# Growth, Uniformity, Local Responsiveness, and System-Wide Adaptation in Multi-Unit Franchising

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Using a sample of 188 franchise systems and the resource-based view (RBV) framework, we investigate the link between multi-unit franchising (MUF) and performance on four key challenges in franchise chain management: growth, uniformity, local responsiveness and system-wide adaptation. Our findings support the assertion that system growth is positively related to MUF rate within a system, in particular in relation to geographic expansion. Interestingly, while uniformity does not seem to be related to MUF rate, we find marginal support for an inverted u-shaped relationship between system-wide adaptation and MUF rate. Furthermore, the data suggest that local responsiveness and MUF rate are related in a u-shaped function. The study reflects that the relationships between the assessed constructs may be more complex than previously suggested and points to implications on how to manage MUF within systems as well as avenues for future research<sup>1</sup>.

#### Introduction

Franchising has been widely adopted by entrepreneurs as a way of doing business and has thus gained great economic importance as well as academic interest (e.g., Blut et al. 2011; Castrogiovanni, Combs, and Justis 2006; Hunt 1977; Kaufmann and Dant 1999; Kaufmann and Rangan 1990; Kidwell and Nygaard 2011; Nair, Tikoo, and Liu 2009; Tracey and Jarvis 2007; Windsperger and Dant 2006). In the US, for example, franchised outlets account for 18 million jobs and contribute more than \$2.1 trillion to the country's economic output (International Franchise Association, 2012). Furthermore, the number of franchisors in Brazil has tripled within a decade, growing from 600 in 2001 to 1,855 in 2011 (Brazilian Franchise Association, 2012), and China now has more than 4,500 franchise systems (China Chain and Franchise Association, 2012).

The rapid growth of franchising worldwide is sustained by many franchisors expanding through a multi-unit development strategy, a phenomenon which has recently gained increased

<sup>&</sup>lt;sup>1</sup> The authors acknowledge the support of the French Franchise Federation in conducting this research.

attention in the literature (Bercovitz 2003; Cox and Mason 2009; Garg, Rasheed and Priem 2005; Gruenhagen and Dorsch 2003; Gruenhagen and Mittelstaedt 2005; Hussain and Windsperger 2010, 2012; Kalnins and Lafontaine 2004; Kalnins and Mayer 2004; Kaufmann and Dant 1996; Kaufmann, Donthu and Brooks 2000, 2007; Vazquez 2008; Weaven and Frazer 2003, 2006). Indeed, one of the misconceptions about franchising is that franchisees operate small "mom-andpop ventures" (Blair and Lafontaine 2005), primarily operated through single-unit franchising (SUF). However, the use of multi-unit franchising (MUF) is on the rise. A recently published survey by the Franchise Update Media Group (2013) highlights that the American top 30 MU franchise chains have more than 40 percent of franchisees that are MU owners. For example, 81.10 percent of all franchisees at McDonald's, 63.52 percent at Taco Bell, and 51.53 percent at Pizza Hut are MU franchisees. The same pattern is observed in France, the country with the most franchise systems in Europe: 21 percent of all franchisees operate at least two units and own 49 percent of all franchise units in the country.

Given the economic importance of MUF, it is surprising that – in relation to the magnitude of franchising studies in general – this field of investigation is relatively underdeveloped. The emerging literature in the field of MUF has mainly concentrated on investigating the antecedents of MUF and, in particular, the motivations for entering into MUF agreements (Dant et al. 2013; Hussain et al. 2013; Hussain and Windsperger 2010). For example, Garg, Priem and Rasheed (2013) contribute to extant knowledge by suggesting that MUF provides asymmetric cost advantages for franchisors and franchisees. In addition, Gomez, Gonzalez and Vazquez (2010) find that the use of MUF is impacted by ex-ante and ex-post contractual problems, as well as network characteristics, such as the geographical concentration of units and type of customer contact. From an agency theory perspective, Gillis et al. (2011) further support the notion that

franchisors use MUF as a reward for franchisees in order to reduce agency problems that may, for example, arise from the opportunistic behavior of the franchisee in fast growing systems (Bercovitz 2003). Perryman and Combs (2012) expand on agency theoretical considerations explaining the motivations behind the co-existence of company-owned outlets, franchised units and MUF in systems. Windsperger and Hussain (2012) use the relational governance perspective to show that knowledge-based trust positively impacts franchisors' propensity to use MUF. Also looking at the phenomenon from an organizational governance view, Jindal (2011) further states that MUF deployment, whether in the form of master franchising or area development, shifts the lower level hierarchy of the system to the MU franchisees who will be more likely to control outlets according to specifications than employee monitors due to their compensation structure. Hussain et al. (2013) use transaction cost theory, property rights view and agency theory to assess MUF rate within systems, proposing the use of a combination of different theoretical perspectives to explain the phenomenon.

