be larger systems that have more outlets and are

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<sup>32</sup> Following the approach used by Argyres and Bercovitz (2015), the franchisee expenditure categories and the weight for each category are as following: Initial Fee (100%); Leasehold Improvements (90%); Equipment and Fixtures (10%); Signage (100%); Uniforms (100%); Grand Opening Advertising (100%); Training (100%); Professional Fees (100%); and Licenses (100%). To emphasize the relationship-specific nature of these franchisee expenditure, I further multiply the sum of these weighted expenditure by the percentage of the required input purchase and take the natural log of the obtained value.

likely to possess great bargaining power and partnership experience with multiple franchisees. I therefore estimated equations that excluded one or the other variable, with no changes in the results.

Second, in order to account for the potential influence of legal environments on contract design, I take into account the state where the franchisor headquartered in.<sup>33</sup> The states differ in enacting “franchisee protection” laws regulating the franchisor’s ability to terminate or non-renew franchise contracts (most commonly by requiring “*good cause*”) (Klick, Kobayashi, & Ribstein, 2009).<sup>34</sup> Compared with those in the states without these “franchisee protection” laws, the franchisor in states with restrictive regulations have to expend resources in potential litigations, exert effort to handle the deficiency performed by the poor franchisees, or keep good record of their relationship with the franchisee to be prepared to justify the reason of termination or non-renewal (Brickley, 2002). In fact, these “franchisee protection” laws have raised numerous lawsuits and have influenced the judicial decisions significantly (Brickley, Dark, & Weisbach, 1991). Considering the shadow of the law, franchisors may have more incentive to include complex dispute resolution provisions. I therefore conduct a two-sample test of proportion, where 77 systems are headquartered in the states without “franchisee protection” laws and 62 systems are headquartered in the states with restrictive laws. I do not find a statistically significant difference between the two groups of franchise systems as to the design of complex dispute resolutions ( $p=0.78$ ), suggesting that franchisors headquartered in the

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<sup>33</sup> Following the approach adopted by Brickley (2002), I classify franchisors’ legal status based on their location of headquarters because a large proportion of franchise outlets are located in the home state. Franchisors are also likely to contract around the laws in other states.

<sup>34</sup> Nineteen states have enacted general statutory restrictions on franchise termination and non-renewal of franchise contracts. The list of these states and the statutes’ substantive provisions can be found in the study of Klick, Kobayashi, and Ribstein (2009).

states with “franchisee protection” laws and those headquartered in the states without these laws do not significantly differ in their design of complex dispute resolution provisions. In unreported regressions, I also added a dummy for the *Headquartered state with restrictive regulations*. It was not statistically significant in any regression and did not affect the main results.

Third, to take into account the binary nature of my dependent variable as well as the possibility that contract duration could be endogenous to the design of complex dispute resolution provisions, I also test my hypotheses using an instrumental variables (IV) probit estimator in my supplement analysis.<sup>35</sup> Because the main model involves interactions between franchisor and franchisees’ transaction-specific investments and contract duration, I would require instrumental variables not only for main effects but also for the interaction effects (Wooldridge, 2002). However, including too many instrument variables would yield highly suspect results. Given these inescapable limitations, I ran the model with only the main effects, using instruments for contract duration. The IV probit estimator replaces the contract duration variable with instrumented values derived from an auxiliary regression of contract duration on all the variables in the dispute resolution provisions model plus one or more “identifying instruments” (Wooldridge, 2002). The estimator is performed using the “ivprobit” command in Stata. Despite the insignificant Wald statistics indicating exogeneity of the contract duration variable ( $\chi^2 = 1.59, p = 0.21$ ), I chose to err on the side of caution and present the instrumented probit estimations in the Models 5 and 6 in Table 3.3, since uncorrected endogeneity problems can induce bias in estimates (Kennedy, 2008).

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<sup>35</sup> Scholars in strategic management have started to emphasize the consequences of endogeneity in the recent decades (e.g., Bascle, 2008; Hamilton & Nickerson, 2003; Semadeni, Withers, & Certo, 2014).

Following the prior research that indicated that contract duration might be influenced by bargaining power between parties and other firm-specific factors (e.g., Argyres & Bercovitz, 2015; Brickley et al., 2006), I use *Presence of area developer*, *Training hours*, and *Franchise referent power* as identifying instruments in the contract duration equation. Considering the economics of scale in learning and the bargaining power rationale, I expect franchises with area developer(s), franchises with more training hours, and franchises with less net change of franchised outlets in the last three years to use longer terms of contract. There is no theoretical basis for believing these identifying instruments to be directly associated with the use of complex dispute resolution provisions.

Empirically, valid instrumental variables should fulfill two requirements: relevance and exogeneity (Kennedy, 2008). The first-stage regression (Model 5 in Table 3.3) indicates that I have achieved meaningful instrumentation. Coefficient estimates of instrument variables *Presence of area developer* and *Training hours* are positive and statistically significant ( $\beta = 1.39, p = 0.07$ ;  $\beta = 1.74, p = 0.00$ ), suggesting that these two instruments are relevant to the contract duration. The coefficient estimate of the instrument variable *Franchise referent power* is negative as predicted but not statistically significant. The Anderson canonical correlations LM test statistic of 20.98 ( $p = 0.00$ ) suggests that the excluded instruments are significantly correlated with the endogenous variables. For the instrument exogeneity test, since I have three instruments for contract duration, I further ran generalized method of moments (GMM) instrumental variable regressions using “ivreg2” in Stata, which provides tests of instrument relevance and exogeneity (Baum, Schaffer, & Stillman, 2003). The Hansen’s J test yielded a value of 2.30 ( $p = 0.32$ ), failing to reject the null hypothesis that the instruments are exogenous.



Table 3.3 IV Probit Estimation

	Models	
	(5)	(6)
	Contract duration	Presence of complex dispute resolution provisions
Brand name capital	-0.09 (0.07)	0.06** (0.03)
Input specification	0.42 (0.26)	0.06 (0.13)
Contract duration		0.08 (0.09)
Market segment –Family restaurant	0.73 (0.71)	-0.02 (0.33)
Market segment –Donut/Bagel/Coffee/Ice cream/Yogurt/Specialty	-2.04 (1.03)	0.58 (0.48)
Franchise age	0.18 (0.42)	-0.20 (0.18)
Tapered integration	0.11 (0.22)	-0.26** (0.11)
Geographic expansion	0.72** (0.36)	-0.55*** (0.17)
Outlet density	-0.17 (0.22)	-0.14 (0.11)
Historical litigation	0.77* (0.46)	-0.03 (0.24)
Relative uncertainty	0.50 (1.34)	-0.01 (0.57)
Presence of area developer	1.39* (0.77)	
Training hours	1.74*** (0.53)	
Franchise referent power	-2.85 (1.79)	
Constant	-1.11 (0.79)	1.04*** (0.22)
$\chi^2$		20.52
$p$ -value		0.04

$N=139$ . Standards errors are in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Note: Model (5) shows the first-stage regression, while Model (6) present results for probit model with endogenous regressor.

The Sargan statistic of 2.29 ( $p = 0.32$ ) also suggests that the instruments are uncorrelated with the error term. Overall, the evidence demonstrates that the instruments can be considered relevant and valid. A Durbin-Hausman-Wu (DWH) test shows that I cannot reject the null hypothesis that the contract duration is exogenous ( $\chi^2 = 0.41, p = 0.52; F = 0.37, p = 0.54$ ). This gives me some confidence that, even with the interaction terms added, the impact of endogeneity is limited, but the results should be interpreted in light of this limitation (c.f. Hoetker & Mellewig, 2009; Poppo & Zenger, 2002). Model 6 in Table 3.3 presents the second-stage IV probit estimation with the predicted contract duration as the independent variable. Consistent to the findings in the Model 3 in Table 3.2, the results in Model 6 indicated that while the coefficient estimate of input specification is not significant, the coefficient estimate of brand name capital is positive and statistically significant ( $\beta = 0.06, p = 0.04$ ), supporting Hypothesis 1 but not Hypothesis 2.

Furthermore, to investigate whether transaction-specific investments and contract duration influence the *presence* of complex dispute resolution provisions, I adopted an inclusive approach in the design of the dependent variable, grouping provisions that contain distinct alternative dispute resolution procedure(s) into one category. Although this is a reasonable default based on the LR tests for combining alternative dependent outcomes (see footnote 26), I conducted additional tests to explore the effect of different variable construction choices. I first recoded the dependent variable by categorizing different types of dispute resolution provisions containing specific ADR procedures. Table 3.4 shows the provision content of each group and its frequency in my sample.

Prior research has highlighted that although both mediation and arbitration lend the disputing parties high control over the information-investigating and evidence-presenting

Table 3.4 Examples of Dispute Resolution Provisions in Franchise Contracts

Types of dispute resolution provisions	Real example	Presence frequency in the sample
Mandatory mediation and arbitration (Mandatory ADRs)	<p><i>“If the dispute is not resolved pursuant to Subsection 36(a)(1), the parties shall submit the dispute to mediation in accordance with the Commercial Arbitration Rules and Mediation Procedures (Including Procedures for Large, Complex Commercial Disputes) of the American Arbitration Association (“AAA”) unless both parties agree to waive mediation and proceed directly to arbitration .... If the parties have not resolved a claim, controversy or dispute by negotiation, mediation or otherwise (which the parties will make a diligent effort to do) or if a claim, controversy or dispute arises subsequent to the termination or expiration of this Agreement, such claim, controversy or dispute shall be referred to Arbitration in accordance with the AAA’s Commercial Arbitration Rules and Mediation Procedures (Including Procedures for Large, Complex Commercial Disputes), as amended (and specifically including the Optional Rules) .... The award of the Arbitrator shall be final and Judgment upon the award rendered in Arbitration may be entered in any court having jurisdiction thereof.”—3Potato4</i></p>	27.86%
Mandatory arbitration	<p><i>“The parties agree that any unresolved controversy or claim arising out of or relating to this Agreement, or breach thereof, shall be settled by arbitration in Miami-Dade County, Florida, administered by the American Arbitration Association in accordance with its Commercial Arbitration Rules and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.”—100M Franchise</i></p>	35.71%
Mandatory mediation	<p><i>“... If a dispute arises out of or relates to this Agreement, or the breach thereof, the parties agree first to try in good faith to settle the dispute by mediation administered by the American Arbitration Association under its Commercial Mediation Procedures as a condition precedent to either party’s right to pursue litigation or any other remedy available under law The parties shall mediate for a minimum of four (4) hours In the event a written settlement agreement is not entered into by the parties within twenty (20) days of the date of submission of the request for mediation or fifteen (15) days of the date of appointment of the mediator, whichever is longer, then either party may withdraw from the mediation by written notice to the mediator and the other party and thereupon pursue litigation or any other remedy available under law.”—Aurelio’s is Pizza Franchise</i></p>	19.29%
Voluntary ADRs	No specific mandatory dispute resolution provisions are included in contracts.	17.14%

processes, mediation and arbitration differ in the decision control that these procedures afford the disputing parties (Ross & Conlon, 2000).<sup>36</sup> While mediation provides the disputing parties more autonomy in deciding the outcome of the dispute, arbitration requires the disputing parties to accept the binding settlements issued by the arbitrator(s). As arbitration always produces a binding settlement that parties forgo decision control once they arbitrate, the threat of arbitration is likely to motivate parties to cooperate in dispute resolution voluntarily (Farber & Katz, 1979).

The complexity of dispute resolution provisions is therefore categorized and ordered according to the extent that the dispute resolution procedure(s) identified in contracts affords the disputing parties control over the evidence-presenting process and the extent that the dispute resolution procedure(s) identified in contracts grant decision control to knowledgeable third parties. I categorize voluntary ADR with no specific ADR specified in contracts as 1, mandatory mediation as 2, mandatory arbitration as 3, and mandatory ADR procedures that include both mediation and arbitration in contracts as 4. The actual values taken by the dependent variable are irrelevant, except that larger values are assumed to correspond to a “greater level of complexity” for dispute resolution provisions.<sup>37</sup> I used an order logit model for the test.

The results of the ordered logit model are reported in Table 3.5 (Models 7 to 10).

The results for the order logit analysis are consistent overall with my initial approach in

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<sup>36</sup> The distinction between mediation and arbitration can be assessed by the *decision control* and *process control* in the dispute resolution process (Elangovan, 1995; Thibaut & Walker, 1978). “Decision control is measured by the degree to which any one of the participants may unilaterally determine the outcome of the dispute. For example, when a third-party decision-maker alone may order a resolution to be imposed, the decision-maker has total decision control. Control over the process refers to control over the development and selection of information that will constitute the basis for resolving the dispute. Participants given authority to conduct an investigation and to plan the presentation of evidence may be said to exercise considerable process control” (Thibaut & Walker, 1978, p. 546).

<sup>37</sup> The complexity of dispute resolution provisions is expected to drive disputing parties to settle voluntarily.

Table 3.5 Supplement Tests from Ordered Logit Model

Variables	Models			
	(7)	(8)	(9)	(10)
Brand name capital (ln)		0.06*	0.06*	0.06*
		(0.04)	(0.04)	(0.04)
Input specification (ln)		0.00	0.01	0.03
		(0.14)	(0.14)	(0.14)
Contract duration			-0.01	-0.01
			(0.04)	(0.05)
Brand name capital * contract duration				-0.01*
				(0.01)
Input specification * contract duration				0.11***
				(0.04)
Market segment –Family restaurant	0.03	-0.03	-0.02	0.05
	(0.35)	(0.36)	(0.36)	(0.37)
Market segment –Donut/Bagel/Coffee/Ice cream/Yogurt/Specialty	-0.37	-0.18	-0.20	-0.26
	(0.52)	(0.54)	(0.55)	(0.55)
Franchise age (ln)	-0.28	-0.34	-0.33	-0.28
	(0.23)	(0.23)	(0.23)	(0.24)
Tapered integration (ln)	0.01	-0.02	-0.02	0.02
	(0.11)	(0.11)	(0.11)	(0.12)
Geographic expansion (ln)	-0.26	-0.34*	-0.34*	-0.38*
	(0.19)	(0.20)	(0.20)	(0.21)
Outlet density (ln)	-0.03	-0.07	-0.07	-0.08
	(0.11)	(0.11)	(0.11)	(0.11)
Historical litigation (ln)	0.00	-0.11	-0.09	-0.21
	(0.23)	(0.23)	(0.24)	(0.25)
Relative uncertainty	-0.15	-0.05	-0.04	0.17
	(0.77)	(0.78)	(0.78)	(0.79)
$\chi^2$	14.9*	17.96*	18.01*	26.10**
Prob> $\chi^2$	0.06	0.06	0.08	0.02
Pseudo $R^2$	0.04	0.05	0.05	0.07

Note:  $N=139$ . Standards errors are in parentheses.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

the main tests. Consistent with the test reported in the main logit model, the likelihood ratio test shows that the ordered logit model herein is significantly improved when I test all independent variables of interest and the interaction terms simultaneously ( $\chi^2 = 8.09, p = 0.02$ ). For Model 8, the results indicate that the franchisor's brand name capital positively affects the complexity of dispute resolution provisions structured in the contract ( $\beta = 0.06, p = 0.09$ ). I also find that the interaction between the brand name capital and contract duration is negative, as predicted, but only marginally significant ( $\beta = -0.01, p = 0.08$ ). In comparison, the interaction between input specification and contract duration is positive and significant ( $\beta = 0.11, p = 0.01$ ). While the order logit analysis provides similar results to those in the main logit model, interpretations of findings for these two models should be made with caution. The main research question of interest in the main model is to investigate whether different parties' transaction-specific investments and their expectation regarding partnership continuity influence the *presence* of complex dispute resolution provisions. In comparison, the tests with the order logit model capture how different parties' transaction-specific investments and their expectation regarding partnership continuity affect the *complexity* of the dispute resolution provisions in franchise contracts.

