Trust, Transactions Costs and Contractual Completeness

The Case of Franchising

George Hendrikse
Patrick Hippmann
Josef Windsperger

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1 George Hendrikse is at Rotterdam School of Management, Erasmus University, P.O. Box 1738, 3000 DR Rotterdam, 00-31-10-4088660, The Netherlands, ghendrikse@rsm.nl, and Patrick Hippmann and Josef Windsperger are at the Center for Business Studies, University of Vienna, Brünner Str. 72, A-1210 Vienna, Austria, josef.windsperger@univie.ac.at.
Abstract

The aim of the study is to explain the degree of contractual completeness in franchising by developing hypotheses from transaction cost and relational governance perspectives. Specifically, we complement the transaction cost view on contractual completeness by examining the impact of knowledge-based trust and general trust on the franchisor’s choice of contractual completeness. First, we investigate the transaction cost determinants of contractual completeness. Contractual completeness is negatively associated with environmental uncertainty and franchisees’ transaction-specific investments, and positively associated with the free-riding risk. Environmental uncertainty prevents the franchisor from setting up detailed contract terms and increases the need of ex-post adaptations and hence less specified contracts. Specific investments of the franchisees increase their motivation to behave cooperatively that requires less detailed contract terms. Franchisor’s free-riding risk increases with the brand name of the system resulting in more detailed contract provisions to mitigate the relational risk. Second, we analyze the relationship between trust and contractual completeness by differentiating between general trust and knowledge-based trust. General trust of the franchisor reduces the franchisor’s perception of relational risk and hence the necessity to control the network relationship by formal contract planning, and knowledge-based trust increases information sharing between the partners and hence the knowledge base for specifying more detailed contracts. The data from the German franchise sector provide support of the general trust, franchisees’ transaction-specific investment and free-riding hypotheses.
1 Introduction

The theory and practice of contracts exhibits a huge gap (Lyons 1996; Lafontaine, Slade 1997; Masten 2000; MacLeod 2000; Scott 2003; Macaulay 2003; Kaplan, Strömberg 2003; Furlotti 2007). On the one hand, contract theory has developed by analyzing either contracts covering all possible contingencies in the complete contracting models in the form of agency relationships, or contracts assigning only residual decision rights in the property rights theory (Bolton, Dewatripont, 2005). On the other hand, actual contracts contain both, they specify various clauses covering certain contingencies and assign decision rights regarding the issues left open (Grandori, Furlotti 2009). This paper aims to contribute to closing this gap by conceptualizing the incompleteness of contracts in franchising, formulating various hypotheses regarding the incompleteness of contracts based on transaction cost and relational governance perspectives, and providing evidence regarding contractual incompleteness in franchise contracts in Germany.

One way to characterize a contract in general is that it is a document delineating specific and residual decision rights (Barzel 1989; Demsetz 1998). Specific rights allocate the benefits and the costs to the involved parties in specific circumstances. For example, a franchise contract specifies the level of the royalty rate and the franchise fee. Residual decision rights specify the identity of the party who has the power to decide on the course of action in circumstances not covered by the specific rights (Leblebici, Shally 1996). In other words, they address the question ‘Who has authority or control?’ (Hansman 1996; Elfenbein, Lerner 2003; Higgins 2007). For example, franchise contracts in the car industry restrict dealers’ decision rights and grant manufacturers extensive completion, monitoring and enforcement power (Arrunada et al. 2005). Residual decision rights are relevant next to specific rights because contracts
are in general incomplete (Hadfield 1990; Scott 2006; Hermalin 2008). Incomplete contracts are completed by the allocation of residual rights in order to decide in circumstances which are not covered by the contract (Lerner, Malmendier 2010). It provides a mechanism to adapt the decisions of both parties to day-to-day changes in the circumstances. Therefore, under environmental uncertainty, complexity and intangibility of knowledge assets, the contract design is an adaptation mechanism that assigns specific and residual rights to regulate the transactions between the partners (Simon 1951; Williamson 1975; Tadelis 2002; Meyer, Teece 2008).

The objective of our paper is to develop a theoretical foundation of the concept of contractual completeness and to complement the transaction cost view of contractual completeness in franchising by adding and testing hypotheses derived from the relational governance view. First, by applying transaction cost theory, we argue that completeness varies negatively with environmental uncertainty and franchisees’ transaction-specific investments. Environmental uncertainty increases ex-post transaction costs thereby preventing the franchisor from specifying detailed contract terms. Franchisees’ specific investments increase their quasi-rents and hence the self-enforcing range of contracts resulting in lower requirements for verifiable contract terms, and franchisor’s transaction-specific investments will require more complete contracts in order to reduce the franchisor’s hold-up risk. Furthermore, we argue that contractual completeness varies positively with the brand name value due to the free-riding risk. Second, based on the relational governance view, we investigate the relationship between trust and the degree of contractual completeness. We distinguish two major dimensions of trust: Knowledge-based trust increases the franchisor’s information base and enables the franchisor to design more complete contracts; on the
other hand, general trust decreases relational risk and results in less complete contracts. These hypotheses are tested by using data from the German franchise sector.

The contributions from this study are two-fold: First, the paper presents a theoretical foundation of contractual completeness which is defined by the ratio of specific and residual rights assigned to the contract partners. Second, we explain the degree of contractual completeness in franchising by combining transaction cost and relational governance perspectives. Specifically, we complement the transaction cost view by examining the impact of knowledge-based trust and general trust on franchisor’s choice of contractual completeness.

The rest of the paper is organized as follows: Section two investigates the concept of contractual completeness. In section three we develop hypotheses to explain contractual completeness in franchising. Finally, we present the results of the empirical study.