Based on the resource-based view (RBV) of the firm (Barney 1991; Barney, Wright and Ketchen 2001; Hussain and Windsperger 2010, 2013) we contribute to the extant literature by building on Bradach's (1995, 1997) seminal work on how chains are organized and managed. A series of hypotheses is developed in this research to test how MUF rate (i.e. the rate of MU franchisees within a system) is linked to performance in system growth (in terms of business units as well as geographic spread), uniformity, responsiveness to local conditions, and systemwide adaptation to threats and opportunities in the competitive environment. Recently, Bodey, Weaven and Grace (2011) have examined the extent to which different forms of MUF, such as master franchising and area development arrangements, satisfy each of these four imperatives. In contrast, our study focuses on the rate of MUF within a system, rather than the type of MUF.

While some empirical evidence suggests that there is a link between MUF and system growth (Kaufmann and Dant 1996; Kaufmann and Kim 1995; Weaven and Frazer 2007), less is known about the relationships between the rate of MUF within a chain and the latter three challenges (Garg, Rasheed and Priem 2005). The investigation of these links is the key contribution of our study.

The following part of this paper presents our research framework based on Bradach's arguments regarding the performance of SUF versus MUF. A review of the empirical studies dealing with the benefits of MUF from the RBV of the firm completes Bradach's arguments and leads to the development of our research hypotheses. This is followed by an explanation of our research design and a description of the methods used for data collection and analysis. After the presentation of the key findings, results will be discussed and the study will finish by underscoring its contribution to theory, as well as its managerial implications.

#### Multi-Unit Franchising as Hierarchy within the Federal Structure

Bradach's (1997) study "Using the plural form in the management of restaurant chains" marked a shift in the focus of franchise research. Until then, franchise scholars mainly focused their attention on the ownership structure of franchise systems and aimed at answering the "why" question: Why do chains decide to operate through franchise units rather than through company-owned units (Oxenfeldt and Kelly 1969; Caves and Murphy 1976; Rubin 1978; Brickley and Dark 1987; Bates 1998; Kaufmann and Eroglu 1999; Windsperger and Dant 2006)? With Bradach, the focus shifted to the "how" question: How should chains be managed once they are in place?

Bradach's central argument is that by using the plural form – a mix of company owned units and franchised units – chain management is more likely to meet four primary challenges in franchising (Bradach 1997; 1998): growth, uniformity, responsiveness and system-wide adaptation. This plural form argument has led to an extensive body of literature (e.g., Botti, Briec and Cliquet 2009; Cannon, Achrol and Gundlach 2000; Cliquet and Penard 2012; Dant, Perrigot and Cliquet 2008; Perrigot and Herrbach 2012; Perryman and Combs 2012), sometimes going beyond the field of franchising research (see, for example, Heide's [2003] study on the plural forms phenomenon in the context of industrial purchasing).

Bradach (1998) observes that former employees as well as MU franchisees tend to replicate the management structures observed in the company arrangement in terms of control, performance evaluation systems and operations reporting schemes. MU franchisees operate mini-chains within the chain and can thus be seen as forms of hierarchical organizations within the plural form structure. Based on an exploratory study of five major restaurant chains in the US, Bradach (1995) notices differences between SU and MU franchisees within the same system regarding their performance on the four key challenges in chain management. As seen in Table 1, Bradach suggests that MU franchisees perform better in both unit growth and adaptation to system wide changes, whereas SU franchisees are better in responding to local challenges. Both SU and MU franchisees perform similarly in relation to the uniformity with system standards.

Table 1 about here

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Surprisingly, most of these propositions still remain to be tested. Bradach (1998) speaks of *"speculation"* when presenting his own findings as his *"data are not fine-grained enough to* 

*enable detailed analysis*" (p. 162). As they are derived from a limited number of case studies (five large and successful chains with between 800 and 6000 units that operate on a specific market – the US fast food sector), the generalizability of the results may also be questionable. We therefore suggest a multi-sector, multi-size and multi-chain approach in order to test Bradach's assertions about the performance of SUF versus MUF as a development strategy for franchisors.