### 3.5 Discussion

The purpose of this study is to advance our understanding of the determinants of the design of dispute resolution provisions in interorganizational relationships. I suggest that the contracting decision in dispute resolution procedures may be determined by the interplay of the investment committed by different parties and contract duration. The findings suggest that brand name capital invested by the franchisor will directly and positively influence the demand for complex dispute resolution provisions. The lack of

support for the interaction effects of brand name capital and contract duration may be because the franchisor with more investment in brand name capital also benefits from the short-term contract that allows it to change franchisees if franchisees act opportunistically (Argyres & Bercovitz, 2015). In comparison, while there is no significant relationship between franchisees' required input and the presence of complex dispute resolution provisions, franchise systems with greater specification requirements for franchisees' input are more likely to lead to complex dispute resolution provisions when the contract duration is long. The lack of support for the direct effects of input specification on the design of dispute resolution provisions may be attributable to the contrasting predictions with regard to the relationship between input specification and the design of dispute resolution provisions. In practice, inputs that are irrelevant to quality control cannot be listed as the items that franchisees are required to purchase from the designated suppliers (Klein & Saft, 1985; Lynk, 1994),<sup>38</sup> so the inputs that are pre-determined to purchase from designated suppliers generally relate to the know-how pertinent to the success for the system. Considering the public nature of court proceedings, once disputes about input requirements are submitted to court, the leakage of confidential know-how becomes likely (Macneil, 1962; Schmitz, 2006). As a result, input specification may also put the franchisor under the threat of adjudication, incentivizing the franchisor to institute complex dispute resolution provisions.

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<sup>38</sup> In fact, input specification in contracts is often perceived by some practitioners as a conflict of interest between the franchisor and franchisees—rather than being devoted to the ongoing success of the franchisees, the franchisor may seek to gain from rebates from suppliers and from the one-time sale of products where the franchisor is affiliated with the designated suppliers (Luxenberg, 1986; Purvin, 1994). For this reason, input specification may exacerbate the likelihood of lawsuits from franchisees.

My study complements the conventional logic that only specific transaction features as a whole or in the future matters. On the one hand, TCE logic advances a rationale about how transaction-specific characteristics may affect governance design while downplaying the role of continuity expectations in determining governance choices. On the other hand, the game-theoretical logic does not take into account that as the different parties have different transaction-specific commitments to the relationship—and thus face different exchange hazards—parties may value the expected time horizon and perceive the benefits from cooperation differently. In line with the argument that parties in a partnership do not necessarily perceive the same hazards as predominant and thus may have different preferences as to how the alliance is structured (e.g., Lee, Hoetker, & Qualls, 2015), my study provides evidence that parties with distinct transaction-specific investments may value the expected future interaction and perceive the benefits from cooperation in addressing disputes differently.

Considering the potential joint influence of the transaction-specific investments and the length of the contract duration on the design of dispute resolution provisions is valuable. Without this contingency logic, in this study, for example, we might conclude that franchisees' input-specified investments have no clear-cut impact on the design of dispute resolution provisions. We might also conclude that contract duration has no influence on the design of dispute resolution provisions. However, the positive interaction between input specification and contract duration allows a more precise interpretation of the relationship. In particular, as can be seen in the figures, increasing the input specification in the franchise system with a long contract term is likely to facilitate the use of complex dispute resolution provisions, while a franchise system with a short contract



term may not need complex dispute resolution provisions to safeguard against franchisee opportunism derived from high input-specified investments.

In addition, my study extends the literature on dispute resolution procedures in the management field by focusing on the determinants of dispute resolution provisions *before* dispute arises. Prior studies have tended to focus on the comparison between legal proceedings and ADR, highlighting the advantages and disadvantages of different dispute resolution procedures. However, the distinction between the design of procedures *before* disputes arise and the actual use of the procedures *after* disputes occur has received little attention to date. In this study, I highlight the advantages that parties can only achieve through their commitment to dispute resolution provisions *ex ante*, but which cannot be obtained through the exercise of dispute resolution procedures *ex post*.

This study also has a number of specific limitations that extensions to this research might address. To begin with, my study considers the partnerships between franchisor and franchisees, so it would be interesting to investigate other forms of collaborative agreements in other industry contexts to probe the generalizability of my findings. It is possible that the conventional approaches to resolve disputes might vary with market segments or industries. As a franchisor typically deals with multiple franchisees in a franchise system, the *ex-ante* design of dispute resolution provisions in franchise context might differ from that in other bilateral or trilateral collaborative contexts. Furthermore, as contractual provisions are likely to be intertwined and jointly determined, future research could be valuable to ascertain the complement versus substitute role of dispute resolution provisions to other contractual terms such as termination provisions and renewal provisions.

In sum, this study provides new insights into how the design of dispute resolution provisions relates to the interest alignment between parties in addressing disputes. My work represents an initial attempt to explore the determinants of the design of dispute resolution provisions by integrating asymmetric approaches to transaction attributes and interfirm governance mechanisms. I believe that further research that examines a relationship from a dyadic or multilateral view will provide a deeper and richer understanding of the complex interorganizational relationships.

## **CHAPTER 4. THE ROLE OF CEO EXPERIENCE IN CONTRACT DESIGN**

### 4.1 Introduction

Firms frequently establish relationships with external partners to access resources and support their development. Contract design, as the agreed-upon governance structure for supporting partnerships and transactions, is one of the most important decisions that firms have to make in inter-firm partnerships (Argyres, Bercovitz, & Mayer, 2007; Poppo & Zhou, 2014). Prior contract research has largely drawn upon transaction cost (e.g., Reuer & Ariño, 2007; Williamson, 1985), property rights (Grossman & Hart, 1986; Hart & Moore, 1988), or agency (Arruñada, Garicano, & Vázquez, 2001, 2005; Jensen & Meckling, 1976) theories to explain the determinants of contract design. The commonality of these prior works is that they focus on investigating how contract design plays an important role in mitigating exchange hazards (see Macher & Richman, 2008; Schepker, Oh, Martynov, & Poppo, 2014, for reviews). However, while contracting decisions involve individuals drafting contracts, an understanding of the role of individuals in determining contract design is largely missing from the contract literature.

The few existing studies that have started to investigate the influence of individuals on contract design (e.g., Argyres & Mayer, 2007; Bercovitz & Tyler, 2014) mostly focus on the influence of individuals on contracting through the lens of individuals' occupation/professional role in the firm. For example, Argyres and Mayer (2007) highlighted that managers and engineers tend to be the repositories of capabilities for some types of contractual provisions, while lawyers play more important roles in developing other types of contractual provisions. Bercovitz and Tyler (2014) further showed that

whereas scientists tend to make subsequent contracts less complex because they focus more on knowledge creation with exchange partners, contract administrators are likely to make subsequent contracts more complex because they center more on knowledge protection from exchange partners. As organizational outcomes are typically affected by the activities conducted by individuals with some discretion over their behaviors (Thompson, 1967), the lack of an understanding about the profile of individuals in charge of designing the contract may limit our understanding of the determinants of contract design. Given the strategic importance of contract design in inter-firm relationships, dealing with this issue represents an important opportunity to extend our theoretical explanation about the antecedents of contract design.

In this study, I specifically investigate how CEO prior career experience may influence contract design. While contracting decisions in inter-firm partnerships may involve the inputs of multiple parties, such as lawyers, contract administrators, scientists, or consultants (Argyres & Mayer, 2007; Bercovitz & Tyler, 2014), the Chief Executive Officer (CEO) is recognized as one of the most powerful actors in a firm with considerable influence on critical strategic decisions (Finkelstein, 1992; Quigley & Graffin, 2017). I study this research question in franchise context. As franchising relies heavily on contractual governance, the literature on franchising has devoted much attention to the determinants of franchise contracts (e.g., Bhattacharyya & Lafontaine, 1995; Brickley, Misra, & Van Horn, 2006). Although contract design is one of the most important strategic choices in franchise partnerships, it is surprising that, to my best knowledge, no research has explicated how contracting decisions are influenced by the franchisor CEO's background characteristics.

I propose to complement the extant contract literature with the upper echelons perspective. Since the seminal work by Hambrick and Mason (1984), abundant studies on upper echelons have shed light on how organizational strategic choices are associated with executives' background characteristics (see Finkelstein, Hambrick, & Cannella, 2009; Wang, Holmes Jr, Oh, Hall, & Zhu, 2016, for reviews). The upper echelons perspective indicates that executives' experiences are crucial to shape their strategic perspective, knowledge, skills, and behaviors (Gupta, 1984; Hambrick & Mason, 1984). While the CEO's human capital accumulated from prior experience has been recognized to matter greatly for firm strategy and performance (Finkelstein & Hambrick, 1996; Fligstein, 1990), we still do not know whether and how different types of career experience, by influencing the formation of the CEO's human capital, may impact their contracting choices. In this paper, I therefore focus on how differences in the types of franchisor CEO's career experience may influence the aspects of franchising management that the CEO pays attention to and the skills that the CEO has accumulated, and how these then affect franchise contract design.

My study addresses the important issue of CEOs' influence on contract design by suggesting that the CEOs' career experience can reflect their cognitive predisposition and influences their attention to different aspects of franchise relationships (Simon, 1961). I suggest that the impact of experience on CEOs' cognitive attention will consequentially influence contract design. I also focus on the contingent effects of different types of CEOs' career experience. An underlying assumption in much of the literature on CEOs' experience is that the presence or the level of prior experience directly affects a firm's strategic choice and performance (e.g., Hermmann & Datta, 2006; Zhu & Shen, 2016). I

extend this literature by suggesting that CEOs' previous experience, as it varies in type, does not always have the same influence. Prior research has suggested that franchise ownership structure affects the operating and governing problems faced by the franchisor (e.g., Michael, 2000; Yin & Zajac, 2004). Accordingly, different franchise ownership structures involving various problems require different knowledge and skills. Recognizing the variations in the ownership structure across franchise systems, I thus investigate how the franchise ownership structure may moderate the influence of the franchisor CEO's experience on contract design.

This study has a number of important implications. First, I contribute to contract research by studying the micro factors at the individual level that influence contract design. My theoretical framework extends the traditional explanations of contract design by bringing insights from the upper echelon perspective on the role of the CEO's experience in strategic choice. My analysis suggests that not only the level of experience but also the types of experience influence the CEO's accumulated human capital and cognitive attention, which consequently affects contract design. Second, I extend the previous research on the CEO experience. While the study of the contingent effect of the CEO's experience on strategic choices has remained largely unexplored, I gain a better understanding of the contingent influence of the CEO's experience on contract design by highlighting the different managerial needs of knowledge and skills for various ownership structures.

## 4.1 Theory and Hypotheses

### 4.1.1 Contract Design in Franchising

Franchising is a hybrid form of organization in which a franchisor grants a franchisee the right to use the trademarked brand name and business format established by the franchisor. Franchising requires knowledge and skills about how to attract, select, manage, and retain franchising partners (i.e., franchisees) (Lafontaine, 1992; Silvester, Stanworth, Purdy, & Hatcliffe, 1996). Know-hows about marketing/branding, business format and restaurant operation are also needed. In turn, franchising requires knowledge and skills in strategy formulation with regards to initial input, ongoing commitments, and post-term competition agreements. As such, the knowledge and skills in franchise contract design compose the cornerstone that allows the franchisor to effectively manage the partnership with franchisees (Brickley, Misra, & Van Horn, 2006; Lafontaine & Slade, 2014).

Franchise contracts include monetary terms and non-monetary terms that delineate the conditions under which a franchised outlet is to be operated (Blair & Lafontaine, 2005). The typical *monetary terms* include the franchise fee and continuing fees such as the royalty rate and the advertising fee. The franchise fee is an initial lump-sum fee that is recognized as “payment to reimburse the franchisor for the incurred costs of setting the franchisee up in business” (Bond, 2001, p. 29). The royalty rate is an on-going fee based on a percentage of franchisees’ sales revenues. Most franchise systems also stipulate a percentage of franchisees’ sales revenues be contributed to support national, regional,

and/or local advertising.<sup>39</sup> These fees are strategic contractual elements because they determine franchisees' residual claims, which play an important role in aligning the interests of franchisors and franchisees (Brickley & Dark, 1987; Castrogiovanni, Combs, & Justis, 2006; Lafontaine, 1992). Higher residual returns are argued to increase franchisee cooperative efforts, while higher shares to franchisors are argued to increase franchisor effort. Prior studies (e.g., Lafontaine & Shaw, 1999) also suggested that the variation in initial fee and royalty fee may be affected by unobserved firm-level heterogeneity in production and monitoring technologies. Considering the termination laws in different states, Brickley (2002) indicated that the institutional context where the franchisor operates may also influence the design of monetary terms.

