



When the Former CEO Stays on Board: The Role of the Predecessor's Board Retention for Product Innovation in Family Firms*

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Understanding product innovation in family firms is an important research endeavor given the economic pre-dominance of those firms, their idiosyncrasies, and the importance of constant renewal for those firms to achieve transgenerational survival. Recently, family firm research has highlighted the role of next-generation chief executive officers (CEOs; i.e., successors) who are often seen as drivers for innovating a family firm's products. However, prior research has typically neglected that predecessors, who are often portrayed as less willing to introduce product innovation, frequently remain involved postsuccession through occupying board positions and thus still substantially influence the decision-making processes and outcomes of family firms, such as product innovation. As a result, our understanding of the role of predecessors and their postsuccession involvement in family firms' product innovation remains unclear. Building on stakeholder salience theory and on insights from the literature on innovation and succession in family firms, we develop hypotheses about how and under which conditions the predecessor's board retention affects product innovation in family firms after succession. Building on more than 200 family firm CEO succession cases in small- and medium-sized, privately owned family firms, our results reveal that the predecessor's board retention negatively affects product innovation. This negative effect is strengthened with increasing involvement of the predecessor in the successor selection process, and it is offset in the case of family succession. Our findings contribute to the emerging stream of research on family firm succession and product innovation and provide important implications for practice.

Practitioner Points

- For family firms facing succession, our results emphasize that they should be aware that predecessors,

who remain involved postsuccession by staying on the board of the firm, constitute salient stakeholders who can substantially hinder product innovation as they tend to preserve the status quo and restrict necessary changes.

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- To ensure the successor's discretion in product innovation, family firms that are planning succession should thus emphasize transparency about and clarity of the predecessor's duties to prevent "shadow emperors" who negatively influence product innovation.
- Moreover, family firms should avoid having predecessors select the new CEOs solely by themselves, as this strengthens their power and legitimacy as important stakeholders and thus increases their negative influence on product innovation.
- In the case of family successions, predecessors tend to be less intervening in product innovation, whereas they hinder product innovation in family external succession. Our results thus imply that

family firms should particularly focus on reducing the predecessor's influence on product innovation postsuccession in family external successions.

Introduction

Product innovation, which refers to “new product[s] or services introduced to meet an external user or market need” (Damanpour, 1991, p. 561), is critical for the competitive advantage and survival of firms in general (e.g., Calantone, Harmancioglu, and Droge, 2010; Katila and Chen, 2008) and particularly important for family firms, as it increases the likelihood of survival across generations (Chrisman, Chua, De Massis, Frattini, and Wright, 2015; De Massis, Frattini, Kotlar, Petruzzelli,

and Wright, 2016; Kraiczy, Hack, and Kellermanns, 2015). A growing stream of research has acknowledged that the idiosyncrasies of family firms render their product innovation processes different from those of other firms (Calabrò et al., 2018; Chirico and Salvato, 2016; Duran, Kammerlander, Van Essen, and Zellweger, 2016). For instance, this research stream has highlighted the specific role of family firm chief executive officers (CEOs) for family firm product innovation (e.g., Duran et al., 2016; Kraiczy et al., 2015) due to their uncontested control over the firm (Carney, 2005), their goals (Kammerlander and Ganter, 2015), and the resources that they bring to the company (Carnes and Ireland, 2013).

In particular, prior family firm research on CEO succession, which refers to the transfer of control from one generation to another (Mitchell, Hart, Valcea, and Townsend, 2009), has emphasized the important role of next-generation CEOs (i.e., successors) for product innovation, particularly highlighting their openness for new ideas (Salvato, 2004), their increased risk-taking propensity (Kraiczy et al., 2015), and their new knowledge and fresh perspectives (Woodfield and Husted, 2017). However, recent research has also shown that former family firm CEOs (i.e., predecessors) often remain active in the firm, for instance, through occupying board positions (Mitchell et al., 2009; Quigley and Hambrick, 2012), which allows them to be “able to stay involved and influential in ways that predecessors in nonfamily firms cannot” (Mitchell et al., 2009, p. 1209). Given the influential role of boards in family firms (Arzubiaga, Kotlar, De Massis, Maseda, and Iturralde, 2018), they can thus still significantly influence the decision-making processes and outcomes of family firms (Mitchell et al., 2009; Sharma, Chrisman, and Chua, 2003), including (product) innovation (Hauck and Prügl, 2015; Woodfield and Husted, 2017). While the role of successors for (product) innovation has received significant attention in the family firm literature (e.g., Kraiczy et al., 2015), the role of predecessors in this regard, despite their high importance, has so far been largely overlooked by researchers. We thus lack profound empirical and theoretical knowledge about how and under which conditions the continued involvement of the predecessor postsuccession affects product innovation in family firms. Given the growing evidence that former CEOs tend to remain involved after succession in family firms (Mitchell et al., 2009; Quigley and Hambrick, 2012), this is a relevant research gap for both academia and practice.

BIOGRAPHICAL SKETCHES

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The aim of our study is thus to extend prior research by examining the following research questions: (1) *How is the predecessor's postsuccession influence through her/his board retention related to product innovation in family firms?* (2) *Which conditions determine how the predecessor's postsuccession influence through her/his board retention affects product innovation in family firms?* To examine these questions, we build on stakeholder salience theory (Mitchell, Agle, Chrisman, and Spence, 2011; Mitchell, Agle, and Wood, 1997), which posits that the influence of stakeholders depends on their salience, that is, the stakeholder's power, legitimacy, and urgency. In particular, we argue that the board retention increases the predecessor's salience to influence the decision-making processes regarding product innovation. Given that prior research on family firm innovation (e.g., Chrisman et al., 2015; Kraiczy et al., 2015) and succession (e.g., Daspit, Holt, Chrisman, and Long, 2016; Kotlar, De Massis, Frattini, and Kammerlander, 2019) has shown that predecessors tend to preserve the status quo (Mitchell et al., 2009) and thus generally show less willingness to innovate compared to their successors (Cruz and Nordqvist, 2012; Hauck and Prügl, 2015; Salvato, 2004), we argue that predecessors who remain on the board of the firm have increased salience to negatively influence product innovation postsuccession in family firms. Furthermore, we examine two contingency factors which affect the predecessor's salience and thus her/his influence on product innovation. Specifically, we build on prior research that has shown that predecessors often substantially influence the selection of the successor due to their powerful position in the family firm (Daspit et al., 2016; De Massis, Sieger, Chua, and Vismara, 2016) and argue that this strengthens the salience of the predecessor and thus the effect of his/her board retention on product innovation. Furthermore, we argue that family ties between the predecessor and the successor strengthen the salience of the predecessor due to the increased cohesiveness between the new and the former CEO, thus further strengthening the proposed relationship. Empirical evidence from more than 200 CEOs of private, small- and medium-sized family firms who took over leadership responsibility and ownership via succession in the past supports most of our hypotheses.

Our study provides several contributions to the family firm innovation literature. First, we contribute to the emerging stream of research at the intersection of product innovation and intergenerational succession in family firms (Chirico and Salvato, 2016; Hauck and

Prügl, 2015; Kraiczy et al., 2015) by taking a stakeholder salience perspective to examine the role of the predecessor's postsuccession involvement through staying on the board of the family firm for product innovation. While prior research has shown that former CEOs tend to stay frequently involved postsuccession and thus affect the decision-making and outcomes of family firms (e.g., Mitchell et al., 2009), little is known about their influence, especially on (product) innovation (Hauck and Prügl, 2015), as scholars have typically neglected to examine their impact. Our results thus improve our scholarly understanding by arguing and revealing that the predecessor's board retention provides her/him with increased salience to hinder product innovation postsuccession in family firms. Second, our study provides important insights into the boundary conditions that affect a predecessor's salience and thus her/his influence on product innovation postsuccession. In particular, our results emphasize that the salience of the predecessor is higher in cases in which s/he is involved in the successor selection, thus further strengthening the negative influence of her or his board retention on product innovation. Furthermore, our findings uncover that the negative effect of a predecessor's board retention is offset if family ties between the predecessor and the successor exist. Last, our study provides important insights for practitioners, as we shed light on the influence of predecessors—a common but under-researched phenomenon in family firms—for product innovation. Specifically, we provide practical “hands-on” advice on how family firms might reduce the possible negative influence of former CEOs by reducing their influence on the successor selection process and using family successions, that is, succession with family ties between the incumbent and the successor. We also contradict several practitioner-oriented claims that disparage family succession and portray later generation family firm CEOs as lacking innovativeness. In fact, our empirical results reveal that postsuccession innovation is higher if family ties exist between predecessors and successors.

