

Multi-Unit Franchising and Relational Governance: A Study of Operating Networks in Brazil

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ABSTRACT

The relationship between relational governance mechanisms and multi-unit franchising, where a single franchisee owns and operates multiple units, has received limited attention in the existing literature. Previous studies primarily focus on the role of trust in such arrangements. Consequently, this study aims to develop and test a theoretical model that explores the association between a higher allocation of units to this type of franchisee and key attributes of relational governance, such as participation and communication. Adopting the franchisors' perspective, our sample consists of 170 networks affiliated with the Brazilian Franchising Association (Associação Brasileira de Franchising [ABF]), and data were collected from various sources, including a self-administered questionnaire (based on data from 2018). The results provide support for our general hypothesis, indicating a positive association between relational aspects of the franchisor-franchisee partnership and a higher proportion of units owned by multi-unit franchisees. Additionally, we find that the operational sector (retail/service) and specific local investments diminish the explanatory power of the model's variables related to relational governance, suggesting a secondary influence on the decision-making process concerning the contractual mix.



Data Availability: Silva Bitti, Eugenio José; Lanchimba, Cintya (2023), "MUF Brazil", Mendeley Data, V1, doi: [10.17632/vyjr2dmgsk1](https://doi.org/10.17632/vyjr2dmgsk1)
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INTRODUCTION

The franchising model has gained widespread recognition as an effective strategy for achieving growth and strengthening brand presence, particularly in sectors such as retail and services (Ghantous & Christodoulides, 2020). Entrepreneurs with a solid business model can leverage franchising to access resources and scale their gains more easily. Consequently, the existing literature commonly highlights the performance advantages of franchised networks compared to networks following a vertical hierarchical model in their units (Madanoglu et al., 2011; Mainardes et al., 2019; Moon & Sharma, 2014). The central focus of the franchising literature revolves around the discussion of network governance, which emerges from the collaboration of two independent entrepreneurs. Previous studies have revealed that the coexistence of owned and franchised stores enables the alignment of strategic objectives that may be more challenging to achieve within networks exclusively composed of one model or the other. For instance, Sorenson and Sørensen (2001) demonstrate that networks foster innovation in franchised units while utilizing their system to develop replicable patterns of the best ideas generated by their franchisees.

However, the franchising relationship can give rise to governance challenges due to disagreements between franchisors and franchisees. Being distinct entities, these parties may have divergent strategic objectives concerning local issues (e.g., territory occupation) and even in terms of temporal considerations (short-term versus long-term goals). For instance, the network's strategy of expanding into new territories may potentially impact the profitability of existing franchised units (Grünhagen & Dorsch, 2003). Similarly, franchisors' pricing and market share objectives may conflict with franchisees' profitability goals (Perrigot et al., 2016). Therefore, the pursuit of governance structures that align conflicting interests becomes crucial. The literature has extensively addressed the concept of contractual mix, referring to the proportion of owned and franchised units, within the broader discussion of employing multiple forms (Bradach & Eccles, 1989). This search entails exploring potential partnerships that arise from the coexistence of different contractual modalities for performing the same set of transactions.

Since the early 2000s, a third possibility in terms of contractual mix has garnered significant attention in the literature: multi-unit franchising (MUFs). In this arrangement, a single franchisee may own two or more units. Prior studies have highlighted several benefits associated with MUFs, including the reduction of horizontal agency problems such as free-riding (Garg et al., 2013), lower monitoring costs by assigning the lo-

cal agent as the primary monitor (Jindal, 2011), a more robust incentive system by offering rewards for good performance to newly allocated units (Gillis et al., 2011), mitigating adverse selection problems in hiring new franchisees (Bodey et al., 2013), higher compliance with network standards (Boulay et al., 2016), and minimizing free-riding. However, the literature also indicates certain drawbacks related to the presence of MUFs, such as increased bargaining power for franchisees (Kalnins & Lafontaine, 2004), as well as challenges associated with monitoring and controlling employees in MUF units (Garg et al., 2013).

In other words, while the franchising model addresses vertical agency problems through agent incentives, these problems could resurface with the adoption of multi-unit franchising (MUFs). Following the logic of agency theory, when store managers are hired as employees in a (multi-unit) franchise, weak incentive problems at the outlet level become a concern (Bradach, 1995), potentially compromising the aforementioned benefits of the multi-unit arrangement. In our study, the central hypothesis posits that the use of relational governance mechanisms can help networks overcome such drawbacks (Calderon-Monge & Pastor-Sanz, 2017; Hussain et al., 2013).

Relational contracting theory predicts the existence of effective but non-contractually specified sanctions that align goals and expectations. These mechanisms, based on factors such as trust, reputation, and a sense of relationship permanence, allow intentionally incomplete agreements that provide flexibility for adjustments as circumstances demand (Carson et al., 2006; Jeffries & Reed, 2000). The set of social norms adopted by the partners shapes the governance structure and characterizes what is known as relational governance (Grandori, 2006). Broadly speaking, the franchising literature includes studies that examine the role of these mechanisms in network arrangement and performance (Gorovaia & Windsperger, 2013; Hendrikse et al., 2015; Liu et al., 2014; Meek et al., 2011; Meiseberg & Perrigot, 2020; Solís-Rodríguez & González-Díaz, 2019).