While comparatively little attention has been given to the determinants of *non-monetary contractual terms* (Bhattacharyya & Lafontaine, 1995; Blair & Lafontaine, 2005), particular non-monetary terms, such as renewal terms and non-compete covenants, are strategic concerns for the franchisor's contracting decision. Renewal terms, for example, are relevant to franchisors because they can influence franchisees' incentive to perform desired behaviors – franchisees are more likely to avoid opportunistic behavior if they perceive a significant risk of non-renewal when such cheating is discovered (Klein, 1980; Klein & Leffler, 1981). The renewal terms often serve as a duration safeguard with different structures and frames (Weber, Mayer & Macher, 2011). Some franchise systems specify a predetermined frequency and periods of renewal terms (i.e., *two consecutive ten-year terms*), while others draft renewal terms with relatively open frequency or periods (e.g.,

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<sup>39</sup> Blair and Lafontaine (2005) indicated that while royalty fees are often specified and administered separately from advertising fees, these fees are not bound by the amount collected specifically for the specified purpose. Accordingly, the sum of these ongoing fees may be particularly relevant to a franchisor's contracting decisions.



additional five-year terms; one additional term). Renewal terms with specified frequency and periods are prevention-oriented, since meeting specific milestones during the specified periods is viewed as a minimal goal that *must* be met (Higgins, 1998). In comparison, renewal terms with open frequency or periods are promotion-oriented, because the terms emphasize flexibility and creativity execution so that meeting expectations is viewed as an *ideal* outcome (Pham & Higgins, 2005).

Since franchisees may seek to use the franchisor's trade secrets or business practices in another business after they leave the franchise system (Jankowski & Previs, 2004), the design of renewal terms may not eliminate the threat of franchisee opportunism (Argyres & Bercovitz, 2015). Non-compete covenants therefore play an important role in franchise contracts to govern the post-termination relationship. The typical non-compete covenants stipulate the particular domain and the period that franchisees are restricted from engaging in competitive activities after leaving the franchise. Strict non-compete covenants that restrict franchisees from competitive activities in large domains and long periods allow franchisors to control franchisee opportunism after the franchisee leaves the system. However, strict non-compete covenants also suppress entrepreneurship and innovation, because the covenants keep franchisees from leveraging their human capital acquired through operating franchise outlets in another business.

Although extant research tends to use the interest alignment rationale to explain the design of initial fees and continuing fees and the safeguarding rationale to explicate the design of renewal terms and non-compete covenants in franchise context, it is still unclear whether and how a decision-maker who oversees contract design in franchise businesses may influence the design of these contractual terms. As decision-makers differ in the level

and types of human capital accumulated from their prior experience, the contractual terms might implicate the decision-makers' emphasis and predisposed concerns about different aspects of the franchise business. These contractual terms might also reflect the value of the decision-makers' human capital on distinct aspects of franchise operations. In the following, I theorize how decision-makers might affect the design of contractual terms.

#### 4.1.2 The Role of the Decision-Maker in Contract Design

Prior research has supported the notion that contractual terms in franchise contracts are designed to mitigate hazards and to achieve efficiency (Arruñada et al., 2001; Bercovitz, 1999; Dnes, 1993; Lafontaine, 1992). There has not been much study, however, of the impacts of managerial human capital accumulated through prior experience on franchise contract design. While decision-makers have bounded rationality and limited cognitions (Cyert & March, 1963; March & Simon, 1958), the role of these decision-makers' background characteristics in contracting decisions remains largely underexplored in the current literature. Recent studies have begun to view contract design as a firm capability residing in different kinds of personnel within the firm (Argyres & Mayer, 2007; Bercovitz & Tyler, 2014), but they tend to examine the determinants of contract design through the lens of organizational roles (e.g., engineers, managers, or lawyers). Little is known about whether the most important strategic decision-maker (that is, the CEO) may significantly influence the approach taken toward partnerships or operational issues. I thus propose to analyze the role of the CEO's experience in contract design. To do so, I draw upon the upper echelon perspective that has shed light on how organizational strategic choices are associated with managerial background characteristics.

#### 4.1.3 Upper Echelon Perspective: The Role of the CEO's Experience

The upper echelons perspective maintains that executives' experiences are among the background characteristics that have an important impact on their strategic perspective, knowledge, skills, and behaviors (Gupta, 1984; Hambrick & Mason, 1984). According to this perspective, executives will carry what they have been exposed to during their careers as part of their cognitive and emotional givens. The givens then serve to filter their perception and interpretation of a particular situation, and, consequently, they affect how the executives will handle the situation (Hambrick, 2007; March & Simon, 1958). According to the Cambridge Dictionary, experience indicates "the process of getting knowledge or skill that is obtained from doing, seeing, or feeling things, or something that happens which has an effect on [individuals]." As such, experience shapes executives' values, beliefs, and cognitive models that make executives differ in their attitudes, knowledge, and perspectives and, as a consequence, make them make different strategic choices (Dearborn & Simon, 1958; Hambrick & Mason, 1984; Hitt & Tyler, 1991; Tripsas, 1997). Because experience is recognized as central to the development of organizational capabilities (Barney, Ketchen, & Wright, 2011; Helfat, 2000; Helfat & Peteraf, 2015) and contract design may be considered an organizational capability (Argyres & Mayer, 2007), I expect executives' prior experience as a central element of organizational capability to have important implications for contract design.

Experienced executives tend to be familiar with the competitive environment and possess relevant skills that allow them to face a less steep learning curve in the executive position (Schnatterly & Johnson, 2008; Zhang & Rajagopalan, 2003). Although top executives often have experiences in multiple functions, they typically spend a significant part of their careers in specific of functional areas. In the restaurant franchise industry,

restaurant operation and partnership management are the two of the most relevant areas where executives cultivate their skills and knowledge. I therefore take the franchising experience and the restaurant experience as the two most relevant sources of managerial human capital in the restaurant franchise industry that influence contract design.

In this study, I particularly highlight the influence of the CEO's career experience on the contract design. Since CEOs have the power to direct the operations and strategic moves of the firm, to integrate and coordinate executives' opinions, and to make final decisions (Calori, Johnson, & Sarnin, 1994), CEOs are likely to affect contract design in direct and indirect ways. In particular, as CEOs gain experience in specific firms and industries, their skills tend to become tailored related to the contexts where they work. When CEOs have worked in related industries for a long period of time, they are inclined to have more industry-specific knowledge and skills (Tian, Halebian, & Rajagopalan, 2011). Since different skills are likely to be more relevant in some industries than in others (Rajagopalan & Datta, 1996), the CEOs' skills are likely to be reflected in their related cognitive schema. In turn, the CEOs' career experiences often shape their values and cognitive bases, affecting the way they scan, perceive, and interpret information. Different initial endowments shaped by experience can therefore make a CEO's search costs for additional contracting inputs differ (Stigler, 1961). Career experience also endows CEOs with specific knowledge about contracting (Azoulay & Shane, 2001). For these reasons, I suggest that the franchisor CEO with experience in different areas is likely to start from different assumptions and emphasize different problems, and thereby differentially affect the contract design. Below I further discuss the distinction between the CEO's franchising experience and the CEO's restaurant experience.

#### 4.1.3.1 Effects of Franchisor CEOs' Franchising Experience

Franchisor CEOs differ in terms of the level of experience and the types of experience they have during their careers. A franchisor CEO's franchising experience refers to the years of the CEO's working experience in the franchise businesses. Compared with those with less experience in franchising, the franchisor CEO with great franchising experience has usually accumulated abundant experience in selecting franchisee partners, and in building and managing franchise relationships. The franchisor CEO with great prior experience in franchising is also likely to experience conflicts or disputes that have taken place between franchisor and franchisees. Furthermore, franchise businesses often engage in wholesale purchases to control the quality of proprietary products or to reach economies of scale (Blair & Lafontaine, 2005). Since franchise businesses often impose some supply restrictions on franchisees requiring franchisees to purchase inputs or goods from the franchisor itself or the designated suppliers (Michael, 2000), the management of procurement process and supply chain partnerships are critical tasks that executives in the franchise industry must experience.

As some franchisor CEOs gain experience through years in the franchising areas, they are likely to possess superior knowledge, skills, and ability in building, managing and developing franchise relationships, and will craft and implement strategies that are aligned with their superior human capital (Beal & Yasai-Ardekani, 2000). In particular, as franchisor CEOs build their reputation over time during their franchising careers, their cost of engaging in opportunistic behaviors is higher. Since economic actors often communicate their exchange experience to others through social networks, CEOs will lose the economic value of their reputation when the possible exchange partners perceive them as untrustworthy and avoid entering into an exchange with them (Fama, 1980; Hill, 1990). As

trust is easy to lose while distrust is hard to reduce (Slovic, 1993), we can expect that opportunistic behaviors by more reputable CEOs will cause greater cost of repairing reputation because reputable CEOs typically have more on-going exchange and prospective exchange in the future. The opportunity cost of leaving a specific area is higher for high human capital CEOs than for low human capital CEOs also because high human capital CEOs have to forgo the benefits of acquiring a much larger quantity of knowledge in their current industry. In line with this argument, Neal (1995), for example, found significant wage losses for displaced workers switching to new industries, which are greater for workers with greater experience and tenure. Brown, Haltiwanger, and Lane (2006) also found that higher-wage workers are more likely to gain by staying within that industry. In this regard, we can expect that franchisor CEOs with greater franchising experience have more incentive to maintain system quality and to advertise on behalf of the franchise system. Furthermore, Blair and Lafontaine (2005, p. 98) have indicated that “franchisors and franchisees may not be able to rely on their estimates of demand and costs over the whole period of an average 15-year contact to set a single upfront franchise fee.” From the perspective of franchisees, the estimates of future demand and costs of products or services, however, may be perceived as more reliable when they are made by the franchisor CEO with greater franchising experience. In turn, the monetary terms involving high fees set up by the franchisor CEO with greater franchising experience is likely to be more justifiable. As franchisees have more confidence on the intention and abilities of the franchisor CEO with greater franchising experience, franchisees will be less likely to refuse to sign contracts involving higher franchise fees and continuing fees (Mathewson & Winter,

1985). Higher franchise fees and continuing fees can thereby reflect the value of a franchisor CEO's franchising of human capital to administer franchise relationships.

As executives carry what they have been exposed to during their careers as part of their cognitive "givens," they are also likely to identify and define business problems and solutions through their career lenses (Hambrick, 2007). In particular, since experienced CEOs are likely to search for more information while restricting themselves to relevant information (Chiesi, Spilich, & Voss, 1979; Perkins & Rao, 1990), the franchisor CEOs with greater franchising experience tend to be aware of issues regarding franchise relationships and procurement decisions. Prior research has suggested that contracting involves elements of uncertainty and ambiguity and that CEOs' ability to process the information and their tolerance for uncertainty and ambiguity may vary with their cognitive characteristics (Dollinger, Golden, & Saxton, 1997). In this regard, with experience in building and maintaining relationships with franchisees and supply chain partners, the franchisor CEO's cognitive characteristics may magnify information related to adverse selection and moral hazard problems.

On the one hand, the franchisor CEO with greater franchising experience is likely to attend to the problem that low-quality potential franchisees misrepresent their abilities to be selected into franchise systems. Because it is costly for low-quality franchisees to commit high upfront fees and continuing fees, the higher fees requirement enables the franchisor to effectively screen and select franchisees with good quality and faith.<sup>40</sup> On the

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<sup>40</sup> Prior studies have indicated that franchisee experience can serve as a quality signal to address adverse selection (Norton, 1988; Shane, 1998). However, these studies tend to assume that franchisors have similar capabilities and motivations in selecting franchisees. As franchisors' capabilities and motivations in managing franchise relationships may hinge on their prior experience, I argue that the franchisor CEO's experience may also influence how franchisor design the monetary terms in contracts.

other hand, as the franchisor CEO with greater franchising experience is likely to have undergone conflicts or disputes between franchisor and franchisees, he or she is inclined to be alert to the potential know-how appropriation by franchisees. Since non-compete covenants will decrease the franchisees' expectations regarding the human capital they can acquire and leverage through operating the outlet (Blair & Lafontaine, 2005), the franchisor CEO with greater franchising experience may perceive a strict non-compete covenant as central to protecting the interests of the whole system. As franchising experience leads the franchisor CEO to be familiar with the importance of duties and obligations in franchise relationships, the franchisor CEO of this kind tends to be concerned about security and system consistency, and thus to adopt prevention-oriented contract terms that stress "sticks" (as opposed to "carrots") in the spirit of caution and vigilance (Bryant & Dunford, 2008; Higgins, 1998). In turn, the franchisor CEO with greater franchising experience has a proclivity toward control in throughput<sup>41</sup> and operational efficiency when they make contracting decisions. Therefore, I posit the following:

*Hypothesis 1a: As the franchisor CEO has greater experience in franchising, monetary terms such as initial fees and continuing fees tend to be higher.*

*Hypothesis 1b: As the franchisor CEO has greater experience in franchising, non-compete covenants tend to be stricter.*

*Hypothesis 1c: As the franchisor CEO has greater experience in franchising, the presence of prevention-oriented renewal terms is more likely.*

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<sup>41</sup> Hambrick and Mason (1984) classified executives' functional experience into two types: "throughput experience" and "output experience." Throughput experience is associated with the experience in production/operations, finance, process R&D and accounting/data processing/information systems, whereas output experience incorporates experience in sales/marketing, product R&D, and entrepreneurship.



#### 4.1.3.2 Effects of Franchisor CEO's Restaurant Experience

Another important indicator of the franchisor CEO's human capital is the years of their working experience in restaurant businesses. By working in a standalone restaurant for years, a franchisor CEO accumulates abundant knowledge and skills regarding how to operate a restaurant over the years but may not necessarily have equivalent experience in franchising.<sup>42</sup> As the food service sector is a mature industry, fierce competition occurs among single-location restaurants, chain restaurants, fast-food restaurants, and other coffee and snack stores (IBISWorld Industry Overlook, 2017). Consequently, profit margins are relatively low across the industry, and restaurant operators place increased emphasis on product development and brand name promotion to stay relevant. As such, compared with those with less experience in operating restaurants, the franchisor CEO with greater restaurant experience has usually accumulates abundant experience in handling customer trends, building proprietary products and services, and developing brand name during his or her prior career in restaurant businesses. "Internal leadership experience" is also central to the franchisor CEO's restaurant experience, as managing and directing a talented workforce is one of main tasks of a restaurant operator.