2 The Concept of Contractual Completeness

Recent empirical studies show that contractual completeness is a very heterogeneous concept with insufficient theoretical foundation (Lusch, Brown 1996; Poppo, Zenger 2002; Luo 2002; Anderson, Dekker 2005; Hagedoorn, Hesen 2008; Mesquita, Brush 2008; Ryall, Sampson 2009; Susarla et al. 2009; Solis-Rodriguez, Gonzalez-Diaz 2012). In the following, we develop the concept of completeness based on the property rights theory and explain contractual completeness under different contract forms.
2.1 Completeness and specific versus residual rights

Three types of contracts can be distinguished in the theory of contracts. First, complete contingent contracts were introduced by Arrow and Debreu in their models of market equilibrium (see Hendrikse 2003). These contracts can be made contingent on all the relevant contingencies because all relevant information is known to all parties and costlessly available. Second, complete contracts started to be analyzed in the late 1960s and 1970s. The introduction of private information and hidden actions (for instance moral hazard problems) prevents contracts being based on all relevant contingencies. However, contracts are still complete because they specify an action for each information set, i.e. complete contracts are made contingent on all the observable information. Finally, Grossman and Hart (1986) started the analysis of incomplete contracts. Incomplete contracts are to be positioned at the other extreme in terms of the costs of writing contracts because it is assumed, due to cognitive boundaries, that writing contracts is prohibitively expensive or not possible. A contract which only specifies who has the right to decide when a certain contingency arises is incomplete. It consists only of residual rights specifying the person with decision authority. Actual contracts consist usually of specific as well as residual rights, i.e. some contractual clauses regarding decision actions are specified, while the remaining contingencies are covered by assigning residual right(s) to the contract parties. There are various reasons for residual rights due to non-contractibility of decision actions. Examples of this are: a lack of insight of the people involved, the costs of writing contractual clauses and determining the optimal course of action, measurement costs (Barzel 1982), the imprecision of language, and environmental uncertainty.

The above differentiation allow us to define the completeness of contracts: contractual completeness is defined as the number of information sets having a specific
right assigned to it divided by the total number of information sets. This can be
operationalized by the number of specific decision rights (sDR) divided by the sum of
specific decision rights and the residual decision rights (rDR). It follows immediately
from \( \frac{sDR}{sDR+rDR} = \frac{1}{1+rDR/sDR} \) that a change in the completeness of contracts
is the same as a change in the ratio between specific and residual rights (sDR/rDR).
The higher the fraction of specific rights compared to residual rights specified in the
contract, the higher the degree of contractual completeness; and the higher the fraction
of residual rights is compared to specific rights, the lower the contractual completeness.
sDR/rDR depends on the contractibility of knowledge. When contractibility is low, the
use of assets is primarily regulated by assigning residual decision rights, and when
contractibility of knowledge is high, the use of assets is primarily regulated by
assigning specific decision rights to the contract partners. For example, the franchisor
has to regulate the advertising tasks in the contract. He has two possibilities: He can
specify in detail the payment of certain advertising fees based on sales and the different
promotion and advertising measures, or he can specify who has the right to make
certain advertising decisions. A franchise contract is more complete when the ratio
between specific and residual rights is high.

This view is compatible with the adaptation view of governance (Simon 1951;
Williamson 1975; Gibbons 2005; Tirole 2009) that formulates a trade-off between
preplanning of decision actions (assigning specific rights) and the planning of decision
procedures (assigning residual rights) (Bolton, Faure-Grimaud 2009).²

² A similar trade-off is well-known in the regulation literature on the choice between rules and standards
(e.g. Kaplow 1992).
2.2 Completeness and contract form

This concept of contractual completeness will be illustrated by comparing three contract forms: franchise contracts, license contracts and market contracts. The question to answer is how to formulate and assign specific and residual decision rights to the contract partners (franchisor/franchisee, licensor/licensee, market partners). We show that the ratio between specific and residual rights increases from franchise contract to licensing and from licensing to market contract; therefore market contracts are more complete than license contract, and license contract are more complete than franchise contracts. We assume that the only relevant assets are $a_0$, the system-specific assets (owned by A) and $a_1$, the local market assets (owned by B).

**Franchise Contract**

Under franchising, both system-specific assets, $a_0$, and local market assets, $a_1$, show a low degree of contractibility due to high intangibility of assets. In this case, the use of $a_0$ as well as $a_1$ is difficult to specify in the franchise contract. Under non-contractible assets, the use of A’s (franchisor) system-specific assets and B’s (franchisee) local market assets is primarily regulated by assigning residual decision rights. Therefore, the degree of contractual completeness ($sDR^F/rDR^F$) is relatively low (see figure 1).

**License Contract**

Under licensing, the use of system-specific assets, $a_0$, is more contractible due to its lower degree of intangibility, and the local market assets, $a_1$, show a high degree of intangibility. Compared to franchising, the use of $a_0$ can be more completely defined in the contract between A and B, while the use of $a_1$ cannot be easily specified. Due to the
high contractibility of $a_0$, more specific decision rights concerning the use of system-specific know how can be included in the license contract. On the other hand, $a_1$ is non-contractible. Hence the use of B’s (licensee) local market assets is more regulated by formulating residual decision rights. Since the use of system-specific assets can be more specified in the license contract compared to franchising, the degree of contractual completeness is relatively higher than under franchising ($s_{DR}^L/r_{DR}^L > s_{DR}^F/r_{DR}^F$) (see figure 1).

**Market Contract**

Under market contract both system-specific know assets, $a_0$, and local market assets, $a_1$, show a high degree of contractibility. Therefore, their use can be almost completely regulated by specifying detailed contract terms regarding the decision actions of the partners in the contract execution period. In this situation, the ratio between specific decision rights and residual rights is high resulting in a high degree of contractual completeness ($s_{DR}^M/r_{DR}^M > s_{DR}^L/r_{DR}^L > s_{DR}^F/r_{DR}^F$) (see figure 1).