Theoretical Background

Product Innovation in Family Firms

Family firms account for the majority of firms around the world (La Porta, Lopez-de-Silanes, and Shleifer, 1999). The survival (or lack thereof) of those firms

over generations has thus attracted increasing scholarly attention (Chrisman et al., 2015; Duran et al., 2016; Kellermanns, Eddleston, and Zellweger, 2012). A growing stream of research has emphasized that in today's rapidly changing environments with shortened product life cycles and intensified competition, product innovation is of great importance for the competitive advantage and long-term survival of firms in general (e.g., Calantone et al., 2010; Katila and Chen, 2008) and family firms in particular (e.g., Calabrò et al., 2018; Chrisman et al., 2015; De Massis, Frattini, et al., 2016; Kraiczy et al., 2015). Prior research has shown that product innovation is crucial for the continuity of family firms across generations as they enable them to constantly adapt and renew themselves and thus to respond to changing business environments (e.g., market and customer needs) and technical conditions (Chirico and Salvato, 2016; De Massis, Frattini, et al., 2016; Jaskiewicz, Combs, and Rau, 2015). Moreover, prior research has argued that product innovation is particularly relevant for family firms, as their longevity and long-term orientation can enable them to search and (re)combine knowledge from their past, present, and future to develop new products (De Massis, Frattini, et al., 2016; Erdogan, Rondi, and De Massis, 2020; Rondi, De Massis, and Kotlar, 2018).¹

Due to its relevance for the continuity of family firms, scholars have increasingly paid attention to product innovation in family firms (De Massis, Frattini, and Lichtenthaler, 2013; Feninger, Kammerlander, and De Massis, 2019; Kraiczy et al., 2015). However, this stream of research has thus far yielded inconsistent findings, and “our understanding of the family-specific antecedents that affect [product] innovation [...] is limited, with a plethora of contradictory and inconsistent findings” (Calabrò et al., 2018, p. 1). While some studies find that family firms introduce more product innovation than other firms (e.g., Gudmundson, Tower, and Hartman, 2003; Westhead, Cowling, and Storey, 1997), others do not confirm such effects (Classen, Carree, Van Gils, and Peters, 2014). The potentially positive effect of family firm status on product innovation is often attributed to quick and flexible decision-making (Craig and

Dibrell, 2006) as well as long-term orientation (Cassia, De Massis, and Pizzurno, 2012; Diaz-Moriana, Clinton, Kammerlander, Lumpkin, and Craig, 2018). In addition, studies have also shown that family firms are more likely to introduce incremental compared to radical product innovation (De Massis et al., 2015). In this vein, researchers have identified potential gaps between the willingness of family firm decision-makers to engage in innovation (which is often assumed to be low) and their ability to do so (which is often assumed to be high; Chrisman et al., 2015; Kotlar et al., 2019). In summary, prior research has shown that product innovation in family firms is complex and different from product innovation in nonfamily firms due to their specific idiosyncrasies, such as their resources, goals, and family involvement (e.g., Calabrò et al., 2018; Chrisman et al., 2015; De Massis, Frattini, et al., 2016; De Massis, Frattini, Pizzurno, and Cassia, 2015; Duran et al., 2016). As a result, researchers have called for a better understanding of which determinants “in product innovation specifically apply to family businesses” (De Massis, Frattini, et al., 2015, p. 2).

The Role of Succession for Product Innovation in Family Firms

Recently, scholars have started to devote their attention to the role of CEO succession in family firms for (product) innovation (Cabrera-Suárez, García-Almeida, and De Saá-Pérez, 2018; Hauck and Prügl, 2015; Kraiczy et al., 2015; Woodfield and Husted, 2017). These studies indicate that CEO succession provides a “catalyst for change” (Kotlar and De Massis, 2013, p. 29) and thus stimulates product innovation as successors tend to be more open toward new ideas and bring new knowledge to the family firm (Handler, 1992; Kraiczy et al., 2015; Salvato, 2004; Woodfield and Husted, 2017). In particular, next-generation CEOs might be especially willing to introduce novel products as they aim to demonstrate their efficacy and worthiness, which they can particularly accomplish by initiating strategic change (Quigley and Hambrick, 2012) and product innovations (Le Breton-Miller, Miller, and Steier, 2004; Woodfield and Husted, 2017).

However, prior research has shown that predecessors tend to have difficulty stepping aside and often remain on the board postsuccession (Sharma et al., 2003), thereby influencing the decision-making

¹Indeed, our focus on product innovation as compared to other types of innovation, such as process and business models, is in line with extant research (e.g., De Massis, Di Minin, and Frattini, 2015) that has argued that product innovation, compared to, for instance, process innovation, poses specific challenges to family firms.

processes and outcomes of firms, such as strategic change (Quigley and Hambrick, 2012), performance (Ahrens, Uhlaner, Woywode, and Zybura, 2018), and (product) innovation (Hauck and Prügl, 2015; Woodfield and Husted, 2017). Although predecessors typically possess useful knowledge about the firm's business (e.g., with regard to firm practices, processes, customers, and competitors) which can provide valuable sources for product innovation (Cabrera-Suárez, Saa-Perez, and Garcia-Almeida, 2001; Chirico and Salvato, 2016; De Massis, Frattini, et al., 2016) and useful mentoring and coaching activities (Woodfield and Husted, 2017), their postsuccession involvement may also restrict the successor's discretion (Quigley and Hambrick, 2012) and thus prevent rather than encourage product innovation (Hauck and Prügl, 2015). In particular, prior research has shown that family firm predecessors often emphasize tradition (De Massis, Frattini, et al., 2016), become increasingly committed to their (proven) strategies and products (König, Kammerlander, and Enders, 2013; Mitchell et al., 2009), and lose their openness toward new ideas over time (Miller, 1991). As a result, their knowledge and advice might be less relevant or appropriate for the development of new products (Hauck and Prügl, 2015). Moreover, given that predecessors tend to preserve the status quo (Kellermanns and Eddleston, 2006) and typically are emotionally attached to their existing products (Cucculelli, Le Breton-Miller, and Miller, 2016; Miller, 1991), they are more likely to overlook the need for change and thus might have a low willingness to encourage product innovation (Hauck and Prügl, 2015). Empirical research on nonfamily firms has shown that a predecessor's involvement postsuccession can restrict the managerial discretion of the successor and thus limit his or her ability to stimulate strategic change (Quigley and Hambrick, 2012). In the family firm domain, prior research has also argued that the postsuccession involvement of former CEOs negatively influences successor discretion, emphasizing the often observed lack of willingness of predecessors to "let go" (Sharma et al., 2003, p. 231) and to transfer control to the successor to allow for strategic adjustments (Mitchell et al., 2009). Initial empirical findings show that the high authority of senior generations during succession constrains the successor's decision-making and thus negatively affects innovation activities (Hauck and Prügl, 2015). Similarly, a qualitative study by Kammerlander, Dessi, Bird, Floris, and Murru (2015) shows that family firms with

a dominant predecessor were resistant to change and thus negatively associated with innovation.

Stakeholder Salience as a Theoretical Lens to Understand Product Innovation Postsuccession in Family Firms

Despite the lack of ownership and operational influence, scholarly and anecdotal evidence suggests that predecessors still exert influence on the succeeding CEO and thus on the decision-making and outcomes of family firms (Ahrens et al., 2018; Mitchell et al., 2009; Quigley and Hambrick, 2012). While in large, publicly owned firms, the former CEO might not be considered a stakeholder any more after he or she left the firm, this is different for smaller, privately owned firms and in particular for family firms. Due to their typically long tenures; their vigorous relationships to employees, customers, and suppliers; as well as their strong emotional attachment to the firm (Kammerlander, 2016), prior CEOs are often granted a specific status that makes their opinion count even in the case of lacking official power. To improve our understanding of the predecessor's influence on product innovation postsuccession, we thus rely on stakeholder salience theory, which posits that the extent to which stakeholders are able to influence the decision-making processes and outcomes of firms depends on their *salience*, which is based on three attributes: power, legitimacy, and urgency as perceived by the decision-maker (Mitchell et al., 1997, 2011). Specifically, *power* refers to the ability of stakeholders to impose their will based on physical, material, or normative resources (Mitchell et al., 1997). In family firms, Mitchell et al. (2011) state that power is primarily normative, that is, power is based on "prestige, esteem, and social symbols such as love and acceptance" (p. 242) and influenced by the degree of kinship, loyalty, and other social obligations accruing from the lifetime membership. *Legitimacy* is defined as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Mitchell et al., 2011, p. 240). In family firms, legitimacy is typically legacy-based and is reflected in "possessing status conferred by birth and/or relationship-based privilege" (Mitchell et al., 2011, p. 244). Especially in family firms, in which the predecessor has shaped and grown the

business for a long time, her or his established beliefs and traditions often possess legitimacy (Mitchell et al., 2011). Finally, urgency refers to the “degree to which stakeholder claims call for immediate attention” (Mitchell et al., 2011, p. 240), implying that the stakeholders’ claims are served promptly. In private businesses, such as family firms, the most critical aspect of urgency is often proximity, implying that nearness, driven for instance, through frequent interactions, fosters the serving of stakeholders’ claims (Lähdesmäki, Siltaoja, and Spence, 2019). While proximity, in general, contains both emotional and physical aspects, our theorizing focuses on the latter, given the often ambiguous nature of emotional relationships between parents and grown-up children.

Hypotheses Development

Predecessor’s Board Retention and Postsuccession Product Innovation

Predecessors have been found to be less willing to foster product innovation compared to their successors (Hauck and Prügl, 2015; Le Breton-Miller et al., 2004; Salvato, 2004). In the following section, we draw on stakeholder salience theory (Mitchell et al., 2011) to argue that predecessors’ board retention will enhance their ability to influence decision-making in family firms and thus lead to generally decreased levels of product innovation in the respective family firm. While predecessors in family firms are in general considered as stakeholders of the respective company independently of their board retention, their stakeholder *salience* is affected by their board retention. Indeed, the predecessor’s board retention renders her/his claims and opinions more salient in the firm’s decision-making processes, so that successors will perceive the former CEOs as more legitimate and powerful and will also perceive their claims as more urgent (Mitchell et al., 2011). As a consequence, successors will make decisions concerning product innovations aligned with the predecessor’s preferences (Miller, Steier, and Le Breton-Miller, 2003; Quigley and Hambrick, 2012), which is likely to hinder product innovation in family firms (Hauck and Prügl, 2015; Salvato, 2004).