Executives' industry experience may increase their access to relevant businesses through prior encounters and enhance their understanding of how to lead and operate an organization in the same industry (Bruderl, Preisendorfer, & Ziegler, 1992). Accordingly, the prior experience in leading and operating restaurant businesses may focus the franchisor CEO on operation effectiveness and entrepreneurial success. The franchisor

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<sup>42</sup> Likewise, by working in the franchise industry for years, a franchisor CEO accumulates rich experience in managing franchise relationships. However, a franchisor CEO of this kind does not necessarily have equivalent experience in operating a restaurant, especially when s/he worked in the other types of franchise businesses.

CEO with greater restaurant experience is likely to value the uniqueness of individual brand names and business models. Rather than emphasizing the control in throughput, the franchisor CEO with great restaurant experience pays attention to the growth in output; that is, sales/marketing, product R&D, and entrepreneurship. As the franchisor CEO with greater restaurant experience tends to possess “output” experience, he or she has a proclivity toward innovation and strategies involving aggressive market share pursuits (Gupta & Govindarajan, 1984). Under this condition, the franchisor CEO would prefer to attract entrepreneurial franchisees and value the innovative vigor brought by them to the franchise system. Franchisor CEO with great restaurant experience would prefer to expedite innovation by leveraging franchisees’ local market assets (Mumdžiev & Windsperger, 2011). One way to speed up system growth and innovation is to provide incentives to motivate franchisees to engage in product and service innovation. High initial fees and continuing fees paid by franchisees are often used to cover innovation launched by the franchisor. However, innovation launched by the franchisor may not meet the local need. To attract entrepreneurial franchisees to join the system and to stimulate franchisees’ interests in investing in product development and market expansion, franchisors may allocate a greater level of residual claims to franchisees by reducing the amount that franchisees are obligated to pay to franchisors (Michael, 1996; Rubin, 1978). In turn, monetary terms, such as initial fees and continuing fees, will tend to be lower.

A promotion-oriented renewal term, served as a “carrot,” is also valuable in encouraging franchisees to commit to innovation and entrepreneurial acts. Since the franchisor CEO with great restaurant experience is mostly concerned about growth, pursuing flexibility, and demanding aspirational achievements with an entrepreneurial

mind, he or she is more likely to value promotion-oriented contract terms (e.g., Bryant & Dunford, 2008; Shah & Higgins, 2001). Furthermore, since the franchisor CEO with greater restaurant experience tends to perceive their unique brand name as unsubstitutable and inimitable, the use of a strict non-compete covenant to avoid franchisees' appropriation is less likely. In fact, as the franchisor CEO is likely to be aware of fierce price-based competition in the food service industry, he or she has a proclivity to enhance product turnover that makes direct competition from ex-franchisees less possible. Overall, the franchisor CEO with greater restaurant experience has a proclivity toward growth in output and operational effectiveness when they make contracting decisions. Thus, I posit the following:

*Hypothesis 2a: As the franchisor CEO has greater experience in restaurant businesses, monetary terms such as initial fees and continuing fees tend to be lower.*

*Hypothesis 2b: As the franchisor CEO has greater experience in restaurant businesses, non-compete covenants tend to be less strict.*

*Hypothesis 2c: As the franchisor CEO has greater experience in restaurant businesses, the presence of promotion-oriented renewal terms is more likely.*

#### 4.1.3.3 Moderating Effects of Tapered Integration on Franchisor CEO's Franchising Experience

Prior studies have indicated that successful implementation of different strategies requires different sets of skills and knowledge that are imbedded in executives' experience (e.g., Finkelstein & Hambrick, 1996; Gupta & Govindarajan, 1984; Porter, 1980). For

example, Porter (1980) indicated that process engineering skills are central to a successful implementation of low-cost strategies, while marketing and product engineering skills are key to a successful implementation of differentiation strategies. Beal and Yasai-Ardekani (2000) also maintain that a CEO's experience in engineering will contribute to firm performance when quality differentiation strategy is emphasized, whereas a CEO's experience in sales will contribute to firm performance when service differentiation strategy is emphasized. While these studies tend to focus on the role of skills and experiences in the implementation of competitive strategies, in this study I highlight that managing franchise systems with different ownership structures also requires different sets of skills and knowledge, which have bearing on the franchisor CEO's experience. Franchise systems differ in the level of tapered integration (i.e., the proportion of outlets owned by the franchisor itself versus owned by franchisees) (Michael, 2000). Since franchised outlets and company-owned outlets have different incentive and monitoring mechanisms (Yin & Zajac, 2004), franchise systems with different levels of tapered integration will demand different knowledge and skills to govern the franchise business.

As discussed above, the franchisor CEO with greater franchising experience is likely to emphasize the relationship between franchisees and the franchisor itself, to pay attention to the franchisees' knowledge appropriation, and to view the franchisor's primary role as controlling and leading the whole system. In comparison, the franchisor CEO with greater restaurant experience is inclined to focus on brand development of the franchise system, to show concern about franchisees' knowledge creation, and to regard the franchisor's main role to be stimulating the growth of the whole system. The impact of

these proclivities on contract design, however, may vary with the ownership structure of the franchise system.

Managerial work is contextually dependent on the fact that the work requirements may vary with organizational type, structure, or industry (Reuber, 1997). As a result, the most effective managerial human capital tends to be specific to particular contexts. While the franchisor CEO's franchising experience is valuable when franchised outlets are prevalent in the system, their human capital in franchising may be devalued in a system with fewer franchised outlets. On the one hand, owning more outlets allows franchisor to predict the costs of quality and to judge whether a standard imposes costs that cannot be sustained by demand levels (Lafontaine, 1992). On the other hand, the high proportion of company-owned outlets can also reflect the franchisor's credible threat of further integration that can ensure the quality of franchisees' operation and keep franchisees from opportunism (Michael, 2000). Hence, owning more outlets can weaken the crucial role of the franchisor CEO's franchising experience in coordinating and controlling the whole system, and at the same time reduce the threat of franchisee opportunism. Consequently, the demands for high franchise fees to account for the franchising human capital or to address adverse selection problems are reduced. The need for strict non-compete covenants and prevention-oriented renewal terms also decreases.

The function of franchising human capital in a system with more franchised outlets may also differ from that in a system with more company-owned outlets. Since franchising human capital tends to be more relevant in some contexts than in others (Rajagopalan & Datta, 1996), franchisor CEOs' franchising experience is likely to drive CEOs to seek ways to manifest their contribution to the organization. Increasing the proportion of franchised

outlets in the system allows the CEOs to utilize their profession in franchising. As such, the franchisor CEO with franchising experience in a system with more company-owned outlets may focus more on attracting new franchisees and sustaining relationships with existing franchisees. For this reason, with more company-owned outlets systemwide, the franchisor CEO with greater franchising experience is more likely to request lower initial fees and continuing fees in order to attract franchisees. Because of an intent to increase number of franchised outlets, the franchisor CEO is also less likely to design strict non-compete terms or prevention-oriented renewal terms. By contrast, with more franchised outlets systemwide, the franchisor CEO with greater franchising experience is likely to pay further attention to knowledge appropriation from franchisees. As a consequence, stricter non-compete terms and prevention-oriented renewal terms are likely to be drafted. Therefore, I predict:

*Hypothesis 3a: The level of tapered integration in a franchise system lessens the positive relationship between the franchisor CEO's experience in franchising and the level of initial fees and continuing fees.*

*Hypothesis 3b: The level of tapered integration in a franchise system lessens the positive relationship between the franchisor CEO's experience in franchising and the strictness of non-compete covenants.*

*Hypothesis 3c: The level of tapered integration in a franchise system lessens the positive relationship between the franchisor CEO's experience in franchising and the use of prevention-oriented renewal terms.*

#### 4.1.3.4 Moderating Effects of Tapered Integration on Franchisor CEO's Restaurant Experience

Prior studies have viewed franchising as enhancing performance by addressing the adverse selection and moral hazard problems derived from the separation of ownership and control (Carney & Gedajlovic, 1991; Shane, 1996, 1998). Franchisees, as residual claimants, are motivated to pursue superior performance, compared to salaried managers of company-owned outlets whose compensation depends less on store performance (Brickley & Dark, 1987; Rubin, 1978). As such, franchisees have more incentives to build up their own capabilities to operate outlets. With more franchised outlets systemwide, knowledge creation and innovation are thus more likely to be initiated and driven by local franchisees, and from the perspective of franchisees, the marginal value of the franchisor CEO's human capital in operating restaurants is reduced.

Alternatively, agency problems are likely to occur in a system with more company-owned outlets because salaried managers are less motivated to sustain and develop restaurants. To supervise salaried managers and to coordinate the remaining franchised outlets, the franchisor CEO's experience in restaurant operation becomes a crucial leverage. In particular, when the company-owned outlets account for a large portion of a franchise system, knowledge creation tends to come from the franchisor itself. Owning outlets gives franchisors information regarding demand levels, customer preferences, and the like (Lafontaine, 1992; Minkler, 1992), which can credibly demonstrate franchisors' knowledge of restaurant operations. While the franchisor CEO with greater restaurant experience is inclined to value the uniqueness of individual store operations, having easier access to local information by owning outlets promotes franchisors' knowledge creation. Owning outlets also enables the franchisor to effectively distribute knowledge, which is

partially attributable to the franchisor CEO's restaurant human capital. In this regard, information from company-owned outlets can serve as a supplement to the franchisor CEO's restaurant experience for leading and coordinating franchisees' behaviors. Considering the central role of the franchisor CEO's restaurant experience in driving knowledge creation and governing agency problems in a system with more company-owned outlets, franchisees are expected to commit higher franchise fees to account for the important human capital sourced from the franchisor CEO's restaurant experience. As the franchisor CEO's restaurant experience is particularly relevant to drive knowledge creation for the whole system with more company-owned outlets, the need for promotion-oriented renewal terms to stimulate knowledge creation from franchisees is reduced. Rather, the prevention-oriented renewal terms become useful to ensure against franchisees' diversion from the standard during the contract period.

Furthermore, since combining the franchisor CEO's restaurant experience with the information gathered from company-owned outlets can promote the development of a unique and sustainable brand, the concern about competition from franchisees who would leave the system may decrease when a system with more company-owned outlets is governed by a franchisor CEO with great restaurant experience. In fact, the disagreements and conflicts between franchisees and franchisors are likely to occur especially when each party has their own opinions and judgment about how to operate a restaurant. As the franchisor CEO possesses greater restaurant experience, his or her cognitive schema about how to operate restaurants is more fixed and unchallengeable. Hence, the franchisor CEO with greater restaurant experience is likely to face manifold dissents from franchisees, especially when few company-owned outlets can serve as a knowledge conduit to fortify



franchisors' power to coordinate the whole system (Michael, 2000). In turn, the likelihood of conflicts between franchisors and franchisees and the turnover rate of franchisees tend to become higher. The demand for strict non-compete covenants will thereby increase when a system with more franchised outlets is led by a franchisor CEO with great restaurant experience. Overall, I predict the following:

*Hypothesis 4a: The level of tapered integration in a franchise system lessens the negative relationship between the franchisor CEO's experience in restaurant businesses and the levels of initial fees and continuing fees.*

*Hypothesis 4b: The level of tapered integration in a franchise system strengthens the negative relationship between the franchisor CEO's experience in restaurant businesses and the strictness of non-compete covenants.*

*Hypothesis 4c: The level of tapered integration in a franchise system lessens the negative relationship between the franchisor CEO's experience in restaurant businesses and the use of prevention-oriented renewal terms.*

## 4.2 Methods

### 4.2.1 Data and Sample

I collected data on franchise systems primarily from Franchise Disclosure Documents (FDDs) and franchise contracts. Franchisors are required by the Federal Trade Commission (FTC) to disclose information, including a management profile, to prospective franchisees no later than two weeks before any binding documents are signed.

Information regarding the management profile in the FDD discloses the name, current occupation, and prior business experience of the key executives and managers in the franchise system. Since the extent of disclosure on the key executives' prior business experience differs across franchise systems, I supplement the executives' profile data with the information from S&P Capital IQ database and LinkedIn. Franchisors are also required to attach their franchise agreement to the FDD. Considering data accessibility and the pervasiveness of franchising activities, my data come from the California Department of Business Oversight. I focus on restaurant franchises to control for market demand and specific technology in different industries (Michael, 2000). As franchisors generally offer a standardized franchise agreement to all prospective franchisees at a point in time (Bhattacharyya & Lafontaine, 1995; Brickley, 1999; Lafontaine & Shaw, 1999), and as my main research question of interest focuses on the influence of a franchisor CEO's experience on contract design, the unit of analysis in this study is the franchise system. After removing franchises with missing data and franchises for which I cannot find information on CEOs' backgrounds, I reached a final sample of 159 franchise systems.

My sample includes the restaurant franchise systems selling franchises in California with FDDs in force during 2014 or 2015. Most franchise systems in my sample are in traditional restaurant market segments: 53 percent are in the quick service/take out (fast food) segment and 37 percent are family-style restaurants. The franchise systems in my sample vary in size: 40 percent have 10 or fewer outlets; 30 percent have between 10 and 50 outlets; 10 percent have between 50 and 100 outlets; and 20 percent have more than 100 outlets. The franchise systems also vary in franchising age: 48 percent have been franchising for no more than five years; 17 percent have been franchising for six to ten

years; 21 percent have been franchising for eleven to twenty years; and 14 percent have been franchising for more than twenty years. The franchise systems in my sample also feature different franchised outlet growth rates: 47 percent have positive franchised outlet expansion rates; 28 percent maintain a stable number of franchised outlets; and 25 percent have reduced the number of franchised outlets in the previous year. As to the CEOs in my sample, about 6 percent entered the current franchise system within one year; 27 percent have stayed in their current franchise system for one to five years; 23 percent have stayed in their current franchise system for five to ten years; 38 percent have stayed in their current franchise system for ten to thirty years; and 6 percent have stayed in their current franchise system for more than thirty years. About 40 percent were founder CEO, while 60 percent were professional CEO.

