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To Merge, Sell or Liquidate?
Socioemotional Wealth, Family Control, and the Choice of Business Exit

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ABSTRACT

We take the perspective that considering the affective motives of dominant owners is essential to understanding business exit. Drawing on a refinement of behavioral agency theory, we argue that family-controlled firms are less likely than non-family-controlled firms to exit and tend to endure increased financial distress to avoid losses to the family's socioemotional wealth (SEW) embodied in the firm. Yet, when confronted with different exit options and performance heuristics suggest that exit is unavoidable family firms are more likely to exit via merger, which we argue saves some SEW, although it is less satisfactory financially. In contrast, non-family firms are more likely to exit via sale or dissolution, options that are more prone to offer higher financial returns than mergers. Family and non-family firms thus show different orders of exit options. We find support for these arguments in a longitudinal matched sample of privately held Swedish firms.

To Merge, Sell or Liquidate?
Socioemotional Wealth, Family Control, and the Choice of Business Exit

Business exit is arguably the most drastic, irreversible, and fundamental strategic action that a firm can enact (Brauer, 2006; DeTienne, 2010). The management literature has recently acknowledged the need to examine not only the creation of businesses but also their ultimate exit (e.g., Brauer, 2006; Decker & Mellewigt, 2007; Denrell, 2003; DeTienne, 2010). As Josefy, Harrison, Sirmon and Carnes (2017: 770) conclude, understanding why some firms exit while others do not "is one of the fundamental questions of organizational research." Given this central focus, research has considered a variety of antecedents that underlie the decision to persist or exit a business (for a review see, Wennberg & DeTienne, 2014). In particular, protracted poor performance is viewed as the most critical factor in explaining business exit (e.g., Brauer, 2006; Chang, 1996; Coucke, Pennings & Sleuwaegen, 2007; Sullivan, Crutchley & Johnson, 1997). However, most research has overlooked the preferences of different types of dominant owners regarding both the decision to exit or remain in business and the form of exit once the decision to divest has been made (e.g., Gimeno, Folta, Cooper & Woo, 1997; Witteloostuijn, 1998). As such, a critical question remains: Do different ownership types enact different business exit strategies when faced with financial distress?

The present study addresses this question by focusing on the difference between family-controlled and non-family-controlled private firms. Family-controlled firms, or businesses owned and managed by families, are prevalent around the world among both privately and publicly traded companies (Amore, Garofalo & Minichilli, 2014; Le Breton-Miller, Miller & Lester, 2010; Miller, Le Breton-Miller & Scholnick, 2008; Schulze, Lubatkin, Dino & Buchholtz, 2001; Villalonga & Amit, 2006), and the owners of such firms are widely recognized as having a heightened attachment to their firm compared to the owners of other organizations (Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson & Moyano-Fuentes, 2007). Specifically, we argue that family firms weigh business exit options not only in terms of their impact on financial wealth but also, and most importantly, in terms of the "affect related value embedded in the

family firm" or the family's socioemotional wealth (SEW) (Gómez-Mejía et al., 2007: 108); and they do so to a greater extent than do their non-family counterparts. This perspective does not suggest that other owner types (e.g., founders) do not derive attachment and non-economic benefits from their firms. However, a vast amount of prior research suggests that these factors tend to be more significant in family firms (for a review, see Zellweger, 2017). Within the family firm context, these factors are often associated with the unique desire for transgenerational continuation of the firm, which may influence exit strategies and differentiate family firms' decisions from those of non-family firms.

We hypothesize that family owners under distressed conditions are less likely to exit than non-family owners. Exiting implies a certain and immediate loss of SEW for the family, whereas preserving it provides the possibility that negative conditions may be reversed in the future and that the family may continue to derive both SEW and financial benefits. In contrast, non-family owners for whom the affective endowment of the firm is less relevant (e.g., in terms of dynastic succession) exhibit a stronger preference for exiting than family firms when distress cues suggest that cutting losses through divestment may be better than retaining the business in the hopes of a future performance turnaround. Additionally, we argue that when exit is unavoidable, family owners will make decisions that result in the highest combined SEW and financial value (merger), thus maintaining the possibility of transgenerational continuation, whereas non-family firms will choose options with the highest financial value (sale or liquidation). To test these proposed hypotheses, we rely on a unique longitudinal matched sample of privately held Swedish firms, which allows us to examine business exit behaviors as a function of family control.

Our study makes important contributions. First, building on a refinement of the behavioral agency model (BAM), we extend the theoretical underpinning of research on forms of business exit by arguing that the exit decision and the modes of exit depend on the dominant owners' wealth at risk. In contrast to the preferences of non-family firms, the least likely mode of

exit for family firms is the one that involves the loss of all SEW (sale), whereas the most likely mode of exit is the one that offers at least some future SEW preservation while mitigating financial losses (merger). In so doing, we contrast the view that SEW loss aversion tends to negate economic rationality by suggesting that family firms consider financial and SEW factors and show a willingness to reach a compromise between the two sets of utilities when the situation demands it. Additionally, existing research has largely focused on the family firm's desire for continuation (Gedajlovic, Carney, Chrisman & Kellermanns, 2012; Nordqvist, Wennberg, Bau & Hellerstedt, 2013). However, previous work is silent regarding what exit strategies family firms may eventually adopt when faced with such a decision. Our work enables us to elucidate how family and non-family owners react differently to financial distress and what types of exit strategies each is likely to enact and in which order when exit is inevitable. Second, we respond to recent calls by entrepreneurship and strategy scholars to examine both business creation and venture divestment (e.g., Brauer, 2006; Decker & Mellewigt, 2007; DeTienne, 2010). Business exit is theoretically important in itself because it is the most crucial strategic owners' action in which the effects of financial and non-financial logics are observed. Lastly, this study is also unique in that the population consists of privately-owned firms, whereas most of the literature on business exit is based on publicly traded firms. For instance, in his review article, Brauer (2006: 777-778) explained that in divestiture research, "it seems important to extend our 'reach' to *small and midsize, privately owned firms [italics in original]*." Future studies on how "family-owned firms divest seem particularly interesting as these firms often face particular constraints."

