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The Enigma of the Family Successor–Firm Performance Relationship: A Methodological Reflection and Reconciliation Attempt

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Abstract

Empirical studies examining firm performance following CEO succession in family firms predominantly document inferior performance of family successors. This evidence is at odds with general theoretical literature that attests a positive effect of family involvement inside the firm. To explore this enigma, we theoretically and empirically disentangle the influence of the CEO attribute *family member* (i.e., the CEO is affiliated to the family) on post-succession firm performance, from other, distinct CEO attributes (e.g., CEO-related human capital). Our analysis on the individual CEO level shows that after respective controls, the *family member attribute* is significantly positively related to post-succession firm performance.

Keywords

succession, family successor, firm performance, CEO characteristics, family firms

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> But whereas I said a moment ago that we have to follow in the steps of our fathers, let me make the following exceptions: first, we need not imitate their faults; second, we need not imitate certain other things, if our nature does not permit such imitation.
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> Cicero (44 BC*, Book I, XXXIII*, p. 121)

CEO succession is a critical event for any type of firm. The challenge linked to a shift in the firm's top position is greater in family firms where business considerations are often intertwined with family ones. Seminal quantitative literature on CEO succession and firm performance in the context of family firms provides strong evidence that firms controlled by family successors perform worse in the *post-succession phase* when compared to firms led by nonfamily successors (Chang & Shim, 2015; Pérez-González, 2006; Smith & Amoako-Adu, 1999). The literature invokes arguments including nepotism, discrimination, and contentment, as well as nonpecuniary or private benefit–driven agendas, with the conclusion that family successors have a "negative causal impact on firm performance" (Bennedsen, Nielsen, Pérez-González, & Wolfenzon, 2007, pp. 688–689). This evidence is in contrast to theoretical arguments in favor of intrafamily CEO succession, suggesting that having a family member as the next CEO has advantages in terms of long-term orientation (Miller & Breton-Miller, 2005), monitoring and disciplining (Fama & Jensen, 1983; Kandel & Lazear, 1992), stronger stewardship behavior (Davis, Schoorman, & Donaldson, 1997), mentoring (Cadieux, 2007), and knowledge transfer (Royer, Simons, Boyd, & Rafferty, 2008). Why do empirical findings contradict these theoretical predictions? Is family CEO involvement really detrimental to post-succession firm performance, or have prior empirical studies partially failed to disentangle the phenomenon by confusing the family affiliation of the CEO with other, distinct CEO attributes (e.g., CEO-related human capital [HC]) of family CEOs?

Disentangling this enigma is the main aim of this study. In fact, we offer a reconciliatory theoretical explanation of the abovementioned questions. By relying on social exchange perspective as an overarching framework that eclectically integrates nuances from agency and contest theory to enlighten the successor selection process (Blumentritt, Mathews, & Marchisio, 2013; Daspit, Holt, Chrisman, & Long, 2016; Villalonga & Amit, 2006), we develop a theoretical foundation for what a *family member attribute* in a CEO succession is (and what it is not), how its performance relation is sourced, and, in contrast to extant empirical literature, we posit it entails a positive post-succession performance relation. In particular, we define the family member attribute as the successor's affiliation with a family influencing the family firm such that, due to prior social exchange, it allows extended access to and the maintenance of family-specific social capital, knowledge, values, and identity while facilitating the intergenerational sustainability of the *essence* of the family firm. Further, we theorize that successor selection in family firms is different from natural (first best) selection, which affects the selected successor's other CEO attributes in a systematic manner. Consequently, we implement an empirical conceptualization that separates the family attribute's performance relation from important distinct CEO attributes affected by altered selection and identified by extant research as affecting the aptitude of social exchanges at the CEO level to drive firm performance.

Using a unique data set on CEO successions, we examine 804 CEO successions in nonpublicly traded medium-sized family firms and find considerable evidence for our theoretical argument. We employ a difference-in-difference approach by comparing post-succession developments in industry- and performance-adjusted (i.e., abnormal) profit margins (Barber & Lyon, 1996; Pérez-González, 2006).

Our article contributes to family firm CEO succession research in several ways. Firstly, our article informs our proposed extensions by providing evidence that a *family member attribute,* understood as a CEO attribute (Chrisman, Chua, & Sharma, 1998), entails a significantly positive relation with post-succession performance. Therefore, a family member attribute of the CEO serves *both* family-centered *and* financial goals: Intergenerational family control is sustained while it fosters performance. Thus, it has a limited "buffering function" for the trade-off between both goals during succession (Minichilli, Nordqvist, Corbetta, & Amore, 2014). Moreover, based on the social exchange theory (SET), we develop a framework that explicates the drivers underlying this positive performance relation: generalized exchange across family boundaries and generalized exchange within the family. This generalized exchange lens allows us to identify the *family member attribute* as a CEO-level characteristic that is purely the result of being part of the family versus not. That is, the *family member attribute* grants access to and fosters the stability of family-specific social capital (as the result of generalized exchange across family boundaries) and family-specific knowledge, values, identity, and vision (as the result of generalized exchange within the family). As such, it is of singular advantage to CEOs who are family members. Second, our theoretical lens responds to calls for a coherent discussion of an interdependent multiple-phase succession process (Daspit et al., 2016). It makes it easy to recognize that the frequently observed underperformance of family successors is economically mainly a consequence of a Type II agency problem (Demsetz, 1983; Villalonga & Amit, 2006) that occurs during the *selection phase*. The parting principal's pursuit of private and family-centered preferences often affects successor selection by imposing a deviation from natural (first best) selection (i.e., altering succession contest rules). This corrodes performance in the *post-succession phase*—a cost borne by minority owners and stakeholders who do not reap private or family-centered gains (Gedajlovic, Carney, Chrisman, & Kellermanns, 2012). Third, our evidence of the positive relationship between selecting a family CEO and post-succession firm performance, keeping all other attributes (e.g., general CEO-related HC, etc.) equal, implies that previous conclusions about the inferiority of family CEOs may have been misplaced. Indeed, it is fundamental to view the family member attribute separately from other distinct CEO attributes, for example, HC. This becomes most clear when reversing the argument: HC scholars will certainly agree that HC is not simply a family effect. All other attributes equal, the family successor is the superior successor.

Quantitative Empirical Evidence of Post-Succession Phase Performance of Family CEOs

There are only a small number of quantitative empirical studies that specifically and directly address the impact of family CEO successors on firm performance *in the post-succession phase*. These seminal studies (Bennedsen et al., 2007; Chang & Shim, 2015; Pérez-González, 2006; Smith & Amoako-Adu, 1999; Wennberg, Wiklund, Hellerstedt, & Nordqvist, 2011) all find that family successions have a negative impact on post-succession performance. This finding is often explained by favoritism and by the different goals and orientations of family heirs. But can we infer from this evidence that it is the *family member attribute* of the CEO that is detrimental to post-succession performance? To reach this conclusion, we must zoom in on the family successor coefficient at a more detailed level. All prior studies only observe *overall effects* captured by the coefficient of the family CEO successor variable. But to see the various forces resulting in this *overall effect*, more microlevel information on the CEO successors and their attributes, as well as an accordant theory, is required. In the following, we theorize on the setting leading to the negative *overall effect* (Section: Preferences, Altered Selection, and Systematically Affected Successor Attributes), reify several important (previously unseen) forces inside the *overall effect*,

and posit that the *family member attribute's* performance relation is positive (Section: Separating Forces on the Family Successor Coefficient in the Post-Succession Phase).

Theoretical Framework and Hypotheses Development

The overarching theoretical framework that serves as a cohesive theoretical structure for our study is SET (Blau, 1964). SET enables coherent theorizing in the dynamic multiphase (Breton-Miller, Miller, & Steier, 2004; Handler, 1990) and multilevel (Coleman, 1986) setting that a family firm succession process, that is, the transition of management and ownership to the next generation, represents. As an umbrella concept, SET facilitates a consistent discussion of relationships and structures that comprise and constrain a succession, while its breadth allows simultaneous incorporation of relationship- and resource-oriented *sister approaches* (Long & Chrisman, 2014), for example, agency theory and contest theory. SET posits that human interaction is crucially influenced by the exchange of social and material resources. It recognizes that repeated exchange creates social norms and structures that generate systemic constellations of expectations, obligations, and shared schemata (Coleman, 1986; Emerson, 1976; Granovetter, 1985). All exchange necessarily occurs within a relation (e.g., a family or professional relation), which influences the reciprocity of an exchange (i.e., the expected complimentary return; Meeker, 1971). Accordingly, SET differentiates between *generalized exchange* and *restricted exchange* (Ekeh, 1974). Fundamental to *restricted exchange* are norms of direct reciprocity, potentially based on market value, which are central to relationships that have a contractual, instrumental, or competitive contest-oriented character (Daspit et al., 2016). *Generalized exchange* operates under norms of indirect reciprocity, that is, no prompt or equal return is expected, observable in relationships based on friendship, kinship, or long-run partnerships where the relation is valued more than reciprocity (Long & Mathews, 2011). Here, the resulting obligations are extended from the individual to group affiliation (e.g., from family CEO to his or her family, including family heirs; Long & Chrisman, 2014). This *extended credit* relies on trust and makes relations cohesive and cooperative (Ekeh, 1974).

Preferences, Altered Selection, and Systematically Affected Successor Attributes

Past and present exchanges influence family business successions in the selection and the post-succession phase. To see this, we stylize the selection phase as a ruled signaling contest (Blumentritt et al., 2013; Lazear & Rosen, 1981; Ocasio, 1999; Rosen, 1986; Tsoulouhas, Knoeber, & Agrawal, 2006). We assume that the contest ruler (i.e., the primary decision maker) is often the parting principal who holds the controlling majority of votes. He or she can either operate a contest under *restricted exchange* and install the successor with the highest level of ability attributes signaled in the CEO labor market (Arrow, 1973; Spence, 1973, 1974) or follow subjective evaluation criteria guided by *generalized exchange* that includes preferences for family successors (e.g., family altruism; Daspit et al., 2016; Howorth & Ali, 2001; Meeker, 1971; Miller, Steier, & Breton-Miller 2003; Pérez-González, 2006; Simon, 1983, p. 57ff.).

Preferences for Family Successors Affecting Successor Selection. It is well known that many family patriarchs wish family heirs to continue their legacy when they retire (Calabrò, Minichilli, Amore, & Brogi, 2018; Kets de Vries, 1993). Indeed, family continuity is of paramount importance—some scholars even define family firms as firms "that will be passed on for the family's next generation to manage and control" (Ward, 1987). This preference for family continuity is nourished by several deeper rooted motives that can be seen as products of prior social exchanges (Edwards, 1969). Due to prior generalized exchange between parents and children, patronizing

and steward-like family firm owners (Davis et al., 1997; Miller & Breton-Miller, 2005) can feel an intrinsic wish or even an obligation to ensure the enduring wealth and reputation of the next generation and thus to altruistically guide their children into their footsteps (Cropanzano & Mitchell, 2005). Other family owners derive utility (e.g., private benefits; Demsetz, 1983; Demsetz & Lehn, 1985) from creating a family legacy that withstands time, that is, maintaining the group (i.e., the dynastic family firm) motivates generalized exchange. Prior social exchange explains why family owners prefer family CEOs, given lower information asymmetries and their positive contributions to achieving shared family-centered nonfinancial goals (e.g., transgenerational family control; Chrisman, Memili, & Misra, 2014; Dehlen, Zellweger, Kammerlander, & Halter, 2014) or for reasons of secrecy, that is, preventing the exchange of idiosyncratic resources across family borders (Lee, Lim, & Lim, 2003).

The unity of ownership and control in the parting principal's hands constitutes a stronghold of power ('Macht', Blau, 1964, p. 115) that can systematically affect the succession contest. Given that there is no professionalization of the CEO selection process (e.g., by family council oversight), family firm owners are powerful contest rulers who are capable of designing it according to their *preferences* (Agrawal, Knoeber, & Tsoulouhas, 2006; Baye, Kovenock, & de Vries, 1993; Chan, 1996; Welch & Byrne, 2001). Their power opens leeway to deviate from contest rules that maximize firm profits (restricted exchange) toward maximizing private benefits or family-centered noneconomic goals (generalized exchange) (Demsetz, 1983; Dyck & Zingales, 2004; Minichilli et al., 2014). In turn, this deviation may inflict Type II agency costs (Villalonga & Amit, 2006) borne by noncontrolling owners, such as other family members and family branches, or outside investors that would have prioritized firm profits (Villanueva & Sapienza, 2009; Zellweger & Kammerlander, 2015). Mechanically, two major types of alterations exist: First, the contest ruler could restrict the candidate pool to his or her kin by excluding nonfamily contestants (pool limitation, including the case of "no contest" when reduced to one). Second, he or she could give the ability signaled from preferred family heirs more weight, thus favoring the selection of a family candidate despite an inferior ability level (favoritism). In small and midsized private family firms, the selection process is arguably even more problematic. That is, family firms are likely to face limited access to the CEO labor market: Family successions also occur because no buyer is found. Others find that nonfamily CEO wages are out of their reach (Chrisman et al., 2014) and that nonfamily CEOs are more difficult to attract because of the generally lower job security (McConaughy, 2000). Indeed, even the most talented CEOs depend on the goodwill of the family, for example, the modal nonfamily CEO Lee Iacocca lost his job at Ford Motor Company in 1978 due to his clash with Henry Ford II despite the company's financial successes (Holusha, 1984). Wrapping this up, some succession contests are altered in favor of family CEOs due to preferences (demand-side) and labor market (supply-side) constraints.