Few papers have explored the relationship between relational contracting and MUFs (only three to be exact), and all of them have focused on trust as a relational mechanism (see Calderon-Monge & Pastor-Sanz, 2017; Dant et al., 2013; Griessmair et al., 2014). However, trust is not the only relational governance mechanism addressed in the literature. For example, studies such as Arranz and Arroyabe (2012) propose that trust and relational norms, which reflect expectations regarding the behavior of business partners, work as complementary mechanisms. In summary, the existing literature on MUFs and relational governance has focused solely on

trust, while the broader literature on relational governance mentions other aspects beyond trust. Therefore, our study investigates the relationship between MUFs and relational governance, considering not only trust but also other dimensions such as communication and participation.

The purpose of our research is to develop and test a theoretical model derived from relational contracting theory that explains the structure of the contractual mix, specifically focusing on the number of units owned by MUFs. We formulate our hypotheses with the assumption that network priorities aimed at fostering a more collaborative environment based on cooperation, participation, and trust facilitate the development of less formal and more socialized governance structures. The central hypothesis of our model posits a positive association between relational governance and multi-unit franchising.

A sample of 170 networks belonging to the Brazilian Franchising Association (Associação Brasileira de Franchising [ABF]) was analyzed using a generalized linear model. The data for the analysis were collected from multiple sources, all based on the year 2018: (a) a self-administered questionnaire distributed by ABF to its members, (b) data obtained from the networks listed in the 2018 ABF yearbook, and (c) locational data gathered from the networks' internet addresses. The results strongly support our model, confirming a positive association between the proportion of multi-unit franchising (MUF) stores and three out of the four factors examined. Furthermore, we observed unexpected outcomes from the control variables included in the model. For instance, we did not find a positive relationship between network geographic dispersion and the proportion of franchised units (MUF/SUF) compared to owned stores. Additionally, we discovered that the explanatory power of the factors used in the model to account for the MUF proportion diminishes when we differentiate between networks operating in the retail and service sectors. The same trend emerges when we control for the initial investment capital required to open a unit. Collectively, these findings suggest that the positive association between a more relational approach and MUFs may only be significant when contrasted with factors related to franchisee resources availability, unit profitability, and network performance evaluation.

Our study contributes to the literature in three significant ways. First, our model enables a comprehensive analysis of the capabilities of franchise networks within relational governance structures, as opposed to previous studies that have examined these aspects separately. Second, we contribute to the limited body of literature on relational contracting in franchising ar-

rangements, further strengthening this area of research. Lastly, our investigation focuses on Brazil, a large emerging market in Latin America that has received relatively little attention in the literature on governance structures of franchise networks.

HYPOTHESIS DEVELOPMENT

Previous franchisee experience

Previous research indicates that the significance and necessity of franchisees' prior experience vary depending on the characteristics of the network and franchisor (Gillis et al., 2011; Ramírez-Hurtado et al., 2011). In other words, the selection of experienced individuals to join the network is influenced by factors such as business characteristics, industry, size, and franchisor maturity. However, the inclusion of experienced franchisees may pose challenges in terms of socialization, cultural integration, and acceptance of network standards. This is because their accumulated knowledge and worldview may make it more difficult for them to embrace the practices, policies, and routines prescribed by the franchisor (Brookes, 2014).

Furthermore, the franchising arrangement, which involves two independent entities, brings together entrepreneurial partners with distinct expectations, timelines, and performance drivers (Dada, 2018). Nevertheless, it is reasonable to assume that individuals who are better prepared are more likely to succeed in managing the unit(s) they are responsible for. For instance, highly skilled and experienced individuals are better equipped to accurately perceive and respond to environmental changes affecting their units (Bradach, 1995), leverage emerging innovations (Sun & Lee, 2019), sustain their operations (Bordonaba-Juste et al., 2011), and achieve superior performance (Ghantous & Das, 2018).

Moreover, if a franchisee operates only a single outlet (SUF), they may experience frustration if they realize that their potential is constrained by the limitations of that outlet. This situation can lead to conflicts and even the termination of the partnership.

In summary, there is a tradeoff in franchise arrangements, and we propose that multi-unit arrangements offer a solution. The complexity of managing multiple units requires individuals who are better prepared and can capitalize on economies of scale and higher profit margins from their mini-chains. Additionally, owning and managing multiple units entails more strategic actions and decisions beyond local operations (Grünhagen & Mittelstaedt, 2005). Therefore, there is an incentive for franchisees and their local teams to adhere more closely to the network's operational standards in order to save resources such as time and attention. Consequently, another advantage of adopting

multi-unit franchising arrangements is the opportunity to rely on individuals who possess greater expertise and familiarity with the business and the franchise system.

H1: The requirement of prior experience for new franchisees is associated with a higher proportion of MUF stores.

Communication

The establishment of open communication channels is a vital component in fostering a more relational form of governance within organizations (Chiou et al., 2004; Popo & Zenger, 2002). Its significance is evident in its direct and indirect positive impact on performance, including the transfer of knowledge, monitoring, and socialization processes that facilitate the diffusion of implicit knowledge (Carnahan et al., 2010; Ghantous & Das, 2018). In the context of franchising arrangements, success heavily relies on replication and standardization (Szulanski & Jensen, 2008), which necessitate effective communication between franchisors and franchisees (Lee, 2017). The transmission of routines and adherence to standards encompass both codified and implicit knowledge dimensions, making communication all the more critical (Combs et al., 2011; Maalouf et al., 2020).