#### The Impact of Multi-Unit Franchising on System Outcomes – A Resource-Based View

The RBV of the firm focuses on the development of competitive advantage through internal capabilities. Barney (1991) suggests that in order to gain competitive advantage in the long-term, organizations need to develop resources that are valuable, rare and difficult to imitate and to substitute. These tangible or intangible resources can be categorized as being physical capital (such as equipment and geographical location), human capital (such as experience, intelligence and insight) and organizational capital (such as planning and controlling systems). This resource-based perspective of the firm allows us to develop research hypotheses in relation to the four key franchise challenges as identified by Bradach.

#### Growth

While resource scarcity theory would suggest that the rate of MUF should decline with a certain size and maturity, the opposite appears to be the case (e.g., Weaven and Frazer 2007). This may be explained by the fact that, apart from larger financial resources brought to the system by large-scale entrepreneurs, there are other resources that franchisors can benefit from

when employing MUF. These other resources may lead to a sustainable competitive advantage (Barney 1991).

For example, MUF may contribute to building resources through organizational capital as this form of franchising allows more efficient control in accordance to organizational guidelines (Jindal 2011; Kaufmann and Dant 1996). There is also the notion that MUF enhances knowledge transfer capacities within the system (Hussain and Windsperger 2010). From a human capital perspective, MU franchisees may provide more profound managerial experiences than SU franchisees, thus transferring their insights from previous appointments to the franchise. In the long run, this may lead to a better position in the market, which in turn may attract further interest of potential MU franchisees with a strong profile (Kaufmann and Kim 1995).

Another factor linking MUF to system growth is the notion that MUF can create economies of scale, which further contributes to the resources of the firm (Garg, Priem and Rasheed 2013; Kaufmann and Dant 1996). For example, in comparison to SUF, fewer resources need to be invested into personnel selection and induction if multiple units are under the management of one franchisee. The costs of hiring, training and monitoring may also be reduced as MU franchisees often already have a proven and successful track record, thus having a greater chance of doing well in the new appointment. Overall, the resource-based arguments outlined here support the idea that MUF is positively related to system development and expansion (Gomez, Gonzalez and Vazquez 2010). We therefore test the following:

Hypothesis 1a (H1a): Growth (numbers of units in the system) is positively related to the rate of MUF within the chain.

As Barney (1991) suggests, geographical location is a factor that can contribute to the physical capital of the organization. Therefore, it is important to understand how MUF is linked to territorial coverage that may, in the long run, enhance the competitive position of the system. For example, fast chain growth across territories can lead to the development of a strong presence and create barriers to entry for competitors. However, as outlined by Cox and Mason (2009), there is still a lack of research regarding the spatial growth of franchise systems. This suggests that, beyond the mere number of units, MU development strategy should also be assessed in terms of territorial coverage. As it is likely that the two are interrelated, we hypothesize:

Hypothesis 1b (H1b): Growth (territorial coverage of the system) is positively related to the rate of MUF within the chain.

#### Uniformity

From the resource-based perspective, uniformity in coherence with system standards is a key challenge in franchising (Brickley and Dark 1987; Rubin 1978). It contributes to intangible capacities of the firm and thus to sustainable competitive advantage. In particular, uniformity of aspects such as point of sale design, layout, choice of products and services and service levels all have an impact on consumers' perceptions of the organization. Uniformity of these aspects can, for example, have an impact on the development of a strong brand image and reputation (Nelson, Loken and Bennett 2009). If these aspects differ across outlets, the brand can possibly become diluted, which can ultimately weaken the market position of the firm. The question thus arises as to what extent the MUF rate within a given system contributes to or detracts from uniformity.

Comparing SU to MU franchisees, Bradach (1995) outlines arguments for why one may outperform the other as well as for why, in fact, they may perform similarly in establishing levels of uniformity in their units. On the one hand, MU franchisees who have to manage their minichains within the system may model their franchisors. This, in turn, can lead to the establishment of common practices across units (Bradach 1997). Moreover, with franchisees operating various units simultaneously, the franchisor has to deal with fewer franchisees than if each of these units were operated by individual franchisees. This means that, first of all, uniformity should be easier to control as there are fewer franchisees that need to be monitored. Second, fewer franchisees also means fewer opportunities for divergence from system standards. Third, well established standards that have proven successful in the past should be easier and faster to transfer across units if fewer franchisees are involved in the implementation of these (Hussain and Windsperger 2010; Weaven and Frazer 2007). Therefore, it could be argued that the rate of MUF is positively related to uniformity. On the other hand, Kaufmann (1992) suggests that SU franchisees could devote more time to their outlets and thus ensure better adherence to system standards. In this case, systems with a higher proportion of SU franchisees would outperform others on uniformity.