THEORETICAL FRAMEWORK AND HYPOTHESES

Family Firms and Socioemotional Wealth

Behavioral (Argote & Greve, 2007; Cyert & March, 1963), strategy (Burgelman, 1994; Duhaime & Grant, 1984) and entrepreneurship (Dehlen, Zellweger, Kammerlander & Halter, 2014; DeTienne, McKelvie & Chandler, 2015; Shepherd, Wiklund & Haynie, 2009) scholars

have long argued that organizations have both economic and noneconomic goals that reflect the beliefs, intentions and values of their dominant and controlling coalitions. As such, non-economic goals may inhere in any firm type, yet according to a long stream of research (for reviews see Gómez-Mejía, Cruz, Berrone & De Castro, 2011; Hoskisson, Chirico, Zyung & Gambeta, 2017; Zellweger, 2017), these tend to be far more salient in a family firm context. Of course, this does not mean that other types of owners are oblivious to non-economic goals; however, for family owners, such goals on average are likely to be much stronger. In particular, as Zellweger, Kellermanns, Chrisman and Chua (2012a: 852) note, "In family firms, where the dominant coalition is controlled by family members, it seems likely that noneconomic goals related to the family itself would be *especially* important." For instance, Ward (1987: 250) define a family firm as "a business that will be passed on for the family's next generation to manage and control," emphasizing the family's intention for transgenerational continuation as a unique feature of family businesses.

Accordingly, a growing body of literature (e.g., Gomez-Mejia, Neacsu & Martin, 2017; Kotlar, Signori, De Massis & Vismara, in press; Leitterstorf & Rau, 2014; Souder, Zaheer, Sapienza & Ranucci, 2016) has analyzed decision making in family firms through a refinement of BAM (Wiseman & Gómez-Mejía, 1998). This research stream embraces the concepts of risk bearing and loss aversion and argues that the non-financial wealth embedded in the family firm *or* SEW represents an important stock that family owners intend to protect even if its preservation might result in suboptimal decisions from an economic perspective (Gómez-Mejía et al., 2011; Hoskisson et al., 2017). SEW incorporates family control, family members' identification with the firm, emotional attachment, binding social ties, and transgenerational succession (Berrone, Cruz & Gómez-Mejía, 2012; Gómez-Mejía et al., 2011). Overall, the desire to preserve SEW may lead family owners to hold on to their assets and avoid exit strategies, even though such strategies may offer higher economic returns.

Business Exit

Business exit refers to "the process by which owners remove themselves, in varying degrees, from the firm" (DeTienne, 2010: 203). Business exit requires the decision to relinquish control and the choice of the appropriate mode by which to exit the business. The business exit literature has distinguished between deliberate and unintentional exits (Wennberg, Wiklund, DeTienne & Cardon, 2010). Deliberate or entrepreneurial exit represents a form of exit in which an owner established a firm with the primary intent to exit the firm at some point. Conversely, unintentional exit represents a case in which the firm was established with the intent of continuing the operations, but because of unforeseen factors, it is required to relinquish control. Given our theoretical interests in family firms and performance distress, we focus on unintentional exits.

Protracted poor performance is viewed as an important, if not the most important, factor in explaining an owner's decision to unintentionally exit a business (e.g., Brauer, 2006; Chang, 1996; Coucke et al., 2007; Sullivan et al., 1997). Evidence suggests that "firms in financial distress will be prompted to undertake a strong restructuring of their operations," and "[e]xit is the most drastic restructuring decision" (Coucke et al., 2007: 162, 163). Continued poor performance eventually leads to "financial distress," which predicts the probability that a firm will enter bankruptcy within two years (Altman, 1968, 1983; Miller & Reuer, 1996). Accompanying this financial distress, organizations often experience resource depletion, reputational loss, and the departure of critical human capital (D'Aveni, 1989; Hambrick & D'Aveni, 1988, 1992).

Exit versus Continuation

Business exit is a difficult decision to accept and implement, especially when owners are highly emotionally involved with their business (Duhaime & Grant, 1984), which, as explained above, is the prevalent case for dominant family owners compared to other owner types. Through exit, the family would lose all (in the case of sale and dissolution) or part (in the case of merger) of its SEW embedded in the firm. First, exit would imply a loss of control; thus, the family's

ability to exercise authority due to a strong ownership position, an ascribed status, or personal charisma would disappear or diminish. These benefits of controlling a firm have been identified as important to family owners (Chrisman, Chua, Pearson & Barnett, 2012). Second, exit would be a very public statement of the firm's demise; hence, the family's identity as reflected by the firm would suffer greatly. Additionally, it would be difficult and painful for family owners to remain emotionally attached to a "ghost" of the firm's former self (Deephouse & Jaskiewicz, 2013). As Zellweger et al. (2012b: 141) underscored, in a family firm "intended to remain under family control, business exit is always seen as a failure." Third, binding social ties among family members and close associates would weaken following exit. According to Cruz, Justo, and De Castro (2012), reciprocal bonds within family businesses often represent closed networks that offer collective social capital, relational trust, and interpersonal solidarity, much of which may be lost once the firm ceases as an ongoing concern. Similarly, Fletcher (2000) argues that family firms are characterized by strong interpersonal linkages, emotional bonds and affectionate ties. Relinquishing the arena in which many of these relations arise by exiting the firm would inflict a major hardship on the family. Finally, and most importantly, the desire to bequeath the business to future generations—with the firm symbolizing the family's heritage and tradition—is thwarted by business exit. Zellweger and Astrachan (2008) and Zellweger et al. (2012a) note that transgenerational continuation or dynastic desire is at the *core* of SEW, and this core would be destroyed if the firm were to be dismissed. Thus, in line with the SEW protection model based on BAM (Gómez-Mejía et al., 2011), given that the accumulated endowment includes not only financial assets but also a high level of SEW for family owners, the non-financial aspects of the firm will suffer a substantial loss if the owners exit the business. When family owners are confronted by the strategic choice of exit or continuation, the SEW model makes an unambiguous prediction: family owners are more likely to resist exit and extend the life of the firm (Feldman, Amit & Villalonga, 2016). In contrast, non-family owners, for whom non-financial utilities are less relevant (e.g., dynastic succession), are more likely to exit and use the

dismissed resources to other ends (Fleming & Moon, 1995; Mitchell, 1994; Sullivan et al., 1997).

