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How Family Businesses Benefit from Familiness: Strategy Change

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How Family Businesses Benefit from Familiness: Strategy Change

Abstract

This article examines the impact of the attribute of "familiness" on family businesses when they decide to change strategies and its implications for their economic lives. An empirical investigation was conducted using a quantitative approach to analyze 135 family coffee producers in Brazil. While some producers continued to pursue the same low-cost strategic orientation despite a fundamental institutional change, others decided to switch to a differentiation strategy to benefit from new market opportunities. The effect of familiness varies between early and late adopters of the new strategy. Our empirical findings provide clarification on the paradoxical nature of familiness by isolating its positive and negative effects on business strategy choice. The article concludes with recommendations for family businesses and policy makers based on our empirical results.

Keywords: familiness, human capital, social capital, strategy change

Com es beneficien les empreses familiars de la dimensió familiar en el canvi d'estratègia

Resum

Aquest article examina l'impacte de l'atribut de *familiness* (o dimensió familiar) en les empreses familiars quan decideixen canviar d'estratègia i les seves implicacions per a la seva vida econòmica. S'ha dut a terme una recerca empírica emprant un enfocament quantitatiu per analitzar 135 productors familiars de cafè al Brasil. Mentre que alguns productors continuen perseguint la mateixa orientació estratègica de baix cost, malgrat un canvi institucional fonamental, d'altres han decidit passar a una estratègia de diferenciació per beneficiar-se de noves oportunitats de mercat. L'efecte de la dimensió familiar varia entre els primers i els darrers en adoptar la nova estratègia. Els nostres resultats empírics aclareixen la naturalesa paradoxal de la dimensió familiar aïllant els seus efectes positius i negatius en l'elecció de l'estratègia empresarial. L'article conclou amb recomanacions per a empreses familiars i responsables polítics basades en els nostres resultats empírics.

Paraules clau: familiness, capital humà, capital social, canvi d'estrategia

Cómo se benefician las empresas familiares de la dimensión familiar en el cambio de estrategia

Resumen

Este artículo examina el impacto del atributo de *familiness* (o dimensión familiar) en las empresas familiares cuando deciden cambiar de estrategia y sus implicaciones para su vida económica. Se ha realizado una investigación empírica mediante un enfoque cuantitativo para analizar 135 productores familiares de café en Brasil. Mientras que algunos productores continúan aplicando la misma orientación estratégica de bajo costo a pesar de un cambio institucional fundamental, otros deciden cambiar a una estrategia de diferenciación para beneficiarse de nuevas oportunidades de mercado. El efecto de la dimensión familiar varía entre los primeros y los últimos en adoptar la nueva estrategia. Nuestros hallazgos empíricos aclaran la naturaleza paradójica de la dimensión familiar al aislar sus efectos positivos y negativos en la elección de estrategias comerciales. El artículo concluye con recomendaciones para empresas familiares y responsables políticos basadas en nuestros resultados empíricos.

Palabras clave: familiness, capital humano, capital social, cambio de estrategia

Introduction

Since Habbershon and Williams (1999) proposed the concept of familiness, much research has been carried out to understand the unique competitive advantage of family businesses. Subsequent research has focused on its operational dimensions (Frank et al. 2017, Zellweger, Eddleston and Kellermanns 2010, Irava and Moores 2010); improvements in definitions and methodological procedures (Frank et al. 2010, Sharma 2008); the familiness creation process within firms (Chrisman, Chua and Litz 2003); considering the social capital perspective (Cano-Rubio et al. 2016, Sharma 2008, Pearson, Carr and Shaw 2008) and its potential effect on emergence of trust (Deferne et al. 2022); and relating familiness to economic geography (Basco and Suwala 2020).

Although the familiness concept is central to the family business strategy literature, it is still unclear how families take advantage or disadvantage of it when choosing their firms' strategic positioning. Previous studies have claimed to clarify the paradoxes of familiness (Dawson 2012): "the model assumes that all familiness is beneficial. Can too much familiness or family social capital have negative consequences?" (Pearson, Carr and Shaw 2008, 964); and "A family firm that is able to understand and manage these paradoxes will have exceptional ability" (Irava and Moores 2010, 139).

Building on the original contribution of Habbershon and Williams (1999), several attempts have been made to complement and extend the concept (see a comprehensive review in Irava and Moores 2010). Considering the challenges to operationalize several dimensions and to account for different assumptions, we focus our investigation on human capital (Hatch and Dyer 2004, Gibbons and Waldman 2004, Hitt, Bierman, Shimizu and Kochhar 2001, Coleman 1988) and social capital (Shane and Stuart 2002, Nahapiet and Goshal 1998, Walker, Kogut and Shan 1997, Burt 1992) as the primary idiosyncratic resources of family businesses that support the business strategy.

Family business scholars have investigated the importance of human capital to align the interests of individual and organizational goals (Dawson 2012), and in conjunction with other sources of capital, how human capital contributes to the survival of family firms (Stafford, Danes and Haynes 2013, Stafford et al. 2010, Danes et al. 2009), to wealth creation and competitive advantage (Hoffman, Hoelscher and Sorenson 2006, Sirmon and Hitt 2003). Although Czakon, Hajdas and Radomska (2023) suggested that knowledge and experience, as constituents of familiness, are effective for family firms to face difficult times, we investigated the paradoxical effects of experience contributing to inertia or strategy change.

This strand of the family business literature posits that social capital investigation contributes to open the "black box" and thus provides a better comprehension of familiness (Pearson, Carr and Shaw 2008, Arregle, Hitt, Sirmon and Very 2007) and its contributions to next-generation entrepreneurs (Salvato and Melin 2008, Steier 2001); to business strategy in emerging countries (Acqaah 2011, Miller, Lee, Chang and Le Breton-Miller 2009); and to the image of the family firm (Zellweger, Kellermanns, Eddleston and Memili 2012). While Herrero and Hughes (2019) shed light on a theoretical discussion on the positive and negative aspects of social capital, this article provides an empirical analysis of when family social capital is too much of a good thing by

means of contributing to strategy change or to inertia.