#### 4.2.2 Variables and Measurement

##### 4.2.2.1 Dependent Variable

Four dependent variables are used in this study. Two variables capture the content of the monetary contract terms and two capture particular non-monetary term content: *Initial fees*, *Continuing fees*, *Strictness of non-compete covenants*, and *Prevention-oriented renewal terms*. I chose to look specifically at these terms for three reasons. First, franchise contract research has identified these terms as central concerns (e.g., Argyres & Bercovitz, 2015; Blair & Lafontaine, 2005). Monetary contract terms have been shown to play a role in addressing incentives problems in franchise systems (e.g., Mathewson & Winter, 1985), while non-monetary terms such as non-compete covenants and renewal terms have been associated with safeguarding, bargaining power rationale, and the concept of self-enforcement (Argyres & Bercovitz, 2015; Love, 1986; Rubin, 1978). Second, I conducted

two preliminary interviews with franchisor executives and legal experts in the restaurant franchise industry. These professionals confirmed the importance of these contract terms, highlighting these contract terms as ones that franchisor CEOs pay particular attention to when designing a contract. Third, initial reviews of the franchise contracts showed that, compared with other categories of terms, the monetary terms, non-compete covenants and renewal terms varied significantly across systems.

The first dependent variable is *Initial fee* that franchisees paid at the beginning of the contract period. It is measured in dollars. Some franchisors require different initial fees for different types of outlets (e.g., food-court type of operation, free-standing type of operation, etc.). Under this condition, I take an average of different initial fee requirements for different types of outlets in the same franchise system. The second dependent variable is *Continuing fee*. Following the argument that it is the sum of the percentage-of-sales fees that influence franchisor and franchisees' decisions at the margin (Blair & Lafontaine, 2005), I measure continuing fee by calculating the sum of the percentage of sales revenues for royalty payment and that for the advertising fee. To evaluate *Strictness of non-compete covenants*, I multiplied the length of the period by the domain in which former franchisees are restrained from operating a competition business. The period length is measured in years, and the domain is measured in miles. *Prevention-oriented renewal terms* is coded as 1 when the duration and the frequency of successive contract periods are explicitly specified. This variable is coded as 0 when the duration or the frequency of successive contract periods is left open.

#### 4.2.2.2 Independent Variables

Following prior research on CEO experiences (e.g., Herrmann & Datta, 2006; Yang, Zimmerman, and Jiang, 2011), I measured the franchisor *CEO's franchising experience* by counting the number of years that the CEO served as a C-level executive (e.g., CEO, CFO, COO, CIO, CMO) or a vice president within the franchising industry before the contract is designed. To measure the franchisor *CEO's restaurant experience*, I counted the number of years that the CEO served as a C-level executive (e.g., CEO, CFO, COO, CIO, CMO) or a vice president in restaurant business(es) before the contract is designed.

#### 4.2.2.3 Moderating and Control Variables

The moderating variable *Tapered integration* is measured by the proportion of units owned by the franchisor. To investigate the theoretical hypotheses, I viewed tapered integration as a long-run structural characteristic that is relatively stable over time. To avoid short-term fluctuations in the sale of franchises that may cause the proportion of company-owned outlets to deviate from a long-run structural desired levels (Michael, 2000), I use an unweighted average of this figure in the last three years.

Considering that both the proportion of franchised outlets and franchisor strategic decisions may change as the franchisor ages and grows (Baucus, Baucus, & Human, 1993; Lafontaine & Shaw, 1996; Shane, 1996, 1998), prior studies have alerted that the cross-sectional correlations between the level of tapered integration and franchisors' strategic decisions may be artifacts of their respective correlations with firm age and size (Rao & Nielsen, 1992; Shane, 1998). Using data of franchise systems in the U.S. from 1980 to 1997, Lafontaine and Shaw (2005) found that established firms—those with eight or more years of franchising experience—tend to hold their proportion of company outlets stable

over time. I therefore added *Franchise system age* to the model to address the risk of institutionalization, the risk that franchisors may both make contract in a particular pattern and increase any of the independent variables or the moderating variable as a result of lifecycle effects (Shane, 1998). As franchisors are typically both managerially and financially constrained in their early years (Oxenfeldt & Kelly, 1969), their bargaining power is relatively low in their early years. Adding franchise system age to the model can also control for the influence of bargaining power on contract design. Prior studies also suggested that CEOs are particularly important in entrepreneurial firms in part due to their power to make final decisions and to shape the vision and direction of the firm (e.g., Bruton, Fried, & Hisrich, 1997). Franchise system age is measured by the log of the number of years since the franchisor began franchising (Barthélemy, 2008).

I also control for the *Contract duration* of the franchise relationship. Prior studies have shown that long contract duration allows franchisees time to recoup their investment with little fear of opportunistic termination (Brickley et al., 2006), whereas short contract duration offers franchisors a credible termination threat to address suspected free-riding hazards from franchisees (Joskow, 1987; Klein, 1980; Williamson, 1985). Contract duration may thus provide alternative explanation about the design of monetary and non-monetary contract terms.

Seldom are all decisions made by CEO who has stake in what is decided, especially in large organizations. More often decisions are made by representatives of various powerful coalitions in the organization, each of which has his/her own turf to guard and power to protect. In comparison, CEOs in small entrepreneurial firms are more likely to take mental shortcuts and “fall back on what they have tried and seen work in the past”

(Hambrick, 2007, p. 336). In this regard, I control for *Franchise system size* by calculating the number of franchised outlets operating in the past three years and taking an average for each system (Barthélemy, 2008; Sorenson & Sørensen, 2001). I log the variable to account for decreasing returns to scale.

Two variables were constructed to control for determinants of the dependent variables that have been particularly emphasized in the franchise contract literature: *Franchisee specific investment* and *Brand name capital*. I evaluate *Franchisee specific investment* by considering the level of assets in which franchisees are required to invest in the system that can no longer be exploited by the franchisee following termination (Bradach, 1997; Combs & Ketchen, 1999). Adjusting the common proxy used to assess franchisee transaction-specific assets or outlet size in prior research (Argyres & Bercovitz, 2015; Hussain et al., 2013), I measure the variable by calculating the sum of franchisees' up-front investments, including Initial Franchise Fee, Leasehold Improvements, Equipment and Fixtures, Signage, Uniforms, Grand Opening Advertising, Training, Professional Fees, and Licenses. I use a logarithmic value to adjust for decreasing returns to scale and to correct for the normal distribution of the measure.

Based on the agency-theoretic arguments, since brand name capital can be significantly eroded by franchisees' profit maximizing behaviors, franchisors with greater brand name capital have incentives to provide franchisees higher-powered incentives (e.g., lower continuing fees) or to design stricter contractual controls (Blair & Lafontaine, 2005). Prior research has also found evidence of the relationships between the proportion of company-owned outlets and the franchisor's brand name (Lafontaine & Shaw, 2005;

Minkler & Park, 1994), which may affect contract design.<sup>43</sup> I therefore include brand name capital to control for the alternative explanations on the determinants of contract design and tapered integration. Brand name capital is measured by the franchisor's advertising expenditures over the last four years (see Argyres & Bercovitz, 2015 for a similar approach). Advertising expenditure data were drawn from the *AD\$pendex* database. I also include *Trademark registered* as an additional control measure of the value of the brand. I calculate the number of trademarks that a franchise system had registered before 2015. I also count the trademarks that had been cancelled or abandoned because they still represented the development of a brand name.<sup>44</sup> Presumably, the more trademarks registered, the more valuable the brand.

Two variables on CEO characteristics were constructed to control for the possible impact of other CEOs' background features on contract design: *CEO career variety* and *CEO organizational tenure*. Prior studies have indicated that individuals with broad career variety are inclined to accumulate cognitive and experiential stock that they can draw upon and utilize in the subsequent stages of their career (Dragoni, Oh, Vankatwyk, & Tesluk, 2011; Tesluk & Jacobs, 1998). Accordingly, CEOs who have broad career variety may make contracting decisions differently from those who do not have varied work experience. To assess CEO career variety, I take into consideration three dimensions of work experience based on the job, organizations, and industries in which the work experience

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<sup>43</sup> Lafontaine and Shaw (2005) showed that the ownership structure varies substantially across franchise systems. They find that variation in brand name value across systems is an important determinant of the ownership structure: franchisors with high brand name value, the franchise system will tend to have higher proportion of company ownership. They reasoned that since franchisees have incentives to free ride on brand name capital, franchisors with greater brand name capital would desire to exert more direct managerial control over outlets in the system.

<sup>44</sup> A trademark owner can renew the trademark after the first five years of the registration. Without the renewal, the trademark will be considered cancelled or abandoned, and others can use or register the trademark freely.



occurred (Crossland et al., 2014; Tesluk & Jacobs, 1998). The measure for CEO career variety is calculated as follows:

$$CEO \text{ career variety} = \sum_{i=1}^3 E_i$$

where  $E_i$  equals 1 if the  $i$ th dimension of working experience in the at least one prior job, at least one prior organization, or at least one prior industry was different from the CEO's current position and zero otherwise. The summation ranges from zero to three.

*CEO organizational tenure* in the focal franchise is controlled because the experiences of newly selected CEOs may have particular impact on strategic choices in the relatively early years of their tenure. It is measured by the number of the CEO's residence years since he or she entered the franchise system. Prior studies have suggested that CEOs typically pursue to manifest their impact on strategic choices in their immediate post-succession phase (Ocasio, 1994; Tushman & Romanelli, 1985; Westphal & Fredrickson, 2001). Gabarro (1987), for example, found that almost all major actions taken by CEOs occur in the first two and a half years in the organization. The immediate post-succession period is characterized by strategic choices that reflect a CEO's mental model of priorities, options, and causal relations (Gabarro, 1987; Hambrick & Fukutomi, 1991).

Finally, as market segments may differ in the degree of requirements they impose to establish a new outlet, the degree to which they offer opportunities for expansion, their formalization levels in transmitting know-how to franchisees, and their know-how intensity (Barthélemy, 2008; Sorenson & Sørensen, 2001; Zeithaml, Parasuraman, & Berry, 1985), I also control for *Market segment* effects. I group restaurant systems into three categories based on the type of service provided: quick service/take-out (fast food); restaurant/family style; and other specialty restaurants, including donuts/cookies/bagels,

ice cream/yogurt, coffee and specialty, and prepared food outlets in retail hosts or shopping malls. Considering that franchise systems held by public parent firms may be less capital-restrained, have greater bargaining power, and possess advantages in the talented labor market, I also include the variable *Public firm* to control for the impact of public parent firms on their franchise contracting proclivity.

### 4.3 Results

Table 4.1 reports descriptive statistics and correlations between the dependent, independent, moderating and control variables. While a few variables exhibit significant levels of correlation, the mean of variance inflation factors (VIFs) is equal to 2.17, which is well below the rule-of-thumb cutoff of 10, indicating that the overall pattern does not reveal a tendency toward multicollinearity (Meyers, Gamst, & Guarino, 2006). To further deal with possible multicollinearity problems, I mean-center all variable prior to creating the interaction terms (Aiken & West, 1991).

Models of the first three dependent variables—initial fee, continuing fee, and strictness of non-compete covenants—were estimated using OLS regression with robust standard errors. Because the last dependent variable—prevention-oriented renewal terms—is binary, I used a probit model. Tables 4.2 and 4.3 present the findings of the analysis. Models 1, 4, 7, and 10 contain all control variables; Models 2, 5, 8, and 11 test for the explanatory power of the franchisor CEO’s franchising experience (H1a and H1b) and restaurant experience (H2a and H2b); Models 3, 6, 9, and 12 show the hypothesized interaction effects (H3a, H3b, H4a, and H4b). For the purpose of discussion, I use the results presented in the full model as shown in Models 3, 6, 9, 12.

Table 4.1 Descriptive Statistics and Correlations

Variables	Mean	S.D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1. Initial fee	36936.02	45123.20	1														
2. Continuing fee	0.09	0.03	0.00	1													
3. Strictness of non-compete covenants	62.15	234.03	-0.03	-0.03	1												
4. Prevention-oriented renewal terms	0.76	0.43	0.04	0.11	0.04	1											
5. CEO franchising experience	12.75	9.82	0.11	0.05	0.08	0.05	1										
6. CEO restaurant experience	17.90	11.09	0.02	-0.12	0.05	-0.11	<b>0.64</b>	1									
7. Tapered integration	0.29	0.28	-0.03	0.03	-0.04	0.07	<b>-0.17</b>	-0.14	1								
8. Franchise system age	9.53	9.90	-0.04	0.02	0.03	-0.08	<b>0.41</b>	<b>0.29</b>	<b>-0.30</b>	1							
9. Contract duration	10.98	4.44	-0.04	0.07	-0.12	-0.07	<b>0.21</b>	<b>0.23</b>	-0.11	<b>0.19</b>	1						
10. Franchise system size	54.38	113.77	<b>0.26</b>	0.10	-0.07	0.11	0.11	0.07	<b>-0.29</b>	<b>0.39</b>	0.01	1					
11. Franchisee specific investment	493315.30	387693.60	0.12	0.08	-0.05	0.07	<b>0.20</b>	<b>0.19</b>	0.15	<b>0.19</b>	<b>0.45</b>	0.00	1				
12. Brand name capital	1050977.00	3962740.00	<b>0.34</b>	<b>0.25</b>	-0.04	0.06	<b>0.17</b>	0.07	-0.04	<b>0.32</b>	<b>0.24</b>	<b>0.33</b>	<b>0.30</b>	1			
13. Trademark registered	5.43	7.64	<b>0.19</b>	<b>0.19</b>	-0.03	0.06	<b>0.24</b>	0.04	<b>-0.22</b>	<b>0.28</b>	0.11	<b>0.41</b>	0.07	<b>0.17</b>	1		
14. CEO career variety	1.62	0.98	0.06	-0.08	-0.12	0.11	0.08	-0.06	-0.02	-0.02	0.05	0.08	0.05	0.06	<b>0.22</b>	1	
15. CEO organizational tenure	11.77	9.53	-0.03	-0.07	0.14	<b>-0.17</b>	<b>0.50</b>	<b>0.55</b>	-0.15	<b>0.47</b>	-0.02	0.10	-0.02	-0.06	0.08	<b>-0.24</b>	1

N=159. Correlations significant at  $p < 0.05$  appear in bold.

Hypothesis 1a predicts that the initial fee and continuing fee will be higher when the franchisor CEO possesses greater franchising experience. The results for Models 3 and 6 provide support for this prediction. I find that the greater the franchisor CEO's franchising experience, the higher the initial fee and continuing fee specified in the contract ( $\beta = 0.04, p = 0.02$  in Model 3;  $\beta = 0.07, p = 0.09$  in Model 6). I also hypothesized a positive relationship between the franchisor CEO's franchising experience and the strictness of the non-compete covenant, as well as the presence of prevention-oriented renewal terms. I found support for Hypothesis 1c but not for Hypothesis 1b. While the presence of prevention-oriented renewal terms is more likely when the franchisor CEO has greater franchising experience ( $\beta = 0.05, p = 0.01$  in Model 12), the influence of the franchisor CEO's franchising experience on the strictness of non-compete covenant is positive but not statistically significant ( $\beta = 0.02, p = 0.13$  in Model 9).