Performance threats should intensify the difference between family and non-family owners in relation to the business exit versus continuation option. SEW presents a psychological barrier to the firm's extinction and causes family owners to tolerate and even justify increasingly negative performance cues while escalating their commitment to the business without resorting to exit (see Chirico, Salvato, Byrne, Akhter & Arriaga Múzquiz, 2018). In this regard, Lansberg (1988), DeTienne and Chirico (2013) and Sharma and Manikutty (2005) argue that family owners often avoid or deny such a reality, preferring instead to continue the operations of a failing business for affective rather than financial reasons. Using hyperbole to illustrate the point, Kaye (1996: 350) refers to the family business as an illness that may become "the drug of choice, with the whole family addicted to keeping some members in business together at all costs." Villalonga and Amit (2010) further observe that owner families often choose to use private funds to support their financially troubled firm even when its future prospects look dim (see also Minichilli, Brogi & Calabrò, 2015; Salvato, Chirico & Sharma, 2010). Thus, although most studies have shown that owners are more prone to exit a business when it is subject to increased financial constraints (Lee & Madhavan, 2010), we predict that, paradoxically, family owners become more resolute in resisting exit and prolonging the life of their ailing firm. This tendency arises because the family has more endowed wealth to lose—attributable to the SEW component of their wealth—even though the financial gains are likely to be higher under exit than under continuation. In other words, a SEW preservation logic and the related tradeoff between avoiding financial losses and preserving non-economic wealth increase family owners' endurance in terms of remaining in the saddle in the face of financial distress.

In contrast, the more salient form of firm-specific wealth for most non-family owners is financial in nature. As threats to their investments increase, when performance distress becomes evident, non-family owners are likely to focus their attention on divesting the business because

the foreseeable benefits of exit (e.g., greater liquidity) are likely to exceed the costs of running a firm whose returns are poor and whose prospects are dim. By planning for an exit strategy that offers the best possible outcome under the circumstances, this tendency may provide the firm with greater leverage for an orderly strategic divestment that might mitigate the owners' potential monetary losses under negative financial prospects (Alexander, Benson & Kampmeyer, 1984; Jain, 1985; Lang, Poulsen & Stulz, 1995). Thus, non-family owners will exit the firm "when the venture is not financially viable" (Park & Ungson, 1997: 281) and/or the potential future financial wealth associated with exit exceeds the financial wealth linked to the continued ownership of an underperforming firm. Indeed, exit "to prevent further deterioration of the firm's assets . . . is preferred by rational shareholders who otherwise may face a zero-value alternative" (Theodossiou, Kahya, Saidi & Philippatos, 1996: 699). In other words, to avoid higher financial losses, non-family owners may discontinue the enterprise when firm resources may be allocated to more profitable alternative uses (Maksimovic & Phillips, 2001, 2002). In line with the fundamental tenet of BAM (Martin, Gómez-Mejía & Wiseman, 2013; Wiseman & Gómez-Mejía, 1998), when threats to performance increase, the stock of financial wealth embodied in the firm is no longer endowed or assured, inducing rational owners or their representatives to take action (e.g., exit) to prevent anticipated losses (Lee & Madhavan, 2010). This leads to our baseline hypothesis:

Hypothesis 1 (baseline): Performance distress renders family firms more likely to persist in continuing the business while inducing non-family firms to exit the business.

Options of Exit

Both family and non-family owners may eventually exit for a host of idiosyncratic reasons (e.g., exhaustion, poor health, desire for change, better opportunities elsewhere, death of founder, divorce; DeTienne, 2010; Graebner, 2009) and adopt a variety of exit strategies (e.g., DeTienne et al., 2015; Wennberg et al., 2010). At the most finite level, business exit may involve the option of completely dissolving the firm's operations and liquidating its assets (Mitchell, 1994). Business exit also may take the form of the owner selling the company, whereby the

acquirer takes over full ownership of its assets and management responsibilities (Decker & Mellewigt, 2007; Mitchell, 1994). Finally, another viable exit option is a merger, in which the original firm ceases to exist as an independent entity but becomes part of another firm such that a residue of the original firm survives (Brauer, 2006; Johnson, 1996). To date very little is known about differences in the form of exit choice adopted by family and non-family owners. In the present study, we argue that the attractiveness of various exit options differs for these two types of owners because the former is motivated to mitigate dual financial and SEW losses and ensure the option to continue extracting non-financial benefits. We also consider the role of performance distress in the exit choice as a function of firm ownership status.

     Merger versus Sale or Dissolution. In general, from an economic perspective, mergers are less preferable than other exit options because of a combination of the complexity and costs of producing value from mergers (e.g., integrating strategies, activities, employees, cultures; Graebner, Eisenhardt & Roundy, 2010), the agency issues involved with being a partial owner (e.g., Balcaen, Manigart, Buyze & Ooghe, 2012; Lang et al., 1995) and uncertain future returns (versus a sale or dissolution that involves an upfront payment; Ravenscraft & Scherer, 1989; Weber & Camerer, 2003). For instance, in a sale, the roles of the two parties are clearly established, and the exchange of cash implies a simple transfer of ownership. Conversely, in a merger, through the exchange of cash and shares, both parties share the value and the risks of the transactions. Thus, with the outright sale of the firm, the risk of the operation is on the buyer. In a merger, the risk is shared between the two parties, making the latter a more hazardous choice (Balcaen et al., 2012; Dumon, 2018; Haleblian, Devers, McNamara, Carpenter & Davison, 2009; Rappaport & Sirower, 1999).

     Most mergers typically erode owner wealth, and only a few achieve positive financial returns (Weber & Camerer, 2003). For instance, Weber and Camerer (2003: 400) claimed that "[a] majority of corporate mergers fail" and that "[f]ailure occurs, on average, in every sense." According to Grubb and Lamb (2000) and Graebner et al. (2010), only approximately 10% to

20% of all mergers succeed. In support of this claim, Meeks (1977) viewed a merger as a "disappointing marriage" and found that return on assets (ROA) for merging firms in the UK consistently declined in post-merger years. Mueller (1985) also reported significant post-merger losses in a sample of US firms. Ravenscraft and Scherer (1987, 1989) similarly found that ROA declined by an average of 0.5% per year among target companies that were merged under pooling accounting (see also Kaplan & Weisbach, 1992). In contrast, scholars have suggested that both sale and liquidation are efficient exit strategies that allow for the redeployment of firm assets to more productive uses (Fleming & Moon, 1995). In addition, empirical evidence suggests that stakeholders react positively to both sale and liquidation decisions (Alexander et al., 1984; Jain, 1985; Lang et al., 1995) and that such decisions provide a positive owner wealth effect (Brauer & Wiersema, 2012; Lee & Madhavan, 2010). For instance, Hite, Owers, and Rogers (1987) found that proposals to sell or liquidate a firm are associated with significant average abnormal returns; in contrast, other forms of exit (e.g., mergers) are associated with low marginal returns. Additionally, research has suggested that, in general, creditors' incentives are skewed toward sale or liquidation over mergers which may be perceived as riskier (e.g., Bergström, Eisenberg & Sundgren, 2002).