In particular, although predecessors no longer possess managerial influence postsuccession, their position within the board helps them to maintain certain power in the eyes of others such as the successors (Mitchell et al., 2011) and thus increase the salience of

the predecessor as a stakeholder. Formally, after succession, it is the new owner-manager (i.e., the successor), who has the ultimate right to decide on any firm issues, including decisions about the development and introduction of product innovation (Beckhard and Dyer, 1983; Cabrera-Suárez et al., 2001). However, in the case of board retention, the predecessor is still endowed with the power to advise the successor (Cabrera-Suárez et al., 2001; Cabrera-Suárez et al., 2018; Woodfield and Husted, 2017), especially with regard to the strategic decision-making of the firm (Mitchell et al., 2009, 2011). Moreover, the predecessor’s retention on the board also increases her or his legitimacy as perceived by the successor (Mitchell et al., 2011) and thus also his/her stakeholder salience. Remaining within the company by occupying a board position emphasizes the continued importance of the former owner-manager (i.e., the predecessor) for the firm and therefore accentuates his or her imprinting effect on firm practices (Kammerlander, Dessi, et al., 2015). Hence, we expect that going beyond the just described power of the predecessor, the fact that the predecessor still holds an official role in the family business likely increases her or his legitimacy as perceived by the successor. Given the typically small size of advisory boards in small- and medium-sized enterprises (SMEs),² board retention provides predecessors with increased power and legitimacy, which strengthen their influence on decision-making in the family firm and—given predecessors’ tendency to preserve their legacy and to maintain the status quo (Mitchell et al., 2011)—thus hinder product innovation.

Furthermore, successors are likely aware that due to the increased legacy-based legitimacy of the predecessor, employees might perceive product changes or new products introduced by the successor as illegitimate (Cucculelli et al., 2016; Katila and Chen, 2008). As argued in prior research, the postsuccession board retention of the predecessor thus threatens the “power base” (Mitchell et al., 2009, p. 1209) and managerial discretion of the successor (Mitchell et al., 2009; Quigley and Hambrick, 2012), resulting in a decreased ability of the successor to introduce product innovation in family firms (Hauck and Prügl, 2015).

Finally, business-related meetings (i.e., formal board meetings) between the predecessor and the successor occur frequently and on a regular basis in cases in which the former CEO stays on the board

²In Switzerland, the average size of such a board is generally between one and five members (Bexio, 2017; BK Imfeld, n.d.).

of the family firm, which, in turn, increases the predecessor's proximity to the successor (Lähdesmäki et al., 2019). As prior research on SMEs has shown, feelings of proximity increase the urgency to fulfill the respective stakeholder's claims as perceived by the successor (Lähdesmäki et al., 2019; Spence, 2016). In other words, successors are likely to be more willing to decide in alignment with stakeholders, such as the predecessor, in the case of a high perceived proximity, which increases with the predecessor's board retention.

In sum, we argue that board retention increases the predecessor's power, legitimacy, and urgency and hence salience as perceived by the successor. With an increasing salience of the predecessor, the successor is likely to care more about the predecessor's preferences, which focus particularly on preserving the status quo (Quigley and Hambrick, 2012) and his or her legacy (Richards, Kammerlander, and Zellweger, 2019; Zellweger, Kellermanns, Chrisman, and Chua, 2012). Hence, successors feel the pressure to align the strategy of the company with the predecessor's preferences (Cucculelli et al., 2016; Dalpiaz, Tracey, and Phillips, 2014; Poza and Messer, 2001). Based on the arguments presented above, we propose that such perceived pressure results in less product innovation (Hauck and Prügl, 2015) given the predecessor's generally observed lower openness to product innovation compared to the successor's willingness to innovate (Salvato, 2004). Hence, we propose that the predecessor's board retention increases his/her salience to negatively impact product innovation in family firms:

H1: The predecessor's board retention is negatively related to product innovation in the postsuccession period.

The Moderating Effect of the Predecessor's Influence on Successor Selection

Furthermore, we propose that the influence of the predecessor in the successor selection process strengthens the negative relationship between the predecessor's board retention on product innovation. Given that owner-managers in small- and medium-sized family firms typically possess a strong decision-making authority, prior research has shown that predecessors often substantially influence the successor selection process (Daspit et al., 2016; De Massis, Sieger, et al.,

2016). Drawing on stakeholder salience theory, we argue that the perceived power and legitimacy of the predecessor strengthened through her/his board retention might be considered even higher in cases in which the successor was selected by the predecessor (compared to a selection by a committee such as the board members of the firm). The predecessor's selection influence might thus strengthen the negative effect of the former CEO's board retention on product innovation as successors might feel even more pressure to conform with the recommendations that the predecessors make in board meetings. Specifically, we propose that the perceived normative power of the predecessor strengthened through her/his board retention might be increased if the successor was selected by the predecessor, as the new CEO might feel obliged to "pay back" in return for selecting her/him. Consequently, the successor might feel more obliged to conform to the perspectives and strategies held by the former CEO (Mitchell et al., 2011). This sense of obligation strengthens the potential pressure perceived by the successor to align and comply with the predecessor's preferences to preserve the status quo instead of promoting product innovation as expressed in board meetings (Hauck and Prügl, 2015; Salvato, 2004).

Furthermore, we argue that also the perceived legitimacy of the predecessor that remains on board increases in cases in which the successor was selected by the predecessor. The reason is that, as shown by prior research, predecessors tend to select successors who are similar to them (Lee, Lim, and Lim, 2003) to ensure the continuity of their legacy-based strategies (Ahrens et al., 2018; Zajac and Westphal, 1996). In particular, due to their similarity, the successor might possess values, attitudes, and perspectives very much in line with those of the predecessor (Ahrens et al., 2018; Zhu and Chen, 2015), which makes it more likely that the successor agrees with the opinions and viewpoints of the predecessor concerning strategic decisions expressed in board meetings. As a result, successors who are selected by the predecessor might perceive the advice provided by the predecessor as more legitimate and thus align their decisions with the predecessor's preferences. Successors might thus refrain from initiating product innovations that are not in line with the predecessor's legacy-based strategies and established beliefs to avoid confrontation with a powerful and legitimate stakeholder (Mitchell et al., 2011; Quigley and Hambrick, 2012). Building on these arguments, we propose that the effect of the

predecessor's board retention on product innovation becomes more negative in cases in which the selection of the successor is determined by the predecessor her- or himself. We thus propose the following:

H2: The predecessor's successor selection influence moderates the baseline relationship in such a way that the effect of the predecessor's board retention on product innovation in the postsuccession period becomes more negative the more influence the predecessor has on the successor selection.

The Moderating Effect of Family Ties

Finally, we propose that family ties between predecessors and successors strengthen the negative effect of the predecessor's board retention on product innovation. In particular, family ties incorporate relational resources such as trust, a shared understanding of each other, and mutual obligations (Arregle, Hitt, Sirmon, and Very, 2007; Bird and Zellweger, 2018), which, as we argue, increase the successor's willingness to accept the strengthened power, legitimacy, and urgency that the predecessor has gained through her/his board retention. In particular, we argue that family ties make the increased power and legitimacy gained through the predecessor's position on the board more accepted by the successor because of the shared experiences and history between the predecessor and the successor, a shared value system, and hence a mutual understanding of how to lead the firm (Kammerlander, Dessi, et al., 2015; Le Breton-Miller et al., 2004). Additionally, the increased legitimacy that the predecessor gained through her/his board retention might be higher in the case of family succession. Specifically, if family ties exist, the successor is well aware of the family firm history and the predecessor's efforts in building and growing the firm (Mitchell et al., 2011), which in turn increases the perceived legitimacy and contributes to strengthening the cohesiveness between predecessor and successor. This cohesiveness, in turn, reinforces the successor's willingness to accept the predecessor's legitimacy and to comply with her or his opinions expressed in board meetings. Moreover, high levels of trust between the predecessor and the successor because of family ties have been argued to further improve the legitimacy of the predecessor when providing advice to the successor (Cabrera-Suárez et al., 2001; Daspit et al., 2016).

Consequently, successors are even more willing to be attentive to the demands of their predecessors because of family ties, and as a result, they are less likely to introduce new products to the firm. Additionally, family ties are typically associated with frequent meetings and regular communication between the predecessor and the successor (Aldrich and Cliff, 2003), also in private settings (Kammerlander, Dessi, et al., 2015). This further intensifies the perceived urgency of the predecessor by the successor and makes it more likely that successors pay attention to the predecessors in board meetings. Nonfamily successors, on the contrary, have not developed the same trust, identity, and mutual obligations with the predecessor. Moreover, their interactions are often limited to formal board meetings. Hence, in contrast to family successors, they are less sensitive to the claims and opinions that predecessors state in the board meetings and, consequently, are more likely to innovate products. Given those arguments, we expect that the effect of the predecessor's board retention will be stronger because of family ties and thus lead to further decreased product innovation, which is the basis for the following moderation hypothesis.

H3: Family ties moderate the baseline relationship in such a way that the effect of the predecessor's board retention on product innovation in the postsuccession period becomes more negative.

In Figure 1, we summarize the proposed direct (H1) and interaction (H2 and H3) effects of predecessors' board retention on postsuccession product innovation.