Trust, a fundamental element in relational contracting (Carnahan et al., 2010), hinges largely on the effectiveness of communication between relational partners. Without quality communication, desired levels of trust and commitment are limited or nonexistent, thereby increasing the likelihood of dysfunctional agent behaviors (Wright & Grace, 2011). Therefore, high levels of trust and intensive communication between franchisors and franchisees are inseparable phenomena. In our proposal, we suggest that the franchisor's emphasis on communication with franchisees is associated with a greater prevalence of multi-unit franchising.

The direct interaction between the franchisor and a smaller number of franchisees (Boulay et al., 2016; Garg et al., 2013) may result in clearer message transmissions. Information exchange would occur at a more strategic level, enabling franchisees to adhere more faithfully to network operational standards (Hussain et al., 2018; Weaven & Frazer, 2007). Consequently, franchisees would disseminate franchisor routines and norms to their units in a more accurate manner. In summary, we propose that the franchisor's emphasis on maintaining direct communication with the set of franchisees will be positively associated with a higher presence of multi-unit franchising within the network.

Therefore, the effective communication between franchisors and franchisees, facilitated by the franchi-

sor's focus on direct communication, is expected to contribute to the prevalence of multi-unit franchising. This relationship highlights the critical role of communication in fostering a more relational approach to governance in franchise networks. Thus:

H2: Greater franchisor emphasis on more direct communication is associated with a higher proportion of MUF stores.

Trust

Trust in a business relationship is defined as the belief that one party will act honestly, benevolently, and with technical efficiency, indicating a state of mutual dependence to achieve shared goals (Moorman et al., 1992; Morgan & Hunt, 1994). Trust and mutual commitment, according to Bretas et al. (2020), create a flexible environment for expansion strategies, enhancing controllability and transparency in relationships. Dant et al. (2013) highlight that single-unit franchises (SUFs) typically rely more on their franchisors due to a stronger sense of dependence, whereas multi-unit franchises (MUFs) tend to have greater autonomy in managing their 'mini-network.' However, Griessmair et al. (2014) note differentiated effects of trust on relationships with MUFs and SUFs, focusing on different aspects of trust. General trust, associated with honesty and benevolence, appears to positively influence the performance of relationships with SUFs but negatively affects the performance of MUFs. On the other hand, knowledge-based trust, linked to technical aspects of operations, has the opposite effect.

Trust is inherently intertwined in the symbiotic relationship between franchisors and franchisees (Liu et al., 2014). Even conventional perspectives rooted in the contractual firm view recognize the importance of trust in reducing contract negotiation and monitoring costs (Dyer & Singh, 1998), which has implications for the resulting governance structure (Bradach & Eccles, 1989). High levels of trust facilitate the establishment of shared norms and routines that encourage relationship-specific investments and knowledge sharing (Meiseberg & Perrigot, 2020).

In our study, we approach the concept of trust from the perspective that the franchisor's emphasis on fostering a climate of trust within the network is associated with a greater presence of MUFs. This perspective is based on three premises. Firstly, as previously mentioned, a higher proportion of MUFs among franchisees reduces the number of direct interactions between the franchisor and franchisees, thereby lowering transaction costs and facilitating the establishment of a governance structure based on trust and coopera-

tion. Secondly, MUFs possess greater bargaining power (Garg et al., 2013; Jindal, 2011), making trust a crucial factor in network governance. Finally, SUFs tend to prioritize short-term profitability (Garg & Rasheed, 2003), potentially leading to resistance against strategic decisions by the franchisor (e.g., concerns about market saturation and sales cannibalization). Consequently, networks aiming to increase trust levels are expected to exhibit a higher prevalence of MUFs. We argue that:

H3: A higher level of franchisor trust in its franchisees is associated with a higher proportion of MUF stores.

Participation

Dwyer and Oh (1988) define 'participation' (as a construct) in decentralized organizations as the level of involvement that relational parties have in the decision-making processes of the partnership. This involvement encompasses various inputs, such as idea generation, direct participation in decision-making, and the formulation of joint goals and objectives. Building upon this notion, we adopt the concept of participation as the degree to which transactional parties are actively engaged in the joint decision-making process, which, in turn, influences the governance structure. Proactive participation by the parties, regardless of power asymmetry in the relationship, is also addressed and considered as one of the relational norms proposed by Heide and John (1992). These norms encompass behavioral expectations within ongoing relationships and are, at least partially, shared by those involved in making decisions regarding the collective goals of the group (Jap & Ganesan, 2000).