Bradach (1995) does not find support for either argument. He observes that SU and MU franchisees perform similarly in terms of uniformity. He speculates that one key reason for this finding is that better performing franchisees are granted more units. This, in turn, increases the challenge of safeguarding uniformity within their mini-chains, which places them at a lower performance position in terms of uniformity than before. As this suggestion needs further empirical investigation we test the following:

Hypothesis 2 (H2): Uniformity is not related to the rate of MUF within the chain.

#### Local Responsiveness

Franchisees' local market knowledge also forms a part of the organization's intangible assets (Barney 1991). Compared to company-owned units, franchised units perform better in terms of being more responsive to local circumstances as they are under less control from central management and can thus react more flexibly to changes (Bradach 1998; Kaufmann and Eroglu 1999). Indeed, in many chains, franchisors give some room for maneuver to their franchisees so that they can better adapt to local market conditions. Some franchisors even encourage – within some limits – their franchisees to innovate under the premise that the whole system may ultimately benefit from these innovations, depending on the extent to which they are relevant to other local contexts (Cox and Mason 2009).

Comparing SUF and MUF, Hussain and Windsperger (2013) suggest that local market knowhow is better deployed in SUF than in MUF for two main reasons. First, the residual income of SU franchisees is entirely dependent on the success of their unit, which may increase the motivation to respond to their customers' changing needs. Bradach (1995, 1998) complements these suggestions, arguing that SU and MU franchisees differ in their capacity to adapt to changes in their local environment. SU franchisees may dedicate all their attention and resources to the success of their unit while MU franchisees need to spread their attention between several units. Moreover, as their units are located in various markets, MU franchisees may not have an insight into each of these local circumstances as profoundly as SU franchisees. Second, the decision rights in MUF may be transferred from the MU franchisees to their outlet managers. This may actually dilute decision-making processes and responsiveness (Hussain and Windsperger 2013). As they often operate their units through hired managers, these managers have no incentive for innovating and adapting to the local market conditions. Systems

developing through MUF should then perform worse in terms of local responsiveness than systems with high levels of SUF:

Hypothesis 3 (H3): Local responsiveness is negatively related to the rate of MUF within the chain.

#### System Wide Adaptation

The dilemma that arises when employing MUF is how to manage the trade-off between local responsiveness and system-wide adaptation (Bradach 1997). The literature provides arguments for why local market responsiveness constitutes an important intangible organizational resource (Barney 1991; Kaufmann and Eroglu 1999). However, there are also arguments put forward supporting the notion that an efficient and effective system-wide adaptation of standards and procedures may be equally or even more important (Hussain and Windsperger 2010; Weaven and Frazer 2007). Bradach (1995) found that the latter may be the most important challenge that companies face. In highly competitive markets - as is the case for franchise chains in most developed economies – it is of crucial importance for a franchisor to respond quickly to the competition by implementing changes within the chain. The adaptation of such changes should ideally take place at a system-wide level in order to ensure competitiveness of the entire chain as well as uniformity. Bradach (1995) describes four stages of system wide adaptation: idea generation, idea testing and evaluation, deciding which one to pursue and implementation. In the first stage, it often occurs that franchisees identify opportunities that are not only interesting for their local markets, but for the entire chain. In the second stage, franchisees can discuss the feasibility of the idea from their local market viewpoint with the chain operators. On this basis, franchisors decide which ideas to pursue. While they can control that these ideas are

implemented in company-owned units, they can only try to persuade franchisees to accept the new practice. As franchisees are independent business owners, they must be convinced that they will benefit from the new idea that the franchisor is proposing. Thus, franchisees make individual decisions about which practices to adapt locally.

With a higher ratio of MU franchisees, it is more likely then that new ideas are adapted at a wider system level, as fewer individual decisions are made and as those decisions are valid for a greater number of units. Furthermore, it is suggested that the transfer of system specific knowledge and practices as an organizational resource is more likely to be achieved through MUF. This is why systems that have a strong focus on corporatization and system-wide adaptation are more likely to use MUF (Hussain and Windsperger 2010; Weaven and Frazer 2007). We thus hypothesize:

Hypothesis 4 (H4): System wide adaptation is positively related to the rate of MUF within the chain.

#### Method

#### Sample

To test our model, quantitative data was collected from franchise systems across a wide range of sectors. We were granted access to a comprehensive list of franchise systems in France from the French Franchising Association (FFF). Their franchise base contains a total of 593 franchise systems and is representative of the French franchising industry.