**INSERT figure 1**

To summarize, we can conclude that contractual completeness is defined by the ratio between specific and residual decision rights. The lower the contractibility of knowledge (e.g. due to high intangibility of knowledge assets and uncertainty), the lower is the probability to formulate specific rights and the more residual decision rights are assigned to the contract partners, and the lower is the degree of contractual completeness.
3 The Impact of Transaction Costs and Trust on Contractual Completeness

In recent years, few researchers in organizational economics and regulatory theory have examined questions of contract design and contractual completeness in franchising. In organizational economics, most of the authors have studied interaction effects between different contract provisions. Wimmer and Garen (1997) have shown that specific assets act as an implicit bond and substitutes for a reduced royalty rate in inducing franchisee efforts. Brickley (1999) presented an agency cost explanation of the complementarities between mandatory advertising and area development plans, restrictions on franchisee’s outside activities and area development plans, and between mandatory advertising and restrictions of outside activities. Berkovitz (1999) applied transaction cost reasoning to analyse interactions between contract provisions. She found that the initial fees and the duration of franchise contracts are positively related with the relationship-specific investments. In addition, she argued that the hostage function of specific investments could be increased by including termination conditions. By applying Klein’s self-enforcement view of contract provisions (Klein 1995), Lafontaine and Raynaud (2000) examined complementarities between residual claimancy rights and self-enforcement mechanisms, such as exclusive territory clauses, multi-unit ownership guarantees, contract renewal and termination rights. They argued that the dilution of the franchisee’s residual income rights requires the use of self-enforcement mechanisms to increase the franchisee’s incentive to maximize the residual surplus of the network. Furthermore, Arrunada et al. (2001, 2005) and Windsperger (2003) advanced the literature by analyzing the entire system of rights in franchise contracts. Arrunada et al. (2001) found some complementarities between completion and termination rights, and between monitoring rights and incentives in the automobile distribution, and Windsperger (2003) found complementarities between

Although these studies offer explanations of certain contract clauses in franchise relationships, they do not explain the factors that influence contractual completeness. A recent exception is Solis-Rodriguez and Gonzalez-Diaz (2012) who examine the determinants of contractual completeness in franchising from transaction cost economics and capability perspectives. They show that contractual completeness varies positively with transaction-specific investments, franchisor reputation and interorganizational experience. In the following, we add to this literature by explaining contractual completeness in franchise relationships using transaction cost and relational governance perspectives. Specifically, we complement the transaction cost view by examining the impact of knowledge-based trust and general trust on the franchisor’s choice of contractual completeness.

3.1 Transaction Cost Theory

According to the transaction cost theory (Williamson 1985; Saussier 2000; Blumberg 2001), uncertainty (environmental and behavioural uncertainty) and transaction-specific investments influence the contract design.

**Environmental Uncertainty**

Environmental uncertainty refers to market, cultural and institutional uncertainty. It prevents the franchisor from setting up detailed contract terms (Williamson 1975; Crocker and Reynolds 1993; Saussier 2000) and increases the need of ex-post
adaptations by allocating residual decision rights. Ex-post adaptation problems result in high ex-post transactions costs under high environmental uncertainty when highly specified contracts are set up at the beginning of the contract period. Therefore, the higher the environmental uncertainty, the more difficult and costly is the planning of decision actions by specific decision rights in the ex-ante period, and the less complete is the franchise contract. This is summarized in the following hypothesis.

H1: Environmental uncertainty will negatively influence contractual completeness.

**Free-riding Risk**

One major issue of behavioural uncertainty in franchise relationships is free-riding on the part of franchisees (Klein 1980). The franchisor may use contract provisions to protect against potential opportunistic behaviour through free-riding (Bercovitz 1999). Free-riding hazards are positively related to the value of the brand name of the franchise system (Klein 1995). The higher the brand name value, the higher the franchisor’s free-riding risk due to behavioural uncertainty, and the more specific clauses are formulated in franchise contracts. We derive the following hypothesis:

H2: The level of free-riding will positively influence contractual completeness.

**Transaction-specific investments**

According to the transaction cost theory, transaction-specific investments increase the network partners’ quasi-rents which can be expropriated by the less dependent partner (Williamson 1985; Heide, John 1988; Klein 2000). In franchising, both the franchisor and the franchisee have to undertake transaction-specific investments.
(1) *Franchisees’ transaction-specific investments*: When franchisees’ transaction-specific investments (e.g. initial investments in outlet equipment and initial fee) are high, his/her quasi-rents are likely to exceed the potential hold-up gains from opportunistic behaviour, thereby increasing the self-enforcing range of contracts (Klein 1995, 1996; Klein, Murphy 1997; Hwang 2006). In this situation, the bonding effect of transaction specific investments motivates the franchisees to behave cooperatively in order to realize the relationship-specific quasi-rents (Williamson 1983; Katz 2008). Additionally, inside the self-enforcing range of contracts, the parties frequently disregard verifiable contract terms (e.g. measures of performance) in favour of nonverifiable contract terms in order to enhance the relationship-specific surplus (Scott 2003; Baker, Krawiec 2006). Consequently, the value-creating effect of franchisees’ transaction-specific investments increases the self-enforcing range of contract and reduces the franchisor’s requirement for specifying more detailed contract terms. We can derive the following hypothesis:

H3a: Franchisees’ transaction specific investments will negatively influence contractual completeness.