Altered Selection Systematically Affects Attributes of Chosen Successors. The design of a contest is decisive for its intended outcome (Konrad, 2009). Unconstrained CEO contests include external candidates from the interfirm CEO market whose competition exhibits a permanent pressure to perform, evolve, and signal excellence (Fama, 1980). The evaluation of labor market signals follows objective evaluation criteria. As a result, this contest is highly selective and the best candidate is chosen. Constrained or altered contests corrode this selectivity, as successors with weaker labor market signals (e.g., education, industry experience, and leadership skills) are selected more often (Ahrens, Landmann, & Woywode, 2015). The underlying mechanism is threefold: (a) Assuming that inherited ability is mean reverting (Galton, 1886, 1890; Heckman, 1995; Mulligan, 1999), the probability of finding a high-ability contestant shrinks when the number of contestants is reduced (e.g., excluding nonfamily candidates); (b) when, due to subjective reasons, certain capabilities of the preferred candidate are valued more than they objectively

should be, or when the preferred candidate's deficits are tolerated, this favored, but second best, (family) candidate is more likely to win. In the same vein, strong previous owner preferences can lead to situations where family successors are persuaded to take over despite their own doubts, other career ambitions, or an education that is not entirely focused on becoming the CEO; (c) when a preference for a family successor is communicated at an early stage (Barach & Ganitsky, 1995), a family heir might anticipate being installed irrespective of his or her ability. This sense of entitlement could make the heir invest less time and energy in personal growth in early life (Bloom & Van Reenen, 2007). Hence, a preference for family heirs systematically biases the selection in their favor and the ability attributes of the selected family CEOs are likely to be inferior in various ways when compared to nonfamily CEOs. Inferior ability attributes, *if performance relevant and not specifically controlled for*, are then captured in the *family successor coefficient* (e.g., Bennedsen et al., 2007; Pérez-González, 2006; Wennberg et al., 2011). Hence, we formulate

Hypothesis 1: *The presence of a family CEO shows a negative association with post-succession firm performance if no controls (e.g., for other CEO attributes, etc.) are applied.*

Separating Forces on the Family Successor Coefficient in the Post-Succession Phase

To get a more granular picture of the impact of selecting a family CEO on post-succession firm performance, we add an additional level of investigation by separating the effects of a series of important, but potentially systematically distorted, CEO ability attributes (H2a–H2d) from the family membership attribute (H3). They do not encompass *every possible* CEO attribute or contextual condition that might predict post-succession performance. Indeed, a theory, an algorithm, or an expert that incorporates *all relevant* CEO attributes while disregarding irrelevant ones, might, due to the boundaries of human rationality and the unavailability of perfect information, actually be utopian (Simon, 1947; Lewis, 2017). Nevertheless, by incorporating *several of the most important consensual attributes* usually considered by experts when recruiting leaders, such as experience and education (H2a and H2b), motivation (H2c), and (non)affiliation with the firm (H2d), the attributes in this article rely on the current societal consensus on normative selection instruments and, therefore, on the accumulated human experience and prior social exchange shaping that consensus (Iles, 1999; Zibarras & Woods, 2010). Moreover, collectively, they reflect *several of the most important conceptual elements* that prior literature has employed to model successor performance: (a) the positive effect of general CEO-related HC and of higher education (H2a and H2b); (b) the negative impact of inherited ownership (H2c); and (c) the negative impact of commitment to the status quo (H2d) (Hambrick, Geletkanycz, & Fredrickson, 1993; Pérez-González, 2006; Ward, 1997). Thus, our choice of attributes mirrors the current topic-related scholarly social exchange and wisdom. Most importantly, the CEO attributes were primarily selected because of the common grounding in SET that ties them all closely together. In fact, they are all CEO attributes that influence the profitability of the firm's overall exchange relations (e.g., its performance) that are potentially incorrectly evaluated in the social exchange in the *selection phase*. Central to this is a key assumption from a social exchange perspective: The attributes of powerful leaders are, in a bounded way and via human interaction (i.e., productive social exchanges with the leader at the top of the firm) (Emerson, 1976), material to firm performance (Blau, 1964; Hambrick, 2007; Hambrick & Mason, 1984). In other words, attributes of powerful leaders shape the nature and types of social exchanges for leading a firm and thereby influence how profitable the firm's overall concerted and productive exchange relations become (Blau, 1964; Westphal & Zajac, 1997). However, the theoretical distinction between H2a–H2d

and H3 lies in the nature of prior exchanges that lead to their formation. Whereas the family member attribute (H3) can only be obtained through prior generalized exchanges *within* and *across* the family boundaries via the mechanism of *extended credit* granted to individuals with family ties, the attributes discussed in H2a–H2d can be acquired through generalized and restricted social exchanges that do not necessarily involve family ties. Relying on this social exchange foundation for all attributes, we present our hypotheses on distinct CEO attributes (H2a–H2d) and the family member attribute (H3) in the following text.

Attributes: General CEO-Related Human Capital and Level of Education (H2a and H2b). In exchange theoretic terms, garnered education constitutes prior exchange (via various media) on the reciprocal relationship of the self with the outside reality that thereby may affect the individual's (perceived) leeway of (inter)action (O'Brien & Kollock, 1991). Higher education is frequently used in social exchanges with informational content (e.g., as a signal) in the job market (Spence, 1974). Acquiring education in an individual–environment exchange system (Homans, 1961) costs personal effort, an aversive transactional stimulus (Emerson, 1976), which decreases with one's capabilities (particularly in Germany, the context of this study, where higher education is free and paid for by the state). Thus, following this argument, capable individuals are expected to reach a higher level of education compared to less capable individuals. Therefore, those CEOs who have a higher level of education, for instance, a university degree, might also be expected to perform and learn the general job tasks of a CEO "better"—that is, their social exchange behavior will be more apt because of a deeper understanding of accordant relations, (normative and material) structures, and alternative ways of optimizing the profitability of the firm's overall exchanges (i.e., firm performance)—than those who do not hold this degree. Thus, we formulate

> ***Hypothesis 2a:*** *The level of the educational degree of the CEO successor is positively related to post-succession firm performance.*

Moreover, there is evidence that general CEO-related HC is material to firm performance (Brüderl, Preisendörfer, & Ziegler, 1992). Acquired by past social exchanges on CEO-related content, it augments the CEO's exchanges in leading the firm (Long & Chrisman, 2014): Heightened awareness of reciprocal relational frameworks between actors and their motivations, plus a finer knowledge of respective social norms, material business constraints, and resulting opportunities, enables the CEO to more suitably identify and execute conducive (rational and symbolic) social exchanges at the firm's top that foster its profitability and even shape its future opportunity structure (Blau, 1964; Coleman, 1986; Goffman, 1959; Long, 2011). In turn, this fosters the CEO's authority, because "*abilities that enable a person to make major contributions to the achievement of a group's goal command respect*" and induce normative compliance with the CEO (Blau, 1964, p. 202). Indeed, arguments in favor of the positive effects of incoming CEOs' general CEO-related HC point out that proven skills, such as previous leadership experience, generate credibility and are helpful in successions (Barach, Ganitsky, Carson, & Doochin, 1988; Breton-Miller et al., 2004; Chrisman et al., 1998; Morris, Williams, Allen, & Avila, 1997). Murphy and Zábojník (2004) argue that mastering general managerial skills contributes substantially to the CEO's ability to lead a firm, while productivity-augmenting exchanges that foster this HC can take place in the education and posteducation (experience) phases (Mincer, 1974; Strober, 1990). General CEO-related HC can be garnered by all successors. In line with this, we posit the following: There is a positive relationship between general CEO-related HC, defined as general managerial skills resulting, for instance, from leadership-, industry-, and age experience,

as well as theoretical and professional managerial knowledge, and the profitability of the firm's overall exchanges.

Hypothesis 2b: *General CEO-related human capital of the CEO successor is positively related to post-succession firm performance.*

Attribute: Inherited Ownership (H2c). While the unification of ownership and control is a performance-driving constellation in most family firms, it matters under which exchange regime (general vs. restricted) ownership is transferred during the transition of ownership and management that comprises a family firm succession (Alcorn, 1982; Barry, 1975). "Inherited security or wealth [a gift, i.e. a form of generalized exchange, see Mauss (1925)] deprives next-generation family members of the hunger and drive they need to be successful entrepreneurial business leaders. They often prefer the pleasures of leisure, artistic expression, and time with family and friends" (Ward, 1997, p. 324). Inherited ownership, independent of one's talent, possibly induces unmotivated lethargic behavior and leads to successor performance remaining below potential (Carnegie, 1889; Holtz-Eakin, Joulfaian, & Rosen, 1993). Carnegie, (1933, p. 49) writes: "The parent who leaves his son enormous wealth generally deadens the talents and energies of the son, and tempts him to lead a less useful and less worthy life." Essentially, it causes a lack of motivation. In exchange theoretic terms, a deprivation–satiation occurs (Homans, 1958, 1961), that is, received abundant possession deprives the successor of the stimulant value of the profits of additional exchanges. Therefore, the successor will engage in less social exchange at the firm's top to optimize the profitability of the firm's overall exchanges (e.g., less exchange with the top management team and key stakeholders, reduced reactions to incoming stimuli from informational exchange, and fewer initiatives sparked by the CEO). Yet, inheriting is not restricted to the family, and not all family CEOs inherit shares. Thus, we posit the following: Inherited ownership, defined as the reception of abundant wealth via the inheritance of firm ownership, sets demotivating incentives and is therefore negatively related to the profitability of the firm's overall exchanges.

Hypothesis 2c: *The attribute "inherited ownership" of the CEO successor is negatively related to post-succession firm performance.*

Attribute: Commitment to the Status Quo (H2d). Firms typically consider whether they want to recruit a leader already affiliated with the firm or an outsider. There are deeper reasons for this: CEOs, particularly in leader-centered family firms, are in a position to strongly exemplify norms, codes of conduct, strategies, structures, and a specific firm culture to their organization (including their successor) through their own leadership (Kelly, Athanassiou, & Crittenden, 2000). Such repeated social exchanges may create persistent elements nourished by resulting collective schemata or cognition, traditions, and vested interests and thereby influence the future trajectory of an organization (Carr, Cole, Ring, & Blettner, 2011; Long, 2011; Stinchcombe, 1965). This influence affects not only the organization itself but also the mindset (or reality) of its members, potentially including internal CEO successors (Mehan & Wood, 1975; Long & Mathews, 2011). Asch (1952, p. 257) noted: "Group conditions penetrate to the very center of individuals and transform their character." Thus, via exposure to the past policies, routines, culture, and history of the firm in social exchanges during prior time worked for the firm, the internal successor can (unconsciously) develop a lingering (hyperbolic) conviction that there is wisdom in the current organizational "status quo" shaped by the previous owner (Geletkanycz & Black, 2001; Simon, 1983). Clinging to and refining the strategies that propelled and currently propel the firm's

success, a successor may mistakenly become overconfident of their continued aptness, even though the contextual business environment might have shifted (Miller, 1990). Being thus biased, he or she may search less actively for potential improvements (Ahrens & Woywode, 2014), due to the "tried-and-tested" nature of extant organizational pathways. From an SET viewpoint, the "status quo" is continued in expected exchange for success (Homans, 1961) in spite of a nuanced (or even terminated) basis for this exchange relation. As commitment to the status quo is not limited to family successors but can also affect nonfamily successors, while some family successors never worked for the firm, it is essential to distinguish it from a family member attribute and to control for it in econometric analyses (Hambrick et al., 1993; Quigley & Hambrick, 2012). Thus, we posit the following: A CEO's commitment to the status quo, defined as a (potentially collective) belief in the sustained appropriateness of the firm's present strategy and structure that is nourished from exchanges during prior time working for the firm, is negatively related to post-succession profitability of a firm's overall exchanges.

Hypothesis 2d: *The attribute "commitment to the status quo" of the CEO successor is negatively related to post-succession firm performance.*

Attribute: Family Member. In H1 we proposed that, due to intrafamily generalized exchange-driven alterations in selection contests that deviate from consensual norms on the general CEO labor market, the presence of family CEOs has a negative effect on post-succession performance due to other CEO attributes (H2a–H2d) being downwardly affected. In contrast, in H3 we will now argue that the *family member attribute* in itself entails a positive impact. That is, we build on SET to identify the features truly unique and of singular advantage to family CEOs that are causally and theoretically distinct from the other CEO attributes addressed in H2a–H2d. Indeed, there are good reasons to believe that a *family member attribute*, defined as the successor's affiliation with a family influencing the family firm that, due to prior social exchange, allows extended access to and the maintenance of family-specific social capital, knowledge, values, and identity while facilitating the intergenerational sustainability of the *essence* of the family firm (that is embedded in a vision of the firm held by a small number of families and the intention to shape it) (Chua, Chrisman, & Sharma, 1999), is in itself advantageous for post-succession performance due to two main mechanisms. To see these, it is essential to realize that succession in a family firm necessarily occurs in a context that is shaped by the incumbent's prior generalized exchanges (a) *across* family boundaries, including important stakeholders such as employees, co-owners, banks, and suppliers and (b) *within* family boundaries (Daspit et al., 2016). Over time, from this (ontologically prior) repeated interaction emerges a fragile fabric of social capital that fosters collective respect, loyalty, trust, support, and even identity and culture among the exchange participants (Long & Chrisman, 2014; Pearson, Carr, & Shaw, 2008). Reciprocity and *extended credit* is expanded from the previous owner to his or her group, the family (Ekeh, 1974).

The first mechanism encompasses the generalized exchange *across* family boundaries and rests on the fact that successors with a family member attribute benefit from this *extended credit.* In fact, the indirect reciprocity inherent in prior generalized exchange is not limited to one generation but to the family as a whole (Long & Mathews, 2011). Indeed, stores of trust, goodwill, obligation, expectation, and covenant of key stakeholders built up through years of social exchanges are *extended* and transferred to family successors (i.e., extended credit). This unique access-granting mechanism (Hechter, 1987, p. 45) makes it more likely that garnered social capital will be sustained from one generation to the next (Miller, Lee, Chang, & Le Breton-Miller, 2009) and is central to managing for the long run. Clearly, this continuity in family management will provide family CEOs with the fruits of their relationships for years to come (Miller &

Breton-Miller, 2005). For instance, if the previous generation particularly cared about their employees (generalized exchange), this extraordinary commitment will, via the norm of (indirect) reciprocity, result in employees having supportive attitudes toward a family heir (extended credit Blau, 1964; Gouldner, 1960), "for generosity [generalized exchange] is of two kinds: doing a kindness and requiting one" because "all men detest ingratitude" (i.e., the norm is reciprocity) (Cicero (44 BC), I, XV, p. 51, II, XVIII, p. 235). Moreover, long-standing suppliers and customers maintain their faith in dealing with the firm just because they are still doing business with the same family. Sharma (2008, p. 974) writes: "Family members are likely to enjoy the endowment effect of accumulated social capital even before making any direct contribution." Due to prior socialization, family CEOs are familiar with the family's values, culture, and expected social obligations. This understanding makes them particularly good at maintaining social processes, structures, and shared schemata with stakeholders in the *post-succession phase* by reciprocating apt as well as anticipated satisfactions (Barnard, 1938). In turn, the sustained maintenance of this family-specific social capital results in supportive stakeholder relationships characterized by enduring commitment, loyalty, harmony, and goal alignment, while it shields the firm from the turbulence and power struggles of succession (Pearson et al., 2008). In the post-succession phase, this setting encourages new productive and generalized exchange between stakeholders and the successor (Campopiano & Rondi, 2019; Homans, 1958; McLarty et al., 2019) which includes knowledge resources necessary for leading and positioning the firm. Ultimately, this productive exchange *across* family borders materializes in augmented post-succession performance. Successors without the family member attribute run the risk of being disconnected from or even disrupting existing relationships, reducing them to restricted exchanges of a brittle and ephemeral nature.