Yet, the paradoxical effects of familiness to business strategy remain unclear. In an attempt to fill this gap, we analyze family businesses in Brazil by accessing a unique database that allows us to compare changes in the strategic positioning after an institutional change, and moreover to compare early and late adopters of the new strategy. Thus, it shed light on how family business in Latin America remains competitive (Botero, Discua Cruz and Müller 2019, Can, Lefranc, Grados and Weston 2018), especially when the competitive environment changed from protectionism to neoliberalism (Almaraz 2020) and generational transfer of entrepreneurial capacity is critical in emerging economies (Fernández Moya and Fernández Pérez 2019). Müller, Canale and Cruz (2022) also shed light on the importance of family involvement in Latin America as a positive influence on the adoption of green innovation in agri-food industry.

Particularly, the coffee business was largely important to Brazilian economy and political structure (Dalla Costa, Drumond and Heras 2015) that preceded the development of manufacturing and service sectors with great contribution of family business groups (Fernández Pérez and Lluch 2016). Moreover, previous studies in the Brazilian context have shown the importance of family ties to candidates in election, suggesting a dynamic of reciprocity between donations to campaign and state actors (Balán, Dodyk and Puente 2022); and the relevance of CEO's education and experience to the internationalization strategies (González and González-Galindo 2022). Thus, human capital and social capital are important dimensions of analysis on the contributions of families to business in Brazilian context.

Do family businesses benefit from familiness in changing their business strategy? How do they take advantage of familiness? Our main contributions to family business strategy research include the following. First, we analyze why families take advantage of familiness when they decide to change the business strategy with implications to the existing bundle of resources. Second, we clarify how families benefit from the positive contributions of familiness and isolate its potentially negative effects. Third, we argue that human capital and social capital are the primary resources of familiness that allow empirical research to establish measurable dimensions of this concept. Finally, we discuss the contributions of family businesses to the emergence of a new market with positive impacts on a developing country.

Literature review

Familiness, human capital, and social capital

According to Barney (1991), a resource provides the firm a sustainable competitive advantage if it is valuable, rare, and imperfectly imitable, and if the organization is prepared to exploit it. Thus, this approach investigates the internal factors that explain the competitive advantage of family business. Moreover, it sheds light on our understanding about "what family firms have advantages and when?" (Habbershon and Williams 1999, 5). This concept provides a framework to investigate the competitive advantage of family businesses relative to their nonfamily counterparts, and further opens a window of investigation into how family businesses vary in taking advantage of resources when choosing their strategic positioning.

Although family business scholars have broadly accepted the concept, its definition and operational dimensions are still in need of clarification (Chrisman, Chua and Sharma 2005, Moores 2009). In an attempt to fill this gap, Pearson, Carr and Shaw (2008) investigated "how" familiness was created, considering the dimensions of social capital; Irava and Moores (2010) examined "what" is contained within the familiness concept; while Zellweger, Eddleston, and Kellermanns (2010) focused on the "who" question to identify which families are most likely to develop familiness.

Still, it remains unclear "why" and "how" family businesses benefit from their idiosyncratic combination of resources. While we observed progress on the concept and operationalization of familiness, we found no convergent framework for a quantitative empirical investigation. We concur with Zellweger, Eddleston, and Kellermanns (2010), who emphasize the family aspects of familiness, and therefore focus our investigation into human and social capital as the primary family-based resources of familiness. These sources of capital are socially complex and highly influenced by the interaction of the business entity, family unit, and individual members (Habbershon, Williams and Macmillan 2003). Moreover, managing these forms of capital challenges the family business because "while physical capital depletes or depreciates with usage and thus more is seen as better, social and human capital increase with usage" (Sharma 2008, 974).

Familiness, Human Capital, and Strategy Change

Human capital consists of investments in education, accumulated knowledge, skill, and experience (Schultz 1982, 1961, Becker 1964). Drawing from the Resource-Based View, Habbershon and Williams (1999) addressed the importance of training and accumulated experience as sources to improve familiness. This form of capital represents a stock of intangible resources that previous studies have associated with firms' positive performance (Hitt, Bierman, Shimizu and Kochhar 2001) and competitive advantage (Hatch and Dyer 2004). To some extent, human capital provides firm-specific knowledge (Hitt et al. 2001) that improves the expectations on the strategic factor market (Barney 1986) and ameliorates concerns over causal ambiguity (Lippman and Rumelt 1982) by improving the firm's capacity to evaluate its resources and even to identify them (Petaraf 1993). According to Mahoney and Pandian (1992), this is important when a firm is able to generate rents not because it has access to better resources, but because it is able to make better use of them, as argued by Penrose (1959). By investing in knowledge, skills, and abilities the family business increases its flexibility to adjust its strategic positioning (Sorenson and Bierman 2009). Thus, we formulate the first hypothesis:

Hypothesis 1: Investments in **formal education** increase the probability of strategy change.

Indeed, the early involvement of children in family firms provides a competitive advantage over non-family firms, because tacit knowledge is difficult to codify and is transferred through direct exposure and experience (Lane and Lubatkin 1998). In addition, the business takes advantage of experience accumulated by families (Sirmon and Hitt 2003) that are imperfectly imitable (Barney 1986), and moreover represent a high level of specificity (Hatch and Dyer 2004, Kor and Mahoney 2004, Kor, Mahoney and Michael 2007) that might be relevant to the family business survival (Stafford, et al. 2010).

Schultz (1961, 1982) addressed the importance

of experience for business owners when engaging in entrepreneurial action. Indeed, experience provides the business a set of tacit knowledge (Dawson 2012), insights and skills (Irava and Moores 2010) that was also recognized by Habbershon and Williams (1999) as a component of familiness. Therefore, we state the second hypothesis:

Hypothesis 2a: Inheritance of **experience** from previous generations increases the probability of strategy change.

While experience may represent an asset for family businesses, previous research has addressed concerns when non-valuable accumulated resources lead to inertia and suboptimal decisions (Mosakowski 2002, Tripsas and Gavetti 2000, Leonard-Barton 1992). One could argue that a family business may be prevented from changing its strategic positioning because the current orientation fits with the existing human capital. Considering the potential negative effect of experience on strategy change, we address a competing second hypothesis:

Hypothesis 2b: Inheritance of **experience** from previous generations decreases the probability of strategy change.