However, it is important to recognize that with few exceptions (e.g., Balcaen et al., 2012; Maksimovic & Phillips, 2001; Maksimovic, Phillips & Yang, 2013), the literature considering the consequences of mergers is largely based on publicly traded firms. Nevertheless, the arguments concerning the financial implications of these various choices are also relevant to our context of privately-owned firms where financial returns from a merger remain low. For instance, Maksimovic et al. (2013) revealed that private firms realize low gains from merging with another entity and such gains are even lower than those of public firms, underlying even more the risks of a merger and the related post-merger integration problems within a private context. Yet, we argue that the above logic that mergers are less likely to be pursued compared to other exit options may not similarly apply to family owners for whom the transmission of the

firm into the future, ensuring the continuity of the family legacy, represents a prime and unique motivation compared to firms with other ownership forms (e.g., Villalonga & Amit, 2010; Zellweger et al., 2012a; Zellweger et al., 2012b). Despite the risks involved, for family owners, a merger provides the ability to balance the dual financial wealth-SEW considerations and a better option than selling or liquidating the firm, which would imply the total and irrevocable loss of all SEW linked to the firm. In particular, the merger option includes the family as a partner in the new entity, allowing the family to continue to be involved with the firm in some way, even though it is no longer in full control. Indeed, although "post-merger integration challenges might well disrupt…close social relationships" within and outside the firm and "weaken family control" (Miller, Le Breton-Miller & Lester, 2010: 203), exit by merger will at least preserve some of the firm's "dynastic genes," the affective content of SEW, and the family may even perceive the elements that survive as a diluted form of the prior family legacy. At the same time, the other merging partner is likely to perceive the family as a reliable and committed potential firm with which to enter into a merger arrangement. That is, the family's SEW may be depicted as an asset that strengthens family owners' commitment to engaging in a successful merger operation.

The above-mentioned differences between family and non-family owners should be accentuated when poor performance is the driver of business exit, which is the most common scenario. First, while exit by merger may be problematic for most businesses (Kanatas & Qi, 2004; Weber & Camerer, 2003), poor-performing firms can use the sale or liquidation mode of exit as a vehicle to generate immediate cash returns that owners can transfer to more highly valued uses (Balcaen et al., 2012; Maksimovic & Phillips, 2001; Sullivan et al., 1997). Supporting this perspective, Balcaen et al. (2012) found that sales and liquidations were less likely than mergers in their dataset of economically distressed private and public Belgian firms. Similarly, Iyer and Miller (2008) found that for distressed firms, the probability of opting for restructuring changes, such as a merger, decreases as the financial situation worsens. Damaraju,

Barney and Makhija (2015) also showed that under high uncertainty, partial forms of divestment are less likely than full divestments. These authors speculated that sales and liquidations may be preferred because of the need to convert losses into immediate cash and the owners' lack of willingness or motivation to choose forms of exit that involve continuing the business after heavy economic distress arises. Second, in a distressed situation, the search for a potential merger partner includes significant additional monetary costs and a considerable amount of time (Sullivan et al., 1997). BAM's logic also suggests that in their pursuit of financial wealth, owners exposed to negative financial signals that put more of their wealth at risk, will be prone to search for potentially more lucrative, more short-term, and less complicated exit options (i.e., sale or liquidation) than time-consuming and financially costly alternative exit options (i.e., a merger). This tendency is compounded by the fact that the financial gains associated with a merging strategy may be highly uncertain (Kanatas & Qi, 2004) and may potentially be perceived as not worth the effort (Hotchkiss & Mooradian, 1998), thus justifying the choice to discount the business's future price instead of waiting for superior future potential returns (Kumar, 2005).

In contrast, in the face of financial distress that renders total firm failure a distinct possibility, we expect that given their stronger non-financial preservation motives and desire to maintain the future option to continue gaining SEW utilities (Chua, Chrisman & De Massis, 2015), family owners will be more willing to engage in merging activities despite the higher financial risks that a merger entails. First, family owners tend to have a long-term orientation, and they are more prone to be patient when they realize that their firm is not performing well or even performing increasingly worse, with deteriorating effects on the family reputation and image (Sharma & Manikutty, 2005; Sirmon & Hitt, 2003). Through a merger, they hope to save some SEW while accepting the risks involved in the merger. As Gómez-Mejía, Makri, and Larraza Kintana (2010: 232) explained, "if the firm fails to survive, SEW would be completely lost, and given this possibility (which would be perceived as more probable when performance declines)", riskier actions would be taken. Therefore, the short-term goal of converting losses

into cash through a sale or liquidation and the owners' lack of motivation to opt for a merger after experiencing distress are arguments that will not hold in a family firm context.

Second, a potential merging partner is particularly interested in carefully assessing the credibility and attractiveness of a distressed partner (Graebner et al., 2010). A distressed firm is more likely to be perceived as a viable partner if it is believed to be trustworthy and fully committed to continuing operations (Graebner, 2009) despite its current losses and weak profits, with the hope that it may become successful or at least contribute to achieving the partner's corporate objectives (Kanatas & Qi, 2004). Rather than a negative endowment, SEW may be viewed as an intangible asset of the distressed family firm because of the family's desire to save some SEW, which should increase its effort and persistence to see the new merging entity succeed in the long run. A successful merger, especially under financial distress, requires that tacit, socially complex forms of knowledge can be effectively transferred from one firm to another. Thus, a high degree of post-deal integration is necessary for the merger's benefits to materialize. Family involvement in the distressed merger may well dampen the turnover of key employees such that the family's presence may be an effective means to enhance retention. Third, by showing a willingness to continue its unprofitable operations to sustain SEW utilities, perhaps placing financial demands in a negotiated agreement with a potential partner on the back seat, the family firm may become more attractive to that partner. Indeed, a family firm may be more inclined to accept a less lucrative offer than a non-family firm if the offer prolongs the firm's existence in some form. This conjecture is in line with Graebner and Eisenhardt's (2004: 397) argument that non-price factors may be particularly important for family firms engaging in mergers and acquisitions in tough situations. In contrast, the other two options of sale and dissolution represent substantial decreases in the possibility of preserving some prospective SEW.