The questionnaire was posted to each franchisor on the list, together with an introductory letter explaining the purpose of the survey and offering the respondents a summary of the findings. A return prepaid envelope was included. The mailing resulted in 188 usable returns from franchisors, giving a response rate of 31.7 percent. Table 2 provides an overview of the sectorial structure of the sample, which is a good representation of the total franchise market in France.

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Table 2 about here

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## Measures

The independent variable of our model is *percentage of multi-unit franchising* (or "rate of MUF") in a franchise system. This ratio is calculated by dividing the number of MU franchisees in any given franchise system by the total number of franchisees in that system for an objective account of the degree of MUF as suggested in the literature (for a summary of MUF measures: Hussain and Windsperger 2010). The theoretical range of the variable is then from 0 percent (no MU franchisee in the system) to 100 percent (all franchisees within the system have at least two units).

It is, however, important to note that the variable is not normally distributed, but censored: 22.9% of all franchise systems have no MU franchisees, while the remaining 77.1% have a rate of MUF varying between 2% and 88%. This non-normal distribution has implications for the regression analysis, an issue that will be addressed later.

All dependent variables are either assessed with objective single-item measures or selfreported multi-item measures. *Geographic dispersion* is objectively measured by the number of French departments within which franchise units of the system are located (France is divided into 100 geographical departments, similar to counties). In line with suggestions from Barthelemy (2004), *costs of monitoring* are objectively measured by the number of staff working for the franchisor and dedicated to the monitoring of the franchised units. As suggested in the literature (Combs and Ketchen 2003) and to reflect a long-term focus, we measure *growth rate* using the objective change in the number of franchise units over a period of time.

The *level of uniformity* is measured by using existing scales assessing how franchisees comply with their franchisor's directives in various fields (point of sale design/store layout; work methods, choice of products or services on offer, level of margins; application of know how (Boulay 2010; Gassenheimer et al. 1994)). All measurement properties are above the required threshold (critical ratio (CR) = .889; average variance extracted (AVE) = .557).

Local responsiveness is a three item scale based on Bradach's work: *Our franchisees* permanently adapt to their local environment; When pressed by the local competition, our franchisees do not hesitate to innovate without our permission; Major innovations in the system often come from ideas initially developed by our franchisees at their local level. We find the CR (.733) and AVE (.478) to be slightly below the cut-off suggested by Bagozzi and Yi (1988) and Hair et al. (2006). However, we decided not to change the scale because of face validity issues if items were deleted.

*System wide adaptability* is also developed on the basis of Bradach's observations and aims at measuring how franchisors perceive their franchisees as a whole (the whole system) to adapt to changes in the environment. It consists of four items: *Our franchisees generate many ideas that help us to improve our offer; We offer our company-owned units the same improvement support as we offer our franchisees; All our units – company-owned and franchised – actively participate in improving methods and processes that will ultimately help the whole system; Company-owned units and franchised units learn permanently from one another. The CR (.887) and AVE (.663) indicate an acceptable psychometric quality of the scale.* 

We also test for discriminant validity between constructs and find it to meet the criteria suggested by Fornell and Larcker (1981). A summary of the key psychometric properties of the measures are shown in Table 3.

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Table 3 about here

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The independent variable of our analysis is "rate of MUF" in a given franchise system. As mentioned above, the variable is not normally distributed, but (left-) censored which, in consequence, prevents us from running traditional OLS-regressions. We thus follow Muthen and Muthen's (2006) suggestions and estimate the model using the maximum probability estimator with robust standard errors (MLR). To do so, we utilize the software Mplus, version 6.11.

#### Analysis and Results

#### **Testing of Hypotheses**

Our main hypotheses are tested with a regression analysis. In accordance with Bradach (1995), we hypothesized that franchise system growth rate by unit (H1a) as well as by territorial coverage (H1b) is positively related to the rate of MUF within a chain. We find strong support for territorial coverage (B=23.27; p=0.05) and marginal support for growth rate by unit (B=13.95; p=0.08). Also as expected, franchise chain uniformity is unrelated to the rate of MUF (B=0.33; p=0.16) (H2). However, contrary to expectations, we do not see a negative relationship between local responsiveness of the chain and the rate of MUF (B=0.37; p=0.18) (H3). Similarly, we do not find system wide adaptation to be related to the rate of MUF (B=-0.26; p=0.22) (H4). Table 4 summarizes the key results of the hypotheses test.