Formal education and experience are components of human capital that comprise the category of head and hand (the capacity to perform) along with another category of heart (the willingness to perform), according to further developments of the individual's human capital in family business, conducted by Dawson (2012).

Familiness, Social Capital, and Strategy Change

Pearson, Carr and Shaw (2008) applied social capital theory to investigate how familiness is created, with a focus on the internal relationships of a family business. In comments complementing their article, Sharma (2008) addressed the importance of external bridges and bonds aspects of social capital. Arregle et al. (2007) examined the process of developing social capital in family firms and suggested further investigations to clarify the components of familiness. According to Hoffman, Hoelscher, and Sorenson (2006), family ties are stronger, more intense, and more enduring than the social capital of nonfamily business.

A family invests more in its social capital as a stock the greater the expectation of future returns. However, there is no available strategic factor market (Barney 1986) for family social capital. It simply is not available for acquisition (Nahapiet and Ghoshal 1998) and its path dependence component reinforces the characteristics of imperfect imitability and imperfect substitutability. Nevertheless, Steier (2001) suggests alternatives for managing and transferring social capital to next-generation entrepreneurs and successors.

Social capital involves relationships between individuals or between organizations (Burt 1997) that are associated with firm performance (Hitt et al. 2001) and competitive advantage (Ding and Abetti 2003, Acqaah 2007). Therefore, social capital by itself represents a valuable resource. Additionally, social capital provides access to other resources embedded within, available through, and derived from the network (Nahapiet and Ghoshal 1998).

Habbershon and Williams (1999) have suggested elements of social capital as components of familiness, for instance, the reputation a family business develops with customers. In this sense, Acqaah (2007) investigated the connections of Ghanaian managers to buyers as one of the constituents of social capital to explain the strategic

orientation and performance in an emerging economy. In addition, Salvato and Melin (2008) analyzed the relationship to customers as a proxy to "bridging" social capital that supported the ability of family businesses to create value across generations; and Cano-Rubio et al. (2016) theoretically discussed bonding social capital by means of shared goals and long-term orientation and bridging social capital by means market orientation and relations with stakeholders. Thus, we propose the third hypothesis:

Hypothesis 3: **Direct connection** to clients increases the probability of strategy change.

According to Burt (1992), social capital creates value by enabling the emergence of trust as a result of strong relationships. An enduring relationship emerges after a selection of parties by similarity of attributes such as education, income, and shared background and interests. Once embedded in a particular relationship of trust, cooperation may emerge (Uzzi 1997) along with lower risk of opportunism (Conner and Prahalad 1996), both of which are relevant when a business is considering a change of strategy.

Another dimension of familiness suggested by Habbershon and Williams (1999) was the firm relationships to the business environment and external stakeholders. According to Zellweger et al. (2012) family businesses take advantage of trust and cooperation that emerges on community social ties. In addition, studies on cooperatives suggested that trust among members lowered transaction costs and facilitated access to resources due to new initiatives (James Jr, and Sykuta 2006). Considering that family business affiliation with cooperatives and associations are forms of social networking, we formulate the fourth hypothesis:

Hypothesis 4: **Affiliation with cooperatives and associations** increases the probability of strategy change.

Considering the previous discussion on the positive effects of social capital, it is expected that the emergence of trust as a result of enduring relationship supports the adoption of new initiatives, the renewal and reshaping of existing resources (Salvato and Melin 2008) that support strategy change and enhance firm's performance (Stanley and McDowell 2014, Acquaah 2007). In contrast to Burt (1992), the study of Smith, Hair and Ferguson (2013) suggests that trust enables the development of long-term relationships. While these two perspectives have different perspectives on causality, both concur on the effects that enduring relationships and trust support the creation of economic value. In this sense, we formulate a fifth hypothesis:

Hypothesis 5a: Enduring **relationship with a buyer** increases the probability of strategy change.

Although the length of a relationship represents an investment in social capital, Coleman (1990) and Bourdieu (1985) shed light on the number of connections. We acknowledge the possibility of nurturing both enduring relationships and numerous connections, but taking into account the potential trade-off, we state a competing fifth hypothesis:

Hypothesis 5b: **Enduring relationship with a buyer** decreases the probability of strategy change.

In fact, Acqaah (2011) finds that while family business relationships with community leaders fostered the successful implementation of business strategy, relationships with political leaders implied reciprocity in favors and resource-consuming activities that limited the ability of family businesses to pursue new

opportunities in Ghana. This latter finding suggests a potential negative effect of nurturing social networks in developing countries in line with Welter and Smallbone (2006) that have discussed the negative sides of trust such as lock-in effects and overconfidence.

Family businesses strategy change: coffee production in Brazil

The coffee industry offers an interesting setting for the study of how family businesses benefit from familiness when changing their strategic positioning. As a consequence of the strategy change, a new market was created with promising opportunities for economic development. Until the late 1980s, the world coffee industry operated under a cartel agreement under the auspices of the International Coffee Organization (ICO). The ICO, formed by both coffee producing and consuming countries, administered the cartel agreement, setting export quotas for member countries, especially during excess supply years, with the goal of maintaining world coffee prices at a stable level. This cartel regulated the international coffee market from 1962 to 1989.

Export controls by the international cartel also influenced domestic policies. In Brazil, for example, the government levied a tax on coffee exports, thereby appropriating the rents from the regulated international price. This policy setting, however, affected decision-making by coffee producers as the export tax muted price incentives for coffee quality segmentation. Producers had no market incentives to invest in quality and differentiate the product, which was marketed as a commodity. One consequence of the coffee policy was adverse selection, as producers did not invest in coffee quality to control costs and increase their marketing margins. As a result, Brazil acquired a reputation of being a high volume, low-quality supplier in the international market.