Anecdotal evidence of the arguments presented above is offered by Lehmann Wines (LW), a family winemaker that, under market pressures in 2003, merged with the Swiss Hess

Group rather than opting for other exit options in order to preserve the family legacy. Steen and Welch (2006: 295-296) explain how "[t]he Lehmann family accepted the market reality that a merger was likely to occur; however, the stress on maintaining a family role, as part of preserving the legacy that LW was seen to represent, appeared to be important . . . it was clear that family members [of LW] were concerned about far more than the offer price available . . . there was an array of nonfinancial considerations that were considered important, even critical". The Hess Group highly trusted and valued the Lehmann family and its culture and commitment toward the business, and it was able to establish strong personal relationships and support the preservation of the family legacy through the promise of an active role of the Lehmann family after the merger. In formal terms:

> *Hypothesis 2: Family firms are a) more likely than non-family firms to exit by merger (versus exit by sale or dissolution), and b) performance distress renders family firms more likely to merge with another entity and non-family firms more likely to sell or dissolve the business.*

> ***Exit by Sale versus Dissolution.*** As discussed earlier, both sale and liquidation options enable owners to allocate assets to better uses. Moreover, selling a firm outright enables its owners to create more value in terms of financial returns (Decker & Mellewigt, 2007; Maksimovic & Phillips, 2001, 2002; Wennberg et al., 2010). As Hite et al. (1987) explained, firms rely on liquidation only when they cannot sell the business. This is true for most firms because the salvage value of the asset is lower than selling the firm as a going concern. However, we expect family owners to behave differently in this regard because they will weight higher than non-family owners the impact of the sale or dissolution exit option on the family's non-financial utilities; thus, dissolution is more likely to happen even though, from the perspective of economic rationality, a sale is superior over salvage.

First, family owners are highly concerned about the future continuity of the business under the family umbrella and the prolongation of SEW. Both firm sale and firm dissolution would imply the total loss of non-financial benefits from the firm, thus representing extreme exit choices for the family. However, leaving their "baby" by handing it to a stranger through a sale

to outsiders may be perceived by family owners as a more difficult and devastating emotional choice than dissolving the business. As Mickelson and Worley (2003: 252) explained, "complex family dynamics can lead to the perception that selling the business means selling out the family." Chang and Singh (1999) offered indirect evidence that being or feeling attached to a firm induces its owners to liquidate rather than to sell the business. Second, given that family owners include a SEW component in firm value, they are likely to overprice their firm when attempting to sell it as an ongoing concern. Thus, a potential buyer may be less interested in purchasing the firm, and any such negotiations are prone to be difficult, leading to the liquidation alternative (Zellweger & Astrachan, 2008; Zellweger et al., 2012a). For example, Zellweger et al. (2012a) found that in a sample of privately held family firms from Switzerland and Germany, owners greatly overestimated the market value of their firm which, according to the authors, occurred because the owners placed a SEW premium on what they "thought" the firm was worth. Because of this (SEW) price premium, the value a given family firm creates for a buyer would have to exceed the value created by a non-family firm without such a premium (Feldman et al., 2016).

The differences between family and non-family firms noted above should be heightened under conditions of performance distress. Profit-maximizing firms rely more on exit by sale when they are not productive and thus experience poor firm-level performance (Alexander et al., 1984; Jain, 1985; Lang et al., 1995). Bruton et al. (1994) claimed that when an organization becomes distressed, firm sale to other actors is the most commonly chosen alternative by owners given that this option is financially beneficial for all parties. Discounting the firm's future value through a sale (Kumar, 2005) thus represents an important "source of liquidity for firms in financial distress" (John & Ofek, 1995: 107) and is certainly a better option than firm dissolution. Accordingly, in their quest to mainly preserve their economic endowment, non-family owners exposed to negative financial signals, which imply the risk of loss to that

endowment, are more likely to sell the business as an ongoing concern than to dissolve it and break up the value of its assets.

By contrast, as performance weakens, family owners may address the grief and financial loss of a failing business by showing reluctance to sell and favoring liquidation, thus avoiding the *tough* emotional choice to sell while maintaining an idealized memory of the firm as it was under the family's possession (Shepherd, 2003, 2009). For example, in 2007, the fully family owned firm Lucky (one of the largest privately held firms from Pakistan in the agri-farming business), facing major, increasing financial losses, confronted the choice of selling their business activities to third parties. Although selling was a viable and financially rewarding option, liquidation was instead chosen, motivated by the family owners' emotional burden of seeing their "baby" owned by external owners (Akhter, Sieger & Chirico, 2016). Additionally, in line with our previous arguments, family owners of financially distressed companies may overvalue their business by paradoxically including a higher SEW component in their assessed value when the need to sell the business becomes more evident because of increasingly weak performance. As such, they may ask for a sale price that the market is unwilling to bear. For example, in the 1990s, the Tía Company—a privately held retail family business from Argentina—and its 61 stores experienced major declining sales and performance because of decreased economic activity in the country and increased competition from a new generation of international giants, including the American retailer Wal-Mart. The company was evaluated by two investment banks, but even given the increasing financial and market difficulties, the family owners committed to a selling price of approximately 150/200 million dollars more than the banks' firm evaluation to compensate for the huge emotional loss related to the potential sale of the family business (Doughty & Hill, 2000). The evidence suggests that unrealistic expectations under increased financial distress, reflecting a high reluctance to sell unless it is 'an offer that could not be refused', may make exiting the business by selling it to actors outside the family

more difficult for the family. Thus, SEW motives render family owners exposed to negative

financial signals more likely to dissolve the business rather than sell it. Formally,

> *Hypothesis 3: Family firms are a) less likely than non-family firms to exit by sale (versus exit by dissolution), and b) performance distress renders family firms more prone to dissolve and non-family firms more prone to sell the business.*

As a direct logical consequence of our arguments in support of Hypotheses 2 and 3, when

exiting a business, given non-family owners' higher consideration for financial wealth as an

outcome of the exit decision, they will be more likely to attempt to sell the firm, then to liquidate

the assets, and, as the least desirable option, to engage in a merger. In contrast, because the net

value that a family owner receives from an exit choice equals the financial benefits of the choice

adjusted by the SEW costs associated with the divestiture option, non-family owners will be

more likely to merge with another entity, followed by liquidation and, as the last option, to

facilitate an outright sale to outsiders. In formal terms,

> *Hypothesis 4: In their exit choice, a) family firms are more likely to show the following order of exit preferences: merger, dissolution, and sale. In contrast, b) non-family firms are more likely to show the following order of exit preferences: sale, dissolution, and merger.*

METHODS

Data

We constructed a longitudinal dataset by combining three longitudinal Swedish

databases. The RAMS database provides yearly data on all non-listed firms registered in

Sweden, including measures such as sales turnover, profitability and debt. The LISA database

provides yearly data on all Swedish inhabitants, including family relationships. Finally, the

multi-generational database provides information on couples (whether they are married or living

together and have children together) and on biologically linked families (parents and children).