Second, prior generalized exchange *within* an owning family's boundaries, that is, in a trust-based parent–child relationship, supports the formation of shared family-centered goals, and ultimately a shared vision for the firm (Long & Mathews, 2011). As such, the family member attribute is in part also connected to the *essence* of the family firm that is embedded in the vision of the firm. Through this prior family-internal generalized exchange, a family member attribute of the CEO ensures that this vision and the resources resulting from it are sustained across generations. For instance, intrafamily generalized exchange elevates the heading and continuing of the family firm—that is, the manifestation of the family's aspiration, identity, and capability—to an honor that can fulfill a successor with a deep sense of duty, pride, and intrinsic motivation. It leads to pro-organizational stewardship behavior (Davis et al., 1997) as the heir derives utility from the success of the firm. Following a desire to shield shared family-centered goals, he or she try to protect the reputation, wealth, and future opportunities of the family and the firm. Therefore, it is argued that family firm leaders are especially willing to invest in the future, which keeps their firm competitive (Miller, Breton-Miller, & Scholnick, 2008; Miller et al., 2009). Moreover, a family relationship between predecessor and successor facilitates productive exchange (Emerson, 1976) of knowledge, making the transition smoother (Breton-Miller et al., 2004; Cabrera-Suárez, De Saá-Pérez, & García-Almeida, 2001; Royer et al., 2008). Indeed, most of the "tricks of the trade" of running the family firm are embedded in the knowledge of the previous owner, who might engage in generalized exchange to share it with a family heir out of intrinsic motivation (Ahrens, Uhlaner, Woywode, & Zybura, 2018). Finally, due to the repeated nature of exchange *within* families, which extends beyond job durations, it is argued that family successors are further motivated to fulfill the success expectations of their family peers (Fama & Jensen, 1983; Hechter, 1987; Kandel & Lazear, 1992).

Based on these two mechanisms of generalized exchanges *across* and *within* family boundaries, we propose that the performance relation of a *family member attribute* in the post-succession phase is positive. Moreover, the implications of altered succession contests in the selection phase

on important but causally distinct attributes were not sufficiently taken into empirical consideration by prior studies (Bennedsen et al., 2007; Pérez-González, 2006; Smith & Amoako-Adu, 1999), resulting in findings of a negative *overall* coefficient of family CEO successors with respect to post-succession financial performance, while the family member attribute was not identified. Hence, we formulate

Hypothesis 3: *The family member attribute is positively related to post-succession firm performance*.

Methods

Sample Selection. The data set collected builds on several sources: (a) the Mannheim Enterprise Panel (MUP) database, (b) the Bureau van Dijk database (Amadeus), (c) the Hoppenstedt database, (d) the German Bundesbank database, (e) standardized computer-aided telephone interviews (CATI) conducted as part of this research, and (f) Web searches. While the preexisting databases mainly serve as sources with regard to the firm information of the nonpublicly held firms, the CATI data were gathered to acquire in-depth information regarding the successions that previous studies might have omitted. As a first step, we filtered out a sample of German family firms using the MUP database: The firms were required to match the following criteria for the years 2002–2008: (a) 30–1,000 employees, (b) going concern, and (c) a family firm. Similar to the family firm definitions of Leach et al. (1990), Lansberg and Astrachan (1994), and Fiegener, Brown, Prince, and File (1994), we assume that a *family firm* is present if a maximum of three individuals own more than 50% of the firm and at least one of these owners is an executive director (CEO). This falls into the class of quantitative definitions, whose measurability of the criteria employed enables researchers to single out family firms in quantitative databases, see for example, Anderson and Reeb (2003) or Pérez-González (2006).

Second, we identified *potential* succession cases among the filtered family firms by employing a second filter. This second filter primarily served to minimize CATI phone calls to family firms that did not experience a succession (nontarget firm). Whether there actually was a succession, that is, a change in ownership and management (target firm) was directly asked later and needed to be confirmed during the CATI. According to the second filter, there is *potentially* a succession if between 2002 and 2008: (a) an executive director resigned, or (b) a new executive director was appointed, or (c) a previous owner (an individual) reduced his share, or (d) a new or previous owner (an individual) increased his share, and (e) one of the previous owners and executive directors was at least 55 years or older. Firms that fulfilled the criteria of both filters were extracted from the MUP database and classified using the International Standard Industrial Classification of all Economic Activities Revision 3.1 (ISIC Rev. 3.1) to serve as a basis for the CATIs. ISIC sections A–C (agriculture, hunting and forestry, fishing, mining, and quarrying), E (electricity gas and water supply), L (public administration and defense and compulsory social security), P (activities of households), Q (extraterritorial organizations and bodies), and Division 91 (activities of membership organizations) are not included. We gathered financial data and replaced missing values using the following hierarchy: (a) MUP, (b) Amadeus, (c) Hoppenstedt, and (d) Web searches. Firms for which no telephone number was available in the MUP database were dropped (<1%).

As a third step, the executive directors of the extracted family firms were contacted to make an appointment with the CEO successor to take part in a CATI on CEO succession (ZEW, 2010). Family firm *succession* is defined by ownership (Barry, 1975) and management

transition (Alcorn, 1982). Since both transitions may not occur simultaneously, we used CATI data to count the *years since succession*, starting with the year the successor became CEO. Following this succession definition and to avoid interviewing nonsuccession firms (nontargets), the CATI included the following confirmatory screening questions to make sure there was a succession in the focal firm. In detail, all interviewees were required to match the following criteria: (a) The interviewee confirms being a successor, (b) the interviewee is an executive director, (c) the interviewee holds a (full or partial) ownership fraction of the firm or the transition of ownership is planned, and (d) the succession took place between the years 2002 and 2008.

CATI overall/target response rates were 59%/29% yielding 804 completed CATIs, which is acceptable given that we ask for leadership data (Daily, Dalton, & Cannella, 2003). Areas covered in the CATI include (a) succession- and (b) successor characteristics (including family ties), and (c) firm performance. Performance and firm size data from the CATI were put highest in the hierarchy. Further, using Bundesbank data on inflation, all data were harmonized and reported in 07/2009 euros.

Variables of Interest. Successions were categorized according to CATI data into: *family CEO* (indicator 0/1), for successors who have a family member attribute, that is, are related by marriage or blood to at least one of the previous owners of the firm; *enterprise CEO* (indicator), for unrelated successors who were previously employees of the firm; and *external CEO* (indicator), for successors with no previous ties to the firm. As successions in a German context may involve more than one CEO (multiple CEOs are common in German firms; see e.g., Choi, Hyeon, Jung, & Lee, 2018; Miller et al., 2014; Simon, 1996), *family CEO (pure*) indicates successions *exclusively* with family CEOs, which can be split into *family CEO (solo*) for single family CEOs and *family CEO (team*) for exclusive family CEO teams. Based on the above, the key variable of interest is *family CEO involved*. It indicates if a *family CEO* is present among the successors. Therefore, if no controls are applied, *family CEO involved* captures H1 (the overall effect), while if controls—in particular, those that separate the effects of important (potentially systematically distorted) distinct attributes (H2a–H2d) on the CEO level—are applied, *family CEO involved* captures H3 (the effect of the family member attribute).

Dependent Variable. Our performance measurement focuses on profit margin (PM) because the ratio of earnings before tax to operating revenue is a straightforward indicator of efficiency and a practical benchmark for comparisons of performance. Using both CATI data and information from firm databases according to the hierarchy described in the sample selection, we measured PM in the succession year and 2009 and derived a differential measure of PM, which, by its construction, controls for time-invariant firm attributes, which may affect performance. Widely used in monthly management reports, PM is less subject to respondent error compared to return on assets (ROA). Moreover, ROA has a denominator in historic (previous owner-affected) values, which is less favorable given a succession context. This is particularly the case for a German accounting context, where assets are usually only written off and not revaluated. PM matches accruals of the current (the successor's) accounting period. Following Barber and Lyon (1996), we introduced industry adjustments to address concerns regarding fluctuations across industries. In addition, we addressed concerns of possible mean reversion due to transitory components in accounting data, but also possible performance trends, by introducing performance adjustments (Barber & Lyon, 1996). The main idea here is to control for the fact that a firm with a good initial performance in a healthy industry section is subject to other performance trends as compared to a weakly performing firm in a struggling industry. The resulting measure is free from expected industry- and performance trajectories and is also called "abnormal" performance. This

difference in industry- and performance-adjusted PM serves as a dependent variable in the regressions.

For conducting both adjustments, we relied on more than 187 thousand firm-year observations for the years 2002–2009 from an adjustment group from the Amadeus database. Industry adjustments were conducted by subtracting the median PM of the respective year and industry (at the 2-digit ISIC code level) of the adjustment group firms from the sample firm value. Following Pérez-González (2006), we designed performance adjustments by sorting the industry-adjusted PM of the adjustment group into deciles for each year. By matching the industry-adjusted PM of each sample firm with the accordant adjustment group decile in the succession year, the relevant adjustment group decile for each sample firm can be identified. The median industry-adjusted PM of the relevant adjustment group decile and year (trend or decile development) is then subtracted from the industry-adjusted PM of the sample firm. For further technical calculation details, we refer to the variable booklet (VB).

Given a CATI approach as our primary source of information, designing the difference score, that is, abnormal PM between the succession year (*first component*) and 2009 (*second component*) in this particular way has several advantages. First, this design is particularly apt to avoid framing issues that distort answers given in CATIs (Tversky & Kahneman, 1981). This caveat would particularly have occurred if we had CAT interviewed over a multiple-year timeframe. Our approach—CAT interviewing in early 2010 and referring to most recent PM in 2009 as the *second component*—keeps the economic and environmental frame of interview constant and comparable. Second, letting the *first component* (the succession year) randomly vary within the boundaries of the years 2002–2008 results in an *average* time span of 3.5 years and allows us to increase our sample by 700%. This larger number of observations and regression controls for time mitigate minor caveats due to this random variation. Moreover, this variation enables inspection of temporal subsamples, for example, to take a long-run perspective also (Miller & Breton-Miller, 2005) (results of this analysis shown in Table 4, column 12). Third, this design reflects some of the most central critiques of difference scores (Edwards, 1994, 1995, 2001). Both components are conceptually nondistinct (both are PM); thus, their algebraic difference can be unanimously interpreted (Edwards, 1994). Moreover, adjusting for mean reversion corresponds to a correction following a polynomial function that ensures that a found relation is not due to one of the components of the difference score, that is, in our case, the succession year PM (Edwards, 2001). In our design, this adjustment is executed within the dependent variable (see also Bennedsen, Nielsen, Pérez-González, & Wolfenzon, 2007; Pérez-González, 2006), thus with no lesser degree of freedom and relying on more observations than sample regressions could have offered.

Independent Variables (H2a–H2d). General CEO-related HC and highest educational degree (H2a and H2b): To approximate the general CEO-related HC, we employed the *human capital score* (*HCS*, ordinal, 0 = *low*, 5 = *high*) from Ahrens et al. (2015). It is composed of the sum of five proxy indicators (0/1) derived from CATI data: (a) Age (in years) of the successor is above or equal to the median of the sample successors as a proxy for general experience; (b) industry experience (in years) above or equal to the sample median as a proxy for industry-specific experience; (c) leadership experience as a proxy for practical managerial skills (indicator if the prior position of the successor was manager or entrepreneur); (d) business education as a proxy for theoretical managerial skills (indicator if the successor holds a university degree in business studies [or a strongly related field] or was educated at a university of cooperative education); and (e) use of a business plan during the succession as a proxy for professional managerial skills (indicator). Inspired by Pérez-González (2006), we measured the highest educational degree of the successor using CATI data (education: highest degree, ordinal, 0 = *low*, 3 = *high*, see VB).

Further, to capture the demotivational effects of inherited ownership (H2c), we directly tracked whether the successor had *inherited ownership* shares using CATI data (indicator variable). Finally, to approximate status quo effects (H2d), we employed CATI data to directly measure the successor's prior exposure to the firm via *time worked at* the firm in years.

Control Variables at the Individual-, Firm-, and Industry Level. On the basis of CATI data, we further disentangled family successions by controlling with binary indicators whether (a) the *family CEO had to be convinced* to become the successor; (b) the family CEO self-assesses that his education was not entirely focused on becoming a successor (*family CEO without focused education*); and (c) an appointment of a *family CEO due to no buyer* being found was observed.

Moreover, the control *ln*(*changes*) is the natural logarithm of the sum of reported organizational changes in the wake of succession (ordinal from 0 to 24) to capture performance effects related to organizational change (CATI data, see VB); the post-succession *degree of influence* of the previous owner (DOI, ordinal, 0 = *low*, 7 = *high*, see VB) using the DOI measure of Ahrens et al. (2018); *unplanned succession*, which is an indicator for successions due to death or disease reflecting findings by Slovin and Sushka (1993) and Hillier and McColgan (2009), which we further split with the *unplanned succession, no emergency plan* indicator for cases where no emergency plan is provided. Inspired by Miller (1993), we controlled for the organizational and environmental context using the *succession contingencies: low relative PM, industry downturn,* and *turnaround* indicators (for detailed coding, see VB). Using the data hierarchy described in the sample section, we controlled for firm size via the *number of employees* in the succession year. We measured the firm's *rating score* in the succession year using the Creditreform solvency index data (ordinal from 100 = *excellent* to 600 = *severe threats to solvency*) to cover effects due to high leverage, liquidity shortages, and financing issues, which might have an effect on performance (unfortunately, we do not have direct data on, e.g., leverage or liquidity). In addition, we directly covered this area using the *sudden financing requirements* indicator, which is true if the successor reports unexpected financing requirements in the post-succession year in the CATI. To address the effects that ownership might have on performance (Villalonga & Amit, 2006), the *successor ownership in years* variable measures the years the successor holds ownership shares, while the *ownership > leadership transition* indicator is true when ownership transfer preceded leadership transfer (both CATI data). On the basis of Web searches, we addressed concerns that firm maturity might affect performance by controlling for *corporate age* in years. We differentiated the special effect that the *generation one* (founder) might have with an indicator, which is true when the *corporate age* is smaller or equal to 25. To account for diversity influences (e.g., Carpenter, 2002), the variable *female CEO successor ratio*, the ratio of female successors to the *number of CEO successors* is derived from CATI data, while the *number of CEO successors* is the sum of new executive directors in a succession. We included controls for *Northern, Eastern, Central, Western,* and *Southern regions of Germany* (indicators) derived from Amadeus zip codes, as regions may affect performance trajectories of firms. Further, we controlled for mean reversion using *performance- and industry-adjusted PM* and *industry-adjusted PM* in the succession year (Pérez-González, 2006).