The end of the international coffee cartel in 1989 and the subsequent decision of the Brazilian government not to tax coffee exports opened the possibility for producers to switch to a differentiation strategy based on coffee quality. In fact, coffee growers have organized into collective action to conquer better conditions to explore specialty coffee production, in line with findings from Welter and Smallbone (2011). In addition to overcoming Brazil's bad reputation in the marketplace, producers also faced the challenge of declining coffee consumption in the early 1990s. In the US, the largest world coffee importer, coffee per capita consumption decreased from 35.7 gallons in 1970 to 26.2 gallons in 1990 and remained steady at this level until 2005 (Leibtag et al. 2007). This declining trend only started to reverse in the early 2000s with the emergence and subsequent rapid growth of the specialty coffee segment.

The upshot is that deregulation and liberalization of the world and domestic coffee markets opened the possibility for producers to invest in quality to differentiate their coffee based on quality attributes. In other words, this institutional change created an opportunity. According to CECAFE, the Coffee Exporter Counsel, the average specialty coffee prices were 39.6% higher than the commodity prices considering the period of 2007 to 2013.

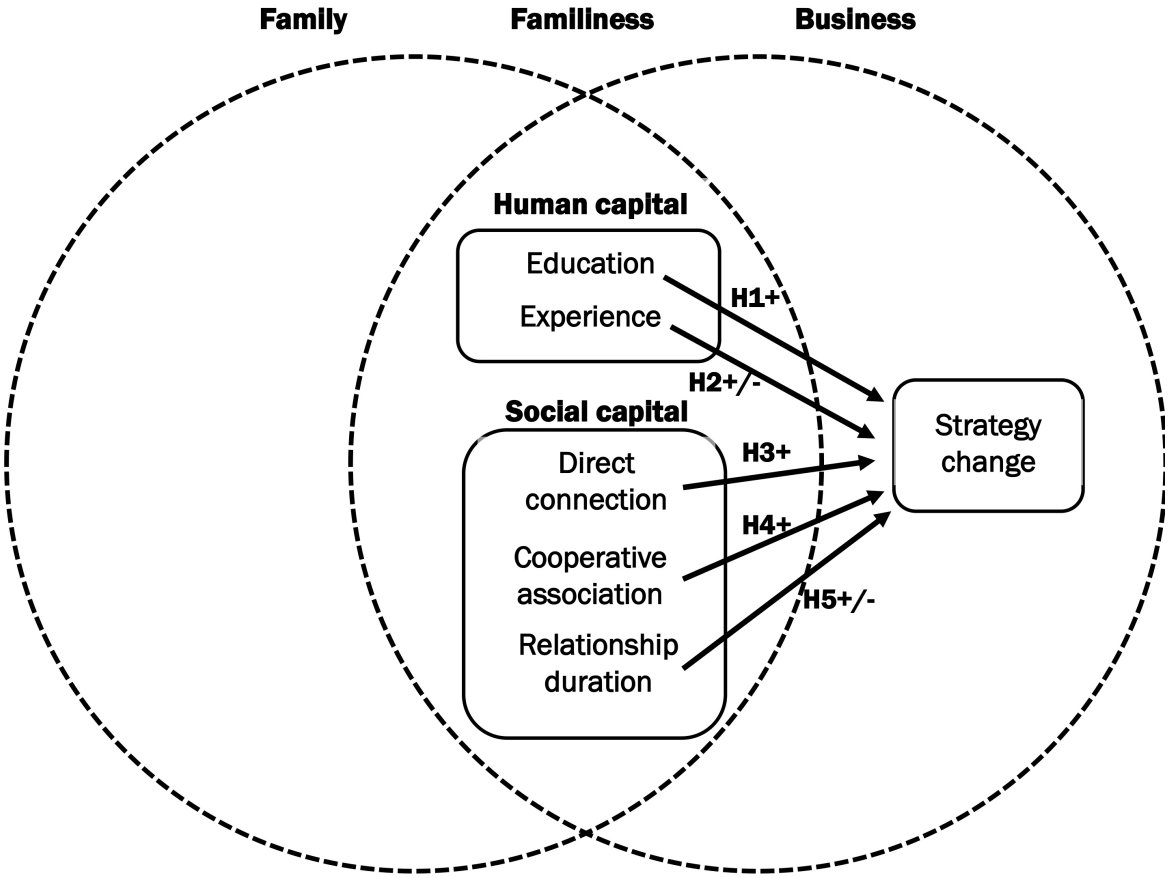
But the switch to a differentiated strategy was not without considerable risks. In addition to the challenges in the demand side, switching to a differentiated strategy entails significant investments in specific assets (e.g. genetics, machinery, agronomic practices) and resource allocation changes by the grower. The low-cost strategy adopted by most Brazilian coffee

growers implies the choice and allocation of a certain resource bundle (Barney 1986), but changing the strategy creates uncertainty about the new allocation of resources. How can a firm deal with this uncertainty and change its strategy?

Research design

We have conducted a qualitative study, comprised of three case studies, to explore possible explanations for pursuing a differentiation strategy after the institutional change. Although physical and financial

Figure 1. Conceptual model



Source: own elaboration.

constraints could prevent the adoption of a new strategy, we have observed some producers that geographically moved the site of production, and others that liquidated assets to invest in high quality coffee production. We have therefore turned our attention to observe family-based reasons that could explain the strategy choice. In this sense, the framework proposed by Habbershon, Williams, and Macmillan (2003) is appropriate, as we have identified that human capital and social capital emerged from the interactions of the business entity, family unit, and individual members (see figure 1).

Most of the organizations in the coffee production industry are family businesses, inasmuch as we observed a family controlling and managing the business. These range from coffee producers who are the founders of their business to producers who represent the 7th generation of their family producing coffee.

Estimation methods

To test the hypotheses presented above, two appropriate methods were chosen for the following reasons. The dependent variable is a binary variable codified (1) for family businesses that changed strategies anfor family businesses that continued to follow a low-cost strategy. The Probit model is appropriate to estimate binary response. The parameters β are estimated by maximum likelihood. The Probit function is represented by ϕ the cumulative distribution function:

TABLE 1. DESCRIPTION AND MEASURES OF ALL VARIABLES

Dependent Variable:	
Strategy change	Strategy change is a dummy variable codified (1) for producers that switched to differentiation strategy or (0) for producers that focused on low-cost strategy. Considering the Cox model, it was also considered the time length until strategy-change.

