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HOW MUCH AM I EXPECTED TO PAY FOR MY PARENTS’ FIRM?
AN INSTITUTIONAL LOGICS PERSPECTIVE ON FAMILY DISCOUNTS

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ABSTRACT

Recent evidence suggests that successors do not simply inherit their parents’ firm, but have to pay a certain price. Building on institutional logics literature, we explore successors’ family discount expectations, defined as the rebate expected from parents in comparison to nonfamily buyers when assuming control of the firm. We find that family cohesion increases discount expectations while successors’ fear of failure and family equity stake in the firm decrease discount expectations. Higher education in business or economics weakens these effects. On average, in our study comprised of 16 countries, successors expect a 57% family discount.
INTRODUCTION

Intrafamily succession, commonly seen as a distinguishing feature of family businesses (cf. Chua et al., 1999), constitutes one of the most intensively investigated topics within family business research (cf. De Massis et al., 2008; Sharma, 2004; Zahra & Sharma, 2004). Despite the significance and maturity of this research stream, we know surprisingly little about the prices at which family firms are transferred from one generation to the next. According to conventional wisdom, children simply inherit the family firm, thus receiving a 100 percent discount on the firm’s value. Preliminary evidence, however, shows that family-internal successors often pay a price for the family’s ownership stake (Christen et al., 2013). In fact, family business scholars and family sociologists contend that intergenerational transfers are rarely based on pure altruism (Karra et al., 2006; Schulze et al., 2001; Steier, 2003).

Most research on price determination in private family firm transfers focuses on management buy outs, buy ins, and venture capital transactions (e.g., Granata & Chirico, 2010; Manigart et al., 2002; Wright et al., 2000), thereby neglecting family internal transfers of ownership. A recent study highlights the price premium incumbent owners expect when selling their firm to family-external buyers to compensate for forgone family internal succession (Zellweger et al., 2012). A few practitioners seem to partly touch upon the topic of family internal transfers by investigating estate and inheritance taxes that accrue to the incumbent owner when transferring the firm to a child (e.g., KPMG, 2014). The literature is silent about transfer prices of family business ownership, probably due to the inherently private nature of these changes in corporate control. From a practical standpoint, our lack of insight is highly unfortunate, given the predominance of family firms around the world and the relevance of family internal succession in the market for corporate control.
To address this research gap, we investigate the family discount that next-generation family members expect to receive from parents when assuming control of the firm, defined as the rebate expected in comparison to nonfamily buyers. We draw from the literature on the microfoundations of institutional logics (Pache & Santos, 2013; Thornton et al., 2012) and discuss how situational stimuli, such as familial cohesion, transgenerational legacy desires of the family, successors’ fear of failure, and family equity in the firm, impact discount expectations. We theorize that situational stimuli affect discount expectations by eliciting different social norms within the family logic. We further argue that for successors with higher education in business or economics the market logic is more accessible, which weakens the effect of the situational stimuli on discount expectations.

Our study makes multiple contributions. First, we add to entrepreneurial exit and succession literatures (Dehlen et al., 2014; DeTienne & Chirico, 2013; Kammerlander, 2014; Wennberg et al., 2011) by shedding more light on the relationship between family norms and financial implications of the family-internal exit route, a topic that has been widely overlooked. Second, we speak to Graebner and Eisenhardt (2004), who explored the interdependent relationships between buyer and seller in the exchange of corporate control, and empirically explore their underlying arguments on transfers of corporate control as social exchange and on the concern for a mutually acceptable agreement. In the context of children and parents as buyers and sellers, we show how legitimacy concerns rooted in familial norms bias perceptions about appropriate prices.

Third, we contribute to institutional logics literature (Friedland & Alford, 1991; Thornton et al., 2012) by exploring the multidimensionality of the family logic. Management scholars have tended to equate the family logic with norms of parental altruism, loyalty, and paternalism and see it as a largely monolithic way of sense making (Greenwood et al., 2010; Miller et al., 2011;
Thornton et al., 2012). Norms of reciprocity and filial duty, however, play a significant role in family relationships (Bengtson, 1993; Kohli & Kuenemund, 2003). Our study shows that various family norms entail contradictory indications of what constitutes a legitimate family discount and highlights an important, but underinvestigated, form of institutional complexity (see Greenwood et al., 2011 for an overview). The family logic has been applied to firm performance (Miller et al., 2011) and downsizing decisions (Greenwood et al., 2010), but never to the intriguing case of price expectations. This extension to management literature takes into account recent sociological approaches to price formation (Beckert, 2011). Fourth, our study lends empirical support to theorizing about the role of education in determining the accessibility of logics (DiMaggio & Powell, 1983; Pache & Santos, 2013; Thornton et al., 2012). Fifth, our study is important from a practical point of view because many family firms throughout the world are transferred from one generation to the next.

THEORETICAL FOUNDATIONS

Institutional logics and family business research

Institutional logics are defined as “socially constructed, historical patterns of cultural symbols and material practices, including assumptions, values, and beliefs, by which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences” (Thornton et al., 2012, p. 2). Scholars (Friedland & Alford, 1991; Thornton et al., 2012) argue that fundamental institutions in society, such as the family and the market, imply particular logics that shape the actor’s interpretation of the world and define legitimacy principles through which role identities, personal goals, and expectations are constructed (Greenwood & Hinings, 1996; Scott, 2007; Suddaby & Greenwood, 2005). With awareness of institutional plurality, academics have rediscovered nonmarket logics as intriguing research avenues, particularly the family logic, and are investigating how the family logic
influences decision making in family businesses (Greenwood et al., 2010; Miller et al., 2011).

Even though research on the family logic is gaining momentum, it remains unclear how its inner workings affect individuals’ expectations and, ultimately, decision making. This lack of insight resonates with researchers’ call for exploration of the inner workings of institutional logics in general and how individual actors relate to the social norms embedded in a logic (Pache & Santos, 2013; Thornton et al., 2012). In order to address this missing link, deeper insights into the microfoundations of institutional logics are needed, especially the cognitive aspects of institutional microprocesses (Greenwood et al., 2010; Miller et al., 2011; Thornton et al., 2012). In their model on the microfoundations of institutional logics, Thornton et al. (2012) emphasize that institutional logics focus attention on certain role identities and social norms that guide cognition. While situational stimuli are said be important for eliciting certain social norms within a logic (Ocasio, 2011; Thornton et al., 2012), education is seen to be decisive in defining which institutional logic is most accessible (Pache & Santos, 2013).