Controls for Endogeneity. To control for endogeneity, we regressed *family CEO involved* on firm performance (PM), firm rating, firm size, regional indicators, industry indicators, median industry revenue growth (2-digit ISIC), corporate age, an indicator if the previous owner has at least one son, and an indicator if the previous owner has children (both CATI). On the basis of

this model, we calculated each firm's likelihood of *family CEO involved* equals true. This probability score serves as *control for endogeneity*. For a similar technique, see Chen and Hambrick (2012). Finally, to control for selection bias, we ran a Heckman model where the selection modeled whether firms revealed performance data in the CATI (representing a subsample). In detail, we regressed performance revelation on the number of CEO successors, firm size, regional indicators, legal form indicators, and industry indicators. From this, we calculated an inverse Mills ratio, a probability density function correcting for truncation-induced estimation bias. This inverse Mills ratio served as a control for selection bias.

List of all the Variables Employed in the article (Variable booklet):

Nr.	Variable	Description
1	*Family CEO*	Indicator equal to one for successors related by marriage or blood to the previous owner. Source: 1.
2	*Enterprise CEO*	Indicator equal to one for unrelated successors who were previously employees of the enterprise. Source: 1.
3	*External CEO*	Indicator equal to one for successors with no previous ties to the enterprise. Source: 1.
4	*Family CEO involved*	Indicator equal to one if a family CEO is among the successors. Source: 1.
5	*Family CEO (pure)*	Indicator equal to one if the successors are family CEOs exclusively. Source: 1.
6	*Family CEO (solo)*	Indicator equal to one if the successor is a single family CEO. Source: 1.
7	*Family CEO (team)*	Indicator equal to one for team successions of family CEOs exclusively. Source: 1.
8	*Profit margin*	The ratio of earnings before taxes to operating revenue (percentage). Source: 2.*
9	*Industry-adjusted profit margin*	Measured in percent and is profit margin of the sample firm valueless the median profit margin of the accordant year and industry (two-digit ISIC) of the Amadeus database. Source: 2.*
10	*Industry- and performance-adjusted profit margin*	Measured in percent and is conducted by subtracting the median industry-adjusted profit margin of the relevant decile and year (trend) of the Amadeus database from the industry-adjusted profit margin values of the sample enterprise. Source: 2.*
11	*Δ [Performance variable]*	Displays the development of the respective performance variable between the succession year and the year 2009.
12	*Human capital score*	Proxy for CEO ability derived from the sum of the five indicators—high experience (age), high experience (industry), leadership experience, business education, and use of business plan. Ordinal scale ranges from 0 to 5. From Ahrens et al. (2015). Source: 1.
13	*Experience—age*	Successors' average age measured in years. Source: 1.
14	*High experience—age*	Indicator equal to one if the successors' average age measured in years is higher or equal to the median age of the successors of the sample. Source: 1.
15	*Experience—industry*	Successors' average industry experience measured in years. Source: 1.
16	*High experience—industry*	Indicator equal to one if the successors' average industry experience measured in years is higher or equal to the median industry experience of the successors of the sample. Source: 1.
17	*Leadership experience*	Indicator equal to one if a successor benefits from experience as manager or entrepreneur in the prior position. Source: 1.

Nr.	Variable	Description
18	*Business education*	Indicator equal to one if a successor studied business studies at university or attended a university of cooperative education. Source: 1.
19	*Use of business plan*	Indicator equal to one if a business plan was used during the succession. Source: 1.
20	*Low human capital*	Proxy for low CEO ability. Indicator equal to one if the sum of the five indicators—high experience (age), high experience (industry), leadership experience, business education, and use of business plan—is below the median sum of the sample successors. Opposite is high human capital. Source: 1.
21	*Education: highest degree*	Ranks the successor's highest degree. Zero represents no degree, 1 is apprenticeship level or training school degree, 2 is professional or technical school (i.e., master of crafts) degree, and 3 depicts degree from university, polytechnic university (of applied sciences), or university of cooperative education. Ordinal scale ranges from 0 to 3. Source: 1.
22	*Time worked at*	Is time in years that the successor worked at the company. Source: 1.
23	*Inherited ownership*	Indicator equal to one if the successor inherited his or her share of the company. Source: 1.
24	*Family CEO without focused education*	Indicator equal to one if the family CEO self-assesses that his or her education was not entirely focused to become successor. Source: 1. Indicator equal to one if the family CEO agreed to become CEO despite own doubts. Source: 1.
25	*Family CEO had to be convinced*	Indicator equal to one if the family CEO agreed to become CEO despite own doubts. Source: 1.
26	*Family CEO due to no buyer*	Indicator equal to one if a family CEO was chosen become no buyer was found. Source: 1.
27	*Ln(changes)*	Is the natural logarithm of the sum of reported post-succession changes in the following categories: new executive directors, dropped executive directors, flattened hierarchy, steepened hierarchy, working time policy, compensation scheme, purchasing, production, marketing and sales, personnel, corporate finance & controlling, additional products, additional methods of production, sorting out of products (moderate), sorting out of products (heavy), new customers, loss of old customers, new suppliers, dismissal of old suppliers, new bank relations, new financiers, regional market activity, national market activity, and international market activity. Ordinal scale ranges from 0 to 24. From Ahrens and Woywode (2014). Source: 1.
28	*Unplanned succession*	Indicator equal to one for successions due to death or disease of the previous owner. Source: 1.
29	*Unplanned succession, no emergency plan*	Indicator equal to one for unplanned successions in which no emergency plan was provided. Source: 1.
30	*Degree of influence*	Displays the weighted aggregate of all post-succession roles held by the previous owner. Active and managing-owner weighted by three, board member by two, and all other roles (coach and consultant; key account holder; special tasks; passive owner; common employee; other role not specified) by one. Ordinal scale ranging from 0 = *no influence* to 7 = *strong influence*. From Ahrens et al. (2018). Source: 1.
31	*Contingency: low relative profit margin*	Indicator equal to one if the company performs -1.0 percentage points in profit margin below the accordant industry mean (two digit from Amadeus) in the succession year and if the company does not fall into the turnaround contingency. From Ahrens and Woywode (2014). Source: 2.*

Nr.	Variable	Description
32	*Contingency: industry downturn*	Indicator equal to one if the average profit margin of the company's industry is below 2.0% in the succession year and if the company profit margin is not higher as 5.0% in the succession year and if it does not fall into the turnaround contingency. From Ahrens and Woywode (2014). Source: 2.*
33	*Contingency: turnaround*	Indicator equal to one if either suffering from both low relative profit margin and industry downturn attributes or earn less than 0.5% profit margin in the succession year. From Ahrens and Woywode (2014). Source: 2.*
34	*Number of employees*	Displays the number of employees of the enterprise. Source: 2.
35	*Rating score*	Displays the company's Creditreform solvency index data. Ordinal scale from 100 = *excellent* to 600 = *severe threats to solvency*. Source: Amadeus.
36	*Sudden financing requirements*	Indicator equal to one for successors reporting unexpected financing requirements in the post-succession year. Source: 1.
37	*Successor ownership in years*	Displays time elapsed in years since the successor started holding ownership. Source: 1.
38	*Ownership > leadership transition*	Indicator equal to one if ownership transition year preceded leadership transition year. Source: 1.
39	*Corporate age*	Displays the corporate age in years. Source: Web searches.
40	*Corporate age squared*	Displays the corporate age in years squared. Source: Web searches.
41	*Generation one*	Indicator equal to one if corporate age is ≤25. Source: Web searches.
42	*Female CEO successor ratio*	Ratio of female CEO successors to all CEO successors in the observed succession. Source: 1.
43	*Number of CEO successors*	Displays the number of CEO successors in the observed succession. Source: 1.
44	*[Industry indicator variables]*	Indicator variables equal to one if the respective industry according to the ZEW industry classification is met. Source: MUP information.
45	*[Region indicator variables]*	Indicator variables equal to one if the respective regional cluster is met. The German postal code is employed to create the following clusters: (a) Eastern Germany with national postalcodes starting with 0 and 1, (b) Northern Germany with national postal codes starting with 2 and 4, (c) Central Germany with national postal codes starting with 3, 5, and 6, and (d) Southern Germany with national postal codes starting with 7, 8, and 9. Source: MUP information.
46	*Years since succession*	Time elapsed in years since the year of the leadership transfer. Source: 1.
47	*Control for endogeneity*	Probability score for the likelihood of a succession involving a family CEO, calculated from regressing family CEO involved on profit margin, rating score, number of employees, region indicator variables, industry indicator variables (ZEW industry classification), median industry revenue growth (two-digit ISIC, source: Amadeus), an indicator if the previous owner has at least one son (source: 1), an indicator if the previous owner has children (source: 1), and corporate age.
48	*Control for selection bias*	Inverse Mills ratio calculated from a probit model predicting the revelation of firm performance data during the standardized interview: Performance revelation was regressed on the number of CEO successors, number of employees, industry indicator variables, region indicator variables, and legal form indicator variables.

Nr.	Variable	Description
49	*[Legal form indicator variables]*	Indicator variables equal to one if the respective legal form is met. Source: 1.

* For conducting both adjustments, we draw 187,388 company-year observations for the years 2002 to 2009 from the Amadeus database using earnings before taxes (Amadeus item 33) and operating revenue (Amadeus item 24) for companies of a size between 30 to 1,000 employees. Unconsolidated sister statements (Amadeus consolidation code U2) and duplicates are excluded. Industry adjustments are conducted by subtracting the median profit margin of the accordant year and industry (at the two-digit ISIC code level) of the Amadeus database from the sample firm value. The industry clusters from Amadeus are required to include a minimum of five observations per year and industry (two-digit ISIC), otherwise the adjustment reports missing data. We use two-digit industry controls because Clarke (1989) shows that the difference between two-digit and four-digit SIC controls is marginal. Following Barber and Lyon (1996) and Pérez-González (2006), we design performance adjustments by sorting the industry-adjusted variable of the Amadeus database into deciles for each year. By matching the industry-adjusted variable (e.g. PM) of each sample firm with the accordant Amadeus decile in the year of the succession, the relevant Amadeus decile is identified for each sample enterprise. The median industry-adjusted PM of the relevant Amadeus decile and year (trend or decile development) is then subtracted from the industry-adjusted PM of the sample enterprise. Unadjusted profit margin values are winsorized at the 0.025 level.
Note. Sources: 1 = standardized interviews; 2 = Data set hierarchy as described in sample selection.

Data Analysis and Results

Table 1 presents summary statistics of the interviewed successors' attributes and mean differences across categories (using the Welch–Satterthwaite *t*-test).

For the *family CEO involved* category, we observe significantly lower ($p < .01$) values of leadership-, industry-, and age-related experience as compared to successions with nonfamily CEO. Furthermore, in successions with family CEOs involvement, the instrument "business plan" was used −11.7 percentage points ($p < .01$) less often, while these successors had 3.26 years ($p < .01$) more time worked at the firm exposure and inherited ownership 59.1 percentage points ($p < .01$) more frequently compared to successions with nonfamily CEOs involvement. Table 2 presents summary statistics on performance developments.

Column 1 in Table 2 shows that the average gain in PM between the succession year and the year 2009 is 0.06 percentage points (first item). The difference-in-difference in PM of successions with family CEOs involvement versus nonfamily CEOs (H1) is −0.83 percentage points ($p < .1$, Column 6, Table 2), while for exclusively family CEOs versus nonfamily CEOs it is −1.10 ($p < .05$, Column 7, Table 2). Panel B shows similar results for single successors. Further summary statistics (e.g., correlations, etc.) are presented in Table 3.

We test H3 with ordinary least squares regressions of the difference in industry- and performance-adjusted PM on family CEO involved (difference-in-difference approach, Huber–White robust standard errors). We keep a vector of fixed controls across all models and add the theoretically motivated controls to separate the family member attribute step-by-step. In alignment with prior literature (Bennedsen et al., 2007; Pérez-González, 2006) we present results using a 10% significance threshold in Table 4.

When controlling for both human capital score (HCS) and highest education (Column 2 of Table 4), the coefficient for family CEOs involved is insignificant, but flips to a positive sign (coef. 0.20, $p > .1$). Adding the inherited ownership and status quo commitment variables to the regression (Column 4, Table 4) yields a positive and marginally significant coefficient for family CEO involved (coef. 1.12, $p < .1$) on industry- and performance-adjusted PM. Controlling also for family successions where no buyer was found, family CEOs who indicated having no focused successor education, and family CEOs who were talked into succession (Column 7, Table 4), having a family CEO involved is related to a significant 1.54 percentage point increase ($p < .05$) in industry- and performance-adjusted PM. We check these results with a series of robustness tests. Controlling for post-succession changes does not affect the results (Column 8, Table 4). Interacting family CEO involved with low HC highlights that low HC among family CEOs

Table 1. Summary Statistics of Interviewed Successors' Attributes.

		Succession type				Difference of means	
	All	Family CEO involved	No family CEO involved	Family CEO(s) (pure) = 1	Family CEO(s) (pure) = 0	(2) and (3)	(4) and (5)
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Education	2.54	2.49	2.61	2.46	2.64	−0.12*	−0.18**,‡
(0 = *low* to 3 = *high*)	(0.027)	(0.036)	(0.041)	(0.038)	(0.037)	(0.054)	(0.053)
Human capital score	2.80	2.52	3.24	2.45	3.26	−0.71**,‡	−0.81**,‡
(0 = *low* to 5 = *high*)	(0.045)	(0.056)	(0.065)	(0.058)	(0.062)	(0.086)	(0.084)
Experience—age (years)	41.6	39.4	45.1	39.1	44.7	−5.7**,‡	−5.6**,‡
	(0.267)	(0.317)	(0.403)	(0.331)	(0.377)	(0.513)	(0.502)
Experience—industry (years)	15.7	14.3	17.8	14.3	17.5	−3.5**,‡	−3.2**,‡
	(0.286)	(0.354)	(0.458)	(0.367)	(0.435)	(0.578)	(0.569)
Leadership experience (%)	83.3	79.8	88.9	78.2	90.0	−9.0**,‡	−11.8**,‡
	(1.351)	(1.861)	(1.832)	(1.991)	(1.649)	(2.612)	(2.586)
Business education (%)	37.7	38.7	35.9	38.3	36.9	2.8	1.4
	(1.715)	(2.196)	(2.748)	(2.289)	(2.593)	(3.517)	(3.459)
Use of business plan (%)	52.1	47.6	59.3	47.0	58.6	−11.7**	−11.6**
	(1.766)	(2.249)	(2.809)	(2.348)	(2.644)	(3.598)	(3.536)
Time worked at (years)	7.38	8.67	5.41	8.75	5.69	3.26**,‡	3.06**,‡
	(0.272)	(0.344)	(0.419)	(0.360)	(0.396)	(0.542)	(0.535)
Inherited ownership (%)	37.8	60.8	1.7	62.1	6.5	59.1**,‡	55.6**,‡
	(1.745)	(2.249)	(0.738)	(2.329)	(1.344)	(2.367)	(2.689)
Family CEO without	26.2	42.5	0.0	46.4	0.0	42.5**,‡	46.4**,‡
focused education (%)	(1.553)	(2.226)	–	(2.346)	–	(2.226)	(2.346)
Family CEO had	3.1	5.1	0.0	5.5	0.0	5.1**,‡	5.5**,‡
to be convinced (%)	(0.615)	(0.989)	–	(1.076)	–	(0.989)	(1.076)
Family CEO due	1.2	2.0	0.0	2.2	0.0	2.0**	2.2**
to no buyer (%)	(0.393)	(0.636)	–	(0.693)	–	(0.636)	(0.693)
Years since succession (years)	3.54	3.65	3.37	3.66	3.38	0.27†	0.28†
	(0.070)	(0.087)	(0.117)	(0.092)	(0.108)	(0.146)	(0.142)

Note. Significance (*p*-value, Welch–Satterthwaite test) is displayed at: †10%, *5%, **1%, and ‡ at Bonferroni-corrected threshold .07%. The values in parentheses display standard errors.