Franchisees hold a crucial role as primary stakeholders in their organizations, assuming different roles within the network. They serve as local unit managers, but before that, they were customers who purchased the franchisor's product. Given the collaborative nature of the franchising arrangement, franchisees play a vital part in the company's performance as active participants in the value co-generation process (Ghantous & Alnawas, 2021). Grünhagen and Mittelstaedt (2002) suggest that the trend toward multi-unit franchises may be driven by the higher interdependence expected in this type of contract. Aspiring multi-unit franchisees may perceive increased participation in influencing network decision-making as an incentive to become owners of multiple units. In comparison to single-unit franchisees, multi-unit franchisees possess greater market influence, as they control numerous outlets while maintaining a more substantial stake in the franchise network. It is expected that franchisees, to some extent, participate in the decision-making process, contributing to choices related to products, policies, and adherence to standards. The intensity of their involvement brings franchisees closer to higher-level decision-making processes and strategic decisions within the company, necessitating a more comprehensive understanding of the overall operations, which may be more challenging to achieve from the strictly localized perspective of single-unit franchises. Therefore:

H4: A higher level of franchisee participation in network strategic decisions is associated with a higher proportion of MUF stores.

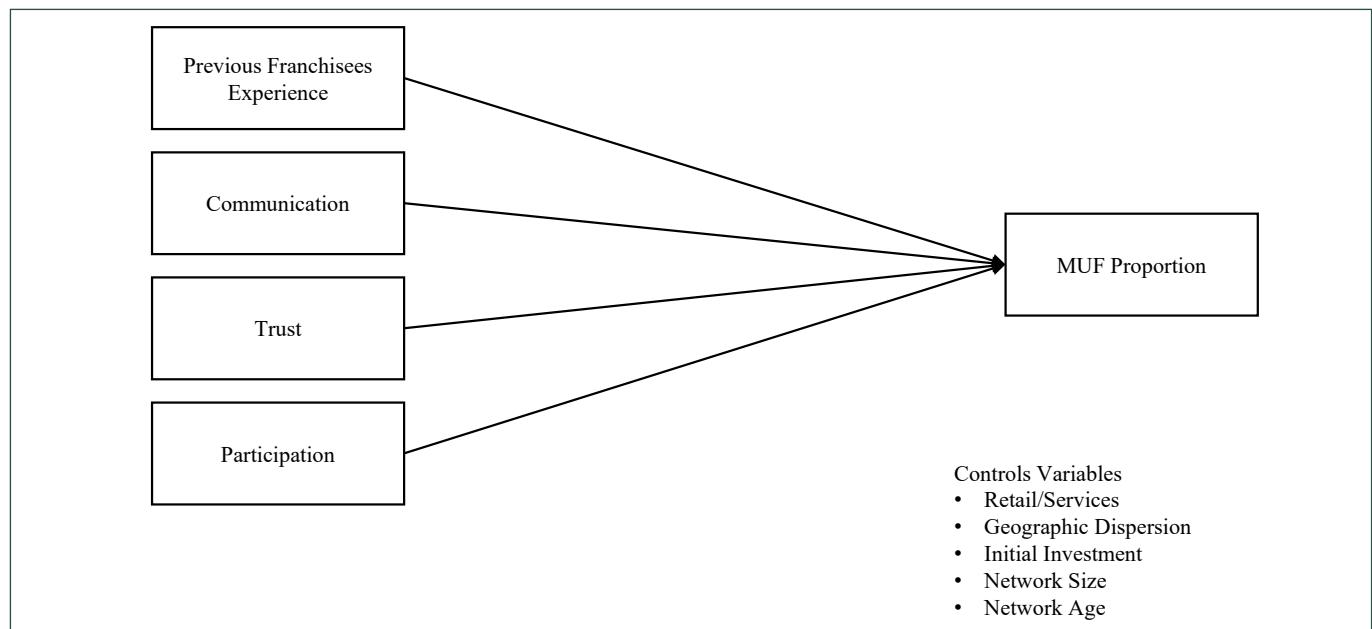


Figure 1. Theoretical model.

Source: Developed by the authors.

The theoretical model proposed is presented in Figure 1 (see Appendix). While we depict the control variables in this illustration, we will provide a detailed explanation and justification for each of them in the subsequent section.

METHODOLOGY

Data

The proposed model was empirically tested using a sample of 170 networks affiliated with the Brazilian Franchising Association (ABF). Multiple data sources were utilized to gather information for the analysis. Firstly, data was obtained from ABF's Official Franchise Guide for the year 2018. This publication provides publicly available information about the associated networks, including details such as the number of owned and franchised units, the duration of franchise agreements, franchise fees, and other relevant data. However, the specific information pertaining to the proportion of multi-unit franchising (MUF) stores, which is essential to this study, was not included in the yearbook. Consequently, a self-administered questionnaire was developed to collect data on the proportion of MUF stores, as well as other variables relevant to the analysis. The questionnaire was distributed to the 963 associated chains with the support of ABF, and a total of 215 responses were received. After applying certain criteria for data quality, only 170 responses were deemed valid and used for the analysis.

A third data source utilized in this study was the websites of the participating networks. Information such as the addresses of the sampled networks' units was collected from their respective web pages. This data collection process took place between April and May 2018. Additionally, data provided by the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística* [IBGE]) was accessed to gather information such as the latitude and longitude of Brazilian municipalities.

It is worth noting that during the data collection process, some instances of conflicting information were observed in the responses provided by certain franchisors. For example, discrepancies were noticed between the reported number of owned and franchised stores in the Official Franchise Guide and the counts of units presented on the chains' websites. In such cases, ABF was consulted to resolve any doubts, or the franchisors themselves were contacted for clarification.