Explanatory Variables: measures for human capital	
Education	Education is a dummy variable codified (1) for owners with a college degree or (0) for owners that didn't complete college.
Experience	The measure is a dummy variable that equals (1) if the producer is the second or third generation or (0) if the producer is the founder.
Explanatory Variables: measures for social capital	
Direct connection	Direct connection is a dummy variable, which is coded (1) if the producer has traded directly with coffee industries or coded (0) if the producer has traded through intermediaries
Cooperative association	Cooperative association is a dummy variable coded (1) if the producer is affiliated with cooperatives or associations.
Relationship duration	Relationship duration is a dummy variable codified (1) for producers having an enduring relationship with the same coffee buyer for more than half of the existence of the business, or (0) if not.

Control Variables	
Farm Size	Farm Size was measured by land dimensions. All data was standardized in hectares (10,000 square meters).
Farm Altitude	Altitude is measured in terms of thousands of meters (for rescaling purposes), taking sea level as the zero reference.
City Size	City size is measured in terms of population, based on the Brazilian Census.
City Per Capita Revenue	City per capita revenue is measured by dividing the total revenue of the city with the population, based on the Brazilian Census.
Distance	The distance between the owner's home and the farm is measured in kilometers (each value represents 1 kilometer, for rescaling purposes).
Age of the owner	Measured in years.
Diversification	Diversification is a dummy variable codified (1) for producers who have diversified from coffee production or (0) for producers who are focused only on coffee production

Source: own elaboration.

$$\Pr(\text{strategy change}) = \phi(\beta_0 + \beta_1 \text{Education} + \beta_2 \text{Experience} + \beta_3 \text{Direct Connection} + \beta_4 \text{Cooperative Association} + \beta_5 \text{Relationship duration} + \beta_6 \text{Farm Size} + \beta_7 \text{Farm altitude} + \beta_8 \text{City Size} + \beta_9 \text{City per capita revenue} + \beta_{10} \text{Distance} + \beta_{11} \text{Age of the owner} + \beta_{12} \text{Diversification})$$

In addition to the probability estimation by Probit, we applied a semi-parametric Cox model. This method is appropriate to evaluate the time spent until the occurrence of an event. In this study, the event is the change of strategy, specifically from a low-cost strategy to a differentiation strategy. The Cox model estimates the probability of changing to a differentiation strategy, conditioned by the time that the family business spent employing a low-cost strategy. The survival function S(t) is the reverse cumulative distribution function of T (nonnegative random variable):

$$S(t) = 1 - F(t) = \Pr(T>t)$$

The survivor function reports the probability of surviving beyond time t, or in other words, the probability that there is no failure event prior to t. The function is equal to 1 at t=0 and decreases toward 0 as t goes to infinity. In survival data, censoring is defined when the failure event occurs and the subject is not under observation. The Cox (1972) proportional hazards regression model asserts that the hazard rate for the jth subject in the data is:

$$H(t|x_j) = h_0(t) \exp(x_j\beta_x)$$

Where β_x are the regression coefficients to be estimated from the data. The baseline hazard $h_0(t)$ is given no particular parameterization and can be left un-estimated. Estimation is possible by likelihood calculations.

$$H(t|x_1, x_2,..., x_k) = h_0(t) \exp(\beta_1 x1, \beta_2 x_2,..., \beta_k x_k)$$

Data

The data used in our empirical analysis of strategy change by family businesses was obtained by interviewing 409 family coffee producing businesses by phone, following a structured questionnaire, between July and November 2007. The family business owners were re-interviewed between April and May 2009. After data analysis and missing treatment, the sample was reduced to 135 family businesses – a unique dataset privately provided by coffee processing industries and cooperatives on a particular industry where we could observe the starting time of a new strategy, and we were thus able to compare early and late adopters. Table 1 describes the explanatory and control variables used in our models and how they were measured.

Results and analysis

Table 2 shows the results of the Probit and Cox estimations. Models 1 and 2 refer to estimations of the Probit model with the probability of changing strategies as the dependent variable. Models 3 and 4 are estimations of the Cox model, which models the probability of changing strategy conditioned by the time spent to make the change. The introduction of explanatory variables in model 2 increased the Pseudo R^2 from 0.048 to 0.150.

Considering the control variables across all models (1 to 4), *Age of the owner* was strongly significant ($p<0.001$) in model 4. This result suggested that the probability of changing the firm's strategy is positively related to the age of the coffee producer. To some extent, one could

TABLE 2. PROBIT AND COX RESULTS

	PROBIT Probability of changing strategies		COX Conditional probability of changing strategies	
Variables	(1) control	(2) all variables	(3) control	(4) all variables
	ß (std. dev)	ß (std. dev)	ß (std. dev)	ß (std. dev)
Human Capital				
Education		0.580*		0.738***
		(0.278)		(0.154)
Experience		-0.158		-0.299*
		(0.251)		(0.142)
Social Capital				
Direct connection		0.981*		0.960***
		(0.444)		(0.211)
Cooperative association		0.599*		0.712***
		(0.293)		(0.153)
Relationship duration		-0.435□		-0.642***
		(0.254)		(0.064)
Controls				
Farm size	-0.044	-0.057	-0.039	-0.054
	(0.088)	(0.094)	(0.081)	(0.075)
Farm altitude	-0.478	0.213	-0.499	0.031
	(0.614)	(0.668)	(0.378)	(0.062)
City size	-2.294	-3.204	-2.433	-3.706
	(2.209)	(2.608)	(4.486)	(3.810)
City per capita	-0.023	-0.020	-0.024	-0.024
	(0.024)	(0.024)	(0.017)	(0.022)
Distance	1.032	0.972	1.190*	1.068***
	(0.668)	(0.745)	(0.543)	(0.293)
Age of the owner	0.013	0.015	0.137***	0.014***
	(0.009)	(0.010)	(0.003)	(0.005)
Diversification	0.094	0.074	0.006	-0.081
	(0.263)	(0.289)	(0.316)	(0.352)
Constant	-0.594	-1.618□		
	(0.776)	(0.923)		
Observations	135	135	135	135
Prob> χ^2	p>0.10	p<0.05	p<0.001	p<0.001
Failures			41	41
Pseudo R^2	0.048	0.150		

*** p<0.001, ** p<0.01, * p< 0.05, □ p<0.10

Source: own elaboration.

argue that older producers have accumulated more human and social capital from their interactions with family and business over the years. *Distance* between the farm site and the owner's home was significant ($p<0.05$) in model 3 and strongly significant ($p<0.001$) in model 4. The probability of changing strategy appears to be significantly associated with how far the producer's residence is from the farm. All other control variables were not statistically significant.