Table 2. Summary Statistics of Differential Performance of Successors.

		Succession Type				Difference in Differences			
	All	Family CEO involved	No family CEO involved	Family CEO(s) (pure) = 1	Family CEO(s) (pure) = 0	FI-NFI (2) − (3)	F-NF (4) − (5)	FI = 1 LHC-HHC	LHC = 1 FI-NFI
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
A. Full sample									
ΔProfit	0.06	−0.29	0.54	−0.47	0.63	−0.83†	−1.10*	−1.29*	−0.75
margin	(0.22)	(0.30)	(0.32)	(0.30)	(1.27)	(0.44)	(0.44)	(0.62)	(0.90)
ΔEmployees	0.19	0.14	0.28	0.13	0.27	−0.13†	−0.14†	−0.02	−0.05
%	(0.03)	(0.02)	(0.08)	(0.02)	(0.07)	(0.08)	(0.07)	(0.04)	(0.05)
ΔRating	3.17	5.20	−0.29	5.44	0.00	5.49*	5.44*	−1.85	1.03
	(1.27)	(1.62)	(2.01)	(1.72)	(1.85)	(2.58)	(2.52)	(3.39)	(4.22)
Changes	8.53	8.22	9.01	8.14	9.03	−0.79*	−0.89**	−1.79**,‡	−0.37
	(0.15)	(0.20)	(0.24)	(0.21)	(0.22)	(0.31)	(0.31)	(0.40)	(0.50)
B. Single successors only									
ΔProfit	0.06	−0.37	0.59	–	–	–0.96†	–	–1.35†	–0.74
margin	(0.27)	(0.36)	(0.39)	–	–	(0.53)	–	(0.73)	(0.99)
ΔEmployees	0.20	0.14	0.29	–	–	–0.15	–	–0.02	–0.05
%	(0.04)	(0.02)	(0.10)	–	–	(0.10)	–	(0.05)	(0.06)
ΔRating	4.40	5.77	2.26	–	–	3.51	–	–2.53	0.26
	(1.47)	(1.93)	(2.28)	–	–	(2.98)	–	(4.06)	(4.62)
Changes	8.53	8.13	9.13	–	–	–1.00**	–	–1.50**,‡	–0.25
	(0.18)	(0.23)	(0.29)	–	–	(0.37)	–	(0.46)	(0.56)

Note. This table presents the mean development between the succession year and the year 2009. FI = family CEO involved; NFI = no family CEO involved; F = family CEO(s) (pure); NF = no family CEO(s) (pure).
Significance (*p*-value, Welch–Satterthwaite test) is displayed at: †10%, *5%, **1%, and ‡ at Bonferroni-corrected threshold .25%. Standard errors are reported in parentheses.

Table 3. Descriptive Statistics and Correlations of Regression Variables: $N = 336$ (equals to maximum missing observations).

Variable	Mean	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 Δ Ind.-&perf.-adj. PM	1.22	4.51	1.00																			
2 Family CEO involved	0.58	0.49	−0.01	1.00																		
3 Family CEO (solo)	0.42	0.49	0.00	0.73	1.00																	
4 Family CEO (team)	0.11	0.31	−0.04	0.29	−0.30	1.00																
5 Fam. CEO & Ent. CEO	0.03	0.17	0.05	0.15	-0.15	−0.06	1.00															
6 Fam. CEO & Ext. CEO	0.02	0.13	−0.01	0.11	−0.12	−0.05	−0.02	1.00														
7 Human capital score	2.87	1.16	0.08	−0.35	−0.42	0.04	0.13	0.02	1.00													
8 Time worked at	6.68	6.62	−0.07	0.18	0.04	0.18	0.13	−0.08	0.12	1.00												
9 Inherited ownership	0.36	0.48	−0.07	0.62	0.51	0.16	0.05	−0.01	−0.23	0.12	1.00											
10 Fam. CEO due to no buyer	0.01	0.08	−0.03	0.07	0.09	−0.03	−0.01	−0.01	−0.09	−0.04	0.02	1.00										
11 Fam. CEO had to be conv.	0.04	0.20	−0.05	0.18	0.12	0.12	−0.04	−0.03	−0.10	−0.10	0.09	0.18	1.00									
12 Fam. CEO w/o focused educ.	0.25	0.44	−0.04	0.49	0.43	0.20	−0.10	−0.08	−0.18	0.04	0.33	0.04	0.22	1.00								
13 Ln(changes)	2.06	0.59	0.10	−0.04	0.01	−0.08	−0.05	0.04	0.15	−0.17	0.02	0.06	0.05	−0.04	1.00							
14 Degree of influence	2.34	1.95	−0.04	0.09	0.05	0.06	0.03	−0.06	−0.08	0.10	0.01	−0.01	0.02	−0.02	−0.06	1.00						
15 Unplanned succession	0.06	0.23	0.08	−0.05	0.00	−0.08	−0.04	0.06	0.05	0.01	0.03	0.15	−0.05	−0.05	0.05	−0.16	1.00					
16 Unpl., no emergency plan	0.02	0.13	0.02	−0.11	−0.07	−0.05	−0.02	−0.02	0.05	0.04	−0.06	−0.01	−0.03	−0.03	−0.07	−0.13	0.55	1.00				
17 Ind.-&perf.-adj. PM	0.22	1.85	−0.18	0.03	0.01	0.02	0.04	−0.01	−0.06	−0.05	−0.01	−0.03	0.02	0.05	0.06	0.10	0.01	−0.01	1.00			
18 Ind.-adj. PM	3.10	5.99	−0.01	0.10	0.14	−0.04	0.02	−0.06	−0.20	−0.03	0.03	−0.02	−0.01	0.14	−0.07	0.07	−0.03	−0.08	0.55	1.00		
19 Conting.: low rel. PM	0.06	0.24	−0.02	0.00	0.00	0.03	−0.05	−0.03	0.04	−0.01	0.06	−0.02	−0.05	0.05	0.04	0.13	−0.01	0.06	−0.02	−0.24	1.00	
20 Conting.: industry downturn	0.13	0.34	−0.01	−0.02	0.02	−0.02	−0.02	−0.05	−0.02	−0.07	−0.06	0.20	−0.04	−0.05	0.07	−0.06	−0.02	−0.05	−0.07	−0.07	−0.10	1.00
21 Conting.: turnaround	0.14	0.34	−0.04	−0.01	−0.03	−0.03	−0.02	0.08	0.17	−0.04	0.06	−0.03	−0.04	−0.05	0.13	−0.07	0.05	0.01	−0.07	−0.35	−0.10	−0.16
22 Number of employees	90.17	101.93	−0.06	−0.07	−0.10	−0.01	0.04	0.03	0.03	−0.13	0.01	−0.03	0.02	0.08	0.11	0.03	−0.08	−0.06	−0.03	−0.14	0.08	−0.02

(Continued)

Table 3. Continued

Variable	Mean	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
23 Rating score	222.36	37.92	−0.01	−0.16	−0.08	−0.08	−0.07	−0.04	0.08	−0.03	−0.14	−0.01	0.04	0.00	0.03	−0.09	0.19	0.20	0.06	0.02	0.02	0.02
24 Sudden fin. requirements	0.13	0.33	0.01	−0.13	−0.08	−0.10	0.04	0.02	0.07	−0.10	−0.09	0.09	−0.08	−0.10	0.24	−0.13	0.02	0.08	−0.03	−0.10	−0.03	0.06
25 Successor own. in years	6.07	5.95	0.03	0.20	0.16	0.01	0.10	0.04	0.00	0.21	0.25	0.05	0.11	0.09	0.00	−0.03	−0.04	−0.01	−0.08	−0.01	0.00	0.00
26 Ownership > leadership	0.67	0.47	0.03	0.08	0.06	0.04	0.05	−0.05	0.00	0.09	0.16	0.05	0.02	−0.03	0.02	−0.14	0.12	0.05	−0.06	−0.04	−0.05	0.03
27 Corporate age	46.25	42.68	−0.02	0.11	0.09	−0.01	0.03	0.06	0.00	−0.04	0.17	−0.01	−0.01	0.05	0.08	−0.15	-0.03	−0.03	−0.14	−0.12	0.03	0.05
28 Generation one	0.40	0.49	0.09	−0.18	−0.11	-0.05	−0.07	−0.06	0.00	−0.13	−0.24	0.02	0.10	−0.05	0.09	0.13	0.06	−0.02	0.16	0.03	0.04	−0.03
29 Education: highest degree	2.63	0.67	−0.04	−0.09	−0.15	0.02	0.10	0.07	0.14	−0.20	−0.14	−0.07	0.02	0.02	−0.01	0.00	0.04	0.07	0.06	−0.01	0.01	−0.05
30 Years since succession	3.31	1.96	0.06	0.07	0.05	0.06	0.00	−0.04	0.14	−0.01	0.13	0.01	0.08	0.08	0.12	−0.11	0.01	0.02	−0.10	0.00	−0.02	0.25
31 Fem. CEO successor ratio	0.10	0.28	0.03	0.22	0.14	0.15	0.02	−0.05	−0.01	0.04	0.10	−0.03	0.09	0.18	−0.09	0.09	−0.04	−0.05	0.01	0.05	−0.07	0.03
32 Nr of CEO successors	1.26	0.50	−0.04	0.10	−0.45	0.59	0.33	0.24	0.24	0.08	0.02	−0.04	0.01	−0.03	−0.03	0.04	−0.05	0.02	0.05	−0.04	0.01	0.00
33 Region 1	0.15	0.36	0.02	−0.12	−0.09	−0.01	−0.07	0.01	0.02	−0.05	−0.12	−0.03	0.00	−0.07	0.06	0.00	−0.03	−0.06	0.03	−0.06	0.06	0.13
34 Region 2	0.21	0.40	−0.02	−0.06	−0.03	−0.10	0.13	−0.01	0.01	0.00	−0.06	0.15	0.04	−0.01	0.01	−0.07	−0.06	−0.07	−0.02	0.03	−0.04	−0.01
35 Region 3	0.31	0.46	0.06	−0.04	−0.03	−0.02	−0.04	0.11	0.03	−0.02	−0.02	−0.05	−0.07	−0.08	−0.03	−0.02	0.12	0.11	0.03	−0.03	−0.04	−0.02
36 Region 4	0.34	0.47	−0.05	0.18	0.12	0.12	−0.01	−0.10	−0.06	0.05	0.16	−0.06	0.04	0.13	−0.02	0.07	−0.04	0.00	−0.04	0.04	0.02	−0.08
37 Contr. for selection bias	0.76	0.21	0.12	0.06	−0.10	0.19	0.06	0.08	0.07	0.09	−0.01	−0.05	−0.05	0.05	0.00	−0.04	0.09	0.11	0.10	0.10	−0.10	−0.04
38 Contr. for endogeneity	0.61	0.22	−0.04	0.48	0.37	0.18	0.00	−0.05	−0.22	0.10	0.37	0.02	0.02	0.23	0.03	0.12	−0.04	−0.04	0.10	0.23	−0.01	0.02

Variable	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
21 Conting.: turnaround	1.00																	
22 Number of employees	−0.01	1.00																
23 Rating score	0.08	−0.14	1.00															
24 Sudden fin. requirements	0.16	−0.02	0.06	1.00														

(Continued)

Table 3. Continued

Variable	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
25 Successor own. in years	0.01	−0.04	−0.01	0.01	1.00													
26 Ownership > leadership	−0.07	−0.07	0.02	−0.03	0.51	1.00												
27 Corporate age	0.08	0.05	−0.05	0.16	0.07	−0.06	1.00											
28 Generation one	0.01	−0.01	0.16	0.03	−0.10	0.08	−0.55	1.00										
29 Education: highest degree	0.05	0.10	0.06	0.00	−0.06	−0.06	0.04	0.03	1.00									
30 Years since succession	0.09	−0.12	−0.02	0.24	0.25	0.03	0.24	−0.09	−0.06	1.00								
31 Fem. CEO successor ratio	−0.05	−0.06	−0.03	−0.14	0.00	−0.02	0.00	−0.04	−0.04	0.01	1.00							
32 Nr. of CEO successors	0.01	0.01	−0.07	−0.01	−0.01	−0.03	−0.01	−0.08	0.14	0.07	0.06	1.00						
33 Region 1	0.00	−0.02	0.12	−0.06	−0.09	0.03	−0.10	0.29	0.00	−0.04	0.00	−0.02	1.00					
34 Region 2	−0.05	0.00	−0.06	0.09	−0.01	0.00	−0.05	0.02	0.02	−0.07	−0.06	−0.05	−0.21	1.00				
35 Region 3	0.04	0.03	−0.02	0.02	−0.02	0.00	−0.02	−0.03	−0.04	0.02	−0.03	0.01	−0.28	−0.34	1.00			
36 Region 4	0.01	−0.01	−0.03	−0.05	0.09	−0.02	0.13	−0.21	0.02	0.08	0.08	0.05	−0.30	−0.36	−0.48	1.00		
37 Contr. for selection bias	−0.01	−0.52	0.08	0.09	0.02	0.07	−0.08	0.04	−0.07	0.15	0.00	0.32	−0.17	−0.10	0.16	0.05	1.00	
38 Contr. for endogeneity	−0.06	−0.16	−0.27	0.00	0.12	−0.01	0.24	−0.29	−0.15	0.15	0.02	0.07	−0.21	−0.23	−0.01	0.36	0.11	1.00

Table 4. Regression Analysis: Differential Abnormal Enterprise Performance.