**Situational stimuli, family norms, and the formation of family discount expectations**

In line with extant literature, we argue that the family logic plays a defining role in family firms (e.g., Greenwood et al., 2010; Miller et al., 2011) and should be highly accessible in the intergenerational transfer of family firm ownership. Unpacking the inner workings of intergenerational family relationships, family sociologists, such as Bengtson (1993) and Kohli and Kuenemund (2003), suggest four central family norms: parental altruism, parents’ self-interested expectations for the future, filial reciprocity, and filial duty (filial piety). Parental altruism induces parents to care for their children (Becker, 1981; Becker, 1988; Kellermanns & Eddleston, 2004). In turn, parents’ self-interested motive for generativity elicits desires for legacy creation (Chua et al., 1999; Zellweger et al., 2012). Filial reciprocity is the familial expectation that the child reciprocates parental support (Gouldner, 1960; Janjuha-Jivraj & Spence, 2009).
Filial duty constitutes the child’s responsibility to support aging parents (Gans & Silverstein, 2006; Silverstein et al., 1997). In the context of intergenerational transfers, these norms constitute the normative basis of legitimacy within the family logic.

We build on the idea that situational stimuli, by focusing successors’ attention on the respective family norms, affect discount expectations (Thornton et al., 2012). In line with institutional thinking, we thus propose that situational stimuli affect discount expectations because they invoke certain social norms that guide expectation formation (Weick, 1995). Theorizing on the microfoundations of institutional logics suggests that the situational context primes individuals to follow appropriate social norms (Ross & Nisbett, 1991; Thornton et al., 2012), a view that has deep roots in social psychology. Literature on cueing and priming describes how typified situational frames invoke certain social identities (i.e., roles) to which social norms and actions are tied (e.g., Bargh & Chartrand, 1999; Fiske & Taylor, 2013; Wheeler & Petty, 2001). For the case of our investigation we thus propose that the situational stimuli of family cohesion, family transgenerational control intention, successors’ fear of failure, and family equity stake affect family discount expectations because they invoke the respective familial norms of parental altruism, parents’ desire for legacy creation, filial reciprocity, and filial duty.

While situational stimuli constitute salient contextual factors that focus attention on a certain logic (Ocasio, 2011; Thornton et al., 2012) and on the norms prevailing within that logic, accessibility refers to how easily that logic comes to mind in general (Thornton et al., 2012). Our research setting indicates that the family logic should be highly accessible because all respondents are part of the owning family. In contrast, accessibility of the market logic should, in part, depend on formal education (DiMaggio & Powell, 1983). Through norms of independence and individual rent seeking, the market logic is largely at odds with the family logic and should, therefore, undermine the legitimacy considerations invoked by situational stimuli of the family
logic. We thus suggest that higher education in business or economics serves as a source of market logic accessibility and weakens the effects of situational stimuli tied to the family logic on discount expectations.

In the following, we will thus first present how four situational stimuli affect discount expectations because they invoke certain social norms that guide expectation formation. We will then theorize how these main effects are weakened in case actors are trained in business or economics.

**Family cohesion**

Family cohesion represents emotional bonding and feelings of closeness, belonging, and acceptance among family members (Johnson et al., 2001). Cohesive families tend to develop a sense of loyalty and responsibility among their members (Kepner, 1991). Family cohesion also engenders a preference for a collectivistic over an individualistic orientation (Lansberg & Astrachan, 1994). Kellermanns and Eddleston (2004) suggest that cohesive family interactions are characterized by altruism, which links each family member’s welfare to that of other family members (Ling et al., 2002; Schulze et al., 2002). Similarly, Corbetta and Salvato (2004) note that “a high degree of altruism influences individual conduct in family firms and helps strengthen family bonds” (p. 356).

Extant research argues that in families with high levels of cohesion parental altruism is particularly prominent (Eddleston & Kellermanns, 2007; Schulze et al., 2002; Simon, 1993). In economic terms, parental altruism describes a relationship in which the utility of parents depends on the utility of their children (Becker, 1981; Becker, 1988). Religious and philosophical studies perceive parental altruism as a moral value that induces parents to care for children without the expectation of reward (Karra et al., 2006). Researchers stress that altruism is a key distinguishing
feature of family businesses (Karra et al., 2006) that motivates parents to care for their children and strengthens the intergenerational bond (Eshel et al., 1998; Simon, 1993).

Building on this reasoning, we suggest that family cohesion increases discount expectations due to expectations of parental altruism. High levels of family cohesion should lead successors to expect parental altruism in the form of favorable financial conditions (i.e., high family discount) when assuming control of the family firm.

H1: Family cohesion is positively related to family discount expectations of potential family-internal successors.

**Family transgenerational control intention**

We further suggest that the family’s wish for transgenerational control over the firm increases discount expectations of the successor. Transgenerational control over the firm occurs only when a next-generation family member assumes control of the firm. Thus, a next-generation family member should be considered a highly legitimate successor who is entitled to a significant family discount.

In establishing this positive conceptual link between family transgenerational control intention and successors’ discount expectations, we rely on the self-interested human desire for legacy creation (Wade-Benzoni, 2006), which signals a strong wish within the family, in particular, of parents, for generativity (Fairclough & Micelotta, 2013; Friedland & Alford, 1991; Miller et al., 2011). Generativity is the human instinct that produces a desire for symbolic immortality (McAdams & de St Aubin, 1992), which individuals achieve by creating a self-defining legacy to be passed on to succeeding generations (Becker, 1997; McAdams & de St Aubin, 1992). Given that generativity and symbolic immortality are basic human desires (Wade-Benzoni, 2006), scholars argue that family business owners tend to place great emphasis on intrafamily succession to ensure that the family firm continues to exist after their exit (Dehlen et
Creating a personal legacy via the family firm enables business owners to live on through their children (Greenberg et al., 1997). Indeed, family business researchers find strong evidence that the wish for transgenerational control is often of crucial importance to business owners, as it increases the owner’s subjective valuation of the firm when selling outside the family (Zellweger et al., 2012), drives owner emphasis on family-centered nonfinancial goals (Chrisman et al., 2012), and even distinguishes family from nonfamily firms (e.g. Chua et al., 1999; Churchill & Hatten, 1997).