These databases provided by Statistics Sweden contain annual information with unique

identifiers for individuals and firms. Thus, our sample and analyses are based on annual

observations of data. These official statistics are reported to the government, and in Sweden, they

are considered highly accurate and reliable. We limited our sample to firms of which the

information of who are the owners of the firms was present. Based on the available data, as a sampling frame, we focused on privately (closely) held firms with at least ten employees[i] (as microfirms are generally more likely to fail; Stinchcombe, 1965) in the 2004-2008 period, yielding over thirty thousand Swedish companies.

Coarsened Exact Matching - Matching Analysis

In order to improve the covariate balance of the treated (family firms) and control (non-family firms) groups (Blackwell, Iacus, King & Porro, 2009; Iacus, King & Porro, 2009; Iacus, King & Porro, 2011a, 2011b), we used coarsened exact matching (CEM). CEM is a monotonic, imbalance-reducing matching method that reduces causal estimation error, model dependence, selection bias, and inefficiency. Accordingly, it is designed to improve the estimation of causal effects via its powerful method of matching (Blackwell et al., 2009) while addressing the most pressing endogeneity concerns (De Figueiredo, Meyer-Doyle & Rawley, 2013; Wooldridge, 2002). However, given that *coarser matching* may reduce the value of matching when adjusting for differences across the case and control groups, we opted for a *finer-grained exact matching* in which the Stata option "(#0)" forces CEM to avoid coarsening the matching variables (De Figueiredo et al., 2013; Feldman et al., 2016; Heckman & Navarro-Lozano, 2004; Rogan & Sorenson, 2014; Younge, Tong & Fleming, 2015). We used the Stata command "k2k" to allow CEM to produce a matching result that has the same number of treated and control units within each matched strata (Blackwell et al., 2009; Iacus et al., 2009; Iacus et al., 2011a, 2011b). Specifically, we matched firm-years on firm age[ii], firm size (the total number of individuals employed by the firm), whether the founder is involved in the firm, number of owners and number of managers (less than three, between three and four, more than four), the financial condition of the firm and the industry. First, firm age and size may affect a firm's propensity to continue or exit (Le Breton-Miller & Miller, 2013; Mitchell, 1994; Wennberg et al., 2010). In particular, research has shown that younger and smaller firms suffer from the liability of newness and smallness; therefore, they are more likely to exit (Hannan & Freeman, 1977; Stinchcombe,

1965; Wiklund, Nordqvist, Hellerstedt & Bird, 2013). Second, research has shown that founders influence the way a firm is managed and whether the firm continues operations or exits the business (Block, 2012). Third, the number of owners and managers may affect firm survival (Jostarndt, 2007). Fourth, the financial condition of a firm has important effects on the decision to exit or continue the business (Brauer, 2006; Mitchell, 1994). Thus, we distinguished between healthy firms (Altman Z-score > 2.99) and firms with a moderate (1.81 < Altman Z-score < 2.99) or high probability of bankruptcy (Altman Z-score < 1.81) (Altman, 1968). Finally, industries may differentially encourage companies to be less or more inclined to choose different exit options (Wennberg et al., 2010). The matching procedure yielded a final matched sample of 7,936 companies. Although in CEM, "[t]reatment and control observations are… matched exactly within each bin, which eliminates the need to compare the means of the treatment and control groups after matching" (De Figueiredo et al., 2013: 856), we ran a means comparison test that confirmed that the matching effectively selected exact controls for the cases.

Mixed Logit Analysis

We conditioned our statistical analyses on the set of matched cases and controls (Blackwell et al., 2009; Iacus et al., 2009; Iacus et al., 2011a, 2011b; Rogan & Sorenson, 2014). Specifically, we relied on a mixed logit model, which allows direct comparisons among multiple discrete choices (see McFadden & Train, 2000; Train, 2003: for a review of the method and mathematical notations). Unlike the multinomial (or conditional) logit model, mixed logit models do not suffer from the independence of irrelevant alternatives problem, and the unobserved heterogeneity issue is addressed by allowing the effect of the parameters to vary across observations through the estimation of random parameter models (McFadden & Train, 2000; Train, 2003). Although mixed logit has existed since the 1970s, it has only become fully applicable with the development of simulation methods. For example, Haan and Uhlendorff (2006) showed how to implement a multinomial logit model with unobserved heterogeneity in Stata. Subsequently, Hole (2007) described how to estimate such a model through the mixed

logit Stata command. Mixed logit fits mixed logit models through the use of maximum simulated

likelihood with Halton draws (Train, 2003). The data setup is the same as that for the case of

fitting a multinomial logit using conditional logit by expanding the dataset and re-specifying the

independent variables as a set of interactions through the *case2alt* Stata command (Long and

Freese, 2006). In each analysis, the omitted alternative becomes the base outcome (Hole, 2007;

Long & Freese, 2006)[iii].

Dependent Variable

In the mixed logit analysis after matching, the dependent variable contains 1 for the

selected alternative (continuation, sale, dissolution or merger) and 0 for non-selected alternatives

(*case2alt* Stata command; data expansion). Given that our data consist of annual observations,

we observed firm transitions by comparing firms' status in adjacent years. Continuation and exit

information is available from Statistics Sweden through the firm identification number.

Continuation occurs when firms remain as an ongoing concern in both t_1 and t_2 in the public

registers. Exit by sale occurs when firms continue operating but under different ownership and

management[iv]. Exit by dissolution occurs when firms exist in year t_1 and disappear from the

public registers in t_2 with their assets liquidated. Exit by merger occurs when the original firms

disappear from the registers, yet they are transformed into a new concern sharing some of their

control with other firms—hence, a merger consists of a blending of firms[v]. The dependent

variable is lagged by one year.