Methodology

Sample and Data Collection

To empirically study the relationship between a predecessor's board retention and product innovation postsuccession, we collected survey responses from CEOs of SMEs that experienced a succession in the past. We focused on small- and medium-sized family firms because in those firms, the CEOs—predecessors and successors—play a particularly important role in shaping firm behavior (Daspit, Chrisman, Sharma, Pearson, and Long, 2017; Kammerlander, Burger, Fust, and Fueglistaller, 2015), as they are the owners of the respective firms. We defined SMEs as firms with fewer than 250 employees (Andries and

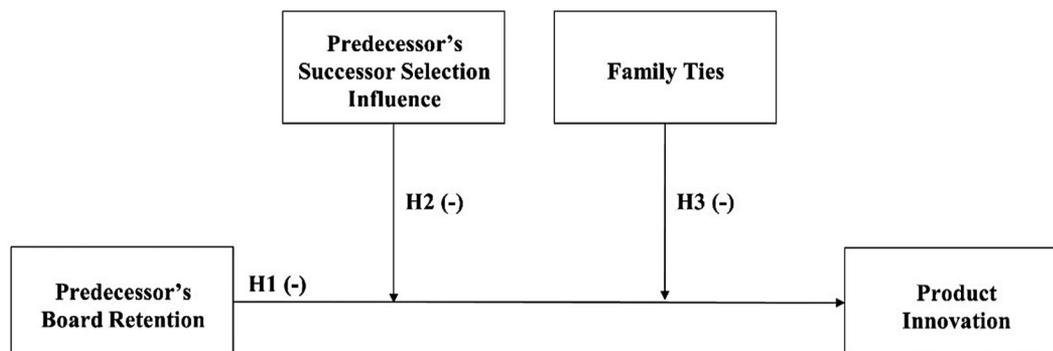


Figure 1. Conceptual Model

Faems, 2013; European Commission, 2018). We used the key informant approach, thereby following other studies on privately held companies (e.g., Eddleston, Kellermanns, and Sarathy, 2008), collecting answers from CEOs because they have first-hand experience with the succession process as well as a comprehensive understanding of product innovations occurring within the firm. Companies in our sample fall under a legal form called “Aktiengesellschaft,” which is similar to a limited company and is the most common form of corporation in Switzerland. This legal form requires firms to set up an (advisory) board (“Verwaltungsrat” in German). The study was part of a larger research project, and the questions on the questionnaire were derived based on the literature. The questionnaire was divided into two main parts with several subparts. The target respondents of the first part were CEOs in general, while the second part targeted only those CEOs who experienced a succession event in the recent past.³ Data collection was carried out via physical mail to 36,699 randomly chosen owner-managers (i.e., CEOs) of privately held Swiss SMEs sampled from the D&B database. Due to the unique characteristics of the sectors agriculture and forestry, petroleum refinement, electricity, gas, and water supply/treatment, financial services including insurance and public administration, we excluded these from the beginning of the data collection process. A total of 2362 survey responses were collected during the seven-week data collection

³The first part of the questionnaire covered questions regarding the (a) demographics and characteristics of the firm (7 questions), (b) perspectives on the economic situation (4 questions), (c) planned succession (7 questions), and (d) demographics of the respondent (13 questions). The second part of the questionnaire included questions regarding the (e) last succession (20 questions), (f) innovation activities (5 questions), (g) financing of the succession (2 questions), and (h) success factors of succession (2 questions).

phase,⁴ in which 523 successors indicated that they took over leadership responsibilities (only those were considered for our sample), while the remaining respondents did not experience succession in the past (e.g., because they were founders of the firm). We excluded those SMEs that were not considered family firms (defined as firms without family ownership). This resulted in 480 successor responses from family SMEs that were used for this study. After removing questionnaires with incomplete information (see information on variables below), we ended up with a final sample size of 205. In late 2018, we followed up with the original survey participants via phone interviews in order to collect additional data (e.g., on innovativeness before succession) to run further robustness tests. We were able to collect additional data from 90 CEOs of the original sample.

Before testing our hypotheses, we conducted several tests to assess the data quality. First, we checked for nonresponse bias. We compared early to late responses of the (1) full sample (both family and nonfamily firms) and (2) family firm sample, thereby assuming that the latter respondents are similar to nonrespondents (Oppenheim, 1966). Comparing the mean values using t-tests across the early and late responders, we found no significant differences for (1) and (2) regarding the variables used in the model. In addition, we used the Heckman’s two-step estimation procedure (Heckman, 1979) for sample selection bias to particularly control for a potential nonresponse bias induced by differences among respondents and nonrespondents with regard to the indication of the level of a

⁴The response rate amounts to 6.4% (excluding letters that, due to incorrect addresses, failed to be delivered) resulting in a marginally lower response rate than previous studies that also focused on top managers (Dehlen et al., 2014). One reason for the low response rate was that the questionnaire was long, requiring respondents to spend approximately 30 minutes to complete it.

company's product innovation. We corrected for this potential bias by estimating the company's likelihood for indicating the level of product innovation and calculating the inverse Mill's ratio (Heckman's λ). In a first step, we employed a probit model (i.e., selection equation), in which the outcome variable is product innovation measured as a dichotomous variable taking the value "1" if the firm indicated the level of introduced product innovation and "0" if the respective firm did not indicate the level of product innovation. We included the *age of the predecessor at takeover*, the *generation currently active in management of the family firm*, and *total revenues generated within last year* as instrumental variables in the probit model. The results of the Heckman model show that the coefficient of λ is statistically insignificant; therefore, we do not find evidence for a sample selection and nonresponse bias. In a second step, we included λ as an additional control variable in our original models; λ is insignificant and does not affect our results. In sum, we concluded that our results are unlikely to be affected by nonresponse bias.

Second, we checked whether our sample is representative of the total population of Swiss SMEs. Therefore, we compared key characteristics on the organizational level (characteristics of the companies) and on the individual level (CEO characteristics) in our sample with data of the entire firm and the national population in 2013 provided by the Swiss Federal Statistical Office. Our sample (205 companies) represents .04% of the entire SME population in Switzerland (549,571 firms). Considering the size of the firms, businesses with fewer than ten employees were underrepresented, as they account for only 34.2% of our sample, while within the population of all firms in Switzerland, those firms account for 92.1%. Although no data on firm age were available from the Swiss Federal Statistical Office, Frey, Halter, and Zellweger (2004), who studied a sample of Swiss SMEs, report an average firm age of 43 years, which is lower than the average firm age of 52 years of our sample. As the focus of our study is on established companies, which already experienced succession in the past, it is reasonable that our sample firms are on average larger and slightly older than the Swiss SME population. With regard to the industry distribution, 35.6% (64.4%) of companies in our sample were active in the service (manufacturing) sector, while 71.6% (28.4%) of the entire Swiss SME population were active in the service (manufacturing) sector, which is in

line with previous research on family firms' industry foci (Bräutigam, Dutt, Evers, Heinemann, and Kraus, 2016). Moreover, the average age of the successors in the sample was 49 years, which was only slightly lower than the average age of managers, 50 years, in Switzerland.

Further, we were careful to avoid common method bias. For our study, common method bias should not be a concern, given that the majority of our variables relate to dates (e.g., how long the predecessor stayed on the board) and "hard facts" (e.g., the number of new products) instead of perceptions that are more likely biased due to a tendency of respondents to answer specific items in a distorted and socially desirable way. Nevertheless, we took additional measures to further reduce common method bias and assess its potential presence in our database. To mitigate the risk of common method bias *ex ante*, the questions were created in a simple and precise manner (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003). In a pilot study before data collection, five practitioners pretested and scrutinized the comprehensibility of the questionnaire, and we integrated their suggestions for improvement. Moreover, as Podsakoff et al. (2003) suggest, we avoided unfamiliar scientific terms, double-barreled questions, and complex syntax. We ordered the questions such that the respondents were not able to expect the investigated correlations to mitigate the risk of respondents editing their responses in a way in which they believed the researchers wanted them to reply (Podsakoff et al., 2003). Moreover, to reduce the potential of social desirability bias in the respondents' answers, we assured full confidentiality to all respondents, which is assumed to enhance honesty (Podsakoff et al., 2003).

In addition, we completed two post hoc tests to test for common method variance. Starting with the Harman single factor test, as suggested by Podsakoff and Organ (1986), we entered all variables of our model into an exploratory factor analysis using a principal component factor analysis (Podsakoff et al., 2003). Nine factors were extracted with eigenvalues greater than one; the first factor explained only 12.1% of the total variance, indicating that no single factor accounts for the majority of the variance and providing initial evidence that common method bias is not a major concern. Additionally, we conducted the marker variable test (Lindell and Whitney, 2001) to investigate the correlation between a dependent variable and another variable called the marker variable (Homburg,

Klarmann, and Schmitt, 2010), which should not be correlated. Subsequently, this variable was used to correct the correlation matrix for common method bias. We assessed the correlation between the perceived importance of resources and the environment for family firm success⁵ (marker variable) and product innovation ($r = .007$) because this predictor has an insignificant correlation with the dependent variable, which underscores the validity of the marker variable (Lindell and Whitney, 2001). Significances of correlations remained similar after correction of the correlation tables, which provides further evidence that common method bias is not present (Van Doorn and Verhoef, 2008).