Regarding the effect of human capital on the decision to change strategy, *Education* was statistically significant in both the Probit model ($p<0.05$) and the Cox model ($p<0.001$). This finding suggests that a higher education level increased the probability of changing strategy, and that the owner's higher education, conditioned by the time that he or she spent on the low-cost strategy, also increased the chance of adopting a differentiation strategy. Thus, considering Education as a proxy for human capital, we found support for *Hypothesis 1: Investments in* ***formal education*** *increase the probability of strategy change.*

Experience from family background, the other proxy for human capital, was not significant in the Probit model, but was significant in the Cox specification ($p<0.05$), which models the probability conditioned by the time spent to switch strategy from 1989 until 2009. The negative coefficient for Experience lends support to *Hypothesis 2b: Inheritance of* ***experience*** *from previous generations decreases the probability of strategy change*.

All measures of social capital were significant in both methods of estimation. *Direct connection* enhanced the probability of changing strategy in the Probit model ($p<0.05$) and also in the Cox model ($p<0.001$). These results support *Hypothesis 3:* ***Direct connection*** *to clients increases the probability of strategy change*. Considering a firm's affiliation with cooperatives and associations, this variable was significant in the Probit model ($p<0.05$) and strongly significant in the Cox model ($p<0.001$). Thus, we found support for *Hypothesis 4:* ***Affiliation with cooperatives and associations*** *increases the probability of strategy change*.

Relationship duration was used as a proxy for enduring relationships between a producer and a coffee buyer; the longer this duration, the lower the probability of adopting a differentiation strategy. Thus, we found support for *Hypothesis 5b: Enduring* ***relationship with a buyer*** *decreases the probability of strategy change*.

Analysis of different time framing

Table 3 shows additional analysis based on the Cox model. Since this method of estimation assumes that the "instantaneous" risk of an event occurring is not constant over time, we compared the probability of changing strategy until 1994 (five years after the institutional change), until 1999 (after 10 years), and until 2004 (after 15 years). Results were presented in models 5, 6, and 7, respectively. It is worth noting that the number of observations dropped when we considered different time frames. We counted only three coffee producers that changed their strategy in the first five years since the institutional change, another 10 producers until 1999, and another 31 producers after 15 years. For comparison, results on previous Cox models considered 41 family businesses that changed their business strategy between 1989 and 2009.

Education, one of our proxies for human capital, was weakly statistically significant in model 5 ($p<0.10$) and strongly significant in model 7 ($p<0.001$). Although not significant in model 6, the coefficient was positive, as discussed in the previous analysis. We interpret these results as providing additional support to Hypothesis 1.

TABLE 3. PROBIT AND COX RESULTS: DIFFERENT TIME FRAMES

	COX Conditional probability of changing strategies			
Variables	(4) until 2009	(5) until 1994	(6) until 1999	(7) until 2004
	ß (std. dev)	ß (std. dev)	ß (std. dev)	ß (std. dev)
Human Capital				
Education	0.738***	0.710□	0.333	0.425***
	(0.154)	(0.429)	(0.237)	(0.099)
Experience	-0.299*	1.330***	-0.110**	-0.157
	(0.142)	(0.047)	(0.045)	(0.207)
Social Capital				
Direct connection	0.960***	-3.523***	0.125	0.982***
	(0.211)	(1.088)	(0.146)	(0.115)
Cooperative association	0.712***	0.765***	0.280	0.636***
	(0.153)	(0.261)	(0.188)	(0.177)
Relationship duration	-0.642***	-0.601***	-0.406***	-0.607***
	(0.064)	(0.212)	(0.049)	(0.136)
Controls				
Farm size	-0.054	(0.143)	0.629	-0.539
	(0.075)	(0.129)	(0.943)	(0.852)
Farm altitude	0.031	0.342***	0.616	0.263
	(0.062)	(0.048)	(0.700)	(0.622)
City size	-3.706	7.652*	0.857	-0.704
	(3.810)	(3.6302)	(4.278)	(4.839)
City per capita	-0.024	0.099***	0.013	0.081
	(0.022)	(0.010)	(0.018)	(0.180)
Distance	1.068***	0.6183	0.259	0.148***
	(0.293)	(0.736)	(0.367)	(0.015)
Age of the owner	0.014***	-0.130***	-0.019***	0.048
	(0.005)	(0.015)	(0.052)	(0.052)
Diversification	-0.081	-0.707***	-0.573*	-0.582
	(0.352)	(0.202)	(0.276)	(0.397)
Observations	135	135	135	135
Prob> χ^2	p<0.001	p<0.001	p<0.001	p<0.001
Failures	41	3	10	31

*** p<0.001, ** p<0.01, * p< 0.05, □ p<0.10

Source: own elaboration.

Regarding our other proxy for human capital (*Experience*), the coefficient sign changed when we considered different time frames. The *Experience* of family background enhanced the probability of changing strategy in the first 5 years after the institutional change; this result was strongly significant in model 5 ($p<0.001$) and supported Hypothesis 2a. However, if we consider a 10-year time frame, the *Experience* of family background reduced the probability of changing strategy. This result is consistent with previous analysis and thus provides support to Hypothesis 2b.