My second hypotheses offer contrasting predictions with regard to the relationship between the franchisor CEO's previous restaurant experience and contract design. I proposed that a franchisor CEO with greater restaurant experience will make initial fees and continuing fees lower, while the franchisor CEO's restaurant experience will make non-compete covenants less strict and the presence of promotion-oriented renewal terms more likely. I find that the greater the franchisor CEO's restaurant experience, the lower the continuing fee ( $\beta = -0.06, p = 0.02$  in Model 6).<sup>45</sup> However, I do not find a significant relationship between a franchisor CEO's restaurant experience and the initial fee ( $\beta = -0.01; p = 0.12$  in Model 3). I also found support for Hypothesis 2b but not for Hypothesis 2c.

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<sup>45</sup> As a check on the robustness of the results for the measure of continuing fee, I constructed variables that distinct the royalty rates from advertising fee requirements. However, the same interpretations held as those presented in the main model.

Table 4.2 OLS Estimation of the Design of Monetary Contractual Terms

Dependent variables	Monetary terms					
	Initial fee (Ln)			Continuing fee (multiplied by 100)		
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	10.13*** (0.14)	10.13*** (0.13)	10.13*** (0.12)	8.63*** (0.32)	8.66*** (0.31)	8.66*** (0.31)
CEO franchising experience	0.05** (0.02)	0.05** (0.02)	0.04** (0.02)	0.08** (0.04)	0.08** (0.04)	0.06* (0.04)
CEO restaurant experience	-0.02* (0.01)	-0.02* (0.01)	-0.01 (0.01)	-0.07*** (0.03)	-0.07*** (0.02)	-0.06** (0.02)
Tapered integration (ln)		0.06 (0.06)	0.05 (0.06)		0.32 (0.22)	0.30 (0.22)
Tapered integration * CEO franchise experience			-0.03* (0.02)			-0.05** (0.02)
Tapered integration * CEO restaurant experience			0.01 (0.01)			0.02 (0.02)
Franchise system age (ln)	0.08 (0.19)	0.07 (0.19)	0.07 (0.18)	-0.88* (0.48)	-0.91* (0.48)	-0.91* (0.47)
Contract duration	0.00 (0.03)	0.00 (0.03)	-0.01 (0.02)	0.08 (0.06)	0.09 (0.06)	0.07 (0.06)
Franchise system size (ln)	-0.21 (0.16)	-0.18 (0.14)	-0.15 (0.12)	0.38 (0.31)	0.51 (0.34)	0.57* (0.33)
Franchisee specific investment (ln)	0.29** (0.14)	0.26 (0.16)	0.31* (0.16)	-0.17 (0.49)	-0.33 (0.55)	-0.22 (0.57)
Brand name capital (ln)	0.05* (0.03)	0.05* (0.03)	0.05* (0.03)	-0.06 (0.06)	-0.07 (0.06)	-0.06 (0.06)
Trademarks registered (ln)	-0.14 (0.24)	-0.14 (0.24)	-0.22 (0.24)	1.18** (0.52)	1.20** (0.51)	1.04** (0.51)
CEO career variety	-0.10 (0.12)	-0.11 (0.12)	-0.12 (0.12)	-0.63* (0.33)	-0.67** (0.33)	-0.70** (0.32)
CEO organizational tenure (ln)	-0.22 (0.16)	-0.23 (0.17)	-0.26 (0.18)	-0.06 (0.31)	-0.09 (0.30)	-0.16 (0.30)
Market segment-Family restaurant	0.22 (0.16)	0.21 (0.16)	0.16 (0.16)	0.18 (0.67)	0.11 (0.65)	0.01 (0.65)
Market segment-Donut/Bagel/Coffee/Ice cream/Yogurt	-0.02 (0.49)	-0.05 (0.49)	-0.13 (0.50)	0.76 (1.07)	0.60 (1.03)	0.44 (0.98)
Public firm	-0.27 (0.21)	-0.23 (0.25)	-0.11 (0.31)	1.20 (0.82)	1.45 (0.89)	1.66* (0.97)
R-squared	0.23	0.24	0.28	0.19	0.21	0.24
F-value	3.01***	2.92***	2.67***	2.93***	2.69***	3.36***

<sup>a</sup> N=159. Robust standards errors are in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 4.3 OLS and Probit Estimations of the Design of Non-Monetary Contractual Terms

Dependent variables	Nonmonetary terms					
	Noncompete range (Ln)			Prevention-oriented renewal term		
	(7)	(8)	(9)	(10)	(11)	(12)
Intercept	3.07*** (0.16)	3.06*** (0.16)	3.04*** (0.15)	0.77*** (0.16)	0.80*** (0.16)	0.86*** (0.17)
CEO franchising experience	0.02 (0.01)	0.02 (0.01)	0.02 (0.01)	0.04** (0.02)	0.05*** (0.02)	0.05*** (0.02)
CEO restaurant experience	-0.02* (0.01)	-0.02* (0.01)	-0.03** (0.01)	-0.02* (0.01)	-0.02* (0.01)	-0.02 (0.02)
Tapered integration (ln)		-0.05 (0.08)	-0.07 (0.08)		0.13 (0.08)	0.15* (0.09)
Tapered integration * CEO franchise experience			0.00 (0.01)			-0.01 (0.01)
Tapered integration * CEO restaurant experience			-0.02** (0.01)			0.02** (0.01)
Franchise system age (ln)	0.08 (0.16)	0.09 (0.16)	0.09 (0.16)	-0.24 (0.17)	-0.27 (0.17)	-0.28 (0.17)
Contract duration	-0.03 (0.03)	-0.03 (0.03)	-0.04 (0.03)	-0.06* (0.03)	-0.06* (0.03)	-0.06* (0.03)
Franchise system size (ln)	-0.15* (0.09)	-0.17* (0.09)	-0.15* (0.09)	0.08 (0.10)	0.14 (0.10)	0.13 (0.11)
Franchisee specific investment (ln)	-0.05 (0.17)	-0.03 (0.18)	0.07 (0.18)	0.04 (0.19)	-0.02 (0.19)	-0.13 (0.19)
Brand name capital (ln)	-0.01 (0.03)	-0.01 (0.03)	-0.02 (0.03)	0.03 (0.02)	0.03 (0.03)	0.04 (0.03)
Trademarks registered (ln)	0.23 (0.18)	0.23 (0.18)	0.26 (0.19)	0.18 (0.20)	0.18 (0.20)	0.16 (0.21)
CEO career variety	-0.25* (0.13)	-0.24* (0.14)	-0.25* (0.14)	-0.02 (0.12)	-0.03 (0.12)	-0.03 (0.12)
CEO organizational tenure (ln)	-0.24 (0.15)	-0.23 (0.15)	-0.26* (0.15)	-0.32* (0.19)	-0.34* (0.19)	-0.37* (0.20)
Market segment-Family restaurant	-0.03 (0.21)	-0.02 (0.21)	-0.00 (0.20)	0.12 (0.28)	0.09 (0.29)	0.06 (0.29)
Market segment-Donut/Bagel/Coffee/Ice cream/Yogurt	-0.31 (0.36)	-0.28 (0.35)	-0.28 (0.35)	-0.55 (0.40)	-0.64 (0.41)	-0.70* (0.41)
Public firm	0.37 (0.47)	0.33 (0.46)	0.26 (0.50)	0.82 (0.57)	1.05* (0.60)	1.44*** (0.52)
R-squared	0.15	0.15	0.19			
F-value	2.01**	1.84**	2.26**			
Pseudo R-squared				0.11	0.12	0.15
$\chi^2$				17.91	21.45*	30.48**

<sup>a</sup> N=159. Robust standards errors are in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

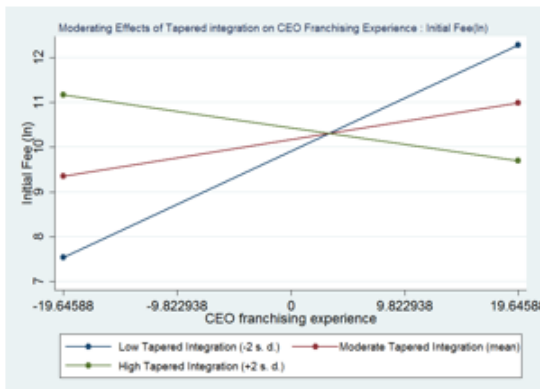
Note: OLS is used to estimate the strictness of non-compete covenants (Models 7 - 9), while Probit model is performed to estimate the design of renewal terms (Models 10 - 12)

While the non-compete covenants tend to be less strict when the franchisor CEO possess greater restaurant experience ( $\beta = -0.03$ ,  $p = 0.02$  in Model 9), the influence of the franchisor CEO's restaurant experience on the presence of prevention-oriented renewal terms is negative but not statistically significant ( $\beta = -0.02$ ,  $p = 0.20$  in Model 12).

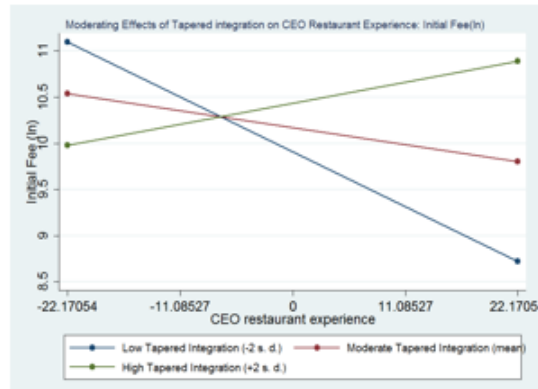
Models 3 and 6 examine the moderating effects of CEO experience and tapered integration on monetary contract terms. I find that the moderating effects of the franchisor CEO's franchising experience and tapered integration on the level of initial fees and continuing fees are negative and significant respectively ( $\beta = -0.03$ ,  $p = 0.10$  in Model 3;  $\beta = -0.05$ ,  $p = 0.03$  in Model 6). However, I do not find statistically significant moderating effects of the franchisor CEO's restaurant experience and tapered integration on the design of monetary terms ( $\beta = 0.01$ ,  $p = 0.24$  in Model 3;  $\beta = 0.02$ ,  $p = 0.26$  in Model 6). The hierarchical  $F$ -tests reveal that the main theoretical variables are jointly significant in Models 2 ( $\Delta F = 2.75$ ,  $p = 0.07$ ) and 5 ( $\Delta F = 3.18$ ,  $p = 0.04$ ). In particular, the model is significantly improved when I test all independent variables of interest and the interaction terms simultaneously in Model 6 ( $\Delta F = 2.54$ ,  $p = 0.03$ ). The interaction plots are presented in Figure 4.1.

In addition, Models 9 and 12 examine the moderating effects of CEO experience and tapered integration on non-monetary contract terms. The hierarchical  $F$ -test in Model 9 and the likelihood ratio test in Model 12 show that the models are significantly improved when I test all independent variables of interest and the interaction terms simultaneously ( $\Delta F = 3.11$ ,  $p = 0.01$  in Model 9;  $\chi^2 = 14.19$ ,  $p = 0.01$  in Model 12). Specifically, I find that the moderating effect of the franchisor CEO's restaurant experience and tapered integration on the strictness of non-compete covenants is negative and significant ( $\beta = -0.02$ ,  $p = 0.03$ );

Panel A: Effects on Initial Fee

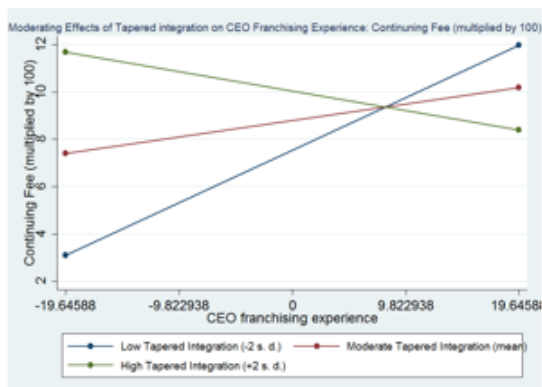


(a) CEO Franchising Experience \* Tapered Integration

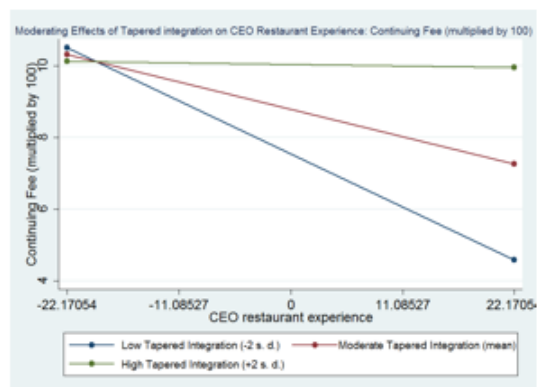


(b) CEO Restaurant Experience \* Tapered Integration

Panel B: Effects on Continuing Fee



(c) CEO Franchising Experience \* Tapered Integration

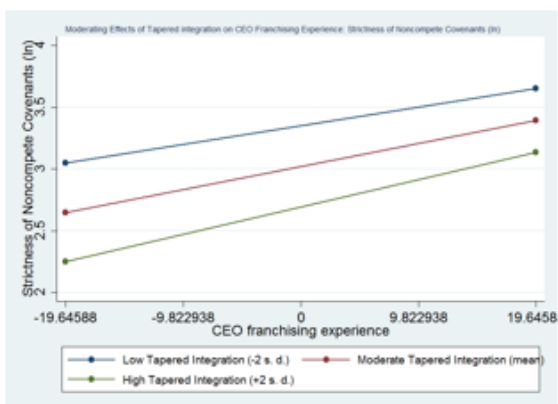


(d) CEO Restaurant Experience \* Tapered Integration

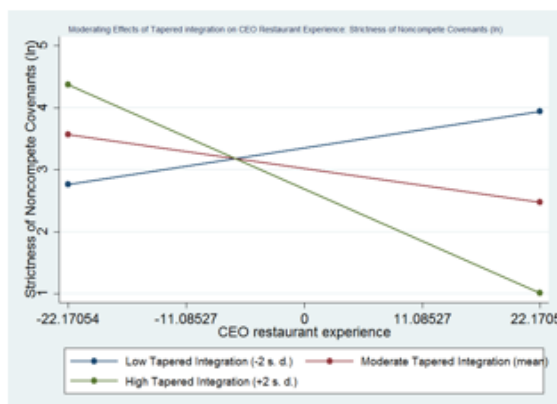
Figure 4.1 Decomposing Interaction Effects on Monetary Contract Terms