(2) *Franchisor’s transaction-specific investments*: When the franchisor’s transaction-specific investments are high (for example expenses for training, site selection, technical support), he/she is subject to increasing hold-up risk. In this case, the franchisor will protect these investments from opportunistic expropriation on the part of franchisees by using more detailed and complete contracts (Goldberg and Erickson 1987; Joskow 1988; Saussier 2000). Hence we can formulate the following hypothesis:

H3b: Franchisor’s transaction specific investments will positively influence contractual completeness.
3.2 Relational Governance View

Recent research results on inter-firm alliances show that trust is an important relational governance mechanism leading to higher relational rents due to savings of transaction costs and/or an increase of transactional value (e.g. Bradach and Eccles, 1989; Dahlstrom and Nygaard, 1996; Zajac and Olsen, 1993). However, the trust concept used in this research stream is heterogeneous. This heterogeneity mainly results from the multidisciplinary focus of trust research that considers trust as multifaceted concept (e.g., Chua, Ingram, and Morris, 2008; Mayer et al., 1995; Williamson, 1993). However, the various types of trust can be differentiated into two main facets (Yamagishi and Yamagishi, 1994): Knowledge-based trust and general trust. Knowledge-based trust is based on “information accumulated over a … history of interactions with the partners” (Yamagishi and Yamagishi, 1994, p. 194) and hence it depends on the contextual situation of the interaction (Droege, Anderson, and Bowler, 2003). On the other hand, general trust exists without having an interaction history with the trustee and is mainly influenced by the trustor’s personality traits and the cultural context (Jarvenpaa, Knoll, and Leidner, 1998). In the following, we examine the impact of trust on the franchisor’s choice of contractual completeness by differentiating between the two types of trust, i.e., general trust and knowledge-based trust.

Knowledge-based Trust and Contractual Completeness

Knowledge-based trust refers to trust that evolves over a period of repeated interactions with an exchange partner. It has a cognitive effect by increasing the trustor’s knowledge base about the trustee derived from the interaction history (Gassenheimer et al., 1996). Repeated positive interactions signal credibility and increase the
‘relationship-specific’ reputation and trust in the exchange partner (Anderson and Weitz, 1989; Ganesan, 1994).

Applied to the franchisor-franchisee relationships, franchisor’s positive experience with franchisees during the contract relationship signals high credibility and increases the franchisor’s trust in his/her network partners. In particular, knowledge-based trust improves information sharing between the franchise partners and enables the formulation of more refined contract terms as “reference points” (Hart, Moore 2008) that determine the self-enforcing range of contracts (Klein 1996). This is compatible with the complementarity perspective of formal and relational governance in inter-firm alliances. Consequently, under a high level of knowledge-based trust the franchisor uses more complete contracts because trust improves the information base for contract planning. We formulate the following hypothesis:

H4: Franchisor’s knowledge-based trust will positively influence contractual completeness.

**General Trust and Contractual Completeness**

General trust means that an individual has a positive view of the others and considers the others as trustworthy, even if he/she has no experience with those other people (Yamagishi and Yamagishi, 1994). Therefore, general trust leads to the perception of lower relational risks by the trustor (Das, Teng, 2004). Applied to the franchisor-franchisee relationship, under a high level of general trust the franchisor perceives lower relational risk and hence lower agency and monitoring costs under given exchange hazards, which results in a lower propensity of the franchisor to control the franchise partners. This is compatible with the substitutability perspective of formal and relational governance in inter-firm alliances (e.g. Gulati, 1995; Wang, Yeung, and
When applied to the choice of contractual completeness, a high-trust franchisor perceives a lower level of relational risk and expects lower agency and monitoring costs, under given exchange hazards. Therefore, a high level of general trust reduces the franchisor’s necessity for formal contract planning. Consequently, a high-trust franchisor is likely to use less specified contracts. We derive the following hypothesis:

H5: Franchisor’s general trust will negatively influence contractual completeness.

To summarize, by applying the relational governance view (e.g. Zaheer, Venkatraman 1995; Dyer, Singh 1998; Gulati, Nickerson 2008) we can conclude that trust influences contractual completeness in the following way: General trust mitigates contractual hazards due to the perception of lower relational risk and reduces the franchisor’s necessity of formal contract planning. Conversely, knowledge-based trust is a increases information sharing and the information base about the franchise partners and hence enables the formulation of more refined contract terms as “reference points” (Hart, Moore 2008).

4 Empirical Analysis

4.1 Sample and Data Collection

Empirical data to test the hypotheses were collected from the German franchise sector. The directory of the German Franchise Federation (DFV) and “Franchise Wirtschaft” (a Bond’s Franchise Guide type directory published in Germany) list all franchise systems operating in the country. Various demographic data (i.e. year system was established,
number of outlets, business sector, etc.) is also listed regarding each system in the “Franchise Wirtschaft”. These directories list 837 franchise systems operating in Germany and served as the sampling frame for this study. The judgmental sampling was employed and the sample was drawn on the basis of the following two criteria: (1) The system should have at least five outlets in Germany. (2) If the data about the number of outlets is not listed in the directory, the system should have started franchising in Germany before year 2008. The final sample consisted of 491 franchise systems.

The data were collected via self-administered questionnaire which was developed in several steps. After several preliminary refinements, we conducted in-depth interviews with franchise professionals from the Austrian and German franchise associations and a pre-test with 20 franchisees in Austria. The respondents are selected on their expertise and relevance to the subject under investigation. This demonstrates the use of the key informant approach for data collection. Accordingly, the key informants for this study were senior managers who are mainly responsible for the franchise expansion. The information about the key informants was retrieved from the “Franchise Wirtschaft”. The personally addressed questionnaires were mailed to the key informants of all 491 relevant franchise systems in Germany. We received back 137 filled questionnaires with a response rate of 28%.