	Differential Post-Succession Performance (Profit Margin = PM)							Robustness Checks: Δ Ind.-&perf.-adj. PM					
	Industry- and Performance-Adjusted ΔPM							Changes	LHC	HC-Elem.	Teams	Long Run	Endogeneity
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Family CEO involved	−0.22 (0.466)	0.20 (0.488)	0.50 (0.521)	1.12† (0.650)	1.45* (0.721)	1.52* (0.734)	1.54* (0.733)	1.35† (0.741)	1.71* (0.846)	1.46† (0.741)		3.89** (1.189)	1.50† (0.779)
Family CEO (solo)											1.40† (0.791)		
Family CEO (team)											1.67† (0.954)		
Family CEO & enterprise CEO											3.36† (2.010)		
Family CEO & external CEO											0.32 (1.051)		
Education: Highest degree	−0.21 (0.339)	−0.19 (0.349)	−0.31 (0.388)	−0.37 (0.388)	−0.33 (0.380)	−0.33 (0.381)	−0.35 (0.382)	−0.32 (0.397)	−0.30 (0.374)	−0.47 (0.414)	−0.38 (0.384)	−0.72 (0.617)	−0.25 (0.401)
Human capital score		0.38† (0.212)	0.51* (0.234)	0.52* (0.235)	0.53* (0.237)	0.52* (0.238)	0.51* (0.239)	0.44† (0.251)			0.48* (0.240)	0.68† (0.370)	0.48* (0.241)
Time worked at			−0.07*(0.031)	−0.07*(0.032)	−0.07*(0.032)	−0.08*(0.032)	−0.08*(0.032)	−0.07*(0.034)	−0.08*(0.032)	−0.07† (0.039)	−0.09* (0.034)	−0.24** (0.057)	−0.08* (0.033)
Inherited ownership				−0.83 (0.638)	−0.78 (0.639)	−0.83 (0.641)	−0.84 (0.640)	−0.97 (0.661)	−0.76 (0.622)	−0.86 (0.639)	−0.85 (0.649)	−1.58† (0.941)	−0.81 (0.630)
Family CEO without focused education					−0.79 (0.660)	−0.66 (0.671)	−0.65 (0.672)	−0.50 (0.699)	−0.67 (0.681)	−0.71 (0.688)	−0.57 (0.692)	−1.65† (0.970)	−0.78 (0.676)
Family CEO had to be convinced						−1.57† (0.947)	−1.39 (0.985)	−1.37 (1.020)	−1.48 (0.990)	−1.44 (1.041)	−1.38 (0.985)	−5.53** (2.007)	−1.20 (0.921)
Family CEO due to no buyer							−2.43 (2.145)	−2.40 (1.793)	−2.08 (2.052)	−2.38 (2.220)	−2.41 (2.120)	2.75 (2.672)	−1.89 (1.881)
Ln(changes)								0.77† (0.436)					
Low human capital (LHC)									−0.36 (0.919)				
LHC *x* family CEO involved									−0.99 (1.141)				

(Continued)

Table 4. Continued

	Differential Post-Succession Performance (Profit Margin = PM)							Robustness Checks: Δ Ind.-&perf.-adj. PM					
	Industry- and Performance-Adjusted ΔPM							Changes	LHC	HC-Elem.	Teams	Long Run	Endogeneity
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Experience— age										0.03 (0.041)			
Experience— industry										0.01 (0.045)			
Leadership experience										0.69 (0.737)			
Business education										0.78 (0.578)			
Use of business plan										0.77 (0.520)			
Control for endogeneity													−0.48 (1.599)
Control for selection bias													3.38* (1.690)
Controls	√	√	√	√	√	√	√	√	√	√	√	√	√
Observations	406	391	373	363	363	361	361	342	361	361	361	109	354
R^2	0.07	0.09	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.13	0.55	0.14

Note. The table displays the post-succession differential abnormal performance using ordinary least squares regressions. The dependent variables are the differences in (industry- & performance-adjusted) PM. Controls include: industry- & performance-adjusted PM in the succession year; industry-adjusted PM in the succession year; number of employees in the succession year; rating score in the succession year; sudden financing requirements in the post-succession year; contingency: low relative PM in the succession year; contingency: industry downturn in the succession year; contingency: turnaround in the succession year; corporate age; corporate age squared; generation one; degree of influence; unplanned succession; unplanned succession, no emergency plan; successor ownership in years; ownership > leadership transition; female CEO successor ratio; number of CEO successors; Northern region of Germany; Central-Western region of Germany; Southern region of Germany; and years since succession. Long run refers to a time horizon of more than 5 years. Interactions between variables are marked via *×*. Huber–White robust standard errors are displayed in parentheses. The stars attached to coefficients display significance (*p*-value) at: ***1%, **5%, and †10%. PM = profit margin; Δ Ind.-&perf.-adj. PM = difference in industry- and performance-adjusted profit margin.

seems to be a driving force behind inferior financial performance (Column 9, Table 4). Column 10 displays an itemized representation of the HCS elements. None of them is significant alone, which highlights the importance of a combination of successor skills as operationalized. Unraveling the constellations of family CEO involvement (Column 11, Table 4) yields that the relation remains robust for teams and nonteams, except for family–external successor teams. We address concerns that these results might have a myopic horizon, by running the full model of Column 7 for the subsample of a 5-year post-succession event window (Column 12). The coefficient of the family CEO involved variable is highly significant 3.89 ($p < .01$). Finally, we subject the full model to selection bias and endogeneity controls (Column 13). The results remain stable (coef. 1.50, $p < .1$). Overall, we cannot reject H1 on the basis of these results (Table 2). When including controls (Table 4), our results provide support for the positive influence of the family member attribute (H3). Regarding the other distinct CEO attributes, H2b (general CEO-related HC) and H2d (commitment to status quo) are supported, while H2c (inherited ownership) finds only weak support ($p < .1$, Column 12) in the long-term perspective. For H2a (highest educational degree) we find no support.

Additional Tests. Next to our main analysis, we also performed a series of additional tests to further increase our confidence in the theoretical reasoning behind our hypotheses. These tests are in line with the idea that the identified family member attribute has a positive effect on post-succession performance because of the generalized exchanges across and within family boundaries. Indeed, our data reveal less disrupted stakeholder relationships in successions with family CEO involvement: hierarchies are changed less often ($p < .1$), the main bank is kept more often ($p < .05$), while previous owner–successor collaboration is rated better ($p < .01$) as compared to successions involving nonfamily CEOs.

Additional analyses also support our theoretical reasoning that the general "uncontrolled" negative effect of family CEO involvement on post-succession performance can primarily be subscribed to a biased selection process (i.e., altered succession contests). Indeed, when surveyed as to why the firm was kept in the family, only 2.2% of the 455 family successors in our sample answered that they were unable to find an adequate buyer or that no price agreement could be settled with potential buyers. Thirty-seven family successions were unplanned, of which in three cases no buyer was found and in six cases no price agreement could be reached. These systemic issues are minor and unlikely to cause the deficits of family successors in important attributes (Table 1). Rather, the dominant force is preference, confirming arguments of family favoritism. For family firms "success" includes meeting family-centered goals beyond financial performance. In successions, intergenerational family control is a particularly crucial noneconomic reference point that is balanced with economic interests. Thus, as the successor is selected, economic performance is only "one" reference point in the utility function that a family is maximizing.

Discussion

In line with prior evidence (Bennedsen et al., 2007; Mehrotra, Morck, Shim, & Wiwattanakantang, 2013; Pérez-González, 2006), our initial results suggest a performance gap between the family and nonfamily successor groups in the post-succession period in favor of the latter. However, conducting a more detailed identification strategy compared to prior studies by controlling for important distinct attributes which are systematically distorted for family and nonfamily successors, we were able to measure the family member attribute's effect more precisely. This analysis revealed a more complex reality and provided pioneering evidence of a significantly positive post-succession performance relation of the family member attribute which is in line with

theoretical arguments in favor of family leadership (e.g., Breton-Miller & Miller, 2006; Fama & Jensen, 1983; Kandel & Lazear, 1992; Miller & Breton-Miller, 2005; Royer et al., 2008). Taking a new perspective based on SET, we theoretically distinguished what is truly unique about family successors. Indeed, whereas previous studies used experience, education, motivation, and (non) affiliation with the firm to explain differences in post-succession performance (e.g., Pérez-González, 2006), we argue that these are not inherent in and should not be confused with being a family member. The novelty and reconciliatory explanation of this study—which solves the noted enigma—lies in visualizing all these influences together in one coherent regression which carves out the effect that is solely due to the family affiliation of a CEO.

Contribution to Theory. Our findings have significant theoretical implications for family business literature. Building on SET (Blau, 1964), we cast light on how the family member attribute's positive influence is sourced by two mechanisms: generalized exchange across family boundaries and generalized exchange within the family. These generalized exchanges at multiple temporal phases (prior and post succession) and multiple levels (within and across the family boundary) allow incoming family CEOs to access and maintain specific types of family-specific social capital, family identity and values, and tacit knowledge (Habbershon & Williams, 1999; Pearson et al., 2008) while facilitating intergenerational sustainability of the essence of the family firm (Chua et al., 1999). Indeed, by making the *social* individual the unit of analysis (Asch, 1952), we theorize how SET's core concepts of generalized exchange, the norm of reciprocity, and extended credit can explain how social capital, values, and identity can be perpetuated across generations (an open question according to Zellweger et al. (2019)) which is of singular advantage to family successors and ultimately results in superior post-succession performance (Coleman, 1988; Gouldner, 1960; Nowak & Sigmund, 2005). In other words, we suggest a family affiliation of the CEO should be understood as a unique leadership attribute (Hambrick & Mason, 1984) which positively contributes to post-succession firm performance. This finding can be linked to the conclusion drawn by Hall and Nordqvist (2008), suggesting that family CEOs, because of their greater general understanding of the family firms' values, norms, and beliefs, actually have a natural advantage. In a similar vein, Stewart and Hitt (2012) question the belief that family firms should try to be more like nonfamily firms and that instead possible synergies between family and business need to be further explored. Our findings confirm that when family CEOs embody not only the family member attribute, but also equivalent capabilities and motivation, they are the preferred successors.

Furthering family firm theory, our evidence also adds to the debate about the trade-off between economic and noneconomic goals during succession (Calabrò et al., 2018; Minichilli et al., 2014) by suggesting that the family membership attribute of CEOs has a buffering function. In fact, it opens leeway to pursue family-centered noneconomic goals and to sacrifice financial performance gains related to the family member attribute. Until this buffer is fully depleted, financial performance setbacks are not suffered compared to when nonfamily CEOs are selected.

Our findings also add to the body of empirical literature testing the effect of generalized exchange on organizational outcomes. More specifically, our findings indicate that generalized exchange in the form of an altruistic family succession can have negative effects on the selection process of a new CEO through succession contest alterations. From an SET perspective, deviations from the norms of the CEO labor market, which are the product of repeated social exchanges, result in the selection of a successor who is inferior in optimizing the profitability of the firm's overall exchanges. However, the results also indicate a positive effect of generalized exchange (before and after succession) on post-succession firm performance, adding a layer of complexity to the nature of generalized exchange. Moreover, by building on altruism next to reciprocity as a rule of exchange, we have shed light on an underresearched social exchange motive (Cropanzano

& Mitchell, 2005; Meeker, 1971). Overall, this casts light on the ambivalent nature of generalized exchange: overemphasis on it in the selection phase is noxious for performance. However, generalized exchange prior and post-succession also fosters performance.

Moreover, our evidence encourages a rethink of prior quantitative contributions. They are clearly correct regarding an overall negative performance effect of family successors. But they may have been myopic regarding the underlying Type II agency problems (here: monopolistic selection alteration), thus they might have measured something else (e.g., a lack of HC). Concomitantly, H3 (the family member attribute effect) is quickly overshadowed by preference-driven selection effects leading to an overall negative performance relation of the family successor group (H1). SET, enriched with contest and agency theory (Blumentritt et al., 2013; Daspit et al., 2016; Villalonga & Amit, 2006), is a capable "theoretical microscope" that enables us to zoom in beyond the standard "*family versus nonfamily*" successor group comparisons of extant empirical research. This theoretical angle allows reconciliation of the noted enigma: it reveals that the family member attribute is not causing the observed general underperformance of family successors. Instead, we offer another explanation: ownership structure and agency problems are focal (Jensen & Meckling, 1976; Schulze, Lubatkin, Dino, & Buchholtz, 2001), because the principal's strong power concentration (Blau, 1964; Emerson, 1976) facilitates the pursuit of preferences. Accordingly, the mechanics in many family firm CEO successor selections are monopolistically altered by limiting the contestant pool and/or by a biased evaluation of the contestants' labor market signals. We theorize that this adversely affects selectivity of succession contests and increases the likelihood of selecting a successor who has inferior attributes in many ways, including attributes of performance relevance (H2b–H2d).

Neglecting the economic implications of the selection mechanics and narrowing analyses down to *family versus nonfamily* can lead to the interpretation that family successors are detrimental to financial performance per se. By controlling for important attributes negatively affected by altered selection (and thereby implicitly controlling for a wide array of unobserved selection alterations), we show that the reverse seems to be true. Indeed, scholars must evaluate the family member attribute in clear separation from distinct effects (e.g., H2a–H2d).

Moreover, the absence of evidence for H2a (higher education) and the support for H2b (general CEO-related HC) supports theories that ask for a match between the extant competences of the CEO and the current job requirements of a CEO position (Finkelstein, Hambrick, & Cannella, 2009). Reversing this insight, further higher education outside this match may constitute an unrelated specific competence (e.g., a university degree in a foreign language). Indeed, this supports the view of Murphy and Zábojník (2004) that many specific competences are nowadays—if needed—quickly available in a computerized form, making it less important for modern CEOs to command these themselves. In line, Hall and Nordqvist (2008) nuance the role of CEO formal education in the context of family firms, suggesting that in isolation, these formal competencies are not sufficient to positively influence performance. Our (weak) long-run evidence of H2c (inherited ownership) suggests that theories postulating a so-called "Carnegie effect" (Bø, Halvorsen, & Thoresen, 2018)—meaning that a large inheritance may harm a recipient's motivation—might be apt at the CEO level in family firms.

Clearly, that too much time spent inside the own family firm before succeeding curbs performance (H2d) brings a new temporal dimension into play that complements some of the field's established wisdom. In fact, while learning the family firm's values, identity and stewardship behavior is important (Breton-Miller & Miller, 2015), so is the timeframe in which this is achieved. Overexposure might (unconsciously) bias, turning currently successful strategies into blinders and ossifying values to dogmas, and even relations might become shackles (Miller, 1990). Importantly, this does not question the success formula of many family firms to put emphasis on stability to manage for the long run (Miller & Breton-Miller, 2005). However, to

achieve this might paradoxically require having the successor gain parts of his or her experience outside the firm. In particular, if he or she is already a capable steward who understands the firm's essence.

Contribution to Practice. Our findings highlight that a family member attribute is primarily something good: it is vital for post-succession performance. But, a family affiliation must not be elevated or overconsidered: its positive effect is easily overtrumped by other CEO attributes of greater importance—for example, our findings show that choosing a family heir *without CEO-related HC* will result in severe performance declines. Vice versa, the family member attribute's positive effect can be seen as a buffer that allows the toleration of *small, marginal* performance-reducing deficits in other CEO attributes until its positive performance effect is counterbalanced. If the family pursues family-centered noneconomic goals beyond this buffer (by accepting even more CEO deficits), a trade-off between economic and family goals begins.