We suggest that family transgenerational control intentions increase discount expectations of the successor because they reflect parents’ self-interested motive for generativity. High levels of transgenerational control intention of the owning family signal to successors that parents’ self-interest is to create their legacy by transferring the firm to a child. Thus, the next-generation successor feels particularly legitimized to assume control and entitled to a significant discount.

H2: The family’s transgenerational control intention is positively related to family discount expectations of potential family-internal successors.

Successors’ fear of failure

We suggest that successors’ fear of failure in managing the firm is negatively related to discount expectations. Fear of failure reflects a perceived lack of skills and capabilities in being a successful entrepreneur and running an entrepreneurial firm (e.g., Chen et al., 1998). Successors who are afraid of assuming control fear that they will be unable to successfully run the family firm (De Massis et al., 2014). Not only may entrepreneurial skills be imperfectly inherited (Bertrand et al., 2008), but assuming control from parents often represents a gift with strings attached; that is, the implicit expectation that the successor will reciprocate the favor of being the heir apparent and successfully continue the parents’ legacy (i.e., the firm) (Kohli & Kuenemund,
For successors who are afraid of failing to manage the family firm the specter of failure thus implies the inability to reciprocate parental support.

The norm of reciprocity constitutes a central aspect of human interactions and describes the fact that “we owe others certain things because of what they have previously done for us” (Gouldner, 1960, p.171). Within the context of intergenerational transfers, reciprocity is considered to be of particular importance (e.g., Janjuha-Jivraj & Spence, 2009; Karra et al., 2006; Kellermanns & Eddleston, 2004). The prior generation expects reciprocity from the next generation via ensuring the prosperous continuation of their legacy, which ultimately enhances their own status in society (Janjuha-Jivraj & Spence, 2009). Therefore, the ability to reciprocate parental support by ensuring transgenerational success of the company is an important selection criteria for choosing the appropriate successor (Janjuha-Jivraj & Spence, 2009). Fear of failure to successfully run the family firm thus constitutes an important stimulus that focuses attention on filial reciprocity because it directly reflects successors’ ability to meet and reciprocate parents’ expectations. When fear of failure is low, the successor should feel particularly legitimized to assume control. This should result in higher discount expectations, because the successor will more likely be able to reciprocate parental support. When fear of failure is high, however, young generation family members are likely to be aware that, under the norm of filial reciprocity, they are neither preferred nor legitimate successors, which reduces their discount expectations.

H3: Potential family-internal successors’ fear of failure associated with running the family firm is negatively related to their family discount expectations.

Family equity stake in the firm

We suggest that the higher family equity stake in the firm, that is, the more strongly family wealth is tied to the firm, the lower should be discount expectations. An undiversified wealth position of parents, most often represented by a high equity stake in the firm (Anderson & Reeb,
2003; Villalonga & Amit, 2006), means that a high discount engenders lower financial compensation of parents for transferring the firm, which has a strong negative impact on parents’ financial well-being, post succession. Thus, a high family equity stake not only signals high levels of control in the hands of parents but should also act as stimulus for the norm of filial duty in the transfer of control across generations, in particular amongst small private firm owners.

Filial duty, also known as filial piety (e.g., Hwang, 1999) or filial responsibility (e.g., Matthews & Rosner, 1988), defines the social role adult children adopt with respect to their aging parents (Gans & Silverstein, 2006). Research on intergenerational relationships highlights that children are confronted with the normative obligation to support their parents and ensure their happiness in later life (Gans & Silverstein, 2006). According to the norm of filial duty, adult children are morally obliged to make sacrifices to ensure their parents’ well-being (Daatland & Herlofson, 2003; Lee et al., 1998). In consequence, the norm of filial duty runs counter to the expectation of a family discount, which would reduce parents’ prosperity.

Researchers have argued that the norm of filial duty is more strongly converted into support if the (financial) needs of parents are high (Gans & Silverstein, 2006). When parents’ wealth is tied up in the family firm, it exposes parents to a compensation risk upon transferring control of the firm. Successors, then, should lower their discount expectations because a high discount runs counter to the norm of filial duty.

H4: The family’s equity stake in the firm is negatively related to family discount expectations of potential family-internal successors.

Moderating effects of the accessibility of the market logic

While the family logic should be highly accessible to potential successors as part of the owning family, we suggest that the accessibility of the market logic should, in part, depend on formal education (DiMaggio & Powell, 1983). The institutional logics literature rests on the
assumption that prior education defines the individual’s attitude toward and embeddedness in a given logic (Bourdieu, 1990; DiMaggio & Powell, 1983; Pache & Santos, 2013). According to DiMaggio and Powell (1983), formal higher education—next to professional networks, which are generally less relevant to young next-generation family members—is the most important source of logic accessibility and, ultimately, legitimacy. These authors write: “Universities and professional training institutions […] create a pool of almost interchangeable individuals who occupy similar positions across a range of organizations and possess a similarity of orientation and disposition that may override variations in tradition and control that might otherwise shape organizational behavior” (p. 152). Education provides access to templates of legitimate behavior and focuses attention on the norms inherent in the logic propagated by education (DiMaggio & Powell, 1983; Pache & Santos, 2013), thereby thrusting aside previously experienced, more traditional perceptions of legitimacy (DiMaggio & Powell, 1983). Through higher education in business or economics, the market logic becomes more accessible to potential successors (Pache & Santos, 2013), who then learn the paradigms of individual wealth maximization and isomorphic management thinking that promulgates independent, market-oriented, and rent-seeking strategizing.

Following Di Maggio and Powell (1983), we thus suggest that higher business or economics education partly overrides the more traditional sense making tied to the family logic and that successors will attend less strongly to family logic situational stimuli. For instance, family cohesiveness and transgenerational control intention are irrelevant in the market logic (Almandoz, 2012). Scholars have found that incumbent owners with high degrees of (business) education are less likely to employ family members for altruistic reasons and are more focused on financial aspirations (DeTienne & Cardon, 2012; Klyver, 2007). The familial social norms of parental altruism and legacy building should thus be less salient for sense making in case the
actor is trained in business or economics. More formally stated, we thus expect that family cohesion (H1) and family transgenerational control intention (H2) lose effectiveness as situational stimuli when successors possess business or economics education.