Table 4 about here

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**Robustness Check** 

As indicated above, we calculate the independent variable of our model, *percentage of multi-unit franchising* (or "rate of MUF"), by dividing the number of MU franchisees in any given franchise system by the total number of franchisees in that system (Hussain and Windsperger 2010). However, as MUF is our central construct, we also used alternative MUF measures to ensure findings are not biased by the measure and that they reflect the underlying phenomenon. Therefore, we created two alternative measures: (1) "intensity of MUF" (=number of units divided by number of franchisees) and (2) "size of the mini-chain" (= average number of units a MU franchisee operates). When running the regression with these two alternative measures, we note that none of the substantive results change (i.e. the directions and significance levels remain unchanged). Apparently, findings hold irrespective of the measure used for MUF.

Further, our findings may also be biased by the fact that our sample of 188 franchise systems is spread across a variety of business sectors. Therefore, we included a dummy variable to account for potential business sector effects. The analysis shows that even when business sector is accounted for, results of hypotheses testing remain stable. Notably, the significance levels remain unchanged.

In sum, both robustness checks confirm the results of the main model, providing convincing evidence for our substantive findings<sup>2</sup>.

#### **Follow-up Analysis**

<sup>&</sup>lt;sup>2</sup> We thank two anonymous reviewers for suggesting conducting robustness checks. Full details of the regression results with the alternative MUF measures and dummy variable are available upon request.

While confirming two of Bradach's (1995) predictions (H1a/H1b and H2), we do not find support for the other two propositions in our data. In order to better understand the relationship between local responsiveness and rate of MUF (H3) and system-wide adaptation and rate of MUF (H4), we split the sample into sub-groups based on the rate of MUF. We are thus able to further explore potential non-linear effects.

More precisely, from our initial sample of 188 franchise systems, we deleted all SU franchises as we are mainly concerned with differences in the two dependent variables between systems with different rates of MUF. After further deleting all missing values, we were left with 134 MU franchisees that vary in their rate of MUF. We further split this sample into four subgroups with MUF rates of less than 7.65 percent (group 1; n=33), between 7.65 percent and 16.25 percent (group 2; n=34), between 16.25 percent and 28.80 percent (group 3; n=34) and more than 28.80 percent (group 4; n=33).

Next, we calculated mean values for local responsiveness and system wide adaptation (Table 5) and plot them against the rate of MUF.

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Table 5, Figure 1 and 2 about here

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The plots displayed in Figures 1 and 2 suggest a u-shaped relationship for local responsiveness and an inverted u-shaped relationship for system-wide adaptation in relation to MUF rate.

To more rigorously assess these two non-linear relationships, we estimate quadratic effects. Interestingly, we find a positive and significant quadratic effect for local responsiveness (B=.035; t=2.490, p<.05), suggesting that high and low rates of MUF are associated with high levels of local responsiveness whereas medium-levels of MUF relate to low levels of local responsiveness.

We do not find a significant effect for system-wide adaptation (B=-.006; t=-1.451, p>.1). It is worth noting, however, that the sign of the coefficient is negative, which would suggest (if significant) an inverted u-shaped effect. To further investigate that effect, we assess the mean values of system-wide adaptation across the four MUF-groups depicted in Figure 2. We note that group 3 seems to perform better than both group 1 (t=1.731, p<.1) and group 4 (t=1.688, p<.1), while none of the other pair-wise comparisons are significant. This finding suggests further evidence for an inverted u-shaped relationship between rate of MUF and system wide adaptation. It is, however, worth mentioning that the discussed effect can be considered marginal and our interpretation should be seen as speculative. Further research should attempt to (dis-) confirm our findings as we are only offering initial exploratory speculations about potentially interesting nonlinear relationships between rate of MUF and local responsiveness as well as system wide adaptation.

### **Discussion and Implications**

In essence, our findings only support some of Bradach's assertions, in particular those in relation to system growth and uniformity. Interestingly, while we only find marginal support for a positive relationship between the rate of MUF and system growth by unit (H1a), the positive link between MUF rate and system growth by geographical dispersion (H1b) is, however, significant. Our interpretation is that fast business growth, which may be particularly important at the early stages of the lifecycle of a given chain in order to gain market share and create barriers to entry for competitors, may be successfully accomplished with the expansion through

MUF. More importantly, if presence across territories within a given country is due to the competitive environment, a greater MUF rate may be desirable. This implies that capital scarcity alone cannot explain the MUF phenomenon, as the theory suggests that, with a certain size and maturity of the system, the propensity for MUF should decrease (e.g., Weaven and Frazer 2007). However, MUF may contribute positively to other organizational resources that enable the firm to develop a sustainable competitive advantage in the long-term, such as more efficient monitoring, knowledge transfer, extensive managerial experience and the creation of economies of scale (Barney 1991; Garg, Priem and Rasheed 2013; Gomez et al. 2010; Hussain and Windsperger 2010; Jindal 2011; Kaufmann and Dant 1996).