Variables

Dependent variable—postsuccession product innovation. Respondents were asked to indicate how many new products/services they introduced within the first two years after the succession took place. As such, our dependent variable is a continuous count variable that is commonly used in studies on product innovation (Artz, Norman, Hatfield, and Cardinal, 2010; Un, Cuervo-Cazurra, and Asakawa, 2010). Two years is a reasonable time frame given that the time period is not too long so that other factors accounting for product innovation do not distort the results (cf. Virany, Tushman, and Romanelli, 1992).

Independent variable—predecessor's board retention. This variable captures the board retention of the predecessor in the postsuccession period (Quigley and Hambrick, 2012). We operationalized it as a continuous variable by reflecting the number of months in which the predecessor held an official position on the board after the succession took place. In this context, it is important to note that Swiss law required the firms in our sample to set up a (nonoperational) board. We limited this variable to 24 months (i.e., two years after the succession took place), which is in line with our dependent variable.

Moderating variables—predecessor's influence on successor selection. To identify the predecessor's influence on the successor selection process (Westphal and Zajac, 1995; Zajac and Westphal, 1996), we

asked to what extent the predecessor played a role in the selection of the successor, that is, whether the predecessor was not involved at all (coded as “0”), was involved together with the board (“1”), or whether s/he had complete control over the successor selection process (coded as “2”).

Family ties. Respondents were asked to indicate which relation they held with the predecessor. Survey options included (1) family member such as child, spouse, or/and other relative (coded as “1”), (2) employee, (3) friend, (4) business partner, and (5) no relationship (options (2) to (5) coded as “0”). This distinction is in line with prior research (e.g., Wennberg and DeTienne, 2014).

Control variables. We controlled for variables at the industry, firm, and individual level that likely affect product innovation postsuccession in family businesses. First, we controlled for industry because the likelihood of product innovation might differ across various industries. As such, we included dummy variables for the following industry sectors: (1) business-related *service industry*, (2) *high-tech industry*, (3) *construction industry*, (4) *IT industry*, (5) *transportation industry*, (6) *retail industry*, (7) *tourism and entertainment industry*, and (8) *health, education, and social services industry*. We used the *traditional industry* as a reference category.⁶ We also controlled for *competitive intensity* at the time when the succession took place because in industries with greater competitive intensity, more (and quicker) product innovations need to take place than in industries with lower levels of competitive intensity (e.g., Levinthal and March, 1993). To capture competitive intensity, we relied on the established scale of Jansen, Van Den Bosch, and Volberda

⁵Respondents were asked to indicate on a 5-point Likert-type scale how resources and the environment in terms of access to and prices of raw materials, energy supply and prices, and the management of natural catastrophes influences the success of the family firm today.

⁶Companies active in (a) the business-related service industry include companies active in management consulting, auditing, advertising, market research, building maintenance, brokerage, as well as research and development; (b) the high-tech industry include companies producing chemicals, pharmaceuticals, mechanical engineering or vehicle construction, electrical engineering, plastic goods, measuring and control instruments, and watches and clocks; (c) the construction industry include building construction/civil engineering, finishing trade, and building installation companies; (d) the IT industry include publishing companies, information services, and communication, telecommunications, and informatics companies; (e) the transportation industry include companies active in the passenger and freight transport, warehousing, logistics, postal and courier services companies, and travel agencies; (f) the retail industry include retail/wholesale trade companies and automotive companies; (g) the tourism and entertainment industry include hotels, restaurants, cultural events, and personal services companies (e.g., hairdresser/beauty salons, laundry service); (h) the health, education, and social services industry include doctors, therapists, hospitals, homes, day nurseries, laboratories, and schools; and (i) the traditional industry include food, furniture, paper, textile, metal, glass, printing, wood processing, toy, and jewellery production companies.

(2006), which is based on a 7-point Likert-type scale ranging from “strongly disagree” to “strongly agree.” The Cronbach’s alpha for this construct has a value of .767, ensuring reliability of the measurement.

Next, we controlled for *firm age* because older firms are expected to maintain established routines (Bracker and Pearson, 1986). We measured firm age as the number of years since the firm’s founding (Lubatkin, Simsek, Yan, and Veiga, 2006), which is in line with previous literature (Cucculelli and Micucci, 2008). We also controlled for *firm size*, measured as the number of employees (Boling, Pieper, and Covin, 2015). Larger firms may have several product innovation-related advantages relative to smaller firms in terms of resource availability but may face disadvantages in terms of bureaucratic and inflexible structures (Bierly and Daly, 2007). Smaller firms, however, might be more agile and dynamic, resulting in more product innovation compared to larger firms (Rauch, Wiklund, Lumpkin, and Frese, 2009). Since economic performance has been shown to affect innovation behavior in family firms (Chrisman and Patel, 2012; Eddleston et al., 2008), we also controlled for the firm’s *performance at takeover* (i.e., at the time of succession). We therefore asked respondents about their perception of the firm’s economic situation compared to that of their competitors at the time of succession (Zellweger et al., 2012), which was measured on a 5-point Likert-type scale that ranged from “much worse than the competitors” (1) to “much better than the competitors” (5). To capture potential time effects—for instance, whether the level of product innovations has changed globally over the years, for example, due to more intensified competition, which would make product innovations more frequent in the recent past—we distinguished between respondents who had taken over their businesses in the last five years (*succession date*; coded as “0”) and those who took over management responsibilities more than five years ago (coded as “1”; see Dehlen, Zellweger, Kammerlander, and Halter [2014] for a similar approach). Moreover, we controlled for *formal agreement of power transfer*. To create this variable, the respondents were asked to indicate whether they had a formal agreement regarding the transfer of roles and responsibilities (coded as “1”) or not (coded as “0”; Chrisman, Chua, and Sharma, 2005; Marshall et al., 2006).

Since individual characteristics of the successor might also affect his or her willingness and ability to introduce product innovation, we controlled for the *successor’s age* (measured in years at the time the succession

took place) and the *successor’s education*. To capture education, the respondents were asked to indicate their highest education. We calculated a dummy variable for higher education of the successor, which was coded as “1” if the successor had acquired a university education (i.e., technical university degree, university degree, or doctoral degree) and “0” in all other cases (i.e., no education, high school diploma, vocational training, or advanced training). We assumed that successors with higher education might be more inclined to introduce product innovation (Davidsson and Honig, 2003).

Results

Descriptive Statistics

Descriptive statistics including the mean, standard deviation, and correlations for the variables used in the regression analyses can be found in Table 1. We standardized the continuous variables, while the dummy variables and the dependent variable were not standardized (Dawson, 2014). The table shows acceptable levels of correlation between independent and control variables. The variance inflation factor (VIF) values are all below the acceptable threshold of 4 (Hair, Black, Babin, Anderson, and Tatham, 2006), with VIF values ranging from 1.11 to 1.99, indicating that multicollinearity is not a concern for our study.

The median of the new products introduced by companies within the first two years after the succession took place is two. On average, 42.9% of the successors had family ties to the predecessor, 46.3% of the predecessors had no influence on successor selection, 24.4% of the predecessors were involved with the advisory board in selecting the successor, and 29.3% of the predecessors had full control over successor selection. Moreover, on average, the predecessor held an official role on the advisory board in the postsuccession period for 11 months. Forty-two percent of the respondents had taken over management responsibility within the last five years before filling out the survey.

Analytical Procedures and Results

To test our hypotheses, we employed negative binomial regressions (Hilbe, 2010) because the dependent variable was of count character. Table 2 shows the results of the tested models. Model 1 contains only control variables. In Model 2, the independent variable

Table 1. Correlations Matrix

	Mean	SD	VIF	1	2	3	4	5	6	7	8	9	10	11	12
1. Product innovation	18.46	143.04	n.a.	1.000											
2. Firm age	51.65	40.14	1.43	-0.032	1.000										
3. Performance at takeover	2.79	0.95	1.15	-0.110*	0.042	1.000									
4. Firm size	39.32	57.73	1.26	-0.011	0.279*	-0.052*	1.000								
5. Competitive intensity at takeover	4.50	1.18	1.16	0.075*	0.048*	-0.063*	0.049*	1.000							
6. Succession date	0.58	0.49	1.25	0.073*	0.198*	0.037	0.124*	0.044	1.000						
7. Formal agreement of power transfer	0.42	0.50	1.11	-0.033	0.054*	0.028	0.098*	0.051*	-0.050*	1.000					
8. Successor's age	39.78	8.80	1.45	-0.016	-0.149*	-0.173*	0.033	0.036	-0.239*	0.007	1.000				
9. Successor's education	0.65	0.48	1.23	0.057*	0.198*	-0.121*	0.205*	0.030	0.025	0.003	0.046	1.000			
10. Predecessor's board retention	10.99	11.52	1.29	0.063*	0.222*	-0.013	0.146*	0.017	0.318*	0.141*	-0.276*	0.013	1.000		
11. Predecessor's successor selection influence	0.83	0.85	1.17	-0.044	-0.087*	0.075*	-0.200*	-0.080*	-0.008	-0.048*	-0.123*	-0.242*	-0.014	1.000	
12. Family ties	0.43	0.50	1.50	0.069*	0.313*	0.227*	0.005	-0.067*	0.078*	-0.107*	-0.450*	-0.032	0.179*	0.139*	1.000

Note: $n = 205$.

* $p < .05$; correlations and VIFs are based on standardized variables (with exception for dummy variables and the dependent variable, which are displayed nonstandardized); means and standard deviations are displayed using unstandardized values for the ease of interpretation.