To check for the non-response bias, we use two methods. First, non-response bias was estimated by comparing early versus late respondents (Armstrong and Overton 1977), where late respondents serve as proxies for non-respondents. Second, the respondents were compared to non-respondents in terms of age, size, advertising fee, and royalties to determine whether non-response was a serious problem for the data.
These variables are available in the “Franchise Wirtschaft” for the entire listed systems. We used these data to run independent sample t-test in order to check whether the sample is representative. We found no significant difference between the respondents and the non-respondents. Based on Podsakoff et al. (2003), we used Harman’s single-factor test to examine whether a significant amount of common method variance exists in the data. After we conducted factor analysis on all items and extracted more than one factor with eigenvalues greater than one, we felt confident that common method variance is not a serious problem in our study.

4.2 Measurement

To test the hypotheses the following variables are important: contractual completeness, transaction-specific investments, environmental uncertainty, franchisor brand name and knowledge-based and general trust (see appendix).

Contractual completeness

The indicator of COMPLETENESS addresses the extent to which specific rights of the franchisor and the franchisee are included in the contract. The general managers were asked to rate the degree of contractual completeness with a two-item seven-point scale: “The tasks of the franchisor are specified in detail in the contract”; “the tasks of the franchisees are specified in detail in the contract”. The higher the indicator, the higher is the degree of contractual completeness. Cronbach’s alpha is 0.871.

Environmental uncertainty
Environmental uncertainty (ENV) results in high ex-post transaction costs under highly specified contracts. Consistent with previous studies we operationalize environmental uncertainty with a three-item scale (e.g. John, Weitz 1989; Celly and Frazier 1996). The franchisors were asked to provide their perception regarding fluctuation in the outlet level sales, unpredictability of the market, and volatility of local economic situation (see appendix). The reliability of this scale was assessed by Cronbach’s alpha (.742).

Transaction-specific investments
The franchisor’s transaction-specific investments (INV_FOR) are operationalized by the following scale: the general managers were asked to rate the transaction-specific investments with a three-item scale: “To what extent does the franchisor bear the initial training costs of the franchisee/the technical support at the beginning of the contract period/the set-up costs of the outlet?” Cronbach’s alpha for this scale is .632. The franchisee’s transaction-specific investments (INV_FEE) are measured by initial investments.

Franchisor brand name
If a franchisor’s brand name (BRAND) is of high value, the franchisor will face a higher free-riding risk. Franchisors were asked to indicate (on a four-item seven point scale) how important their brand name is in terms of recognition and strength compared to their competitors, and competitive advantage (e.g., Barthélemy, 2008). Cronbach’s alpha is 0.811.

Trust
We differentiate between knowledge-based trust and general trust (KTRUST, GTRUST). Table 1 presents the results of the factor analysis.

**Table 1: Rotated Factor Matrix**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>The cooperation is based on partnership basis</td>
<td>.776</td>
<td>.080</td>
</tr>
<tr>
<td>The exchange of information between us and the partners goes beyond the agreed scope</td>
<td>.642</td>
<td>.093</td>
</tr>
<tr>
<td>The majority of people trust other</td>
<td>-.009</td>
<td>.703</td>
</tr>
<tr>
<td>Most people are trustworthy</td>
<td>.034</td>
<td>.939</td>
</tr>
<tr>
<td>Most people behave cooperatively if they are trusted</td>
<td>.173</td>
<td>.659</td>
</tr>
<tr>
<td>There is great trust between ourselves and the partners</td>
<td>.899</td>
<td>.045</td>
</tr>
<tr>
<td>There is an atmosphere of openness and honesty between us and the partners</td>
<td>.922</td>
<td>.041</td>
</tr>
</tbody>
</table>

Knowledge-based Trust (KTRUST): Derived from Yamagishi and Yamagishi (1994) and Dyer and Chu (2000), KTRUST is measured using a four-item seven-point Likert-type scale. The franchisors were asked to rate the level of trust based on their interaction experience with the business partners (franchisees). Cronbach’s alpha for this variable is 0.876.

General Trust (GTRUST): Based on Yamagishi and Yamagishi (1994) and Lazzarini et al. (2008), we measure this variable with a three-item seven-point Likert-type scale. The franchisors were asked questions about their general attitude and opinion toward trusting others. The items refer to ‘most people trust others and most people are trustworthy’. Cronbach’s alpha for GTRUST is 0.806.

**Control Variables**

**Size (SIZE):** We control for the firm size (e.g. Lyons 1994; Banerjee, Duffto 2000; Susarla et al. 2009). The SIZE of the firm refers to the total number of outlets representing economies of scale through standardization. The larger the total number of
outlets, the larger are economies of scale through standardization, due to lower average contractual set-up costs, and hence the higher the tendency towards using more specified contractual provisions (Lyons 1994). Therefore, we use the number of total outlets as indicator for economies of contract standardization.

**Age (AGE):** Age is a proxy for inter-organizational experience and learning. Prior relationships may allow for the design of more complete contracts because the franchisor develops contract design capabilities (Argyres et al. 2007; Solis-Rodriguez, Gonzalez-Diaz 2012).

**Contract duration (DUR):** Since a long-term contract reduces the franchisor’s flexibility to adjust the contractual relations in the ex-post period, the franchisor is likely to specify more contingencies in the franchise contract to cover more possibilities due to the long-term perspective of the relation (Chen, Bharadwaj 2009).

**Sector (SEC):** This is a dichotomous variable: 0 refers to product franchising and 1 to services franchising. Since services franchising firms are characterized by more intangible and hence less codifiable know-how compared to product franchising firms, we expect a lower degree of contractual completeness for services firms.