Direct connection, one proxy for social capital, also showed different coefficient signs depending on different time frames used in the analysis. When the firm trades directly with coffee processors instead of trading with intermediary agents, the probability of changing strategy decreased in the first five years ($p<0.001$), but increased in the first 15 years after the institutional change ($p<0.001$). Although model 5 indicated the contrary, model 7 was consistent with previous results that supported Hypothesis 3. *Cooperative association*, another proxy for social capital, was consistent with previous results that supported Hypothesis 4. *Firms' affiliation with cooperatives and associations* increased the probability of their changing strategy in the first five years ($p<0.001$) and also in the first 15 years ($p<0.001$). *Relationship duration*, the third proxy for social capital, was also consistent with previous results that supported Hypothesis 5b. Results from models 5, 6, and 7 ($p<0.001$) indicate that enduring relationships between owners and coffee buyers resulted in lower propensities to adopt new strategies. Taken together, our results suggested a positive effect of *Education* and *Cooperative* association on strategy change that was consistent and robust in both methods of estimation and also considering different time frames for the strategy change. A positive effect of *Direct connection* on strategy change was consistent in both Probit and Cox models, but this effect was negative for the early adopters that shifted strategy in the first five years after the institutional change of 1989. On the other hand, our results suggest a negative effect of *Experience* and *Relationship duration* on strategy change. However, the owner's *Experience* had a positive effect when we analyzed the strategy shift by early adopters.

Discussion

Our results shed light on how family businesses took advantage or disadvantage of familiness when deciding to alter their business strategy due to an institutional change (see Table 4). Moreover, we took advantage of identifying a particular industry where we could observe the starting time of a new strategy, and we were thus able to compare early and late adopters that helped to clarify the paradoxical effects of familiness.

We have found a straightforward relation between *Education* and strategy change that remained consistent when we compared early and late adopters. Thus, we conclude that investing in training supports the development of a family business and contributes to open new opportunities. Even more important in an emerging country with several limitations, we reinforce the recommendation to invest in education, since it helps family businesses to make better use of existing resources (Mahoney and Pandian 1992).

We have found paradoxical effects regarding the *Experience* proxy on human capital. The overall finding supported the idea that experience contributes to inertia (Mosakowski 2002, Tripsas and Gavetti 2000, Leonard-Barton 1992) in the sense that keeping the

TABLE 4. MANAGING PARADOXES ON FAMILINESS REGARDING STRATEGY CHANGE

	Positive Familiness: f (+)	**Negative Familiness: f (-)**
Human capital: *Education*	• Increased the probability of strategy change • Consistent effects on early and late adopters of strategy change	• No significant negative effect
Human capital: *Experience*	• For early adopters, increased the probability of strategy change	• Decreased the probability of strategy change
Social capital: *Direct connection*	• Increased the probability of strategy change • Consistent effects on late adopters	• For early adopters, decreased the probability of strategy change
Social capital: *Cooperative association*	• Increased the probability of strategy change • Consistent effects on early and late adopters of strategy change	• No significant negative effect
Social capital: *Relationship duration*	• No significant positive effect	• Decreased the probability of strategy change • Consistent effects on early and late adopters of strategy change

Source: own elaboration.

same strategy fits with the existing human capital. However, we also observed that accumulated experience has contributed to strategy change for early adopters.

Adherent with discussions about social capital contributions to familiness (Pearson, Carr and Shaw 2008, Sharma 2008), we have found that *Cooperative association* contributes to business development in an emerging country. In fact, this finding concurs with Acqaah (2007, 2011), who addressed the way that social connections helped managers in Ghana to share information and opportunities, and even prevent threats where the institutional setting provides weak enforcement. While the connections to cooperatives and associations were clearly supportive of the adoption of a new strategy, our findings on the other proxy were contingent. The overall findings supported that direct connection to clients contributed to strategy change, but this effect was modified when we observed early adopters. Our interpretation was that having direct connection to clients created an incentive to follow the same strategy just after the institutional change as a way to maintain the value of the existing social capital. After a certain time, both producer and client would agree to follow the new pattern.

Although we would expect a paradoxical effect from the enduring *Relationship with buyer*, our findings suggested a straightforward decrease in probability of changing strategy. Previous investigations have addressed the way in which an enduring relationship can enable the emergence of trust and cooperation (Uzzi 1997), and can also contribute to lower the threat of opportunism (Conner and Prahalad 1996). According to our interpretation, producers with enduring relationships would take advantage of this when deciding to mobilize their resources to pursue the production of specialties, especially in the context of an emerging country where information flows are restricted and legal enforcement of contracts is weak. However, longer relationships between producer and buyer have resulted in a lock-in pattern (Welter and Smallbone 2006) of pursuing the same low-cost oriented strategy, which is consistent with previous findings from Pearson, Carr and Shaw (2008).

While Acqaah (2011) observed that nurturing social capital in developing countries has provided positive or negative effects depending on the behavior of the counterpart, our results suggest that the effects vary according to the type of social connection. Investing in a direct relationship to clients and nurturing a network through affiliation with cooperatives and associations supports the adoption of new strategies. In contrast, producers with enduring relationships with buyers maintained the same orientation even after the institutional change created new opportunities.

Conclusions

Previous researchers have contributed on "how" familiness is created, taking into account the theory of social capital; the "what" contained within the concept; and on "who", seeking to identify which families are most likely to develop familiness. Our analysis focused on "why" and "how" family businesses benefit from their idiosyncratic bundle of resources. Do family businesses benefit from familiness when changing their business strategy? How do they take advantage of familiness? The empirical investigation was conducted through a quantitative approach to analyze 135 family businesses in the Brazilian coffee industry.

When coffee producers have taken advantage of familiness, at the same time overcoming any potential negative effects, they have changed their economic lives and remain competitive. In fact, the emergence of a specialty coffee industry supported by those producers that have decided to change their business strategy has opened a new window of export opportunities, a fundamental alternative to avoid the risk of domestic demand dependence and to ameliorate exposure to commodity price fluctuations, especially after an institutional change.