In regards to uniformity, Bradach (1995) suggests that SU and MU franchisees may perform similarly. This proposition is supported by our findings (H2). The potential reason for this is that the advantages of one form of franchising outweigh those of the other – as suggested by Bradach (1997) and Kaufmann (1992). On the one hand, a higher MUF rate indicates that there are fewer franchisees in the system, which means easier control of franchisee actions within the chain, as well as fewer opportunities for deviant behavior. On the other hand, SU franchisees may be more devoted to their outlets and thus ensure better adherence to system standards (Kaufmann 1992). Moreover, the best franchisees may become victims of their own success (Bradach 1995). While successful franchisees may be granted more units, they will find it increasingly difficult to adhere to system standards and control for uniformity with the growth of their mini-chains. This may, in the end, lower their performance on these challenges.

However, from a resource-based perspective, uniformity in coherence with system standards is a key challenge in franchising (Brickley and Dark 1987; Rubin 1978). Thus, in order to establish and maintain uniformity across a system, it is important that franchisors provide

support to MU franchisees to help them to comply with standards within their mini-chains. In particular, training can be offered to local managers that are hired by franchisees in order to ensure that standards are well understood across the system.

Local market knowledge is also an intangible asset, as it allows the firm to respond to changing market needs in a competitive manner (Barney 1991). The literature suggests that SUF outperforms MUF in local responsiveness (Bradach 1995, 1998; Hussain and Windsperger 2013). Interestingly, we do not find support for the proposition that local responsiveness is negatively related to the rate of MU franchisees within the chain (H3). Our follow-up analysis shows that the link between local responsiveness and MUF rate follows a u-shaped curve. Bradach (1995) himself puts various explanations forward for why this may be the case. In particular, he suggests that issues which demand a local response may be of regional, rather than unit, nature. MU franchisees with only a few outlets in a particular region may be very effective in catering to such regional contingencies. With the opening of more outlets across different regions and the entering of more MU franchisees, this effectiveness may weaken across the chain. Therefore, local responsiveness may drop with the rate of MUF up to a certain point. However, with system and MUF rate growth, individual MU franchisees also endeavor to further develop their businesses. Bradach (1995) outlines that as MU franchisees open more units, they are more likely to hire staff specialized in different functions, such as marketing, which again enables them to understand and cater to local and regional demand. This chain of events could explain the u-shaped relationship between local responsiveness and MUF rate.

Finally, we do not find support for Bradach's (1995) assertion that system-wide adaptation is positively related to the rate of MU franchisees within the chain (H4). Rather, our data suggest some initial evidence that the relationship between the two follows an inverted u-shape function.

The explanation for this may be grounded in the lifecycle of systems (Blut et al. 2011; Lillis, Narayana and Gilman 1976), which suggests that organizations will need different organizational capacities in the different stages of the lifecycle (Barney 1991). In relation to franchise systems, growth is the most important objective in the maturity stage. Growth may be most rapidly achieved by an increased MUF rate, as suggested above. Once a certain system size is achieved, other objectives may become a greater priority, in particular defending market share from new competition by ensuring excellent performance across the chain. Simultaneously, control becomes more complex with a greater number of franchisees and units that are dispersed over a wider territory (Blair and Lafontaine 2005). This also detracts from investment into further growth, as well as other managerial activities, such as persuasion and monitoring of system wide adaptation of innovations within the chain. The same may hold for MU franchisees who might find it increasingly difficult to control actions in their growing mini-chains within the system (Jindal, 2011).

Overall, the findings suggest that, while MUF increases the likelihood of innovations being adapted across the system at the start, this probability diminishes if the MUF rate goes beyond a certain point. Franchisors need to be aware of when they reach this tipping point in order to implement initiatives that support further system-wide adaptation, such as investment into internal communications events to present novelties and their benefits to the different franchisees.