Independent Variables

Inverse Altman's Z-score. To distinguish firms with financial difficulties from better-

performing firms, we used an inverse Altman's Z-score model. This model produces a

continuous measure: lower levels of the inverse Z-score indicate financial health, whereas higher

levels indicate a firm in financial distress (Miller & Reuer, 1996). Although scholars have used

different evaluation models as predictors of distress and bankruptcy, Altman's Z-score "has been

used to model financial conditions more frequently in strategic management studies" (Dowell,

Shackell & Stuart, 2011: 1032). The Z-score model builds on indicators of size, leverage,

liquidity and performance as predictors of financial distress on the basis of Altman's (1968,

1983) optimization of the model's predictive abilities. Following Altman (1968, 1983) and

subsequent literature (e.g., Iyer & Miller, 2008; Wennberg et al., 2010), we used the following

variables and notations: Z-Score = A*3.3 + B*.99 + C*.6 + D*1.2 + E*1.4*-1[vi].

Family firm measures. We used a binary measure to designate a firm as family controlled,

and as a robustness test of our results we used a continuous composite measure of family

involvement. Following the work of Miller et al. (2007), we first labeled family-controlled firms

as those that were owned and managed by two or more family members (see also Wennberg,

Wiklund, Hellerstedt & Nordqvist, 2011; Wiklund et al., 2013). The family firm dummy variable

is coded "1" if the firm is a family firm and "0" if the firm is a non-family firm. Many other

studies have used a family firm dummy to distinguish family firms from non-family firms and to

capture the importance of non-financial forms of wealth, or SEW, to dominant owners (e.g.,

Berrone, Cruz, Gómez-Mejía & Larraza-Kintana, 2010; Leitterstorf & Rau, 2014). However,

recent attempts have been made to theoretically (see Gómez et al., 2011) and empirically

consider the distinguishing features of family involvement to proxy the relative weight given to

SEW in firm decisions. Such features include the presence of family owners and managers (e.g.,

Chrisman & Patel, 2012; Patel & Chrisman, 2014), having a family CEO at the helm (e.g.,

Berrone et al., 2010; Feldman et al., 2016) and intergenerational involvement (e.g., Chirico,

Sirmon, Sciascia & Mazzola, 2011; Chrisman et al., 2012). Accordingly, we included the

following indicators of family involvement: a) *percentage of family owners* (number of family

owners/number of total owners) (ranging from 0 to 1); owners are those who declare part

ownership to the tax authorities; b) *percentage of family members managing the business*

(number of family managers/number of managers) (ranging from 0 to 1); c) *presence of a family*

chief executive officer (CEO) (dummy variable coded as 0 or 1); and d) *intergenerational*

involvement, i.e., the presence of multiple generations that own and manage the firm (ranging

from 0 to 2). Given that these four measures showed strong convergence by loading highly on a single factor and demonstrated high internal consistency, we built a composite measure of family involvement by adding the standardized values of each measure (see Finkelstein, 1992: and Martin et al., 2013 for a similar procedure). When the family ownership and control criteria were met for the family firm dummy, family involvement was measured according to these four indicators. Again, all firms that did not meet these conditions were considered non-family firms and were coded as 0, making the variable left-censored (see Chrisman & Patel, 2012: and Patel & Chrisman, 2014 for a similar procedure).

Additional Covariate Controls

Following the recommendation of Blackwell et al. (2009) and other studies (e.g., Younge et al., 2015), we included a number of additional covariate controls. First, we controlled for CEO age as a proxy for a CEO's experience and career, which can affect the decision to continue or exit the business (Wennberg et al., 2011). Second, we controlled for high- and low-discretion slacks given their potential effects on firm survival (Bradley, Shepherd & Wiklund, 2011; Brauer, 2006). High-discretion slack was measured as the level of cash reserves, whereas low-discretion slack was measured as the debt-to-equity ratio (George, 2005). Following Chen (2008), we standardized these two measures and summed them to obtain a general slack index. We also controlled for the log of firm assets because of the relevant role of firm assets for both firm continuation and firm exit strategies (Brauer, 2006). Third, we controlled for environmental dynamism and munificence, which may influence the decision to continue or exit the business (Brauer, 2006). Munificence was measured by averaging the regression coefficients of a given industry's (four-digit NACE code) net sales and operating income. Dynamism was calculated as the average of the standard errors of the regression slopes for net sales and operating income regression equations used in calculating industry munificence (see Keats & Hitt, 1988). Fourth, we controlled for density given its potential effect on firm survival. Given that in the Swedish context the level of competition is mainly determined at the regional level (Delmar & Wennberg,

2010), density was measured as the number (log) of organizations per region (Baum & Mezias, 1992). Lastly, to capture time dependency, the log of time was incorporated into the analyses. The log of time has been found to be the most appropriate functional form (e.g., compared with year dummies) in discrete-time models with multiple destinations (Box-Steffensmeier & Jones, 2004).

RESULTS

Descriptive statistics and correlation coefficients of the study's variables are presented in Table 1. As previously mentioned, for hypothesis testing, we relied on a mixed logit model with robust standard errors clustered on the firm (Blackwell et al., 2009).

Insert Table 1 about here

In Tables 2 and 3, we report the estimated coefficients and their p-values when we used the family firm dummy variable and as a robustness test of our main results the composite measure of family involvement. For parsimony, we present only the models pertaining to the specific hypothesized relationships we test in our paper, thus avoiding the duplications related to the different base outcomes we use to run the different regressions. To examine the effect sizes, we follow King, Tomz, and Wittenberg's (2000) simulation-based approach from the Clarify package (in particular, estsimp routine) and assess the conditional relationships posited in the hypotheses. The results are graphically displayed in Figures 1 and 2 for family and non-family firms (Hoetker, 2007; Zelner, 2009). The base outcomes are "exit by continuation" in Table 2 and "exit by merger" and "exit by dissolution" in Table 3. For each mixed logit analysis, we started with a base model containing the control variables, the inverse Z-score and the family firm dummy or family involvement composite measure. Then, we included the interaction terms between the inverse Z-score and the family firm dummy or the family involvement composite measure. Overall, the results show that family firms are more likely than non-family firms to continue and resist all forms of exit – merger, sale and dissolution (Table 2. Models 1 and 3).