Thus, our work strongly emphasizes the necessity of a thoughtful choice of successors. It is important to note that talent is not inherited as efficiently as property and control rights. The children of gifted founder CEOs are not automatically the next great CEOs. Furthermore, it is not enough to have a family successor. The goal must be to nurture a family successor who is capable of withstanding and winning a succession contest against internal and external competitors. It is not just education (many family successors have a university degree), but a *focused* education, which includes the transfer of tacit family knowledge, attending a decent university, and obtaining training and courses tailored to the special demands of family firm CEO successors, that fosters a successful transgenerational leadership. Moreover, external experience gathered outside the own firm is a source of acquiring an additional competitive edge for family successors. The concept of "earning the legacy"—in a broader sense—helps to avoid the negative influence of inherited ownership.

The danger of unwise successor selection can be reduced if an unconstrained contestant pool is allowed, which could be embedded in the family codex. Minichilli et al. (2014) suggest that normative evaluation criteria and joint evaluation with a neutral third party, such as a succession consultant or mediator, or external board members prevents decisions being *overly* driven by family-centered motives, while respecting them. Systemic issues (e.g., labor market access, unplanned succession) can be countered by long-run succession planning that extends search time. Although stylized in the literature, family firm leaders should not overestimate the labor market's beneficial effects. Rather, critical awareness of one's own (and experts') preferences and biases, that is, knowing the "own mind well enough to mistrust it" (Lewis, 2017, p. 31) is crucial for a family firm leader. It can be vital for performance to accept an external interim CEO, a *seat-warmer* (Lee et al., 2003), if the ability of family heirs is currently insufficient or if they display only a reserved willingness to take the lead. This comes at the cost of temporarily reduced family control, but otherwise the human tradition of passing possessions to the next generation, including the ownership and CEO position of a firm, may endanger the performance and existence of the family firm.

Limitations and Future Research Directions. Although we use a rich array of controls, unobserved, time-variant heterogeneity might affect results, thus we adopt a conservative stance and speak of a "performance relation." Moreover, our sample is subject to survivor bias. Ideally one would wish to complement the analysis with future-oriented (market-based) performance indicators, for example, market-to-book ratios (e.g., Pérez-González, 2006; Villalonga & Amit, 2006). However, this approach is unavailable here since most sample firms are not publicly traded. Further, our analysis relies on a difference between the succession year and the year 2009. In a first best approach, one would like to compare averaged values of a standardized

pre-succession period with averaged values of a standardized post-succession period, which is impossible with the data at hand. However, this issue is minor given our number of observations.

Our study also offers several opportunities for future research. While this study advanced the econometric identification of the family member attribute, we still need a deeper understanding of the antecedents at the family, firm, and environmental level that make it a positive force, especially how generalized exchange relationships *across* the family boundary are created and how they are maintained *across* generations. In the same vein, research into context and contingency that analyzes when the family member attribute radiates the most conducive effects to the firm is clearly needed. It might well be that a setting of *distinctive familiness*, that is, an enhanced stock of capital of the firm resulting from a *balanced* prior exchange between family and business system (Chrisman, Chua, & Steier, 2005; Sharma, 2008), might be particularly vital for the family member attribute's positive effect. Also, the family member attribute might entail "dark sides" potentially connected to agency issues (Gedajlovic et al., 2012). Research can shed light on how these might be avoided. Moreover, its relation to managerial discretion, which might amplify its effects, deserves a more detailed understanding. In this quest, the exceptional capabilities of SET to study an individual in his or her group setting, the reciprocal human interactions that constitute the group (Asch, 1952; Simmel, 1895), and the emergent structures, norms, and constellations of expectations, obligations, and shared schemata (Thibaut & Kelley, 1959) could provide great advantages.

Future studies might illuminate predecessors' intentions in terms of preferences, hopes, visions and how their (in)stability across time impacts selection of the next CEO. That being said, far more research on the inherent challenge confronting any firm seeking a new CEO is needed. That is, how do we—as humans, or better, as behavioral administrative man—select people for positions (Simon, 1947)? In fact, this process is subject to numerous cognitive and affective biases (March & Simon, 1958), and even sophisticated data-driven models based on seemingly objective criteria have severe limitations (Lewis, 2017). The issue is immense and far from a clear resolution, which is why Lewis (2017) in his book on the friendship of Amos Tversky and Daniel Kahneman coined it "the problem that never goes away."

This, however, does not mean that more research on CEO attributes, especially in the context of a family firm, the most ubiquitous firm type on the planet, has no merit. Indeed, every additional CEO attribute that research identifies as relevant to lead a family firm will improve our capability to make "better," more informed, successor selection decisions. Hence, systematic research, both qualitative and quantitative, at the unit level of the family business leader—the CEO level—will yield progress. Our findings regarding tenure inside the firm deserve further investigation: Is the resulting bias towards the status quo the same for family and nonfamily CEO successors? We also need studies that compare the impact of CEO attributes inside and outside the family firm context. Is the set of CEO-level attributes required to steer a family firm likely to differ from those for heading an S&*P* 500 nonfamily firm? Established knowledge-based findings from nonfamily firms might not be directly transferable.

While CEO-level studies must carefully take into consideration other trajectories (e.g., from firm- or industry level) that could spoil inference, such an endeavor might especially benefit from multidisciplinary research teams. Seeking the advice from adjacent disciplines, especially psychology and sociology, could prove a prudent provision for measuring individual attributes in the state of the art. Data sources for such an agenda are plentiful. Not only do they encompass direct interviews with CEOs (as in this manuscript), bibliographical information on CEOs is available due to disclosure regulations or in compendia, and even CEO statements in newspapers, in speeches or on firm homepages might be computerized and analyzed with linguistic software to measure CEO attributes (e.g., Hirshleifer, Low, & Teoh, 2012).

Conclusion

Deepening the identification beyond that of prior empirical studies, we provide pioneering evidence that a family affiliation of the CEO successor is positively related to post-succession performance. However, this effect is small and in effect magnitude is easily excelled by the negative impacts of other CEO attributes. This also explains why the family successor coefficient appears negative when the analysis is not granular on the CEO attribute level. Our evidence entails implications for theory and practice: it corrects the impression that selecting a family CEO is primarily negative and reconciles the contradiction of the "family successor enigma."

When interviewed about their reasons for becoming a CEO, one family CEO answered in this fashion: "It was definitely a family tradition." But should this be considered a sufficient reason for family succession? On this, we refer to the words of the famous Roman statesman and constitutionalist Marcus Tullius Cicero in the opening quote of this article: "if our nature does not permit," meaning if the family successor is otherwise not equipped to be the next CEO, then according to Cicero and to the findings in this research, the answer is no. In fact, this study is empirical evidence for a more than 2000-year-old Roman advice of when to become a family successor.

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References

Agrawal, A., Knoeber, C. R., & Tsoulouhas, T. (2006). Are outsiders handicapped in CEO successions? *Journal of Corporate Finance*, *12*(3), 619–644.

Ahrens, J. -P., & Woywode, M. (2014). Heroes of the Green Room - Post-succession restructuring and corporate performance in family firms. *Family Firm Institute Best Unpublished Research Award 2014*.

Ahrens, J. -P., Landmann, A., & Woywode, M. (2015). Gender preferences in CEO successions in family firms: Family characteristics and human capital of the successor. *Journal of Family Business Strategy*, *6*(2), 86–103.

Ahrens, J. -P., Uhlaner, L., Woywode, M., & Zybura, J. (2018). "Shadow emperor" or "loyal paladin"? – The Janus face of previous owner involvement in family firm successions. *Journal of Family Business Strategy*, *9*(1), 73–90.

Alcorn, P. B. (1982). *Success and survival in the family-owned firms*. New York, NY: McGraw-Hill.

Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *The Journal of Finance*, *58*(3), 1301–1328.

Arrow, K. J. (1973). Higher education as a filter. *Journal of Public Economics*, *2*(3), 193–216.

Asch, S. E. (1952). *Social psychology*. New Jersey: Prentice-Hall.

Barach, J. A., & Ganitsky, J. B. (1995). Successful succession in family business. *Family Business Review*, *8*(2), 131–155.

Barach, J. A., Ganitsky, J., Carson, J. A., & Doochin, B. A. (1988). Entry of the next generation: Strategic challenge for family business. *Journal of Small Business Management*, *26*(2), 49–56.

Barber, B. M., & Lyon, J. D. (1996). Detecting abnormal operating performance: The empirical power and specification of test statistics. *Journal of Financial Economics*, *41*(3), 359–399.

Barnard, C. I. (1938). *The functions of the executive*. Cambridge, MA: Harvard University Press.

Barry, B. (1975). The development of organization structure in the family firm. *Journal of General Management*, *3*(1), 42–60.

Baye, M. R., Kovenock, D., & de Vries, C. G. (1993). Rigging the lobbying process: An application of the all-pay auction. *The American Economic Review*, *83*(1), 289–294.

Bennedsen, M., Nielsen, K. M., Pérez-González, F., & Wolfenzon, D. (2007). Inside the family firm: The role of families in succession decisions and performance. *The Quarterly Journal of Economics*, *122*(2), 647–691.

Blau, P. (1964). *Exchange and power in social life*. New York, NY: Wiley.

Bloom, N., & Van Reenen, J. (2007). Measuring and explaining management practices across firms and countries. *The Quarterly Journal of Economics*, *122*(4), 1351–1408.

Blumentritt, T., Mathews, T., & Marchisio, G. (2013). Game theory and family business succession: An introduction. *Family Business Review*, *26*(1), 51–67.

Breton-Miller, L, I., & Miller, D. (2006). Why do some family businesses out-compete? Governance, long-term orientations, and sustainable capability. *Entrepreneurship Theory and Practice*, *30*(6), 731–746.

Breton-Miller, L, I., & Miller, D. (2015). Learning stewardship in family firms: For family, by family, across the life cycle. *Academy of Management Learning & Education*, *14*(3), 386–399.

Breton-Miller, L, I., Miller, D., & Steier, L. P. (2004). Toward an integrative model of effective FOB succession. *Entrepreneurship Theory and Practice*, *28*(4), 305–328.

Brüderl, J., Preisendörfer, P., & Ziegler, R. (1992). Survival chances of newly founded business organizations. *American Sociological Review*, *57*(2), 227–242.

Bø, E. E., Halvorsen, E., & Thoresen, T. O. (2018). Heterogeneity of the carnegie effect. *Journal of Human Resources.* Advance online publication. doi: 10.3368/jhr.54.3.0915.7366R1.

Cabrera-Suárez, K., De Saá-Pérez, P., & García-Almeida, D. (2001). The succession process from a resource- and knowledge-based view of the family firm. *Family Business Review*, *14*(1), 37–46.

Cadieux, L. (2007). Succession in small and medium-sized family businesses: Toward a typology of predecessor roles during and after instatement of the successor. *Family Business Review*, *20*(2), 95–109.

Calabrò, A., Minichilli, A., Amore, M. D., & Brogi, M. (2018). The courage to choose! Primogeniture and leadership succession in family firms. *Strategic Management Journal*, *39*(7), 2014–2035.

Campopiano, G., & Rondi, E. (2019). Hierarchical dyadic congruence in family firms: The interplay of supervisor and supervisee socioemotional wealth importance and familial status. *Entrepreneurship Theory and Practice*, *43*(2), 322–329.

Carnegie, A. (1889). Wealth. *The North American Review*, *148*(391), 653–664.

Carnegie, A. (1933). The advantages of poverty. In *The Gospel of Wealth and Other Timely Essays*. New York, NY: Doubleday, Doran & Co.

Carpenter, M. (2002). The implications of strategy and social context for the relationship between top management team heterogeneity and firm performance. *Strategic Management Journal*, *23*(3), 275–284.

Carr, J. C., Cole, M. S., Ring, J. K., & Blettner, D. P. (2011). A measure of variations in internal social capital among family firms. *Entrepreneurship Theory and Practice*, *35*(6), 1207–1227.

Chan, W. (1996). External recruitment versus internal promotion. *Journal of Labor Economics*, *14*(4), 555–570.

Chang, S. J., & Shim, J. (2015). When does transitioning from family to professional management improve firm performance? *Strategic Management Journal*, *36*(9), 1297–1316.

Chen, G., & Hambrick, D. C. (2012). CEO replacement in turnaround situations: Executive (mis) fit and its performance implications. *Organization Science*, *23*(1), 225–243.

Choi, Y. S., Hyeon, J., Jung, T., & Lee, W. J. (2018). Audit pricing of shared leadership. *Emerging Markets Finance and Trade*, *54*(2), 336–358.

Chrisman, J. J., Chua, J. H., & Sharma, P. (1998). Important attributes of successors in family businesses: An exploratory study. *Family Business Review*, *11*(1), 19–34.

Chrisman, J. J., Chua, J. H., & Steier, L. (2005). Sources and consequences of distinctive familiness: An introduction. *Entrepreneurship Theory and Practice*, *29*(3), 237–247.

Chrisman, J. J., Memili, E., & Misra, K. (2014). Non-family managers, family firms, and the winner's curse: The influence of non-economic goals and bounded rationality. *Entrepreneurship Theory and Practice*, *38*(5), 1103–1127.

Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, *23*(4), 19–39.

Cicero, M. T. (44 BC). *De Officiis. Translated by Walter Miller* (1913 - reprint). Cambridge, MA: Harvard University Press.

Clarke, R. N. (1989). SICs as delineators of economic markets. *The Journal of Business*, *62*(1), 17–31.

Coleman, J. S. (1986). Social theory, social research, and a theory of action. *The American Journal of Sociology*, *91*, 1309–1335.

Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, *94*, S95–S120.

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of management*, *31*(6), 874–900.

Daily, C. M., Dalton, D. R., & Cannella, A. A. (2003). Corporate governance: Decades of dialogue and data. *Academy of Management Review*, *28*(3), 371–382.

Daspit, J. J., Holt, D. T., Chrisman, J. J., & Long, R. G. (2016). Examining family firm succession from a social exchange perspective: A multiphase, multistakeholder review. *Family Business Review*, *29*(1), 44–64.

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Towards a stewardship theory of management. *Academy of Management Review*, *22*(1), 20–47.

Dehlen, T., Zellweger, T., Kammerlander, N., & Halter, F. (2014). The role of information asymmetry in the choice of entrepreneurial exit routes. *Journal of Business Venturing*, *29*(2), 193–209.

Demsetz, H. (1983). The structure of ownership and the theory of the firm. *Journal of Law and Economics*, *26*(2), 375–390.

Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *The Journal of Political Economy*, *93*(6), 1155–1177.