Dependent variable

Given that the objective of this study is to examine the relationship between factors associated with relational governance and the prevalence of multi-unit fran-

chising (MUF) in comparison to single-unit franchising (SUF), the dependent variable in this research is defined as the proportion of MUF-owned units relative to the total number of franchised units. In other words, the number of MUF-owned stores is divided by the total count of franchised units.

Independent variables

The four variables relevant to the hypotheses were obtained from the questionnaire administered to the franchisors and were constructed using principal component analysis. To assess the internal consistency and reliability of these variables, Cronbach's alpha was employed, as shown in Table 1. The questionnaire questions are provided in Appendix 1 for reference.

Table 1. Cronbach's alpha.

Variables	Cronbach's alpha
PREVEXP	0.734
COMMUNIC	0.753
TRUST	0.827
PARTICIP	0.971

Note. Source: Developed by the authors.

PREVEXP (H1): This variable assesses the franchisee's level of prior experience using a three-point Likert scale. Franchisors evaluated the franchisees' experience in terms of human resource management, financial resources, and market knowledge.

COMMUNIC (H2): Franchisor-franchisee communication skills were measured using a six-point Likert scale. Franchisees were asked about the processes implemented to disseminate new ideas and the incentives provided to foster strong relationships within the network.

TRUST (H3): Trust was measured using a four-element, six-point Likert scale based on the franchisors' perceived qualifications. The questions pertained to the work environment, information exchange, and cooperation between both parties.

PARTICIPATION (H4): This variable gauges the extent to which the franchisor involves the franchisee in operational decisions of the franchise network, including marketing, advertising, research and development, human resources, training planning, expansion, and conflict resolution. It was measured on a six-point Likert scale.

Control variables

In our model, we include control variables to account for the impact of different levels of network exposure to agency problems and resource needs, which may influence the expected positive relationship between re-

lational contracting and MUFs. The first control variable is RETSERV, a dichotomous variable indicating '1' for retail chains. Retail chains are characterized by operations that allow for remote monitoring due to the direct observability of their outputs (Taylor, 2000). If remote monitoring is more efficient in this type of business, the disciplining potential of formal governance mechanisms is greater, reducing the need or desirability of a more relational governance profile.

The second control variable, GEODISP, is related to the network's geographic diffusion and measures the spread of network units. This variable is operationalized using data on occupied municipalities obtained from the networks' websites. Euclidean distances based on latitude and longitude are calculated to determine the distances between cities. It is assumed that networks with concentrated units are more easily monitored than networks with units spread out across the Brazilian territory. To capture the distance between groups of units rather than just individual units, a cluster analysis is applied to define groups within each network. The variable is created by summing the Euclidean distances between stores within each group and the Euclidean distances between groups. Larger values indicate more spread-out networks.

Three additional control variables capture structural aspects and factors related to the networks' resource needs and access. The first is ININVEST, which represents the initial investment reported by the network to open a new unit. SIZE reflects the network's scale and is measured by the total number of units. MATURE represents the network's experience with the franchised arrangement, specifically the duration of time the organization has been operating as a franchised network.

Model

As previously mentioned, we employ generalized linear models (GLMs) to examine the relationship between the response variable and the explanatory variables. GLMs are particularly suitable when the response variable follows a distribution function from the exponential family, especially in cases involving proportions or binary responses. GLMs also accommodate the use of non-normal error distributions and non-constant variances (McCullagh & Nelder, 1989; Myers & Montgomery, 1997; Nelder & Wedderburn, 1972).

In Appendix 2, we present the distribution of the dependent variable, as well as the distribution of errors and the variance of the model. This allows us to assess the goodness-of-fit of the data to the GLM framework.

The R program was used to estimate the following equation:

$$MUF = \alpha_0 + \alpha_1 PREVEX + \alpha_2 COMUNI + \alpha_3 TRUST + \alpha_4 PARTICIP + \alpha_5 RETSERV + \alpha_6 GEODISP + \alpha_7 ININVEST + \alpha_8 SIZE + \alpha_9 MATURE + \varepsilon$$

The validation of the model is carried out in two steps. In the first step, the likelihood ratio test ($\chi^2 = 60.94$, significant at 5%) is performed to establish the best model. Once this stage is completed, the Kolmogorov-Smirnov test is performed to check the fit of the model (Appendix 3) and finally an analysis of the residuals is performed (Appendix 2). It can be evidenced that the selected model adequately fits the data.

RESULTS

Table 2 displays the descriptive statistics and Pearson correlation coefficients for the variables included in the analysis. The observed correlations align with our expectations and are mostly of small magnitude ($r \leq 0.30$), except for the correlation between TRUST and COMMUNIC, which is relatively stronger ($r = 0.47$). This finding is consistent with the existing literature that highlights the close association between trust and communication.

However, one unexpected result is the positive correlation between SIZE and ININVEST ($r = 0.33$). In our sample, we observe that larger networks with more units tend to require higher financial resources for opening new units. This finding challenges the notion that larger networks can achieve economies of scale and reduce costs. Instead, it suggests that these networks may face higher upfront investment requirements for expansion. Please refer to Table 2 for detailed descriptive statistics and correlation coefficients.

Table 3 presents the results of the econometric procedure, focusing on the dependent variable, which is the proportion of MUF-owned stores relative to the total number of franchised units. The table is organized from left to right, starting with Model 1, which includes only the variables related to the four hypotheses. Subsequently, the control variables are added one by one.