### 4.3 Results

Table 2 presents the descriptive data for the sample in Germany.
Table 2: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPLETENESS</td>
<td>98</td>
<td>2.00</td>
<td>7.00</td>
<td>5.1378</td>
<td>1.36936</td>
</tr>
<tr>
<td>ENV</td>
<td>127</td>
<td>1.00</td>
<td>7.00</td>
<td>3.7323</td>
<td>1.35956</td>
</tr>
<tr>
<td>INV_FOR</td>
<td>137</td>
<td>1.00</td>
<td>7.00</td>
<td>4.3723</td>
<td>1.25249</td>
</tr>
<tr>
<td>INV_FEE</td>
<td>123</td>
<td>0.00</td>
<td>100000.00</td>
<td>12668.5691</td>
<td>14701.9721</td>
</tr>
<tr>
<td>BRAND</td>
<td>137</td>
<td>1.33</td>
<td>7.00</td>
<td>5.6448</td>
<td>1.11306</td>
</tr>
<tr>
<td>KTRUST</td>
<td>136</td>
<td>1.00</td>
<td>7.00</td>
<td>5.7960</td>
<td>1.03914</td>
</tr>
<tr>
<td>GTRUST</td>
<td>136</td>
<td>1.00</td>
<td>7.00</td>
<td>4.5368</td>
<td>1.31979</td>
</tr>
<tr>
<td>SIZE</td>
<td>118</td>
<td>1.00</td>
<td>2520.00</td>
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<td>0.6378</td>
<td>.48254</td>
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</table>

To test the hypotheses, we conduct an OLS regression analysis with COMPLETENESS as a dependent variable. The explanatory variables refer to environmental uncertainty (ENV), transaction-specific investments of the franchisor and franchisees (INV_FOR, INV_FEE), franchisor brand name (BRAND), knowledge-based and general trust (KTRUST, GTRUST), SIZE, AGE, contract duration (DUR) and sector (SEC). Table 3 presents the correlations of the variables used in the regression analysis. In addition, the variance inflation factors are well below the rule-of-thumb cut-off of 10 (Neter et. al. 1985). In sum, we do not find any collinearity indication.
Table 3: Pearson Correlations

<table>
<thead>
<tr>
<th></th>
<th>COMPL.</th>
<th>ENV</th>
<th>INV_FOR</th>
<th>INV_FEE</th>
<th>BRAND</th>
<th>KTRUST</th>
<th>GTRUST</th>
<th>SIZE</th>
<th>AGE</th>
<th>DUR</th>
<th>SEC</th>
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<tr>
<td>INV_FOR</td>
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<td>.009</td>
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<td>BRAND</td>
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<td>.037</td>
<td>.297**</td>
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<td>.039</td>
<td>.053</td>
<td>.171*</td>
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<tr>
<td>SIZE</td>
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<td>-.124</td>
<td>-.130</td>
<td>-.181*</td>
<td>.053</td>
<td>.041</td>
<td>1</td>
<td></td>
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<tr>
<td>AGE</td>
<td>.196</td>
<td>.053</td>
<td>-.052</td>
<td>-.091</td>
<td>.128</td>
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<td>-.078</td>
<td>.453**</td>
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<tr>
<td>DUR</td>
<td>.304**</td>
<td>-.365**</td>
<td>.158</td>
<td>.412**</td>
<td>.273**</td>
<td>.084</td>
<td>-.090</td>
<td>-.041</td>
<td></td>
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<tr>
<td>SEC</td>
<td>-.278**</td>
<td>-.028</td>
<td>-.085</td>
<td>-.140</td>
<td>-.085</td>
<td>.070</td>
<td>-.119</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>AGE</td>
<td>1</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>DUR</td>
<td>.242**</td>
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<tr>
<td>SEC</td>
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<td>.015</td>
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<td></td>
</tr>
</tbody>
</table>

** p< 0.01; * p < 0.05

We estimate the following regression equation:

\[
\text{COMPLETENESS} = \alpha + \beta_1 \text{ENV} + \beta_2 \text{INV\_FOR} + \beta_3 \text{INV\_FEE} + \beta_4 \text{BRAND} + \beta_5 \text{KTRUST} + \beta_6 \text{GTRUST} + \beta_7 \text{SIZE} + \beta_8 \text{AGE} + \beta_9 \text{DUR} + \beta_9 \text{SEC} + \varepsilon
\]

First, according to the transaction cost theory, environmental uncertainty is negatively related to contractual completeness (H1), because it is impossible or very costly for the franchisor to preplan all relevant decision actions under a high environmental uncertainty. In addition, the franchisor brand name is positively related with contractual completeness in order to limit franchisees’ free-riding behavior (H2). Furthermore, completeness varies negatively with the franchisees’ specific investments due to the bonding effect of relationship-specific investments (H3a). On the other hand, contractual completeness varies positively with the franchisor’s specific investments (H3b), in order to protect these investments from opportunistic expropriation on the part of franchisees. Second, based on the relational governance view, knowledge-based
trust and general trust influence contractual completeness. Knowledge-based trust enables information sharing and increases the knowledge base to design more complete contracts (H4) and general trust reduces the franchisor’s perceived relational risk and decreases contractual completeness (H5).

Table 4 reports the results of the regression analysis; we proceed in three steps: In model 1 we test the impact of the control variables (SIZE, AGE, DUR and SEC) on completeness; in model 2 we test the transaction cost hypotheses (H1, H2, H3a, H3b) and in model 3 the relational governance hypotheses (H4, H5).

Control variables: Based on the data form the German franchise sector, we find that contract duration (DUR) has a positive and significant impact on completeness. This suggests that the franchisor will design more complete contracts under longer contract duration because it reduces his/her flexibility to adjust contract rules within the contract period. In addition, we find that the coefficient of SEC is negative and significant indicating that the franchisor will set up more complete contracts in the services sector because he/she aims to protect the intangible system assets from opportunistic exploitation. In addition, the coefficients of the control variables (SIZE and AGE) are not significant but have the expected positive sign.