Contributions to theory

We concluded that family businesses mobilize their human capital and social capital as the primary family-based resources for adopting a new strategy, especially when doing so implies changes to the existing bundle of resources. In this sense, we have answered "why" to our question about the benefits of familiness. The overall findings supported the idea that family businesses that have invested in education and have accumulated experience in the business over generations presented an advantage over others with less human capital, making them better able to seize new opportunities. Similarly, we have observed that family businesses that have invested in social capital can benefit from it when deciding to change

their business strategy.

However, the effects of familiness on business strategy are contingent and paradoxical. Our investigations on "how" to benefit from familiness helped our understanding of the positive and negative impacts both of experience accumulated over generations and of nurturing a direct connection to clients. To some extent, the quantitative approach was appropriate to isolate the specific contributions of the constituents of familiness and to test over different time frames to compare early versus late adopters. In fact, another theoretical contribution of our findings stems from the analysis of human and social capital interaction effects that overcame the limitations on previous findings.

Contributions to practice

The practical implications of our findings are twofold. First, public policy makers have to account for family dynamics around human and social capital when designing training and technology programs. Second, family businesses should actively assess how they can benefit from their familiness. Thus, we have addressed recommendations to foster the development of an emerging economy by means of promoting family businesses.

In addition, our results have clarified the paradoxical effects of familiness that support practical recommendations for family business owners and managers. First, generational experience supports strategy changes for early adopters, but the overall findings supported the idea that accumulated experience contributes to inertia, preventing the business from adjusting its strategic positioning after changes in the competitive environment. Alternatively, family businesses may overcome the potential negative impact of experience by investing in social capital. Second, nurturing social capital positively contributes to the business if it promotes access to information; it allows opportunities and threats to be anticipated as would be expected when the business has a direct connection to clients and when it is engaged in associations and cooperatives. However, owners and managers should be careful when committing to an enduring relationship with the main client of the business, since it implies incentives to maintain the same strategic orientation while the economic environment may present other more promising alternatives.

Limitations and future research

Although we have acknowledged the efforts to clarify the constituents of familiness, we found no convergent framework for an empirical study considering a quantitative approach. In an attempt to investigate the bundle of resources that results from socially complex interactions of business entity, family unit, and individual members, we have focused on human capital and social capital contributions to familiness.

Still, our measures were limited in their ability to capture reputation—founder influenced, family influenced, trans-generational potential—(Irava and Moores 2010) and *heart*—the willingness to perform—(Dawson 2012), both of which are sources of human capital in familiness. Likewise, our metrics simplified or neglected the contributions to familiness of social capital such as altruistic behavior (Irava and Moores 2010, Eddleston, Kellermanns and Sarathy 2008), or cognitive (meaning) and relational dimensions of trust and identity (Zellweger, Kellermanns, Eddleston and Memili 2012, Zellweger, Eddleston and Kellermanns 2010, Pearson, Carr and Shaw 2008, Sharma 2008, Arregle et al. 2007). Although we based our measures on

previous empirical investigations to assess appropriate proxies of human capital and social capital, future studies could explore alternative proxies and measures for the constituents of familiness.

The empirical investigation focused the context of coffee production in Brazil, taking advantage of a unique dataset and context where some family businesses changed their business strategy while others kept the same orientation after an institutional change. We suggest other studies to investigate if our findings can be replicated in different industries.

The familiness implications for family businesses are both positive and negative. While we have made progress in understanding the different contributions of familiness to business strategy, we await continued investigation into the ability of family businesses to manage the paradoxical nature of familiness.

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Apèndix 1

	Variable	Mean	Std. Dev.	Min.	Max.	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Strategy change	16.039	3.742	1	18	1.000												
2	Education	0.482	0.501	0	1	-0.089	1.000											
						0.237												
3	Experience	0.460	0.499	0	1	-0.000	-0.048	1.000										
						0.992	0.524											
4	Direct connection	0.080	0.271	0	1	0.187*	0.052	0.066	1.000									
						0.013	0.492	0.387										
5	Cooperative association	0.648	0.479	0	1	0.121	-0.120	0.084	-0.135	1.00								
						0.107	0.112	0.266	0.074									
6	Relationship duration	0.573	0.495	0	1	0.160*	0.005	0.081	-0.086	-0.106	1.000							
						0.033	0.946	0.284	0.254	0.160								
7	Farm size	418.454	1540.233	0	15000	-0.045	0.171*	-0.067	0.028	-0.014	0.010	1.000						
						0.586	0.040	0.423	0.740	0.868	0.898							
8	Farm altitude	848.2	200.119	209	1184	0.077	-0.188*	0.142	-0.082	0.012	0.217**	-0.238**	1.000					
						0.318	0.014	0.063	0.289	0.881	0.004	0.005						
9	City size	35.183	60.507	1.492	319.094	-0.032	0.176*	-0.012	-0.030	-0.064	-0.096	0.000	-0.191*	1.000				
						0.669	0.019	0.866	0.692	0.400	0.202	0.999	0.012					
10	City per capita	9.606	6.102	2.675	43.145	-0.004	-0.051	-0.069	-0.037	0.033	-0.036	-0.036	-0.006	0.069	1.000			
						0.950	0.4951	0.361	0.623	0.668	0.629	0.665	0.931	0.358				
11	Distance	57.657	17.250	0	1400	-0.148	0.200*	-0.038	0.143	-0.125	-0.058	0.359**	-0.130	-0.037	0.009	1.000		
						0.050	0.007	0.614	0.060	0.098	0.442	0.000	0.092	0.626	0.906			
12	Age of the owner	51.181	12.826	24	83	0.035	-0.126	-0.088	-0.068	0.151*	-0.175*	-0.027	-0.066	0.046	0.162*	0.028	1.000	
						0.642	0.094	0.245	0.368	0.046	0.019	0.745	0.386	0.541	0.031	0.711		
13	Diversification	0.670	0.471	0	1	0.023	0.266**	-0.080	0.072	-0.112	0.031	-0.015	-0.162*	0.027	0.078	0.125	0.007	1.000
						0.755	0.000	0.290	0.342	0.138	0.679	0.855	0.034	0.719	0.300	0.096	0.925	

**p<0.01, *p<0.05

Source: Own elaboration.