In Model 1, the variables COMMUNIC and TRUST support their respective hypotheses (H2 and H3). However, PREVEX (H1) shows the expected direction but lacks statistical significance. PARTICIP, which corresponds to H4, exhibits a contrary sign to what was proposed, but the estimate is not statistically significant.

Models 2 and 3 introduce the control variables associated with agency theory. In Model 2, the inclusion of DISPGEQ does not significantly impact the estimator's value or the model's explanatory power (variation of the χ^2 from 18.89 to 19.09). Surprisingly, DISPGEQ itself is not significant.

Table 2. Descriptive statistics and Pearson's correlation coefficients.

Variable	Average	Standard deviation	Correlation coefficients								
			1	2	3	4	5	6	7	8	9
1. MUF (%)	0.34	0.24	1								
2. PREVEXP	2.08	1.11	0.14	1							
3. COMMUNIC	12.68	2.34	0.19*	0.07	1						
4. TRUST	17.39	2.48	0.08	0.06	0.47***	1					
5. PARTICIP	10.41	12.05	-0.14	-0.09	0.16*	0.14	1				
6. GEODISP	7.48	3.75	0.15*	-0.04	0.06	0.12	0.24**	1			
7. ININVEST	168.633	219.063	0.30***	0.03	0.01	0.08	0.14	0.05	1		
8. MATURE	8.82	9.85	0.09	0.02	-0.03	0.06	-0.08	0.04	0.19*	1	
9. SIZE	11.27	0.99	-0.21**	0.04	0.05	0.04	0.002	0.001	0.33***	0.15	1

Note. * p < 0.05, ** p < 0.01, *** p < 0.001. Source: Developed by the authors.

Notably, we conducted additional tests comparing DISPGE0 with the overall proportion of franchised stores, and surprisingly, geographic dispersion showed a positive and significant relationship with the proportion of owned stores in our sample. However, as this is not the main focus of the current study, we omit the details of this supplementary analysis.

Model 3 demonstrates a substantial increase in explanatory power ($\chi^2 = 34.38$) with the inclusion of the variable RETSERV. This addition leads to a decrease in the estimator values for COMMUNIC and TRUST. As previously discussed, remote monitoring is more feasible in the retail sector compared to the service sector due to the greater objectivity in measuring unit performance. This reduced agency costs and created an opportunity for employed managers, particularly those from MUFs, to take over unit management. The results of Model 3 suggest that agency issues continue to play a significant role in determining the contractual mix of franchise networks.

In Model 4, we included the third control variable related to agency, which is ININVEST. This variable, significant at the 0.1% level, leads to a substantial increase in the model's explanatory power (variation of $\chi^2 = 57.14$ significant at 0.1%). However, it does not cause variations in the other estimators, except for making PREVEXP significant at the 5% level. This result is expected since a higher level of investment is typically associated with larger and/or more complex units in terms of operations, which requires greater expertise from the franchisee. This expertise is often easier to find by allocating additional units to franchisees who are already known by the network.

In Models 5 and 6, we introduce the remaining control variables: MATUR and SIZE. Interestingly, the size of the networks exhibits a negative and significant relationship with the proportion of MUFs. This finding suggests that smaller networks prioritize operating with fewer franchisees, possibly as a way to reduce the effort involved in searching, selecting, and developing new franchisees. However, when these control variables are included, there are no significant variations in terms of the magnitude of the estimators or the explanatory power of the model.

DISCUSSION AND IMPLICATIONS

Our hypotheses received considerable support from the data. The requirement of prior franchisee experience (PREVEXP) only shows significance (at 5%) in the presence of the control variables, indicating that this attribute is associated with a greater presence of MUFs in networks that typically deal with larger units and operate in the retail sector (Brookes, 2014).

On the other hand, both COMMUNIC and TRUST exhibit the expected positive sign and statistical significance (at 0.1%), supporting H2 and H3. This finding is consistent with the existing literature, which highlights the relationship between communication and trust, leading to higher satisfaction levels between franchisors and franchisees (Chiou et al., 2004; Griessmair et al., 2014). In the context of MUFs, franchisees are likely to have a higher level of communication compared to SUFs.

However, the effects of COMMUNIC and TRUST are diminished when the control variables are included. This can be attributed to the simplified remote monitoring in the retail sector, which reduces the relative importance of communication in determining the contractual mix. Additionally, the significant positive effects of RETSERV and ININVEST on the proportion of MUF units suggest that the size of units and the capacity for remote monitoring make it more conducive to establishing partnerships with regional managers rather than local managers (SUFs).

In the retail sector, where margins tend to be lower compared to the service sector, allocating more units to franchisees can be a solution to maintain their motivation over time. This allocation can lead to benefits in terms of local (or regional) management, while the franchisor benefits from increased compliance from franchisees. This interpretation aligns with the findings of Solís-Rodríguez and González-Díaz (2019), suggesting that relational governance mechanisms complement formal governance structures.