Transaction cost hypotheses: We find that franchisees’ transaction-specific investments (INV_FEE) have a negative and slightly significant influence on completeness indicating that higher INV_FEE increase the bonding effect and reduce the franchisor’s necessity to use more complete contracts as safeguarding mechanism. In addition, we find that the impact of franchisor brand name (BRAND) on completeness is positive and significant. This implies that a strong brand name may be associated with high free-riding hazards leading to more complete contracts. On the other hand, the coefficient of environmental uncertainty (ENV) is negative, as expected, but not
significant. This non-significant result is consistent with recent studies on contract design (Anderson and Dekker, 2005; Chen, Bharadwaj 2009; Benaroch et al. 2012). Furthermore, the impact of franchisor’s transaction-specific investments (INV_FOR) on contractual completeness is positive, as expected, but not significant. Overall, the transaction cost and control variables explain over 25% of the variance in contractual completeness.

Table 4: OLS Regressions (Dependent variable: COMPLETENESS)

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>4.612 ***</td>
<td>2.330 **</td>
</tr>
<tr>
<td></td>
<td>(0.404)</td>
<td>(1.033)</td>
</tr>
<tr>
<td>ENV</td>
<td>-0.043</td>
<td>-0.016</td>
</tr>
<tr>
<td></td>
<td>(0.112)</td>
<td>(0.120)</td>
</tr>
<tr>
<td>INV_FOR</td>
<td>0.172</td>
<td>0.149</td>
</tr>
<tr>
<td></td>
<td>(0.112)</td>
<td>(0.110)</td>
</tr>
<tr>
<td>INV_FEE</td>
<td>-2.169e-5 **</td>
<td>-1.970e-5 *</td>
</tr>
<tr>
<td></td>
<td>(1.072e-5)</td>
<td>(1.046e-5)</td>
</tr>
<tr>
<td>BRAND</td>
<td>0.289 *</td>
<td>0.349 **</td>
</tr>
<tr>
<td></td>
<td>(0.157)</td>
<td>(0.160)</td>
</tr>
<tr>
<td>KTRUST</td>
<td>-0.100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.155)</td>
<td></td>
</tr>
<tr>
<td>GTRUST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>6.340e-5</td>
<td>5.061e-4</td>
</tr>
<tr>
<td></td>
<td>(4.506e-5)</td>
<td>(4.668e-5)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.007</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.019)</td>
</tr>
<tr>
<td>DUR</td>
<td>0.121 ***</td>
<td>0.156 **</td>
</tr>
<tr>
<td></td>
<td>(0.043)</td>
<td>(0.060)</td>
</tr>
<tr>
<td>SEC</td>
<td>-0.607 **</td>
<td>-0.326</td>
</tr>
<tr>
<td></td>
<td>(0.297)</td>
<td>(0.307)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.155</td>
<td>0.266</td>
</tr>
<tr>
<td>(p-value)</td>
<td>(0.009)</td>
<td>(0.003)</td>
</tr>
</tbody>
</table>

*** p < 0.01; ** p < 0.05; * p < 0.1

Relational governance hypotheses: When we add knowledge-based and general trust (KTRUST, GTRUST) as relational governance variables in our regression model (model 3), R Square significantly increased from 0.266 to 0.324 indicating that trust is an important determinant of contractual completeness. Specifically, we find that the
impact of general trust (GTRUST) on completeness is negative, as expected, and highly significant. This is consistent with the view that a high-trust franchisor perceives a lower relational risk and expects fewer agency problems in the ex-post period. Therefore, he/she will not set up highly specified contracts to control opportunism. On the other hand, the results show that knowledge-based trust (KTRUST) does not significantly influence contractual completeness.

5 Discussion and Conclusion

The aim of the paper is to explain the degree of contractual completeness in franchising by developing and testing hypotheses derived from the transaction cost theory and the relational view of governance. First, starting from the recent literature which shows that contractual completeness is a very heterogeneous concept without sufficient theoretical foundation, we develop a theoretical foundation based on the property rights view of allocation of decision rights. Contractual completeness is defined by the ratio between specific and residual decision rights stipulated in contracts. The higher (lower) the fraction of specific rights compared to residual rights, the more (in-) complete the contract is. Second, we develop and test the following hypotheses: According to the transaction cost theory, completeness varies negatively with franchisees’ transaction-specific investments and environmental uncertainty, and positively with franchisor’s transaction-specific investment and brand name. The data from the German franchise sector confirm the negative relationship between contractual completeness and franchisees’ specific investments and the positive relationship between contractual completeness and the franchisor brand name. The negative relationship between franchisees’ transaction-specific investments and completeness contradicts with the result of Solis-Rodriguez and Gonzalez-Diaz (2012).
This deviation is due to not taking into account the different impact of franchisees’ and franchisor’s specific investments. Since the franchisor will design the contract, he/she tries to protect his/her investments from opportunistic behaviour on the part of franchisees resulting in more complete contracts. On the other hand, the bonding effect of franchisees’ transaction-specific investments enables the franchisor to reduce formal control by formulating detailed contracts. Contrary to results in the contract literature (e.g. Cocker and Reynolds 1993; Saussier 2000), the impact of environmental uncertainty on contractual completeness is not significant. This might be due to the ambiguous effect of uncertainty on formal governance in the transaction cost literature (e.g. Walker and Weber 1984; Blumberg 2001; Poppo and Zenger 2002). On the one hand, environmental uncertainty requires more adaptability (Klein 1989) and hence less complete contracts, and on the other hand, the franchisor may increase control (Noordewier et al. 1990) by formulating more complete contracts when the degree of uncertainty increases.