Panel A: Effects on Strictness of Non-compete Covenants

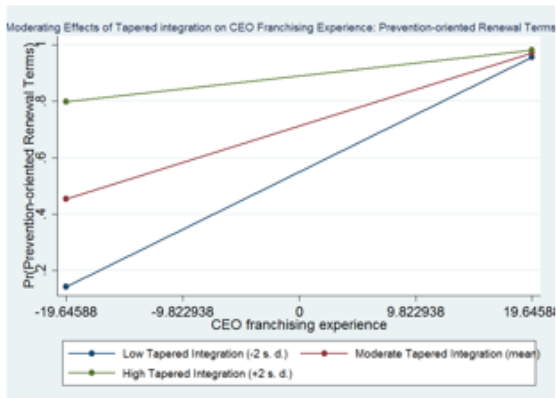


(a) CEO Franchising Experience \* Tapered Integration

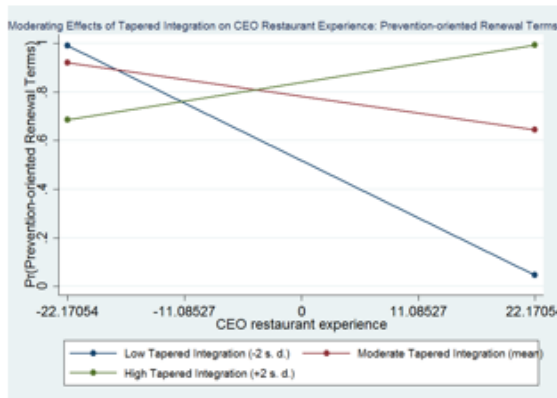


(b) CEO Restaurant Experience \* Tapered Integration

Panel B: Effects on Prevention-oriented Renewal Terms



(c) CEO Franchising Experience \* Tapered Integration



(d) CEO Restaurant Experience \* Tapered Integration

Figure 4.2 Decomposing Interaction Effects on Non-Monetary Contract Terms

the moderating effect of the franchisor CEO's restaurant experience and tapered integration on the presence of prevention-oriented renewal terms is positive and significant ( $\beta = 0.02$ ,  $p = 0.02$ ). However, I do not find statistically significant moderating effects of CEO franchisors' franchising experience and tapered integration on the design of non-monetary terms ( $\beta = 0.00$ ,  $p = 0.86$  in Model 9;  $\beta = -0.01$ ,  $p = 0.53$  in Model 12). The interaction plots are presented in Figure 4.2. Overall, I find support for H3a, H4b and H4c, but I do not find support for H3b, H3c, and H4a.

#### 4.3.1 Supplement Analyses

While I test the influence of the CEO's experience on each individual contractual term separately in the main model, prior studies have suggested that various contractual terms can be jointly determined (Argyres et al., 2007; Bercovitz & Tyler, 2014). To address this concern, I conducted two robustness checks.

First, I tested the hypotheses using a seemingly unrelated estimation procedure that allows for a comparison across models when the error terms for different equations are correlated (Pindyck & Rubinfeld, 1991). As seemingly unrelated estimation allows different estimators, I am able to use OLS estimates for the first three regressions and Probit estimates for the last regression to fit the original models followed by the *suest* procedure. Unreported results (available upon request) indicate that the combined estimation results are very similar to the results in the main models.

Second, to verify that the potential simultaneity among contractual terms does not confound the findings, I adopt an instrumental variables (IV) framework to estimate a system of equations where initial fee, continuing fee, non-compete covenants, and renewal terms are jointly determined (see Argyres et al., 2007 for a similar approach). As the

contract literature indicates that non-monetary terms are normally determined before setting the monetary terms (Bharath et al., 2011; Lin et al., 2016), I assume a unidirectional relationship between the monetary and the non-monetary terms. Specifically, I assume that the monetary terms are affected by the non-monetary terms, but not vice versa. In addition, since non-compete covenants primarily deal with concerns about opportunism ex post while renewal terms are mainly associated with concerns about opportunism ex ante, I view these two non-monetary terms being determined independently. However, I expect that the initial fee and the continuing fee may be simultaneously determined and be affected by one another. Thus, I conducted an IV framework to estimate if the two monetary terms are determined simultaneously and if the determination of the monetary terms is influenced by the non-monetary terms. I employed the two-stage least squares (2SLS) method to derive instruments for the endogenous variables. Table 4.4 presents the results of the IV estimation.

Models 13 and 14 in the Table 4.4 report IV estimation results of the effect of the CEO's experience on monetary terms after controlling for the joint determinations of initial fee and continuing fee, respectively. Models 15 and 16 report IV estimation results of the effect of the CEO's experience on monetary terms after controlling for the joint determinations of non-monetary terms, initial fee and continuing fee, respectively. In Models 13 and 14, the 2SLS model was identified by including *Training hours* and *State expansion* in the initial fee equation, but not in the continuing fee equation. I expect that greater training hours requirement for franchisees before the outlet opens will lead to a greater initial fee. Entering more states may also raise the coordination and control efforts by the franchisor to help the franchise adapt to the local market conditions (Kaufman &

Table 4.4 IV Estimation of Joint Determination of Contract Terms

Variables	Initial fee (13) <sup>a</sup>	Continuing fee (14) <sup>b</sup>	Initial fee (15) <sup>c</sup>	Continuing fee (16) <sup>d</sup>
Initial fee		2.17** (0.92)		
Continuing fee	-0.01 (0.09)			
Strictness of noncompete covenants			-0.03 (0.32)	-0.66 (0.98)
Prevention-oriented renewal terms			1.08 (1.06)	5.56* (3.29)
CEO franchising experience	0.04*** (0.01)	-0.02 (0.05)	0.03 (0.02)	0.03 (0.05)
CEO restaurant experience	-0.02 (0.01)	-0.03 (0.04)	-0.01 (0.02)	-0.05 (0.05)
Tapered integration (ln)	0.09 (0.07)	0.20 (0.19)	0.01 (0.08)	0.04 (0.26)
Tapered integration * CEO franchise experience	-0.03*** (0.01)	0.01 (0.03)	-0.02** (0.01)	-0.04 (0.03)
Tapered integration * CEO restaurant experience	0.01* (0.01)	-0.00 (0.02)	0.00 (0.01)	-0.01 (0.04)
Control variables	As in column (3) of Table 2	As in column (6) of Table 2	As in column (3) of Table 2	As in column (6) of Table 2
<i>Endogeneity test</i>				
Durbin-Wu-Hausman test	1.64	3.97	1.83	5.43
<i>p</i> -value	0.20	0.05	0.61	0.14
<i>Underidentification test</i>				
Anderson canon. Corr. LM statistic LM statistic	18.50	10.12	7.45	7.45
<i>p</i> -value	0.00	0.01	0.02	0.02
<i>Instrument exogeneity test</i>				
Sargan statistic	0.58	0.06	2.29	1.28
<i>p</i> -value	0.44	0.81	0.13	0.26

$N=159$ . Standards errors are in parentheses. \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$

<sup>a</sup> Instrument variables for continuing fee: *input purchase requirement* and *presence of different types of operation*.

<sup>b</sup> Instrument variables for initial fee: *total training hours* and *state expansion*.

<sup>c, d</sup> Instrument variables for non-compete covenants and prevention-oriented renewal terms: *presence of area developer*, *in-class training* and *on-going training*.

Eroglu, 1999; Minkler, 1992), thereby increasing initial fee to compensate the heightened expenditure. *Input purchase requirement* and *Presence of different types of operation* were included in the continuing fee equation, but not the initial fee equation. An input purchase requirement clause obligates franchisees to purchase certain raw materials from the designated suppliers or the franchisor itself (Lafontaine & Raynaud, 2002). As prior studies have indicated that continuing fees are associated with the relative important of the franchisor's efforts to the franchisees' (Bhattacharyya & Lafontaine, 1995), I expect that greater input purchase requirement, reflecting the relative importance of the franchisor's efforts to the franchisees', will lead to higher continuing fees. The presence of different types of operation is also associated with continuing fees because greater continuing fees provide greater economic incentives to the franchisor to make an effort to coordinate the operation of various types of outlets (Rubin, 1978). There is no theoretical basis for believing the training hours and state expansion to be directly related to the continuing fee, nor for the input specification or the presence of different types of operation in the system to be directly associated with the initial fee.

I first conducted a Durbin-Wu-Hausman (DWH) specification test to examine the endogeneity of the continuing fee variable in the initial fee equation (Model 13). The tests indicated that the residuals of the regression of all the exogenous variables on the suspected endogenous variable were not significant, indicating that continuing fee is exogenous in the initial fee model of interest ( $\chi^2 = 1.64, p = 0.20; F = 1.45, p = 0.23$ ). Because 2SLS can yield inefficient estimates when endogeneity is not significant, the original OLS estimates for the initial fee regression is relatively efficient (Davidson & MacKinnon, 1993). However, for the continuing fee regression (Model 14), the DWH test statistics ( $\chi^2 = 3.97,$

$p = 0.05$ ;  $F = 3.58$ ,  $p = 0.06$ ) suggest that initial fee is indeed endogenous.<sup>46</sup> The results show that after I control for the joint determinations of initial fee and continuing fee, the effects of the CEO's experience on continuing fee become insignificant. Instead, the findings indicate that the effect of the initial fee on the continuing fee is positive and significant ( $\beta = 2.17$ ,  $p = 0.02$ ).

In Models 15 and 16, I applied *Presence of area developer*, *In-class training*, and *On-the-job training* as the instrument variables for the strictness of non-compete covenants and prevention-oriented renewal terms variables. Overall, the findings suggest that the results with respect to the effects of the CEO's franchising and restaurant experiences on initial fee are robust after controlling for the joint determination of non-monetary terms and initial fee. However, the results show that after I control for the joint determination of non-monetary terms and continuing fee, the effects of the CEO's experience on continuing fee become insignificant. Instead, the results show that the effect of the presence of prevention-oriented renewal terms on continuing fee is positive and modestly significant ( $\beta = 5.56$ ,  $p = 0.09$ ).<sup>47</sup>

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<sup>46</sup> The Anderson canonical correlations LM test statistic of 10.12 ( $p = 0.01$ ) suggests that the excluded instruments are heavily correlated with the endogenous variable. For the instrument exogeneity test, the Sargan statistic of 0.06 ( $p = 0.81$ ) suggests that the instruments are uncorrelated with the error term. The evidence in the regressions therefore demonstrates that the instruments are relevant and valid.

<sup>47</sup> To verify that the instruments are relevant (i.e., correlated with endogenous variables) and valid (i.e., not correlated with the error term in the explanatory equations), I perform a variety of tests, as shown in at the bottom of Table 4.4. In the initial fee equation (Model 15), the DWH specification test showed that the residuals of the regression of all the exogenous variables on the suspected endogenous variables (i.e., non-monetary terms variables) were not significant, indicating that both *strictness of noncompete covenants* and *prevention-oriented renewal terms* are exogenous in the *initial fee* model of interest ( $\chi^2 = 1.83$ ,  $p = 0.61$ ;  $F = 0.54$ ,  $p = 0.66$ ). Because 2SLS can yield inefficient estimates when endogeneity is not significant, the original OLS estimates for the initial fee regression is relatively efficient (Davidson & MacKinnon, 1993). For the continuing fee regression, while the DWH test statistics ( $\chi^2 = 5.43$ ,  $p = 0.14$ ;  $F = 1.63$ ,  $p = 0.19$ ) also suggest that *strictness of noncompete covenants* and *prevention-oriented renewal terms* are exogeneous, the results in the second-stage regression indicate the modest effect of prevention-oriented renewal terms on continuing fee. The Anderson canonical correlations LM test statistic of 7.45 ( $p = 0.02$ ) suggests that the excluded instruments are significantly correlated with the endogenous variables. For the instrument exogeneity test, the Sargan statistic of 1.28 ( $p = 0.26$ ) suggests that the instruments are uncorrelated with the error term. Overall, the evidence demonstrates that the instruments are relevant and valid.

#### 4.4 Discussion

In this study I sought to extend previous research on the antecedents of contract design in interorganizational relationships. Specifically, I investigate the influence of the franchisor CEO's different types of experience on the franchise contract design.

The results suggest that when the franchisor CEO has greater prior franchising experience, s/he is more likely to include prevention-oriented non-monetary terms in contracts and make the monetary terms such as initial fees and continuing fees higher. In comparison, the findings show that the franchisor CEO with greater prior restaurant experience tends to include promotion-oriented non-monetary terms in contracts and make the initial fees and continuing fees lower. My study extends prior research that perceives contract design as an outcome of experiential learning process (Mayer & Argyres, 2004; Vanneste & Puranam, 2010). While these studies suggested that contract design is largely influenced by actual problems experienced rather than potential problems foreseen, their focus is on the impact of partnership experience at the firm level. Rather, my study emphasizes the role of executive's experience at the individual level, providing a more nuanced understanding of contract design through the lens of the influence of the CEO's prior experiences. Furthermore, compared to prior literature focusing on the influence of individuals on contracting through the lens of individuals' occupation in the firm (e.g., Argyres & Mayer, 2007; Bercovitz & Tyler, 2014), my study investigates the influence of an individual's prior multifaceted experience on contracting. In particular, my analysis suggests how distinct types of franchisor CEO experience drive him/her to attend to different aspects of franchise business and thus affect his/her preference on contract design. The implication is that contracting capabilities may not only reside in different kinds of

employees as argued by prior contract research, but they may also hinge on the depth and content of experience of the most powerful employee (i.e., the CEO) within an organization.