Table 2. Results of Negative Binomial Regressions of Product Innovation

	Model 1	Model 2	Model 3	Model 4	Model 5
	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
<i>Control variables</i>					
Industry dummies	Included	Included	Included	Included	Included
Firm age	-0.312** (0.119)	-0.276* (0.121)	-0.177 (0.119)	-0.293* (0.120)	-0.194† (0.118)
Performance at takeover	-0.234* (0.110)	-0.303** (0.112)	-0.300** (0.107)	-0.275* (0.111)	-0.270* (0.106)
Firm size	0.0647 (0.115)	0.112 (0.123)	0.0897 (0.109)	0.129 (0.126)	0.106 (0.111)
Competitive intensity at takeover	0.605*** (0.113)	0.639*** (0.113)	0.575*** (0.111)	0.625*** (0.113)	0.561*** (0.111)
Succession date	0.823*** (0.223)	0.900*** (0.223)	0.849*** (0.219)	0.833*** (0.225)	0.765*** (0.221)
Formal agreement of power transfer	0.293 (0.232)	0.330 (0.227)	0.258 (0.221)	0.311 (0.224)	0.230 (0.218)
Successor's age	0.160 (0.124)	0.116 (0.123)	0.134 (0.124)	0.116 (0.123)	0.136 (0.123)
Successor's education	0.515* (0.249)	0.538* (0.248)	0.431† (0.243)	0.515* (0.248)	0.404† (0.242)
<i>Moderating variables</i>					
Predecessor's successor selection influence	0.109 (0.117)	0.0783 (0.116)	0.100 (0.112)	0.0901 (0.116)	0.107 (0.111)
Family ties	0.830** (0.252)	0.932*** (0.253)	0.799** (0.249)	0.891*** (0.246)	0.749** (0.242)
<i>Independent variable</i>					
Predecessor's board retention		-0.300* (0.125)	-0.339** (0.120)	-0.449** (0.149)	-0.510*** (0.145)
<i>Interaction effects</i>					
Predecessor's board retention x Predecessor's successor selection influence			-0.356*** (0.107)		-0.366*** (0.106)
Predecessor's board retention x Family ties				0.376 (0.218)	0.418* (0.213)
Inalpha	0.473*** (0.100)	0.449*** (0.100)	0.401 (0.101)	0.436 (0.101)	0.383*** (0.102)
Constant	0.919* (0.365)	0.804* (0.370)	0.971 (0.366)	0.785 (0.359)	0.967** (0.355)
Observations	205	205	205	205	205
Pseudo-R ²	0.132	0.136	0.144	0.139	0.147
Log likelihood	-588.374	-585.547	-580.212	-584.096	-578.331
LR χ^2	179.277***	184.931***	195.600	187.834	199.364***
Wald test: χ^2		5.780*	11.390	17.400	31.830***

Note: $n = 205$, standard errors in parentheses; *** $p < .001$, ** $p < .01$, * $p < .05$, † $p < .1$; regressions are based on standardized variables (with exception for dummy variables and the dependent variable); industry dummy variables for the following sectors are included in the regressions but not reported (“included”): business-related service industry; high-tech industry; construction industry; IT industry; transportation industry; retail industry; tourism and entertainment industry; and health, education, and social services industry. Traditional industry is used as the reference category.

is added. Models 3 and 4 report results from the full model, including the interactions between the independent variable and the moderator variables. Model 5 shows the results when all interactions between the independent variable and the moderator variables are added simultaneously. Pseudo-R-squared values indicate a good model fit.

Model 1 shows that *firm age* is negatively and significantly related to *product innovation* ($\beta = -.312$, $p < .01$), *performance at takeover* is negatively and significantly related to *product innovation* ($\beta = -.234$, $p < .05$), *competitive intensity at takeover* is positively and significantly related to *product innovation* ($\beta = .605$, $p < .001$), and *succession date* is

positively and significantly related to *product innovation* ($\beta = .823, p < .001$). Moreover, *successor's education* is positively and significantly related to *product innovation* ($\beta = .515, p < .05$). Additionally, *family ties* are positively and significantly related to *product innovation* ($\beta = .830, p < .01$).

Model 2 shows that the *predecessor's board retention* is negatively and significantly related to *product innovation* ($\beta = -.300, p < .05$). The effect size indicates that for each one-standard deviation increase in the months (i.e., 11.5 months) of the predecessor's board retention, the number of product innovations decreases by 25.9%. As such, we accept H1.

In Model 5, the interaction between the *predecessor's successor selection influence* and the *predecessor's board retention* is negatively and significantly associated with product innovation ($\beta = -.366, p < .001$). This suggests that a one-standard deviation increase in months of predecessor board retention decreases the number of product innovations by 10.1% if the predecessor has no influence on successor selection, by 40.6% if the predecessor selects the successor together with the board, and by 60.8% if the predecessor has complete control over the selection process. This suggests that the negative impact of the predecessor's board retention gets stronger the more influence the predecessor has over the selection process; hence, we accept H2. To test whether the relationship between the predecessor's board retention and product innovation is significant at the various levels of the predecessor being involved in the successor selection process, we conducted simple slope tests (Aiken and West, 1991; Dawson, 2014). In cases in which the predecessor is not involved in the successor selection process, the slope of the predecessor's board retention and product innovation is insignificant ($p > .1$), indicating that there is no significant decrease in product innovation with an increase in months of the predecessor's board retention, while the slopes are significant ($p < .001$) if the predecessor is involved in the successor selection process, which indicates that there is a significant decrease in product innovation with an increase in months of the predecessor's board retention.

In Model 5, the interaction of *family ties* and the *predecessor's board retention* is positively and significantly related to *product innovation* ($\beta = .418, p < .05$). This result suggests that the number of product innovations decreases by 39.9% for each one-standard deviation increase in months of predecessor board retention in the absence of family ties and that the number of product

innovations decreases by 8.8% for each additional standard deviation increase in months of predecessor board retention if family ties are present. Since the negative effect of board retention on product innovation is weakened instead of strengthened, the results do not support H3. By conducting simple slope tests (Aiken and West, 1991; Dawson, 2014), we found that in the case of family ties the slope of the predecessor's board retention and product innovation is insignificant ($p > .1$), indicating that there is no significant decrease in product innovation with an increase in months of the predecessor's board retention, while in the absence of family ties, the slope is significant ($p < .001$), which indicates that there is a significant decrease in product innovation with an increase in months of the predecessor's board retention. Figures 2 and 3 show the interactions of the *predecessor's successor selection influence* and *family ties* and the *predecessor's board retention* and their impact on *product innovation*.

Robustness Tests

We ran several robustness tests to ensure the reliability of our results. Specifically, we aimed to scrutinize the quality of data, the suitability of our sample, and the robustness toward alternative variable specifications.

First, we addressed reverse causality in order to check if the assumed directionality of the hypothesized relationships are valid. As such, we checked for the possibility of endogeneity between the predecessor's board retention and product innovation (Hamilton and Nickerson, 2003) because one might argue that predecessors remain on board more often in innovative companies given their emotional attachment. We employed two instrumental variables in a two-stage least squares (2SLS) regression, namely the *months the predecessor occupied an office within the company* and the *mean hours the predecessor spent in the company two years postsuccession*, which are substantially correlated with the predecessor's board retention. We performed tests to validate the appropriateness and validity of the instrumental variables (Baum, Schaffer, and Stillman, 2007) and found no evidence for over- or under-identification,⁷ con-

⁷First, we assessed the over-identification tests of all instruments (i.e., Hansen, 1982) to test the validity of over-identifying restrictions and hence the validity of instruments (Arellano and Bover, 1995; Hansen, 1982). The results show that our instrumental variables are appropriate, and the over-identifying restrictions indicate that the models are tenable (Baum et al., 2007). Second, we used the under-identification test (i.e., Kleibergen and Paap, 2006) to test if the instrumental variables risk under-identification. The results indicate that under-identification of the instrumental variables is not the case.

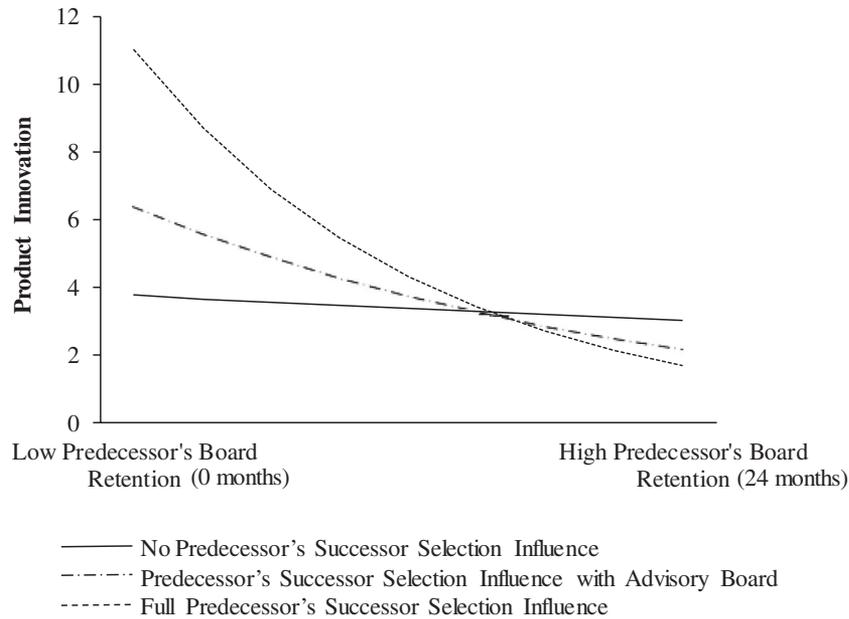


Figure 2. Interaction of Predecessor's Successor Selection Influence and the Predecessor's Board Retention and the Impact on Product Innovation