In a similar vein, fear of failure is likely to have less impact on discount expectations if the successor studies business or economics. Children’s obligation to reciprocate parental support by successfully continuing their parents’ legacy (H3) rests on the assumption that actors’ relationships are interdependent; however, successors adhering to the market logic assume that actors are independent (Almandoz, 2012; Friedman, 1970). The buyer does not have any reciprocity duties other than paying the agreed-upon price. Successors focusing on the market logic expect incumbent owners to demand a price that reflects the market value of the ownership stake. Personal financial circumstances of parents (i.e., the seller) that are relevant in the family logic and that engender a lower family discount, given the norm of filial duty (H4), are irrelevant to determine transaction prices in the market for corporate control. Under the market logic, prices reflect the current value of the future revenue streams from the business, and should thus be independent of personal ties between buyer and seller. Accordingly, we predict that higher education in business or economics reduces the impact of family equity stake on successors’ discount expectations.

H5a: Higher education in business or economics of the potential family-internal successor weakens the positive link between family cohesion and family discount expectations.

H5b: Higher education in business or economics of the potential family-internal successor weakens the positive link between transgenerational intention and family discount expectations.

H5c: Higher education in business or economics of the potential family-internal successor weakens the negative link between fear of failure and family discount expectations.

H5d: Higher education in business or economics of the potential family-internal successor weakens the negative link between family equity stake and family discount expectations.

METHOD
Sample and statistical procedure

We used the 2011 GUESSS dataset, which contains a large number of potential family firm successors, to conduct our analysis.\(^1\) Data was collected with an online survey administered to students in about 500 universities in 26 countries between March and July 2011,\(^2\) resulting in 93,265 responses. To limit our investigation to intergenerational family firm ownership transfers, we included only respondents who answered the question, “Are your parents currently self-employed or do they have a majority ownership in a company?” with either “Yes, father,”; “Yes, mother,”; or “Yes, father and mother” (N=28,105). Detailed questions about succession were posed only to students who indicated that they had been thinking “repeatedly” about taking over their parents’ firm (students answering “never” or “sketchily” did not receive extra questions) to ensure that respondents answered the questions with adequate care and knowledge (cf. Thompson, 2009). This reduced the sample to 6,366 respondents. We excluded 207 students who already took over the majority of shares of their parents’ business and included only respondents who answered all necessary survey items and who came from a country where our country-level control variables were available. The final dataset consists of 3,293 responses of potential successors from 16 countries: Argentina, Austria, Brazil, England, Finland, France, Germany, Hungary, Japan, Mexico, Netherlands, Portugal, Russia, Singapore, South Africa, and Switzerland.

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\(^1\) The GUESSS project investigates career choice intentions of students across the globe. See www.guesssurvey.org. For other studies using GUESSS data and the administration procedure of the survey, see Zellweger, Sieger, and Halter (2011), Laspita, Breugst, Heblich, and Patzelt (2012), and Lima, Lopes, Nassif, and Silva (2014).

\(^2\) Start and end dates differed considerably between countries and between universities within countries. Start dates were between March and May 2011, and end dates were between April and July 2011. Students could win iPads, travel vouchers, or other items in raffles. GUESSS reports indicate a response rate of 6.3% (Sieger et al., 2011), which compares favorably to previous GUESSS editions (Fueglistaller et al., 2009) and other e-mail student surveys (Porter & Whitcomb, 2003). This, however, is very likely to be an underestimation. Not all universities may have invited all of their students, and student e-mail accounts may not always be used regularly. Given the uniqueness of the sample (size and scope), we believe that the benefits of using GUESSS data more than outweigh its potential disadvantages.
To test for item nonresponse bias, we applied Heckman’s (2005) sample selection technique. We first estimated a probit model with all our control variables where the dependent variable indicates whether respondents answered the family discount question. Using the predicted values of the probit model, we then calculated the Inverse Mills Ratio (IMR) and entered it in our regression models (Berk, 1983). This variable was not significant (p>0.5) and did not change our results.3

Given the nature of our dependent variable and the characteristics of our sample, we applied OLS regression while adding multiple country-level control variables to account for potential differences across countries. Even though our data is clustered on the country level, which prevents us from controlling for shared errors among respondents from the same country, we did not use multilevel models, mainly because the variance explained by country-level factors in our sample is below 5% and we did not hypothesize country-level effects.

Measures

**Dependent variable.** To measure expected family discount we asked respondents: “Assume that a family-external buyer would have to pay an amount of 100 for the family firm’s total equity. How much would you have to pay?” Framing the question in this way has several advantages. First, it does not imply that a discount is desirable or expected, as it does not ask for a discount expectation but for a transfer price expectation compared to a reference category. Second, using “family-external” as a reference category captures the price differential based on family membership, which is essential for our study. Third, the question refers to a general amount (100), not to a particular currency, which ensures comparability of answers across countries. Fourth, using “the family firm’s total equity” ensures that all respondents referenced

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3 We did not test for nonresponse bias by comparing data from early and late respondents, which is based on the assumption that late respondents are more similar to nonrespondents than are early respondents (Oppenheim, 1966). Due to the data collection procedure at GUESSS, identifying early and late respondents reliably is, unfortunately, not possible.
the same object and excludes valuation biases due to differences in the actual ownership stake held by parents. To identify expected family discount, we deducted all answers from 100; results range from 0 to 100 percent.