Table 3. Estimated results.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	0.3534 (0.125)	0.354 (0.013)	0.2761 (0.122)	0.1143 (0.101)	0.1142 (0.101)	0.1055 (0.101)
PREVEXP	0.0266 (0.04)	0.026 (0.001)	0.0238 (0.013)	0.0216* (0.0108)	0.0216* (0.109)	0.0222* (0.0108)
COMMUNIC	0.0353*** (0.009)	0.0351*** (0.001)	0.0266** (0.009)	0.0206** (0.007)	0.0207** (0.007)	0.0199** (0.007)
TRUST	0.0235*** (0.007)	0.0234*** (0.007)	0.0181** (0.007)	0.0184** (0.006)	0.1844** (0.006)	0.0184** (0.006)
PARTICIP	-0.0020 (0.001)	-0.0021 (0.001)	-0.0016 (0.001)	-0.0016 (0.001)	-0.0016 (0.001)	-0.0017 (0.001)
DISP GEO		6.065E-10 (1.232E-09)	4.245E-10 (1.002E-09)	5.888E-10 (9.170E-10)	5.875E-10 (9.236E-10)	8.274E-10 (9.154E-10)
RETSERV			0.1410*** (0.0402)	0.0157*** (0.037)	0.1587*** (0.037)	0.1640*** (0.037)
ININVEST				4.742E-07*** (1.214E-07)	4.739E-07*** (1.224E-07)	4.818E-07*** (1.219E-07)
MATURE					-0.00002 (0.001)	-0.00006 (0.001)
SIZE						-2.283E-11*** (4.953E-12)
D ² (%)	9.71	9.81	17.02	26.76	26.76	28.27
Chisq	18.89***	19.09**	34.38**	57.14***	57.14	60.94***

Note. * p < 0.05, ** p < 0.01, *** p < 0.001. Source: Developed by the authors.

However, our hypothesis (H4) predicting a positive relationship between franchisee participation in decision-making processes and the presence of MUFs did not find statistical significance and had an unexpected sign. This may indicate that MUFs adopt a follower posture regarding the franchisor's procedures and routines, focusing more on issues related to their own mini-chain. Further research is needed to investigate this point, considering the possibility of a variable specification problem or low construct validity.

The behavior of our control variables throughout the tests raises important discussions, particularly regarding the surprising result related to geographic dispersion. Contradicting previous research in franchising, including in Brazil, we found no statistical relationship between geographic dispersion and the proportion of MUF units. However, in additional analyses (not included here), we discovered a negative relationship between geographic dispersion and the overall proportion of franchised units (MUFs + SUFs). This finding could be attributed to the severe recession Brazil experienced between 2014 and 2017, as well as potential opportunistic behavior by franchisors repurchasing units during franchisee insolvency. The difficulty of attracting new franchisees, especially in markets distant from the country's wealthier regions, may also contribute to this result. Future research is needed to further explore these findings and their implications.

In summary, our results indicate that relational governance mechanisms complement formal governance mechanisms in franchise networks. This is evident when comparing Models 1-3 to Models 4-6 in Table 2. Initially,

factors such as trust and communication appear to be positively associated with a higher presence of MUFs among franchisees. However, when considering the effects of distance monitoring capacity and resource requirements, the importance of relational governance factors diminishes while the explanatory power of the models increases. This suggests that while relational governance mechanisms are important for building healthy relationships in franchise networks, they play a secondary role in shaping the contractual mix when compared to factors related to monitoring capacity and resource considerations.

CONCLUSIONS

The study aimed to develop and test a theoretical model to understand the association between multi-unit franchises and relational governance in franchise networks. The findings of the study provided considerable support for the model. The results revealed a positive relationship between a higher proportion of stores owned by multi-unit franchisees and factors related to a relational governance profile in franchise networks. This relationship was explained by factors such as trust, communication, and the preference for experienced franchisees.

Additionally, the study found that this relationship was attenuated in retail chains, possibly due to tighter profit margins, which lead chains to allocate more stores to capable franchisees. The practicality of remote monitoring in retail businesses may also contribute to this phenomenon. These conjectures warrant further investigation and discussion.

Furthermore, the study showed that the explanatory power of relational governance factors was reduced by the higher financial resources required to open a new unit. This finding is not surprising, as larger operations demand more capable individuals with sufficient financial resources, which may favor the prevalence of multi-unit franchises in networks operating in Brazil.

However, the study has notable limitations. The cross-sectional nature of the data restricts making causal claims, emphasizing the need for future longitudinal studies. The assumption that the tested factors inherently characterize a more relational governance profile requires further exploration and the development of a model that confirms this link while capturing differences in the effect on the relational governance framework. The term 'relational governance mechanism' also requires better characterization and understanding.

Moreover, future research should consider different types of multi-unit franchises, such as master franchisees and area developers, as they may have distinct strategic objectives and governance dynamics. Considering these nuances can provide a more comprehensive understanding of multi-unit franchising.