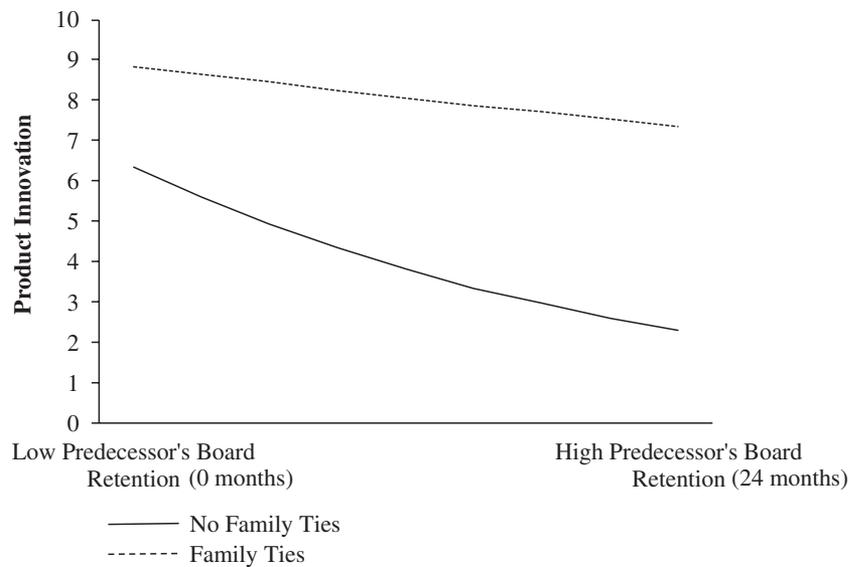


Figure 3. Interaction of Family Ties and the Predecessor's Board Retention and the Impact on Product Innovation

cluding that the instrumental variables are appropriate. We used the test of endogeneity (Hamilton and Nickerson, 2003) to determine whether the regressor is exogenous. The results indicate a $\chi^2 = .174$ and $p = .677$, showing that the predecessor's board retention is exogenous and that endogeneity is not a concern. Moreover, we also tested the endogeneity between the predecessor's influence on successor selection and product innovation as one might argue

that predecessors of innovative companies are particularly interested in selecting their successors due to their emotional attachment. To conduct this test, we employed the *desire of the predecessor for free time as the main reason for resigning from the company* and the *number of candidates who were considered as potential successors* as two instrumental variables within a 2SLS regression. We found no evidence for over- or under-identification. The test of endogeneity (Hamilton

and Nickerson, 2003) reports a $\chi^2 = .081$ and $p = .776$, which indicates that the predecessor's influence on successor selection is exogenous and that endogeneity is not a concern.

Second, we separately added additional control variables: (1) we included the *percentage of family members on the board* as a control, as the composition of the board could affect the authority of the predecessor, which may, in turn, influence product innovation (Gómez-Mejía, Takács Haynes, Núñez-Nickel, Jacobson, and Moyano-Fuentes, 2007). By including this control variable, we found that our results remain stable; (2) further, we included the *percentage of revenues generated with products introduced in the years before succession* as a control variable because companies that are innovative presuccession might have an increased likelihood to remain innovative postsuccession. Again, the results remained stable, with the exception of H1 that becomes insignificant, which might be attributed to the substantially reduced sample size, as we only had data for this control variable on a fraction of the originally sampled firms. Third, we used an alternative control for *firm age*, given the ongoing debate on family firm life-cycle stages (Gómez-Mejía et al., 2007) versus time of ownership (Zellweger et al., 2012) as later generations may differ with regard to their innovation compared to previous generations (Duran et al., 2016). Specifically, we considered the *generation* currently involved in the company, which is mainly active in firm management, and we found results consistent with our main results.

Fourth, we used an alternative coding for the family ties variable. To capture the effects of friendship ties between the successor and the predecessor and to determine whether these ties have similar characteristics as family ties (e.g., because of trust, shared values, and closeness), we additionally included the category "friends" in our family ties variable (i.e., family and friendship ties coded as "1" and as "0" otherwise) and find similar results for H1 and H2; however, H3 becomes insignificant, implying that friends do not share the same characteristics as family members. To better understand the moderating effect of friendship ties on the baseline relationship, we introduced *friendship ties* into the regressions as an additional dummy variable coded as "1" if the successor is a friend of the predecessor and "0" otherwise and found a negative yet insignificant moderating effect of friendship ties on the predecessor's board retention and product innovation. These findings indicate that the moderating

effect is contingent upon family ties but not on friendship ties.

Fifth, we ran negative binomial regressions on the number of product innovations introduced three instead of two years after succession as an alternative dependent variable. This is reasonable because the introduction of product innovation might require a certain amount of preparation time (Longenecker and Schoen, 1978). Moreover, especially in early years postsuccession the successor might be still occupied with other noninnovation-related business issues. The results remained similar with the exception of H1, which became insignificant, which might be attributed to the substantially reduced sample size. Sixth, to check whether the duration since the succession took place matters, we excluded cases (i.e., 11 firms) in which the succession did not take place at least two years ago. All results remained robust (H1: $\beta = -.253$, $p < .05$; H2: $\beta = -.333$, $p < .01$; H3: $\beta = .458$, $p < .05$). In sum, these tests provide support that our results remained robust to alternative model specifications.

Discussion

Prior research has demonstrated that product innovation is crucial for the survival and prosperity of family firms across generations (e.g., De Massis, Frattini, et al., 2016) and family firm research has often referred to the important role of next-generation CEOs (i.e., successors) to innovate the products of family firms (e.g., Kraiczy et al., 2015). Although predecessors constitute important stakeholders in family firms and typically remain involved in postsuccession decision-making, for instance, through their board retention (Ahrens et al., 2018; Arzubia et al., 2018; Mitchell et al., 2009), the current literature has paid scarce attention to their role for product innovation postsuccession so far.

Our aim was thus to extend research on family firm innovation by drawing on stakeholder salience theory (Mitchell et al., 2011) as well as on the literature on family firm innovation (e.g., Chrisman et al., 2015) and succession (e.g., Daspit et al., 2016) to analyze the role of the predecessor's postsuccession involvement through occupying a board position for product innovation in family firms. In addition, we examined contingency factors that influence the salience of predecessors and thus the effect of their postsuccession involvement on product innovation in family firms.

In particular, our findings show that the predecessor's board retention generally has a negative effect on product innovation, indicating that the mere retention of the predecessor on the board postsuccession can harm the introduction of product innovation. In line with stakeholder salience theory, this finding supports our arguments that the board retention increases predecessors' salience to influence decision-making and thus to hinder product innovation in family firms. In particular, this finding supports the idea that the successor tends to align her/his decision-making with the predecessor's preferences due to her/his perceived power, legitimacy, and urgency, resulting in less product innovation in family firms with increasing board retention of the predecessor. In other words, the predecessor's board retention constrains the ability of the successor to introduce new products or services. This result further supports prior research that has shown that predecessors tend to be committed to preserve the status quo and lose their open-mindedness over time (Quigley and Hambrick, 2012), resulting in less willingness to innovate (Hauck and Prügl, 2015; Salvato, 2004). However, this result stands in contrast to the theoretical arguments of a positive line of inquiry in the literature that emphasizes the mentoring and coaching benefits of predecessors for product innovation in case they remain involved in the firm (e.g., Cabrera-Suárez et al., 2001).

Moreover, and in line with our arguments, we find that the predecessor's influence on successor selection strengthens the negative relationship between the predecessor's board retention and product innovation. In particular, our results show that the effect of a predecessor's board retention on product innovation becomes more negative, the more influence the predecessor exerts on the successor selection process (i.e., full control over the predecessor selection process instead of shared influence with the board or even no influence), which supports our theorizing. This finding indicates that the increased power and legitimacy of the predecessor gained through her/his board retention as perceived by the successor are higher in cases in which the predecessor selected the successor herself/himself, thus strengthening her or his ability to hamper product innovation. This finding is also in line with arguments of prior research that has shown that predecessors tend to select successors with values, attitudes, and perspectives very similar to themselves to prolong their legacy-based strategies (Ahrens et al., 2018; Zajac and Westphal, 1996).

Furthermore, our empirical results reveal that family ties moderate the relationship between predecessors' board retention and product innovation postsuccession. However, in contrast to our proposed arguments, our results show a positive moderating effect of family ties. These findings indicate that the negative influence of a predecessor's board retention on product innovation is offset if family ties between the predecessor and the successor exist and that it remains negative if the predecessor and the successor are unrelated to each other (i.e., no family ties exist). A possible explanation might be that the predecessor views the family successor as particularly competent and trustworthy to successfully lead the firm due to the family-based relationship between the successor and the predecessor, which is grounded in trust and mutual respect (Handler, 1991). As a result, the former owner-manager might intentionally avoid making negative intervening claims and might be more willing to provide the successor with the respective liberty and discretion to act and make decisions, thereby stimulating product innovation. Another possible explanation might be that, in the case of family ties, the successor perceives the predecessor as less salient due to their family relationship. Specifically, due to their family history, the mutual understanding and respect between them, the successor might listen to the predecessor's claims but does not shy away from questioning the predecessor's advice and from conflict, as is typical in many parent–child relationships. As a result, the successor does not necessarily conform to the predecessor's claims, which offsets the negative influence of the predecessor's board retention on product innovation. Our post hoc robustness tests provide further evidence that the positive moderating effect of family ties is explicitly related to family-related characteristics, as the results show that friendship ties exert a negative yet insignificant moderating influence on the baseline relationship.