**Independent variables.** For family cohesion (H1), the strength of bonding among family members, we used four items from the FACES III scale (cf. Olson, 1986; 1991): “Family togetherness is important,” “Family members feel very close,” “When family gets together, everyone is present,” and “Family members ask each other for help.” Answers range from 1 (strongly disagree) to 7 (strongly agree). Cronbach’s Alpha reaches 0.83. Principal component analysis reveals that the items load on one component only, with high loadings between 0.76 and 0.89 (p<0.001) (cf. Hinkin, 1995). For transgenerational control intention (H2), we used two items based on family business studies that explore two central features of transgenerational control (Chrisman et al., 2004; Chua et al., 1999; Zellweger et al., 2012): the importance of tradition and history and the long-term goal of controlling the firm. The items are: “Tradition and history play a very important role in our family business” and “We have the overarching goal of keeping the firm in the family’s hands in the long term.” Answers range from 1 (strongly disagree) to 7 (strongly agree). The Pearson correlation is 0.605 (p<0.01). For successors’ fear of failure (H3), we used a three-item scale to capture fear of not being able to successfully manage the family firm in the future (e.g., Chen et al., 1998; Langowitz & Minniti, 2007; Shinnar et al., 2012). Respondents indicated (1=not at all; 7=very much) whether “having the necessary entrepreneurial skills and capabilities” and “having relevant technical know-how” represent barriers to becoming a successor and whether they experience “fear of failure” about assuming control. Cronbach’s Alpha is 0.82. All items load on one component only, with significant loadings between 0.78 and 0.91 (p<0.001). For family equity stake (H4) (i.e., undiversified family
wealth) (Anderson & Reeb, 2003), we asked respondents: “What is the percentage of equity that is in the hands of your family?”

**Moderator variable.** To capture if respondents are receiving higher education in business or economics (HEBE), we constructed a dummy variable coded “1” if students are studying in one of these two fields and “0” otherwise. For the interaction terms, we multiplied the standardized values of the independent variables by the moderator variable.

**Control variables.** We included additional individual-, firm-, and country-level variables that might affect family discount expectations. On the individual level, we follow previous succession studies that highlight the importance of age (Stavrou, 1999), gender (Schroeder & Schmitt-Rodermund, 2013), and birth order (Goldberg & Wooldridge, 2004). Our gender variable is coded “0” for male and “1” for female; for birth order, we controlled for the number of older siblings. Because accessibility of logics should advance along with level of education (Kim et al., 2006), we added a dummy variable for study level ( “1” if the respondent was at the undergraduate level; “0” if on other levels). We included an entrepreneurship education dummy (“0” if students have not attended any entrepreneurship-related class; “1” if they have), which may constitute a further source of bias (cf. Souitaris et al., 2007).

On the firm level, we controlled for performance of the family firm, as performance may make certain norms more or less salient. For instance, when the firm is performing well, the relevance of filial duty may be lower, as the necessity for children to ensure parents’ financial well-being is lower. We included a performance measure where respondents rated firm performance compared to competitors (1=much worse; 7=much better) over the last three years.

Unfortunately, the number of total siblings is not available. However, we have no reason to believe that our respondents are systematically early or late born; hence, the number of older siblings should serve as a reasonable proxy. This is confirmed by an out-of-sample-test with GUESSS data from 2014 where we find a high correlation between those two variables (coefficient = 0.583, p<0.01). Number of older siblings may be even more appropriate for our purposes. For instance, in a family with five children, both the oldest and the youngest child have four siblings. However, the eldest child (zero older siblings) may experience an uncontested opportunity or pressure to take over; for the youngest child (four elder siblings), in contrast, the succession option is likely to be seized or has already been seized by the elder siblings.
based on four dimensions: relative growth in sales, market share, profit, and job creation (adapted from Dess & Robinson, 1984; Eddleston et al., 2008). Cronbach’s Alpha is 0.91. Item loadings range from 0.78 to 0.93 (p<0.001). Next to performance, *firm size* (Lee, 2006) and *industry sector* (e.g., in terms of competitiveness; see Cucculelli & Micucci, 2008) may affect family discount expectations. We included *number of employees* (full time equivalents) to account for size and two dummy variables that indicate two well-represented industry sectors in our sample, *construction* and *services* (“1” if the firm is active in the sector; “0” if not).

The family’s long-term involvement in the business is a key characteristic of family firms (Chua et al., 1999), which may render the family logic more salient. We controlled for the number of years that the firm has been owned by the family (*ownership duration*), if the **CEO is a family member** (“0” if yes; “1” if no) (see also Astrachan et al., 2002), and the respondent’s *personal equity share* (%) in the firm, as the latter might affect perceptions about legitimate transfer prices. We considered if the respondent has ever *worked in his or her parents’ firm* (“0” for yes; “1” for no), as this indicates knowledge of the firm’s inner workings and may stimulate the prevalence of certain norms. We included one item that measures perceived *knowledge and insight* into the firm’s financial performance. Respondents indicated their level of agreement with the statement, “I have a good insight into the family firm’s (financial) performance” (1=strongly disagree; 7=strongly agree). To account for emotional attachment to the firm that may affect price estimates (Zellweger & Astrachan, 2008), we included the respondent’s *affective commitment* to the firm via a three-item scale based on Allen and Meyer (1990). Cronbach’s Alpha reaches 0.88; all item loadings are significant (p<0.001), ranging from 0.86 to 0.92. Finally, we assessed the degree to which assuming control of the firm is feasible and not a purely hypothetical scenario (*feasibility of succession*) by asking for respondents’ extent of agreement (1=strongly disagree; 7=strongly agree) to the statement, “In principle, and aside from my personal preferences and
obstacles/barriers, I could join the company if I wanted to do so.” Given the size of the firms we studied (mean firm size: 30.3 employees) and given the context in which the related question was asked in the survey, the possibility to join should have been understood by the respondents as the possibility to take over the firm.

At the country level, we controlled for nation wealth (Wennekers et al., 2005) via gross domestic product per capita (GDPPC), retrieved from the International Monetary Fund (IMF). Because in wealthier countries it tends to be easier to accumulate wealth, in part because of more advanced social security systems, parents can afford to be more generous when transferring the firm to children as they are less dependent on the proceeds. Using data from the GLOBE project (House et al., 2004), we controlled for three cultural dimensions: performance orientation (which might favor business logic), group collectivism (which might favor family logic), and power distance (as the acceptance of others’ power, authority, and privileges might lead to lower family discount expectations) (cp. Laspita et al., 2012; Mueller & Thomas, 2001). Because tax regulations may bias family discount expectations (KPMG, 2014), we included testamentary freedom per country (Ellul et al., 2010), representing to what extent parents are free to bequeath wealth unevenly to children (thus giving a discount to one child). Inheritance tax may lead potential successors to expect higher discounts, which may lower the tax burden for the family. We included a dummy variable indicating if inheritance tax exists (“1” if yes; “0” if no). As shown in Table 1, respondents expect a family discount of 57.1%, on average.