To conclude, we find that the links between MUF rate and system performance on the key challenges of growth, uniformity, local responsiveness and system wide adaptation – and thus the development of organizational capacities – may not be as straightforward as previously suggested. Particularly noteworthy are the findings that there is no link between MUF rate and

uniformity, as suggested by Bradach, but that the relationship between MUF rate and system wide adaptation resembles an inverted u-shape function. As one could argue that uniformity and system-wide adaptation should develop in parallel and given that our results in regards to system-wide adaptation were non-significant, future research should investigate whether the findings presented here can be replicated.

While we consider our results to be robust across different industries and different measures of MUF, we would call for establishing different MUF measures. For example, a measure for "MUF concentration" would be an interesting additional indicator that could take into account that, for instance, a MU franchisee that operates two units might be vastly different from one that operates – say – 50 units.

Moreover, it is important to further investigate the finding of a u-shape relationship between local responsiveness and MUF rate, as it might support some of Bradach's rivalry explanations in relation to MU franchisee behavior. Generally, the idea that the functions for local responsiveness and system-wide adaptation are in an inverse relationship to each other seems intuitive – as they are opposite managerial outcomes. However, as we can only present initial exploratory results, further research is necessary to assess whether these findings hold across other samples.

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Table 1			
Performance of Multi-unit vs. Single-unit Franchisees			

	Single-unit Franchisee	Multi-unit Franchisee
Unit growth	0	+ +
Uniformity	+	+
Local responsiveness	+ +	+
System wide adaptation	0	+ +

 $0 = low \ performance$   $+ = medium \ performance$   $++ = high \ performance$ 

(Bradach, 1995)

Sector	n	%
Clothing and personal accessories	19	10,1
Household goods	19	10,1
Food trade	19	10,1
Other retailing	19	10,1
Automotive services	10	5,3
Construction and energy	16	8,5
Hairdressing and beauty	20	10,6
Other personal services	20	10,6
Business assistance services	12	6,4
Hotels	5	2,7
Quick service restaurants	9	4,8
Table/full service restaurants	12	6,4
Real estate	7	3,7
Travel	1	0,6
Total	188	100,0

# Table 2Sample Structure by Sector

Growth (change in #units)	1.000				
Growth (#regions)	0.382	1.000			
Local responsiveness	0.076	0.062	1.000		
Uniformity	0.147	-0.030	0.053	1.000	
System wide adaptation	-0.052	-0.133	0.224	0.389	1.000
Critical Ratio	n.a.	n.a.	0.733	0.889	0.887
AVE	n.a.	n.a.	0.478	0.557	0.663

Table 3Key Psychometric Properties of the Measures

Hypotheses	coefficient	p-value	supported
H1a: Growth (change in #units)	13.95	0.08	marginal support
H1b: Growth (#regions)	23.27	0.05	Yes
H2: Uniformity	0.33	0.16	Yes
H3: Local responsiveness	0.37	0.18	No
H4: System wide adaptation	-0.26	0.22	No

# Table 4Regression Results

Table 5Mean Values for Local Responsiveness and System-wide Adaptation

Variable	Group (MUF rate)	Group Size	Mean Value
		22	2.00
Local Responsiveness	Group 1 (<7.65%)	33	3.99
	Group 2 (7.65%–16.25%)	34	3.87
	Group 3 (16.25%–28.80%)	34	3.81
	Group 4 (>28.80%)	33	3.96
System-wide Adaptation	Group 1 (<7.65%)	33	5.03
	Group 2 (7.65%–16.25%)	34	5.27
	Group 3 (16.25%–28.80%)	34	5.39
	Group 4 (>28.80%)	33	5.01

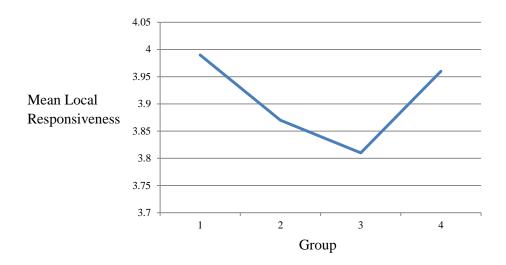


Figure 1 MUF Rate and Local Responsiveness

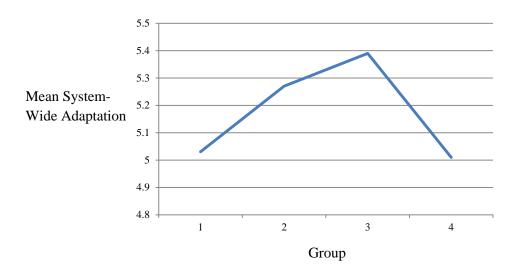


Figure 2 MUF Rate and System-Wide Adaptation