Theoretical Implications

Our results contribute to the family firm innovation literature in the following ways: First, our results extend the emerging research stream on intergenerational succession and product innovation in family firms (Chrisman et al., 2015; Hauck and Prügl, 2015; Kraiczy et al., 2015) by taking a stakeholder salience perspective to analyze the influence of predecessors' board retention on product innovation

postsuccession. While “next-generation members [CEOs] have received considerable scholarly attention [...], researchers have so far overlooked that of the incumbents [predecessors]” (De Massis, Sieger, et al., 2016, p. 279), especially for product innovation. We thus contribute to this research stream by analyzing the role predecessors play in product innovation through staying involved in the family firm postsuccession. Specifically, we theorize how the board retention increases the stakeholder salience (i.e., power, legitimacy, and urgency) of predecessors in family firms and thus strengthens their influence on product innovation. In particular, we argue that predecessors are less willing to introduce new products and services as compared to their successors; and their board retention decreases the successors’ ability to innovate. This is an important implication for research on family firm innovation, as it highlights that the innovativeness of family firms is highly influenced not only by the current CEO (or successor; e.g., Kraiczy et al., 2015) but also by the former CEO, who is likely to maintain a role as an important and influential stakeholder who can thus influence the successor’s ability to innovate—a fact that has so far been largely overlooked by prior research. Our findings also have important consequences for the related research stream studying the effect of imprinting and path dependence on innovation in family firms (e.g., Jaskiewicz et al., 2015; Kammerlander, Dessì, et al., 2015), as we argue how past knowledge and established routines are preserved within family firms, namely through prolonged board retention of the predecessor, which increases her or his power, legitimacy, and urgency.

Second, our study contributes to research on family firm innovation by improving our understanding of two important boundary conditions that influence the predecessor’s salience and thus her/his influence on product innovation postsuccession. Specifically, we expand prior research by theorizing that the increase of salience of the predecessor through her/his board retention is not homogenous across all succession cases but is strengthened by her/his influence on the successor selection process, which, in turn, significantly moderates the predecessor’s influence on product innovation postsuccession. The negative moderating effect of a predecessor’s selection influence is also informative for family firm succession research (e.g., Daspit et al., 2016). A large body of research has studied the success and hindering factors of family succession processes (e.g., De Massis, Chua,

and Chrisman, 2008). However, while some studies have conceptually argued that predecessors “lead the planning and selection process with little input from others” (Daspit et al., 2016, p. 49), there is a lack of theoretical knowledge whether such a leading role of the predecessor is beneficial or detrimental for the firm. We contribute to this research stream by theorizing that the stakeholder salience of the predecessor is substantially strengthened in cases in which the successor was determined by the predecessor, which, in turn, can have negative consequences for the firm due to decreased product innovation.

Finally, our findings highlight that family succession offsets the initially negative effect of predecessor board retention on product innovation. This result contributes to research on family firm innovation in general (e.g., Calabrò et al., 2018; De Massis et al., 2013; Feranita, Kotlar, and De Massis, 2017; Roed, 2016), as it contradicts the perspective that innovation is lower for firms led by family CEOs compared to nonfamily CEOs (Block, Miller, Jaskiewicz, and Spiegel, 2013) and supports academic claims that later generation family CEOs might also lead highly innovative firms (Duran et al., 2016). Our results suggest that successors with family ties to the predecessor can benefit from a trust-based relationship that strengthens the liberty of the successor, thereby reducing the negative impact of the predecessor on product innovation. This finding might be informative to literature studying the willingness and ability of family firm owner-managers to innovate (e.g., Chrisman et al., 2015) as it suggests that in case of family successions, successors might enjoy higher perceived ability to introduce changes to the product and service portfolio. In summary, our results thus extend the emerging stream of research on intergenerational succession and family firm (product) innovation (e.g., Chirico and Salvato, 2016; Hauck and Prügl, 2015; Kraiczy et al., 2015; Woodfield and Husted, 2017) by revealing how and under which conditions the predecessor’s board retention influences product innovation in family firms.

Managerial Implications

This study provides important practical implications for family firms, their predecessors, their successors, and their advisors. First, predecessors often possess a rich amount of experience and insights about the family firm and its environment that are valuable for

the continuity of the firm in general (Cabrera-Suárez et al., 2001). However, former CEOs tend to be reluctant to change what they have shaped and grown (Quigley and Hambrick, 2012) and our results indicate that the postsuccession involvement of predecessors through staying on the board of the firm impedes product innovation. Family firms that strive for product innovation should thus be aware of the possibility that the predecessor constitutes a salient stakeholder who can substantially hamper the introduction of new products. Given the useful knowledge and insights possessed by the predecessor (Cabrera-Suárez et al., 2018), however, the involvement of the former CEO may be beneficial for other areas in the firm (e.g., Ahrens et al., 2018). To ensure the successor's liberty in the introduction of new ideas and thus to prevent the predecessor's possible harmful influence on product innovation, family firms should reduce the formal and informal influence of the former CEO concerning product-related decision-making. For instance, family firms can provide clarity and transparency of the predecessor's duties and tasks and officially reduce the power and legitimacy of the former CEO regarding product innovation. In addition, our results further emphasize that family firms should avoid having predecessors select the new CEOs solely by themselves, as this strengthens their power and legitimacy as important stakeholders and thus possibly increases their negative influence on product innovation. Rather, our results point to the important role of a board committee in the selection of a new CEO to avoid that the predecessors and their legacy-based strategies remain prioritized. Furthermore, our study indicates that predecessors tend to be less intervening in product innovation in the case of family succession, whereas they hinder product innovation in succession without family ties between incumbent and successor. This finding implies that family firms should particularly focus on reducing the predecessor's influence on product innovation postsuccession in nonfamily successions.

Moreover, our findings highlight that predecessors who stay on the board postsuccession should critically reflect the relevance and timeliness of their advice and remain open to new ideas provided by the successor to support the innovativeness of the family firm. They should pay attention to providing the successor with sufficient liberty and discretion to initiate changes and product innovation. In addition, former CEOs could use their power and legitimacy to strengthen

the successors' initiatives for the development of new ideas and thus foster product innovation.

Finally, our results emphasize that although successors should be open toward the insights from senior generations, they should refrain from taking their established wisdom as the rule. Although predecessors tend to remain influential stakeholders, successors should question long-held assumptions and should not shy away from discussions about new products to avoid confrontation or conflict, as this prevents the introduction of product innovation. Indeed, successors are encouraged to constructively question and discuss the advice of the predecessor, to combine it with their own experiences and insights, and ultimately to develop product innovation in order to ensure the transgenerational success of the family firm. Next-generation networks, in which peers can openly discuss their challenges and ideas, might support successors to succeed with this endeavor.

Limitations and Future Research

As with any empirical work, our study has certain limitations, several of which represent important avenues for future research. First, this study focuses on small- and medium-sized Swiss family firms, and the results might thus not be generalizable to other cultural contexts or larger firms. Therefore, future research should replicate our study in other countries and cultures.

Second, although we differentiate between family ties and no family ties, our data do not allow us to draw conclusions about the actual quality (e.g., valence or intensity) of the relationship between predecessor and successor (Bird and Zellweger, 2018). Gauging relational aspects such as trust or conflicts between predecessor and successor as well as their emotional proximity thus represents an important avenue for future research as we might assume that a higher level of trust in the successor and her/his capabilities facilitates product innovation via providing more discretion to implement necessary changes. Additionally, it would be worthwhile to study cases in which family-owned firms appoint a family member as CEO, following a CEO without family ties—a less common, yet potentially insightful constellation, which we could not investigate due to data constraints.

Third, we could not empirically capture the willingness versus the ability (Chrisman et al., 2015; Huang, Chen, Xu, Lu, and Tam, 2019) of the involved parties to implement product innovation. For instance,

future research might study under which conditions the predecessor's board retention fosters or impedes the willingness of the successor to implement product innovation and which circumstances affect her/his ability to innovate. While one could argue that close mentoring might positively affect the ability to improve the products, it might also reduce the successors' willingness or motivation to drive the development of product innovation. Additionally, further research could shed light on the role of other internal and external stakeholders, whether family or nonfamily, that might affect product innovation postsuccession.

Fourth, while our results show that product innovation is increased when predecessors are not involved in the successor selection process, we lack knowledge about why predecessors decide to cede such influence to family and nonfamily board members. One could assume that personality aspects, prior experiences, and the predecessor's network itself affect such decisions. Future research is needed to gain more in-depth insights into those factors.

Moreover, more research is needed about the predecessor's innovation-related activities just *before* succession. While one might assume that in the period before succession, predecessors are mainly concerned about the stability in business operations and in making the succession process smooth and efficient (hence deprioritizing product innovation), some predecessors might also feel encouraged to trigger new product development processes just before succession, as this might help their successors to shine brightly. In particular, qualitative, case-based work might be helpful to better understand predecessors' product innovation-related activities just before handing over their businesses to the next generation.

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