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Insert Table 1 here
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5Information was retrieved from the “International Estate and Inheritance Tax Guide 2012” from EY (see http://www.ey.com/Publication/vwLUAssets/International_Estate_and_Inheritance_Tax_Guide/$FILE/International_Estate_and_Inheritance_Tax_Guide.pdf) and from KPMG publications (see http://www.kpmg.com/global/en/issuesandinsights/). We hoped to capture the inheritance tax issue in more detail; however, our review shows that inheritance taxes are highly heterogeneous, not only across countries, but also across individual succession cases. The applied inheritance tax rate and the tax-exempt amounts largely depend on a company's legal form, the presence of real estate property involved in the transfer, and other characteristics. We thus refrained from estimating average inheritance tax rates per country.
Tests for validity

To test whether our measures are empirically distinguishable, we applied Harman’s single-factor test (1967) as a first step (see Podsakoff & Organ, 1986). Entering all study variables into an exploratory factor analysis led to an 11-factor solution accounting for 59.55% of total variance. The largest factor accounted for 13.53% of total variance. An exploratory factor analysis with our multi-item independent variables revealed that all items uniquely load on their respective factors (factor loadings >0.71). We conducted a confirmatory factor analysis with our independent variables (Podsakoff et al., 2003). The corresponding structure fits the data well ($\chi^2(30)=307.321, \text{RMSEA}=0.046, \text{CFI}=.981$). The fit of a one-factor structure is significantly worse ($\chi^2(37)=7733.519, \text{RMSEA}=0.219, \text{CFI}=0.485$) and different ($\chi^2=7426.198, df=7, p<0.001$) from the proposed factor structure. Hence, our variables are empirically distinguishable, which provides initial evidence that common method bias should not be a serious concern.

We analyzed our data with the common latent factor (CLF) approach (Podsakoff et al., 2003), allowing items of our independent variables to load both on their theoretical constructs and on an uncorrelated common factor. Adding this factor did not significantly improve model fit, all original factor loadings remained significant. The potential presence of common method bias is further mitigated because we used a wide set of control variables and multiple independent variables that are only moderately correlated (Siemsen et al., 2010). Also, Siemsen et al. (2010) have shown that common method bias usually deflates nonlinear effects. We infer that finding significant interaction effects signals that common method bias should not be a serious concern.

To mitigate social desirability concerns, respondents were assured strict confidentiality, which reduces the tendency to provide socially desirable answers (Podsakoff et al., 2003). We used $z$-standardized variables and found that the Variance Inflation Factors of our independent variables do not exceed 2.109. Thus, multicollinearity should not be a major concern.
We assessed power needs with a power analysis (Cohen, 1988), comparing the full model (including interaction terms, Model 4) to a model with main effects only (Model 3, Comparison A). We also compared the model with our four main independent variables (Model 2) to a model with control variables only (Model 1, Comparison B). For Comparison A at the power level of 0.95, the required sample size is $N=3,168$; for Comparison B at a power level of 0.95, the required sample size is $N=2,574$. Both numbers are below our actual sample size of $N=3,293$, indicating sufficient statistical power to estimate the proposed relationships.

We tested for potential endogeneity by applying the commonly used Heckman two-step procedure with multiple instrumental variables (cf. Baum et al., 2007; Heckman, 1976). For each of our four independent variables, we identified several variables that are related to the potential endogenous variable(s) and not to the dependent variable or to the error term in the regression; thus, they qualify as instrumental variables (Kennedy, 2008). Examples include human capital support available from parents if the child creates a new firm (family cohesion), the “future orientation” dimension from GLOBE (transgenerational control intention), years of study (fear of failure), and parents’ equity share in a potential start-up of the child (family equity stake). We used those instrumental variables to compute the estimated values of the four independent variables. The estimated values were then used to run separate regressions for the dependent variable (expected family discount). For all four independent variables we find that endogeneity is not a concern, as both the Wu-Hausman F test and the Durbin-Wu-Hausman chi-square test are nonsignificant (the smallest p-value is 0.25 for transgenerational control intention).

**RESULTS**

Table 2 shows the results of our regression analysis. Model 1 includes the control variables only. In Model 2 we add our independent variables. Family cohesion is positively and
significantly related to family discount ($\beta=1.691$, $p=0.018$), which confirms H1. H2 is not supported, as transgenerational control is not significantly related to family discount ($\beta=0.145$, $p=0.883$). Fear of failure is negatively and significantly related to family discount ($\beta=-1.595$, $p=0.023$), which supports H3. The amount of equity that the family holds in the firm is negatively and significantly related to family discount ($\beta=-3.940$, $p<0.001$), supporting H4. Comparing Model 1 and Model 2 reveals that the addition of our independent variables increases $R^2$ significantly ($p<0.001$). In Model 3, we added the HEBE moderator as an additional independent variable, which fails to reach significance ($\beta=-0.399$, $p=0.493$). In Model 4, we added the four interaction terms. As hypothesized, the HEBE * family cohesion interaction term is negative and significant ($\beta=-1.353$, $p=0.036$), which confirms H5a. H5b finds no support, as the HEBE * transgenerational control interaction is not significant ($\beta=0.480$, $p=0.474$). Hypotheses H5c and H5d are supported, as the HEBE * fear of failure ($\beta=1.272$, $p=0.032$) and the HEBE * family equity stake interactions ($\beta=2.561$, $p<0.01$) are significant. Adding the interaction terms significantly increased $R^2$ ($p<0.01$).

To facilitate interpretation of our significant interactions, we plotted them in Figures 1, 2, and 3. Figure 1 shows that the relationship between family cohesion and expected family discount is generally positive but weaker (less positive) when HEBE exists, which offers additional support for H1 and H5a. Figure 2 shows that fear of failure and expected family discount are negatively related. The relationship is weaker (less negative) when HEBE exists, which corresponds to H3 and H5c. Following the same logic, Figure 3 illustrates that HEBE weakens the negative link between family equity stake and expected family discount, which lends further support to H4 and H5d.