Overall, the findings regarding relational governance mechanisms and multi-unit franchising can be valuable for franchisors when making decisions about franchising one or multiple units, offering insights into the strategic considerations related to governance choices

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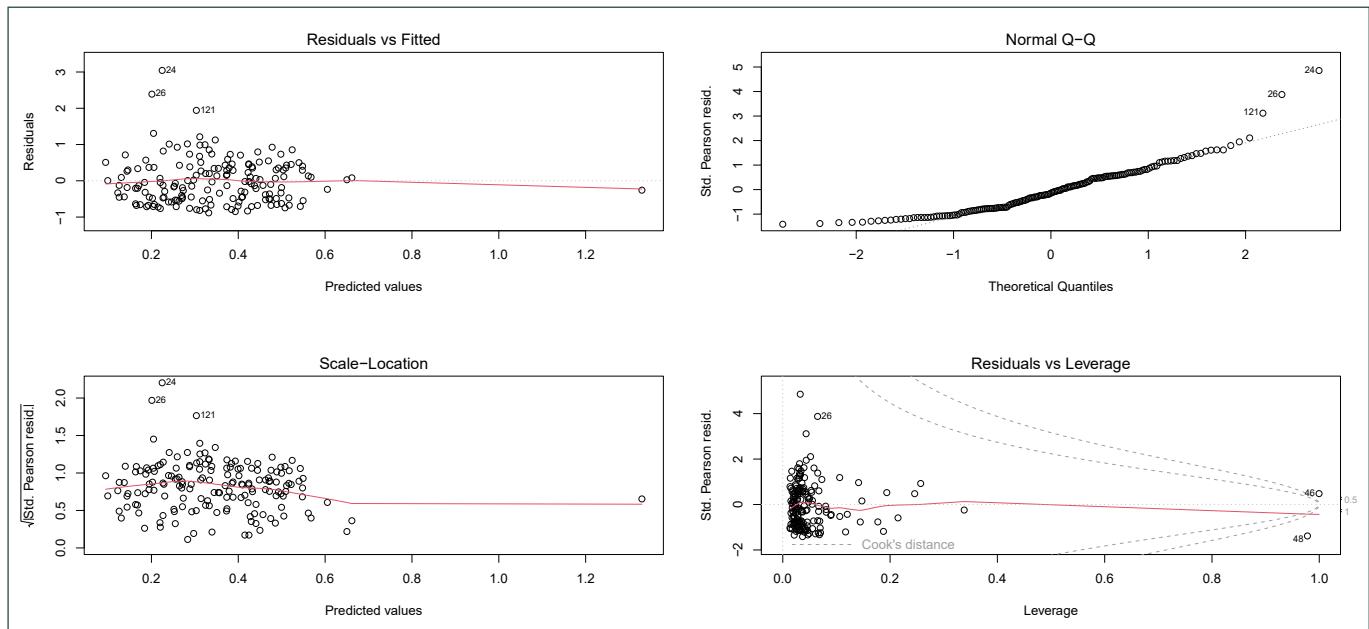
APPENDIX 1

Measures of variables (independent variables).

PREVEX Previous franchisee's experience (H1)	Cronbach's alpha: 0.734	Our network requires previous people management experience from candidates to become one of our franchisees Our network requires previous experience in financial management from candidates to become one of our franchisees Our network requires previous experience in franchised businesses from candidates to become one of our franchisees	Dummy – 1/yes and 0/no Dummy – 1/yes and 0/no Dummy – 1/yes and 0/no
COMMUNIC Communication (H2)	Cronbach's alpha: 0.753	We seek to create processes that facilitate the dissemination of new ideas throughout the network We encourage communication between our franchisees We encourage communication between franchisees, store managers, and analysts in our network	5-point Likert-type scale (1 totally disagree – 5 totally agree) 5-point Likert-type scale (1 totally disagree – 5 totally agree) 5-point Likert-type scale (1 totally disagree – 5 totally agree)
TRUST Trust (H3)	Cronbach's alpha: 0.827	We really trust our franchisees We invest in an atmosphere of openness and honesty between our staff and franchisees In our network, there is an environment of trust and cooperation between franchisees and between them and the managers of our own stores (if any) Most people behave cooperatively when the situation calls for trust	5-point Likert-type scale (1 totally disagree – 5 totally agree) 5-point Likert-type scale (1 totally disagree – 5 totally agree) 5-point Likert-type scale (1 totally disagree – 5 totally agree) 5-point Likert-type scale (1 totally disagree – 5 totally agree)
PARTICIP Participation (H4)	Cronbach's alpha: 0.971	What is the franchisee's level of participation in the network's decision-making processes in relation to marketing? What is the franchisee's level of participation in the network's decision-making processes in relation to research and development? What is the franchisee's level of participation in the network's decision-making processes in relation to advertising and promotion? What is the franchisee's level of participation in the network's decision-making processes in relation to marketing human resources policies? What is the franchisee's level of participation in the network's decision-making processes in relation to training? What is the franchisee's level of participation in the network's decision-making processes in relation to new businesses? What is the franchisee's level of participation in the network's decision-making processes in relation to growth strategies? What is the franchisee's level of participation in the network's decision-making processes in relation to internal conflicts?	5-point Likert-type scale (1 very little participation – 5 intense participation) 5-point Likert-type scale (1 very little participation – 5 intense participation) 5-point Likert-type scale (1 very little participation – 5 intense participation) 5-point Likert-type scale (1 very little participation – 5 intense participation) 5-point Likert-type scale (1 very little participation – 5 intense participation) 5-point Likert-type scale (1 very little participation – 5 intense participation) 5-point Likert-type scale (1 very little participation – 5 intense participation) 5-point Likert-type scale (1 very little participation – 5 intense participation)

APPENDIX 2

Distribution of dependent variable and residuals of the model.



APPENDIX 3

Model validation.