Dyck, A., & Zingales, L. (2004). Private benefits of control: An international comparison. *The Journal of Finance*, *59*(2), 537–600.

Edwards, J. N. (1969). Familial behavior as social exchange. *Journal of Marriage and the Family*, *31*(3), 518–526.

Edwards, J. R. (1994). The study of congruence in Organizational Behavior Research: Critique and a proposed alternative. *Organizational Behavior and Human Decision Processes*, *58*(1), 51–100.

Edwards, J. R. (1995). Alternatives to difference scores as dependent variables in the study of congruence in Organizational Research. *Organizational Behavior and Human Decision Processes*, *64*(3), 307–324.

Edwards, J. R. (2001). Ten difference score Myths. *Organizational Research Methods*, *4*(3), 265–287.

Ekeh, P. P. (1974). *Social exchange theory: The two traditions*. Cambridge, MA: Harvard University Press.

Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology*, *2*, 335–362.
Fama, E. F. (1980). Agency problems and the theory of the firm. *The Journal of Political Economy*, *88*(2), 288–307.
Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, *26*(2), 301–325.
Fiegener, M. K., Brown, B. M., Prince, R. A., & File, K. M. (1994). A comparison of successor development in family and nonfamily businesses. *Family Business Review*, *7*(4), 313–329.
Finkelstein, S., Hambrick, D. C., & Cannella, A. A. (2009). *Strategic leadership: Theory and research on executives, top management teams, and boards*. Oxford: Oxford University Press.
Galton, F. (1886). Regression towards mediocrity in hereditary stature. *Journal of the Anthropological Institute of Great Britain and Ireland*, *15*, 246–263.
Galton, F. (1890). Kinship and correlation. *The North American Review*, *150*(401), 419–431.
Gedajlovic, E., Carney, M., Chrisman, J. J., & Kellermanns, F. W. (2012). The adolescence of family firm research taking stock and planning for the future. *Journal of Management*, *38*(4), 1010–1037.
Geletkanycz, M. A., & Black, S. S. (2001). Bound by the past? Experience-based effects on commitment to the strategic status quo. *Journal of Management*, *27*(1), 3–21.
Goffman, E. (1959). *The presentation of self in everyday life*. New York, NY: Doubleday.
Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, *25*(2), 161–178.
Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *The American Journal of Sociology*, *91*, 481–510.
Habbershon, T. G., & Williams, M. L. (1999). A resource-based framework for assessing the strategic advantages of family firms. *Family Business Review*, *12*(1), 1–25.
Hall, A., & Nordqvist, M. (2008). Professional management in family businesses: Toward an extended understanding. *Family Business Review*, *21*(1), 51–69.
Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review*, *32*(2), 334–343.
Hambrick, D. C., Geletkanycz, M. A., & Fredrickson, J. W. (1993). Top executive commitment to the status quo: Some tests of its determinants. *Strategic Management Journal*, *14*(6), 401–418.
Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, *9*(2), 193–206.
Handler, W. C. (1990). Succession in family firms: A mutual role adjustment between entrepreneur and next-generation family members. *Entrepreneurship Theory and Practice*, *15*(1), 37–51.
Hechter, M. (1987). *Principles of group solidarity*. Berkeley: University of California Press.
Heckman, J. J. (1995). Lessons from the bell curve. *The journal of Political Economy*, *103*(5), 1091–1120.
Hillier, D., & McColgan, P. (2009). Firm performance and managerial succession in family managed firms. *Journal of Business Finance & Accounting*, *36*(3-4), 461–484.
Hirshleifer, D., Low, A., & Teoh, S. H. (2012). Are overconfident CEOs better innovators? *The Journal of Finance*, *67*(4), 1457–1498.
Holtz-Eakin, D., Joulfaian, D., & Rosen, H. S. (1993). The Carnegie Conjecture: Some empirical evidence. *The Quarterly Journal of Economics*, *108*(2), 413–435.
Holusha, J. (1984). Iacocca exposes scars of Ford era. *The New York Times*.
Homans, G. C. (1958). Social behavior as exchange. *The American Journal of Sociology*, *63*(6), 597–606.
Homans, G. C. (1961). *Social behavior: Its elementary forms*. New York, NY: Harcourt, Brace & World.
Howorth, C., & Ali, Z. (2001). Family business succession in Portugal: An examination of case studies in the furniture industry. *Family Business Review*, *14*(3), 231–244.
Iles, P. (1999). *Managing staff selection and assessment*. Philadelphia: Open University Press.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360.

Kandel, E., & Lazear, E. P. (1992). Peer pressure and partnerships. *The Journal of Political Economy*, *100*(4), 801–817.

Kelly, L. M., Athanassiou, N., & Crittenden, W. F. (2000). Founder centrality and strategic behavior in the family-owned firm. *Entrepreneurship Theory and Practice*, *25*(2), 27–42.

Kets de Vries, M. F. R. (1993). The dynamics of family controlled firms: The good and the bad news. *Organizational Dynamics*, *21*(3), 59–72.

Konrad, K. A. (2009). *Strategy and dynamics in contests*. Oxford: Oxford University Press.

Lansberg, I., & Astrachan, J. H. (1994). Influence of family relationships on succession planning and training: The importance of mediating factors. *Family Business Review*, *7*(1), 39–59.

Lazear, E. P., & Rosen, S. (1981). Rank-order tournaments as optimum labor contracts. *The Journal of Political Economy*, *89*(5), 841–864.

Leach, P., Kenway-Smith, W., Hart, A., Morris, T., Ainsworth, J., Beterlsen, E., . . .Pasari, V. (1990). *Managing the family business in the U.K.: A stoy hayward survey in conjunction with the London Business School*. London: Stoy Harvard.

Lee, K. S., Lim, G. H., & Lim, W. S. (2003). Family business succession: Appropriation risk and choice of successor. *Academy of Management Review*, *28*(4), 657–666.

Lewis, M. (2017). *The undoing project: A friendship that changed our minds*. New York, NY: W.W. Norton & Company.

Long, R. G. (2011). Commentary: Social exchange in building, modeling, and managing family social capital. *Entrepreneurship Theory and Practice*, *35*(6), 1229–1234.

Long, R. G., & Mathews, K. M. (2011). Ethics in the family firm: Cohesion through reciprocity and exchange. *Journal of Business Ethics*, *21*, 287–308.

Long, R. G., & Chrisman, J. J. (2014). Management succession in family business. In L. Melin, M. Nordqvist, & P. Sharma (Eds.), *Sage handbook of family business* (pp. 249–268). Thousand Oaks, CA: Sage Publications.

March, J. G., & Simon, H. A. (1958). *Organizations*. New York, NY: John Wiley & Sons, Inc.

Mauss, M. (1925). *The gift: Forms and functions of exchange in archaic society*. New York, NY: Free Press.

McConaughy, D. L. (2000). Family CEOs vs. nonfamily CEOs in the family-controlled firm: An examination of the level and sensitivity of pay to performance. *Family Business Review*, *13*(2), 121–131.

McLarty, B. D., Vardaman, J. M., & Barnett, T. (2019). Congruence in exchange: The influence of supervisors on employee performance in family firms. *Entrepreneurship Theory and Practice*, *43*(2), 302–321.

Meeker, B. F. (1971). Decisions and exchange. *American Sociological Review*, *36*(3), 485–495.

Mehan, H., & Wood, H. (1975). *The reality of ethnomethodology*. New York, NY: John Wiley & Sons, Inc.

Mehrotra, V., Morck, R., Shim, J., & Wiwattanakantang, Y. (2013). Adoptive expectations: Rising sons in Japanese family firms. *Journal of Financial Economics*, *108*(3), 840–854.

Miller, D. (1990). *The Icarus paradox: How excellent organizations can bring about their own downfall*. New York, NY: Harper Business.

Miller, D., & Breton-Miller, L, I. (2005). *Managing for the long run: Lessons in competitive advantage from great family businesses*. Boston, MA: Harvard Business Press.

Miller, D. (1993). Some organizational consequences of CEO succession. *The Academy of Management Journal*, *36*(3), 644–659.

Miller, D., Breton-Miller, L, I., & Scholnick, B. (2008). Stewardship vs. stagnation: An empirical comparison of small family and non-family businesses. *Journal of Management Studies*, *45*(1), 51–78.

Miller, D., Lee, J., Chang, S., & Le Breton-Miller, I. (2009). Filling the institutional void: The social behavior and performance of family vs non-family technology firms in emerging markets. *Journal of International Business Studies*, *40*(5), 802–817.

Miller, D., Le Breton-Miller, I., Minichilli, A., Corbetta, G., & Pittino, D. (2014). When do non-family CEOs outperform in family firms? Agency and behavioural agency perspectives. *Journal of Management Studies*, *51*(4), 547–572.

Mincer, J. A. (1974). *Schooling, experience, and earnings*. New York, NY: Columbia University Press.

Miller, D., Steier, L., & Le Breton-Miller, I. (2003). Lost in time: intergenerational succession, change, and failure in family business. *Journal of Business Venturing*, *18*(4), 513–531.

Minichilli, A., Nordqvist, M., Corbetta, G., & Amore, M. D. (2014). CEO succession mechanisms, organizational context, and performance: A socio-emotional wealth perspective on family-controlled firms. *Journal of Management Studies*, *17*(7), 1153–1179.

Morris, M. H., Williams, R. O., Allen, J. A., & Avila, R. A. (1997). Correlates of success in family business transitions. *Journal of Business Venturing*, *12*(5), 385–401.

Mulligan, C. B. (1999). Galton versus the human capital approach to inheritance. *Journal of Political Economy*, *107*(S6), S184–S224.

Murphy, K. J., & Zábojník, J. (2004). CEO pay and appointments: A market-based explanation for recent trends. *American Economic Review*, *94*(2), 192–196.

Nowak, M. A., & Sigmund, K. (2005). Evolution of indirect reciprocity. *Nature*, *437*(7063), 1291–1298.

O'Brien, J. A., & Kollock, P. (1991). Social exchange theory as a conceptual framework for teaching the sociological perspective. *Teaching Sociology*, *19*(2), 140–153.

Ocasio, W. (1999). Institutionalized action and corporate governance: The reliance on rules of CEO succession. *Administrative Science Quarterly*, *44*(2), 384–416.

Pearson, A., Carr, J., & Shaw, J. (2008). Toward a theory of familiness: A social capital perspective. *Entrepreneurship: Theory & Practice*, *32*(6), 949–969.

Quigley, T. J., & Hambrick, D. C. (2012). When the former CEO stays on as board chair: Effects on successor discretion, strategic change, and performance. *Strategic Management Journal*, *33*(7), 834–859.

Pérez-González, F. (2006). Inherited control and firm performance. *American Economic Review*, *96*(5), 1559–1588.

Rosen, S. (1986). Prizes and incentives in elimination tournaments. *The American Economic Review*, *76*(4), 701–715.

Royer, S., Simons, R., Boyd, B., & Rafferty, A. (2008). Promoting family: A contingency model of family business succession. *Family Business Review*, *21*(1), 15–30.

Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. *Organization Science*, *12*(2), 99–116.

Sharma, P. (2008). Commentary: Familiness: Capital stocks and flows between family and business. *Entrepreneurship Theory & Practice*, *32*(6), 971–977.

Simmel, G. (1895). The problem of sociology. *The ANNALS of the American Academy of Political and Social Science*, *6*(3), 52–63.

Simon, H. A. (1983). *Reason in human affairs*. Stanford University Press: Stanford.

Simon, H. (1996). *Hidden Champions: Lessons from the 500 of the World's Best Unknown Companies*. Boston, MA: Harvard Business School Press.

Simon, H. A. (1947). *Administrative behavior. A study of decision-making processes in administrative organization*. New York, NY: Macmillan.

Slovin, M. B., & Sushka, M. E. (1993). Ownership concentration, corporate control activity, and firm value: Evidence from the death of inside blockholders. *The Journal of Finance*, *48*(4), 1293–1321.

Smith, B. F., & Amoako-Adu, B. (1999). Management succession and financial performance of family controlled firms. *Journal of Corporate Finance*, *5*(4), 341–368.

Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, *87*(3), 355–374.

Spence, M. (1974). Competitive and optimal responses to signals: An analysis of efficiency and distribution. *Journal of Economic Theory*, *7*(3), 296–332.

Stewart, A., & Hitt, M. A. (2012). Why can't a family business be more like a nonfamily business? Modes of professionalization in family firms. *Family Business Review*, *25*(1), 58–86.

Stinchcombe, A. L. (1965). Social structure and organizations. In J. G. March (Ed.), *Handbook of organizations* (pp. 93–142). New York, NY: Rand McNally.

Strober, M. H. (1990). Human capital theory: Implications for HR managers. *Industrial Relations*, *29*(2), 214–239.

Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York, NY: Wiley.

Tsoulouhas, T., Knoeber, C. R., & Agrawal, A. (2007). Contests to become CEO: Incentives, selection and handicaps. *Economic Theory*, *30*(2), 195–221.

Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, *211*(4481), 453–458.

Villalonga, B., & Amit, R. (2006). How do family ownership. *control and management affect firm value? Journal of Financial Economics*, *80*(2), 385–417.

Villanueva, J., & Sapienza, H. J. (2009). Goal tolerance, outside investors, and family firm governance. *Entrepreneurship Theory and Practice*, *33*(6), 1193–1199.

Ward, J. L. (1987). *Keeping the family business healthy: How to plan for continuing growth, profitability, and family leadership*. San Francisco, CA: Jossey Bass.

Ward, J. L. (1997). Growing the family business: Special challenges and best practices. *Family Business Review*, *10*(4), 323–337.

Welch, J. F., Jr., & Byrne, J. A. (2001). *Jack, Straight from the Gut*. New York, NY: Warner Business Books.

Wennberg, K., Wiklund, J., Hellerstedt, K., & Nordqvist, M. (2011). Implications of intra-family and external ownership transfer of family firms: Short-term and long-term performance differences. *Strategic Entrepreneurship Journal*, *5*(4), 352–372.

Westphal, J. D., & Zajac, E. J. (1997). Defections from the inner circle: Social exchange, reciprocity, and the diffusion of board independence in U.S. corporations. *Administrative Science Quarterly*, *42*(1), 161–183.

Zellweger, T. M., Chrisman, J. J., Chua, J. H., & Steier, L. P. (2019). Social structures, social relationships, and family firms. *Entrepreneurship Theory and Practice*, *43*(2), 207–223.

ZEW. (2010). Computer Aided Telephone Interview "Generation Change/Succession".

Zellweger, T., & Kammerlander, N. (2015). Family, wealth, and governance: An agency account. *Entrepreneurship Theory and Practice*, *39*(6), 1281–1303.

Zibarras, L. D., & Woods, S. A. (2010). A survey of UK selection practices across different organization sizes and industry sectors. *Journal of Occupational and Organizational Psychology*, *83*(2), 499–511.

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