Insert Table 2 and Figures 1-3 here
Robustness tests

As the distribution of our dependent variable shows fat tails at both extremes, we calculated a separate generalized linear model (GLM). Results are identical for the main variables and the interaction terms, both in significance levels and directions. We performed two additional tests to evaluate whether the indicated discount expectations represent wishful thinking or realistic estimations of respondents. The GUESSS data set contains complete answers from 128 respondents who indicated that they had already assumed control of their parents’ firm. They were asked: “Assume that a family-external buyer would have had to pay an amount of 100 for the family firm’s total equity. How much did you have to pay?” As with our dependent variable, we deducted the numbers from 100 to represent the family discount that was actually given. The average of 55% (standard deviation [SD]=36.94) is very similar to the mean discount in the sample for the main analysis (57.1%, SD=36.31).

We also performed an out-of-sample check with data from a separate research project in Germany. In that database, which contained 561 family firm owners who had already assumed control of their parents’ firm, respondents indicated they had received a family discount of 59.9% (SD=39.9), which is not significantly different from the expected discounts we found for Germany in our main sample (59.1%; p=0.764). We also note that 64% of respondents have already been working in their parents’ firm (10 hours per week [median]) for two years [median]). Hence, they should have good insights into relevant aspects of the firm, which is further supported by their claim that they possess reliable knowledge of the firm’s financial condition (mean=5.14 on a scale from 1 to 7; SD=1.67). This supports the credibility of their
answers in general; thus, we regard our respondents as reliable key informants (Kumar et al., 1993).⁶

We conducted a robustness check with a subsample of respondents where only one parent owned a family firm (N=1'972). For the main effects, we found almost identical results; only fear of failure was no longer significant (p=0.179). Although in the right direction, two of our interaction effects (family cohesion * HEBE and fear of failure * HEBE) failed to remain significant (p>0.05). Thus, while the underlying pattern is broadly consistent, results do not fully hold, possibly because the family logic and the norms that it entails are particularly prevalent if both parents are family firm owners.

We assessed effect sizes in our models. The change in R² is close to (Model 2 versus Model 1) or smaller than (Model 4 versus Model 3) the often-used threshold for practical significance of 1%, a likely result because interaction terms, which we added in Model 4, often have small effect sizes (cf. Barkema & Schijven, 2008; Laspita et al., 2012). We assessed odds ratios as indicators of effect size (cf. Autio et al., 2013) by performing a median split with our dependent variable (median = 60) and logistic regressions. The odds ratios for our significant relationships range between 0.875 and 1.156 (closest to 1 is 1.064),⁷ which are acceptable values compared to other recent studies (cf. Barkema & Schijven, 2008; Norman et al., 2013). We calculated f² (Cohens’ f squared) for all our significant relationships; the range is 0.001 to 0.003. While this is admittedly small, it is acceptable compared to a recent meta analysis (cf. Aguinis et al., 2005) and other recent studies (e.g., Laspita et al., 2012). In general, small effect sizes can have substantial theoretical and practical value (cf. Aguinis et al., 2005). Even a trivial increase in our

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⁶ It is not our intent to explore the accuracy of value estimates, even though the estimates seem to match actual family discounts rather well. The main goal of our paper is to investigate the cognitive processes of actors who deal with various norms that are part of the family logic and how these norms are impacted by the presence of a largely competing logic, i.e., the market logic.

⁷ Odds ratios greater than 1 indicate a positive association between variables, and odds ratios of less than 1 indicate a negative association.
independent variables translates into significant monetary values that are reflected in the family discount variable.

**DISCUSSION**

We explored the price discounts that next-generation family members expect to receive in comparison to nonfamily buyers when assuming control of their parents’ private family firm. Familial cohesion increases discount expectations, while successors’ fear of failure and family equity stake reduce discount expectations. We theorized that these situational stimuli impact discount expectations as they focus attention on different social norms within the family logic, notably parental altruism, filial reciprocity, and filial duty. Our argument that successors to whom the market logic is highly accessible through education in business or economics are less likely to attend to the stimuli associated with family norms is supported.

Our study adds to entrepreneurial exit and succession literatures (Dehlen et al., 2014; DeTienne & Chirico, 2013; Kammerlander, 2014; Wennberg et al., 2011) by shedding more light on the relationship between family norms and financial implications of the family-internal exit route. Although widely overlooked in the succession literature, this topic constitutes an important part of succession planning (Eddleston et al., 2013; Handler, 1989; Sharma et al., 2003; Ward, 1988) and is a crucial determinant of family firm survival (Le Breton-Miller et al., 2004). Allowing for family discounts is equivalent to a cost of equity capital subsidy at later-generation family firms, with supposedly important consequences for investment patterns and strategic preferences. Our research also extends literature on owner transgenerational control intention (Zellweger et al., 2013) by exploring how this socioemotional wealth dimension affects the financial implications of a family internal transfer of control, thus complementing Zellweger et al.’s (2012) work on family-external transfer prices.
Beyond the entrepreneurship and family business context, we speak to Graebner and Eisenhardt (2004), who explored the interdependent relationships between buyers and sellers and who were the first to depict change in corporate control as a social exchange. Following their argument that courtship between acquirer and seller biases corporate control transactions and related prices, we suggest that for children and parents as buyers and sellers, legitimacy concerns rooted in familial exchange norms bias perceptions about appropriate prices. We provide a nuanced perspective about price formation in this social exchange (Beckert, 2011), where actors are embedded in ongoing personal relationships (Granovetter & Swedberg, 2001), adhere to social norms (MacKenzie & Millo, 2003), and build price expectations according to what they consider just and legitimate (DiMaggio & Powell, 1983; Durkheim, 1947).

We contribute to institutional logics literature, in particular to the microfoundations of institutional logics (Friedland & Alford, 1991; Thornton et al., 2012), by exploring the multidimensionality of the family logic, which is an important addition to management scholarship that tends to equate it with norms of altruism, loyalty, and paternalism (Greenwood et al., 2010; Miller et al., 2011; Thornton et al., 2012). Drawing from family sociology, however, it becomes evident that there is more richness built into the family logic, which challenges the many attempts to treat this logic as a monolithic way of sense making. Although norms of reciprocity and filial duty play a role in family relationships (Bengtson, 1993; Kohli & Kuenemund, 2003), they have been overlooked within the institutional logics literature. Our study shows that the various family norms entail contradictory indications of what constitutes a legitimate family discount and highlights an important but, so far, underinvestigated form of institutional complexity (see Greenwood et al., 2011 for a review). It also lends empirical support to arguments about the powerful role of education in determining accessibility of certain logics (DiMaggio & Powell, 1983; Pache & Santos, 2013; Thornton et al., 2012). We contribute to
competing logics literature (see Greenwood et al., 2011 for a review) by showing that familial legitimacy considerations have less impact on price expectations if successors are trained in business or economics.