Furthermore, based on the relational governance view, we investigate the relationship between trust and contractual completeness. According to Yamagishi and Yamagishi (1994), we differentiate between knowledge-based and general trust. Our data support the view that franchisor’s general trust in their franchise partners result in the perception of lower relational risk and require therefore less specified franchise contracts. However, the impact of knowledge-based trust on contractual completeness is not significant in franchise relationships. One explanation could be that the knowledge acquisition effect of repeated interactions with an exchange partner is less relevant in franchising because the franchisor designs more standardized franchise contracts, which are not specifically adjusted to the interaction history of the different franchise partners.
How does this study extend the results in the literature? The major contribution of this study is the development of a new theoretical concept of contractual completeness and the explanation of contractual completeness in franchising by combining the transaction cost theory with the relational governance view. First, the franchise contract consists of two types of clauses: specific rights as contract provisions which specify in detail what the franchisor and franchisee has to do under certain circumstances during the contract period, and residual rights as contract provisions which specify the franchisor’s and franchisees’ rights to make certain decisions during the contract period. Contractual completeness is defined by the ratio between specific and residual decision rights stipulated in contracts. For example, the franchisor has to regulate the advertising tasks in the contract. He has two possibilities: He can specify in detail the payment of certain advertising fees based on sales and the different promotion and advertising measures, or he can specify who has the right to make certain advertising decisions. A franchise contract is more complete when the ratio between specific and residual rights is high. Second, we complement the transaction cost view on contractual completeness (e.g. Solis-Rodriguez and Gonzalez-Diaz 2012) by examining the impact of knowledge-based trust and general trust on the franchisor’s choice of contractual completeness. General trust of the franchisor reduces the franchisor’s perceived relational risk and hence the necessity to control the network relationship by formal contract planning, and knowledge-based trust increases information sharing between the partners and hence the knowledge base for specifying more detailed contracts. Finally, the paper adds to the existing work on interorganizational networks that combines transaction cost and relational governance perspectives. Consistent with the interorganizational governance literature (e.g. Zaheer, Venkatraman 1995; Mumdziev, Windsperger 2013), the extension of the transaction
cost reasoning by the relational governance view significantly increases the explanatory
power of the research model.

This study has important limitations: We measure all constructs from the
franchisor’s point of view. For instance, we use the franchisor’s perception to measure
environmental uncertainty. This issue should be addressed in future studies by
collecting data from the franchisees. In addition, the measurement of contractual
completeness is only a first step to operationalize contractual completeness. The
development of a more valid indicator for completeness requires the use of more
objective measures based on franchise contracts. Furthermore, we made the distinction
between specific and residual decision rights. However, franchise contracts are
characterized by two forms of incompleteness: one form of incompleteness is covered
by the residual decision rights. They do not specify a course of action regarding many
contingencies, but only the identity of the party who has authority to decide when one
of these contingencies arises. The other type of incompleteness refers to the
standardization of system-specific know how by using the business format. It implies a
certain “rule-governed behaviour” (Heiner 1983, 568; Heiner 1986) and entails a
certain rigidity because it standardizes behavior across outlets regardless of the local
circumstances. This raises the question regarding the appropriate limits of uniformity
(Kaufmann, Eroglu, 1998). Battigalli and Maggi (2002) label these two forms of
incompleteness as discretion and rigidity. Future work has to address the circumstances
when these forms of incompleteness arise.
References


Figure 1: Contractual Completeness and Contract Form
APPENDIX: MEASURES OF VARIABLES

Index of Contractual Completeness (COMPLETENESS): The general managers were asked to rate the degree of contractual completeness with a two-item seven-point scale: “The tasks of the franchisor are specified in detail in the contract”; “the tasks of the franchisees are specified in detail in the contract.”

Two items, measured on a 7 point Likert-type scale (1 strongly disagree – 7 strongly agree), Cronbach alpha = 0.871.

Environmental Uncertainty (ENV):
Three items, measured on a 7 point Likert-type scale (1 strongly disagree – 7 strongly agree), Cronbach alpha = 0.742
1. The sales at the outlet level are very fluctuating.
2. It is very difficult to predict the market development at the outlet level.
3. The economic environment in the local market changes frequently.

Franchisee Transaction-specific Investments (INV_FEE): Initial investments required to start a new franchised outlet.

Franchisor Transaction-specific Investments (INV_FOR):
Three items, measured on a 7 point Likert-type scale: To which extent the franchisor has to bear the following expenses? (1 not at all – 7 to a very great extent), Cronbach alpha = .632
1. Franchisee training at the beginning of the contract period
2. Technical support at the beginning of the contract period
3. Set-up of the outlet organization

Franchisor Brand Name (BRAND):
Four items, measured on a 7 point Likert-type scale (1 strongly disagree – 7 strongly agree), Cronbach alpha = 0.811
1. Our brand is very strong compared to our competitors.
2. Our franchise system enjoys higher brand recognition compared to our competitors.
3. Our franchise system enjoys a good reputation for quality.
4. Our brand name is very important for us for achieving competitive advantage.

Trust:
Knowledge-based Trust (KTRUST):
Four items, measured on a 7 point Likert-type scale (1 strongly disagree – 7 strongly agree), Cronbach alpha = .876
1. The cooperation is based on partnership basis.
2. The exchange of information between us and the partners goes beyond the agreed scope.
3. There is great trust between us and the partners.
4. There is an atmosphere of openness and honesty between us and the partners.

General Trust (GTRUST):
Three items, measured on a 7 point Likert-type scale (1 strongly disagree – 7 strongly agree), Cronbach alpha = .806
1. The majority of people trust others.
2. Most people are trustworthy.
3. Most people behave cooperatively if they are trusted.

**Sector (SEC):** 0 = Product franchising firms; 1 = Services firms

**Size (SIZE):** Number of outlets in the franchise system (franchised + company owned)

**Age (AGE):** Number of years since opening up the first franchised outlet in Germany

**Contract Duration (DUR):** Length of the contract in years