In addition, this study suggests the contingent effects of the CEO's different kinds of experience on contract design in function of the franchise ownership structure. A few franchise studies have started to investigate the contingent performance implication of alternative ownership structures (e.g., Sorenson & Sørensen, 2001; Yin & Zajac, 2004).<sup>48</sup> For example, Sorenson and Sørensen (2001) argued that the optimal mix of outlet ownership hinges upon the extent of environmental heterogeneity faced by the system. Yin and Zajac (2004) also contended that performance differences between company-owned outlets and franchised outlets may be attributable to the matching of one structure with a correspondingly appropriate strategy. However, these studies overlooked the fact that strategic decisions are made by executives who can play important roles in determining the function of particular ownership structures. As the function of particular ownership structures may vary with the executive's professional experience, in this paper I suggest that the contract design will change accordingly. The results in this study suggest that the value of a franchisor CEO who has greater franchising experience on governing the whole system may decrease with the proportion of company-owned outlets in the system, and therefore lower initial fees and continuing fees that are typically used to compensate franchisors' commitment. In comparison, the franchisor CEO's restaurant experience may be particularly important in building the unique business format and developing

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<sup>48</sup> Most franchising research has been devoted to examining the non-contingent implication of different ownership structures. On the one hand, franchising has advantages over company ownership as franchising allows firms to grow faster and to minimize agency costs (Brickley, Dark, & Weisbach, 1991; Norton, 1988; Shane, 1996, 1998). On the other hand, company ownership is viewed beneficial as it facilitates knowledge transfer and provides bargaining leverage for franchisors (Bradach, 1998; Michael, 2000).



innovations when there are more company-owned outlets systemwide. As a result, the increasing inimitability and unstitutability of the franchise business format reduce the need for strict non-compete covenants. However, since the franchisor CEO with greater restaurant experience may rely more on company-owned outlets to test and evaluate new ideas when more company-owned outlets are present in the system, the need for promotion-oriented renewal terms is reduced while the demand for prevention-oriented renewal terms to govern the potential franchisees' deviation increases.

An important limitation of this study is that because my data are cross-sectional only, the causal relationship between the CEO's experience and contract design cannot be clearly demonstrated. I attempted to mitigate this problem by ensuring that I only coded the background characteristics of the CEOs who were in the position when the contract is designed, and by controlling for the CEO's organizational tenure. Furthermore, while I have attempted to control for some franchise-specific variables that may affect contract design, I see opportunities to extend my study by testing how contract design changes with the succession of franchisor CEOs with different experiences within each franchise system. For these reasons, I encourage future research to gather panel data to measure the effects of the CEO's experience on contract design.

In sum, my research provides important new insights into how contract design may be influenced by the background characteristics of the most powerful actor (i.e., CEO) in a firm. I underscore the need to extend beyond the economic theoretical approach to contract design to consider the individual-based micro-foundation of interfirm contracts. I believe that until more models accounting for individual roles in interorganizational

governance are carefully crafted and empirically explored, scholars' understanding of interorganizational relationships will remain limited.

## CHAPTER 5. CONCLUSION

In this dissertation, I attempt to advance our understanding on the antecedents of contract design by investigating how franchise contract design are affected by (1) the asymmetric commitments by the franchisor versus its franchisees, (2) the franchisor and franchisees' value being placed on future interactions, and (3) the career experience of the franchisor CEO who oversees contract design in the franchise system. Compared to extant research that often focuses on only one side of the relationship and overlooks asymmetries with regard to the transaction characteristics and contracts *per se*, in this dissertation I view transactions and contracts at the dyadic level, adopting the theoretical perspectives from transaction cost economics, research on the shadow of the future, and the contract literature to address multiple questions proposed in the second and the third chapters. Going beyond the economics theoretical rationale, I also take the individual-level factors into consideration to explain the determinants of interfirm contract design in the fourth chapter. The broad contributions of this dissertation are summarized in the following.

To begin with, this dissertation contributes to interfirm contract literature by highlighting an additional perspective on how contracts are designed to safeguard firms' interests. Prior contract research has suggested that firms can resort to more complex or complete contracts to protect against potential hazards (Anderson & Dekker, 2005; Mesquita & Brush, 2008; Reuer & Ariño, 2007). By connecting TCE logic (Williamson, 1985) with the contract literature in economics (Arruñada et al., 2001, 2005; Klein et al., 1978), I identify that the favorableness of contractual provisions may differ between partnering firms and that not only the number of contractual provisions but also the favorableness of those contractual provisions is related to the safeguard function of

contracts. By demonstrating that contractual provisions can be categorized into at least two dimensions where each dimension is more in favor of one party than the other in the relationship, I argue and show that in face of greater exchange hazards, firms may resort not only to include provisions in their own favor but also to exclude provisions in the partner's favor. The important implication for the extant contract research is that selective exclusion of contractual provisions can also serve as safeguards against hazards.

Furthermore, even though transaction-specific investments, according to TCE logic, may lead to hold-up problems, the investments by different parties to the relationship might also affect how the parties value the future interactions. Combining the TCE rationale and the literature on the shadow of the future (Poppo et al., 2008), I theorize how the parties' transaction-specific investments interplaying with predetermined contract duration shapes the shadow of the future. Specifically, I indicate that the shadow of the future would promote the partner to cooperate in resolving disputes when disputes arise, thereby affect the demand for structuring complex dispute resolution provisions *ex ante*. The important implication is that firms are likely to adopt complex dispute resolution provisions to address their vulnerability to the uncooperative intention in resolving dispute by the partner firm.

In addition, this dissertation also presents an important perspective on the role of individuals in contract design. Bringing upper echelon perspective (Gupta & Govindarajan, 1984; Hambrick & Mason, 1984) into the contract research, I demonstrate the effects of CEO prior career experience on contract design. The important implication is that the CEO's prior career experience might affect contract design as the CEO's experience shapes

his or her skills and cognitive schema, which consequently influence how he or she perceives the partnership and the role of contracts.

### 5.1 Future Extensions

The basic findings in this dissertation could open the way for a number of promising lines of research. First, while my findings indicate that vulnerable party is likely to protect its interests by not only including contractual terms in its favor but also excluding contractual terms in favor of the threatening party, it is possible to explore factors that might influence parties' proclivity to adopt particular approaches. For example, the legal environment might shape parties' perceptions with regard to the enforceability of specific contractual terms (Klick, Kobayashi, & Ribstein, 2009) and how the court would interpret a contract (e.g., Eggleston, Posner, & Zeckhauser, 2000; Schwartz, 1992), thereby affecting each party's intention to include or exclude particular contractual terms. It is also interesting to consider whether and how including contractual terms versus excluding contractual terms might determine relationship development and performance. Sometimes the inclusion of particular contractual terms might be prevention-motivated/promotion-motivated, and sometimes the exclusion of particular contractual terms might be promotion-motivated/prevention-motivated. It would be interesting to investigate how exchange parties mix the terms-inclusion strategies and the terms-exclusion strategies in order to achieve their collaborative objectives.

Second, although research on contract design has examined the antecedents and consequence of contract complexity or contract completeness, most studies account for contract design by focusing on the number of words, the number of pages, the kilobytes of information in contracts, or the number of provisions in contracts (Robinson & Stuart, 2007;

Reuer & Ariño, 2007). Prior work tends to emphasize the bright side of contract complexity, suggesting how contractual terms align partners' expectations, create incentives, and protect partners' interests. However, greater contract complexity may both increase information-processing cost and heighten the likelihood of interpretation misalignment between parties caused by the limitation of human cognition. As an extension, it would be interesting to further examine how managers balance the desire to exploit benefits from contract complexity and the commitment to minimize the cognitive loading imposed by the contract on them. Ongoing research (e.g., Hagedoorn & Hesen, 2009) that views contracts from both objective and subjective perspectives is particularly encouraging in this area. Furthermore, as contractual terms are likely to be interdependent to one another and are likely to be associated with other interfirm governance mechanisms, fruitful directions for future work include further understanding of whether and how the different dimensions of contracts and other interfirm governance mechanisms function as complements or substitutes. For example, it would be interesting to explore whether a contract that imposes significant cognitive loading on parties tends to increase or decrease the renegotiation frequency.

Finally, while in this dissertation I also explore the effects of the CEO's career experience on contract design in franchise context, it would be attractive to investigate whether and how the relationship between top managers and lawyers in firms affects contract design as well as the contracting process. Contract design is not only relevant for the firms whose business interests are represented in the contracts, but also for other parties, such as lawyers, courts, and policymakers involved in the drafting and enforcement of contracts (Hagedoorn & Hesen, 2009). As interorganizational partnerships are frequently

employed in races to markets, managers are inclined to look for contracts that are less costly and more flexible for ex post adjustments. However, as contracts are legal documents that may wind up in litigation, lawyers may have different points of view about how contracts should be devised (Ring, 2006; Mayer & Argyres, 2004). On the one hand, persons trained as managers are likely to view legal considerations as an afterthought, treating the firm's lawyers as a "necessary evil" (Nelson & Nielsen, 2000, p. 474). Managers may only consult lawyers when the firm is confronted legal problems. They are also predisposed to consult their firm's attorneys with technical questions for fear that the lawyers' answers might preclude the managers from intended actions (Linowitz & Mayer, 1994). On the other hand, lawyers may also overstate legal risk to justify larger income and higher status (Langevoort & Rasmussen, 1997). Sometimes the desire to keep the clients happy, as well as overconfidence bias (or other cognitive biases), may also compromise the lawyers' judgments (Langevoort & Rasmussen, 1997). It is therefore promising to study the trade-offs between what managers pursue and what lawyers emphasize during the contracting process. Bagley (2008), for example, has put that the "legal astuteness"—the capability of top managers to communicate with attorneys and to work together to solve problems—may confer competitive advantage to a firm when legally astute managers can use formal contracts to complement with relational governance to define and manage interorganizational relationships. Accordingly, several opportunities for future research exist, exploring how the components of "legal astuteness" influence contract design. In addition, since "a person trained as a scientist may have a difficult time understanding the point of view of a lawyer" (Daft & Lengel, 1986, p. 564), and since increasing numbers of lawyers are serving as CEOs of U.S. publicly traded companies (France & Laville, 2004),

potential research questions also include whether top managers with legal background make the contracting process more smoothly, or, conversely, whether top managers with legal background tend to result in complex contracts in the stage of partnership formation while reducing the frequency of renegotiation or ex post contract adjustments.

Naturally, there are important limitations to my work here. My studies are limited by the cross-sectional construction based on archival data, and are relatively silent on the performance implications of contract design. Although indirect inferences may be made concerning efficiency from the linkages between transaction-specific factors and contract design, it would be attractive to study the implication of contract design more directly. Future research could investigate how such contract designs affect partners' joint and individual performance outcomes, possibly drawing insightful conclusions on the environments where the partnership locates (macro level), the relative influence of individuals in contract design (individual level), and how the alliance evolution and dynamics influence and are influenced by contracting decisions in different stages of interorganizational relationship (temporal level).

In sum, although this dissertation has underscored factors that could influence the interfirm contract design by employing transaction cost logic, as well as the literature on the shadow of the future and upper echelon perspective, there is still much to learn about interfirm contract design by considering various instruments within contracts (e.g., task specificity, number of contingency, renegotiation policy, affiliated agreements, etc.) that firms can use to manage partnerships and to consider the potential influencing factors at different levels (e.g., individual level, team level, environmental level). I hope this dissertation, which emphasizes both the asymmetric view of and the role of individuals in



contract design, provides an opportunity to shed new light on the antecedent of interfirm contract design and to open rich pathways for future contract research.

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## VITA

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#### EDUCATION

Krannert Graduate School of Management, Purdue University  
Ph.D., Strategic Management, 2017

National Taiwan University

M.B.A., International Business, 2012

B.B.A., International Business, Minor in Japanese Language and Literature, *Magna Cum Laude*, 2009

#### RESEARCH INTERESTS

Inter-Organizational Collaborative Strategy, Governance Design, Franchise,  
Organizational Distrust

#### REFEREED PUBLICATION

Guo, S. L. 2017. The Origins of Complex Dispute Resolution Provisions. *Academy of Management Best Paper Proceedings*.

Guo, S. L., Lumineau, F., & Lewicki, R. 2017. Revisiting the Foundations of Organizational Distrust. *Foundations and Trends® in Management*, 1: 1-88.

#### PRESENTATIONS

“The Origins of Complex Dispute Resolution Provisions”

- Academy of Management Annual Meeting, Atlanta, USA, August 2017
- Midwest Strategy Meeting Conference, Iowa State University, June 2017

“The Role of CEO Experience in Contract Design” with F. Lumineau

- Academy of Management Annual Meeting, Atlanta, USA, August 2017

“An Asymmetric View of Franchise Contracts” with F. Lumineau

- Academy of Management Annual Meeting, Atlanta, USA, August 2017
- Midwest Strategy Meeting Conference, University of Kansas, June 2016
- Krannert PhD Proseminar, Purdue University, May 2016

“Revisiting the Foundations of Organizational Distrust” with F. Lumineau

- Academy of Management Annual Meeting, Philadelphia, USA, August 2014



- Invited Participant, Doctoral Workshop, Midwest Strategy Meeting Conference, Washington University in St. Louis, June 2015

## **TEACHING INTERESTS**

Strategic Management, International Business, Collaborative Strategy

## **TEACHING EXPERIENCE**

Instructor, *Strategic Management* (MGMT451/ MGMT 352), capstone course for undergraduate, Krannert School of Management, Purdue University  
Spring 2014, Spring 2015, Spring 2016, Fall 2017 (40 hours\* 4 sections)

## **HONORS, AWARDS, AND GRANTS**

- Invited Participant, BPS Dissertation Consortium, Academy of Management Annual Meeting, Atlanta, USA, August 2017
- Bilisland Dissertation Fellowship, 2016-2017
- Robert W. Johnson Award for Distinguished Research Proposal, 2016
- Invited Participant, PhD Boot Camp, Strategy Research Initiative, Washington, DC, June 2016
- Invited Participant, Doctoral Workshop, Strategic Management Society Annual Conference, Denver, October 2015
- Krannert Doctoral Student Travel Grant, 2014-2017
- Krannert Research Assistantship, 2012-2016
- Taiwanese Government Scholarships to Study Abroad (GSSA), 2012

## **INDUSTRY EXPERIENCE**

- Ford Motor Company (Taiwan), Intern in Purchasing Department, 2010
- Caesar Park Hotel (Taiwan), Intern in Finance Department, 2009
- Bank of Taiwan, Intern in Credit Management Department, 2007

## **PROFESSIONAL ACTIVITIES**

### **Membership**

Academy of Management

### **Service**

- Ad hoc reviewer for *Journal of Business Research*
- Reviewer for the BPS and OMT divisions, Academy of Management Annual Meeting (2014—Present)
- Co-organizer of franchising symposium, BPS division, Academy of Management Annual Meeting, 2017