**Limitations and future research**

Because we study price expectations and not actual transfer prices, price determination in intrafamily transfers of corporate ownership may be more complex. Intervening factors include family constellation and negotiating power of actors. Our theorizing, however, explores sense making among potential successors and not actual results from a familial negotiation. This study focuses on microfoundations, which calls for individual-level data collected at the source and from successors with a family business background who have reasonable insight into their parents’ firm. We achieved this goal with the database at hand. In addition, a prospective view, which our successors apply when indicating price estimates, avoids the survivor bias of retrospective studies and is not uncommon in company valuation that often draws from future cash flow scenarios (cp. Carter et al., 2003). Robustness checks show that actual realized discounts, both in the GUESSS sample and in an independent sample, are highly similar to the expected discounts that we found.

Transgenerational control is an important concern of entrepreneurial parents (Dehlen et al., 2014) who desire that a child assumes control of the business. Although this gives children and their deliberations about an appropriate price a high level of legitimacy, replicating our study with realized transfers holds further promise. Because our focus on the buyer does not shed light on the sense making of incumbent owners, scholars could apply our framework to explore sellers’ sense making. Our study may not apply equally to transfers at the same generational level and among more or less distant relatives. Because interdependence abounds in other constellations,
such as work teams, joint ventures, and, more broadly, in agreements and transactions where parties interact over multiple rounds and across various domains, scholars could investigate in what ways interdependence alters the financial characteristics of such transactions.

We used survey data, which raises some concerns about the reliability of inferences; therefore, we addressed nonresponse, social desirability, and common method biases. Even though our analysis is unable to completely rule out common method bias, the limitations of our empirical approach have to be weighed against the opportunity to study institutional microprocesses with a large-scale quantitative study (Thornton et al., 2012). Although our adjusted $R^2$-values might appear low, there is an inconclusive debate on appropriate levels of effect sizes (cf. Ferguson, 2009; Hair et al., 2010; Lattin et al., 2003). Our $R^2$-values, however, are in the same range or higher than those reported in recent studies that use larger (e.g., Lee et al., 2011) or smaller (e.g., Grichnik et al., 2014) samples. Most importantly, even a trivial increase in our independent variables translates into significant monetary values that are reflected in family discounts, which suggests that our results indeed matter. Nevertheless, we note that the amount of variance in family discounts explained by the studied variables suggests that many other factors besides the ones tested in the present study explain family discounts.

Our data is cross-sectional, which prevents us from drawing valid conclusions on causality. Given our in-depth theoretical reasoning, however, we believe that causality likely exists in the expected direction. Potential endogeneity concerns are mitigated because, theoretically, our key variables are likely exogenous to family discount expectations; empirically, our tests show that endogeneity is not a major issue. Although better measures may capture the four familial norms, such measures were unavailable. We acknowledge that business or economics education may not be able to capture all the nuances of the market logic, such as negotiations in a transaction. Even though we would have liked to measure family norms and the market logic directly, capturing
logics via stimuli and sources of logic accessibility is theoretically sound and at the same time a challenge for the institutional logics perspective (Thornton et al., 2012).

We directed questions to successors, which may be an issue when trying to capture parental altruism and parental desire for legacy creation. Given the deep embeddedness of family successors, however, our respondents should have strong insights into family cohesion and the intention of parents to transfer the firm to a child. We have no reason to believe that parents would assess family cohesion and transgenerational control intention to a systematically different degree. Also, it appears plausible that the positive effect between family cohesion and discount would also hold if questions had been directed to parents.

Our results suggest further study of control variables that emerged as significant (e.g., age effects). Because female successors consistently expect a higher family discount, further research seems warranted applying gender theories. Most of our country-level control variables are significant. For instance, family discount is higher in wealthier nations where parents seem to be able to afford lower transaction prices. If a country’s tax regime allows parents to bequeath wealth unevenly to children, expected discounts are higher. Also, inheritance tax is positively related to family discount as lower transaction prices will reduce the tax burden. Finally, because discounts translate into cost of equity capital subsidies, family discounts may create incentives to take less efficient allocation decisions for that capital, an area ripe for future research.

**Practical implications**

The topic of our study holds wide practical relevance because many family firms throughout the world are transferred from one generation to the next. Opening up the black box of intergenerational transfer pricing for family business ownership should help incumbent entrepreneurs and their successors take apart the complex deliberations at play, facilitate discussions, and ultimately determine appropriate transfer prices. Complexity emerges not
primarily from technical challenges tied to valuation but from the interdependent relationship of parent and child as seller and buyer. The family internal market of corporate control is an intimate one, where the norms of family rule and the laws of the market are partly suspended. Understanding the inner workings of the family logic and how familial norms affect legitimacy perceptions about transaction prices may help reduce family conflicts in the succession context.

CONCLUSION

By illuminating family discount expectations related to private family firm ownership transfers, we open the black box of how the family logic guides intergenerational transfers of organizational ownership. Exploring how individuals attend and respond to family norms and how the market logic impacts this process holds wide theoretical and practical relevance in light of the prevalence of private family firms and family internal succession around the globe.
REFERENCES


Heckman, J. J. (1976). The common structure of statistical models of truncation, sample selection and limited dependent variables and a simple estimator for such models (Vol. 5). Cambridge, MA: NBER.


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*Note. Standard errors in italics. Standardized variables were used. *p<0.05; **p<0.01; ***p<0.001*
FIGURE 1: Family Cohesion and Higher Education in Business or Economics (HEBE)

FIGURE 2: Fear of Failure and Higher Education in Business or Economics (HEBE)

FIGURE 3: Family Equity Stake and Higher Education in Business or Economics (HEBE)