Insert Tables 2 and 3 about here

The results regarding Hypothesis 1 are reported in Table 2 with "continuation" as the base outcome. Specifically, Models 2 and 4 examine the interaction effects of Hypothesis 1 (inverse Z-score*family firm measures). To interpret the related results, when comparing sale or dissolution versus continuation ("sale" and "dissolution" columns), we plotted the two significant interactions with the family firm dummy variable, which show that performance distress renders family firms less prone to exit (i.e., they persist longer) and non-family firms more prone to exit by sale or dissolution (see Figures 1a and 1b, respectively). Hypothesis 1 is thus supported for both sale and dissolution. However, the interaction effects between the inverse Z-score and the family firm measures are not significant when comparing merger versus continuation (Table 2; Models 2 and 4; "merger" column). Apparently, it becomes difficult to discriminate whether merger or continuation is best under financial distress (see Peel & Wilson, 1989), which is likely because with both exit options, some form of family influence is preserved.

The results regarding Hypotheses 2a and 2b are shown in Table 3 when "merger" is the base outcome. When comparing sale or dissolution versus merger, both the family firm dummy and the family involvement coefficients are negative and significant (Table 3, Models 1 and 3), thus supporting Hypothesis 2a that family firms are more likely than non-family firms to exit by merger versus exit by sale or dissolution. Next, Models 2 and 4 examine the interaction effects (inverse Z-score*family firm measures), which are negative and significant, indicating that poorly performing family firms are more likely to exit by merger (versus sale or dissolution) than non-family firms are. Consistent with our expectations, Figures 2a and 2b with the family firm dummy variable, respectively, show that performance distress renders family firms more prone to exit by merger and non-family firms more prone to exit by sale or dissolution. Thus, Hypothesis 2b is also supported.

The results regarding Hypotheses 3a and 3b are reported in Table 3 when "dissolution" is the base outcome. When comparing sale versus dissolution, both family firm coefficients are

negative and significant (Table 3, Models 5 and 7), which supports Hypothesis 3a: family firms are less likely than non-family firms to exit by sale than by dissolution. Models 6 and 8 examine the interaction effects (inverse Z-score*family firm measures), which are not significant ($p>0.05$). Hence, family firms are less prone to exit by selling the business than non-family firms are, but this difference is not magnified under financial distress. Thus, Hypothesis 3b is not supported.

Insert Table Figures 1a,b, 2a,b about here

To test whether the slopes in Figures 1 and 2 are significantly different from one another in each graph, we calculated the difference in predicted probabilities associated with family and non-family firms (i.e., the vertical distance between the family and non-family firm values in the different figures) at different levels of the inverse Altman Z-score along with the 95% confidence interval for this difference (King et al., 2000; Zelner, 2009). This method enables us to determine the statistical significance of the difference of two slopes point by point. The results show that the interaction effects are always significant at different levels of the inverse Altman Z-score (the difference in predicted probabilities is significantly different from zero at $p < 0.05$), except for very low levels of the inverse Altman Z-score (extreme left side of the graphs), where the 95% confidence interval includes zero. This result is also evident in Figures 1 and 2, where the confidence intervals overlap to a different extent for financially healthy firms. Hence, the exit/continuation strategies adopted by family and non-family firms are significantly different from each other at different levels of the Altman Z-score and as performance declines. However, for very high levels of financial health, these differences are not statistically significant. This is likely because among well-performing firms, it may be *less* relevant to discriminate which strategy offers the greatest financial and/or non-financial gains.

Finally, the results presented in Tables 2 and 3 provide support for Hypotheses 4a and 4b. When leaving the business, family firms are more prone to prefer a merger, then dissolution, and finally sale as the last exercise option. The opposite is true for non-family firms, which show the

order of sale, dissolution, and merger as their exit options. To further test the statistical significance of the order of exit options by ownership form, after preprocessing the data with CEM, we ran an ordinal logit model with a generalized linear latent and mixed models (GLLAMM) approach (see Rabe-Hesketh & Skrondal, 2012; Rabe-Hesketh, Skrondal & Pickles, 2004) as well as a generalized ordered logit model (see Long & Freese, 2006), which account for the ordered exit options that we theorized for family and non-family firms (*ordered dependent variable for family firms*: merger = 3; dissolution = 2; sale = 1; *ordered dependent variable for non-family firms*: sale = 3; dissolution = 2; merger = 1). First, in support of Hypotheses 4a and 4b, in the ordinal logit model, both of the family firm coefficients (family firm dummy: .70, p = .000; family involvement: .09, p = .000) are significantly and positively related to the ordered dependent variable for family firms (see Table 4; Models 1a, 1b) and negatively related (family firm dummy: -.70, p = .000; family involvement: -.09, p = .000) to the ordered dependent variable for non-family firms (see Table 4; Models 2a, 2b).

Second, we further tested the order of exit options by using a generalized ordered logit model (Stata command gologit2), which allows the effects of the explanatory variables to vary with the point at which the categories of the dependent variable are dichotomized. The first panel contrasts category 1 with categories 2 and 3 of the ordered dependent variable, whereas the second panel contrasts categories 1 and 2 with category 3 of the ordered dependent variable (Long & Freese, 2006). In support of Hypotheses 4a and 4b, both family firm coefficients are significant and positively related to the ordered dependent variable for family firms (Family firm dummy = first panel: .76; p = .000; second panel: .78, p = .000. Family involvement = first panel: .10; p = .000; second panel: .10; p = .000; see Table 4, panels 1a, 2a, 1c, 2c) and significant and negatively related to the ordered dependent variable for non-family firms (Family firm dummy = first panel: -.78; p = .000; second panel: -.76, p = .000. Family involvement = first panel: -.10; p = .000; second panel: -.10, p = .000; see Table 4, panels 1b, 2b, 1d, 2d). For both the ordered logit and generalized order logit models, we used Heckman's (1979) two-step

procedure to test for sample selection bias related to the exclusion of the firm continuation category (exclusion restriction: total gross investments), and we calculated the inverse Mills ratio and controlled for it in the analyses[vii]. In short, utilizing both the ordinal logit model with GLLAMM and the generalized order logit model, we found support for Hypotheses 4a and 4b (see Table 4).

Insert Table 4 about here

Robustness Tests

Beyond our focal analyses, we also conducted a number of robustness tests to further support our results. First, we used the four measures of family involvement separately, and overall our results were confirmed; yet increased intergenerational involvement made family firms more likely to sale than dissolve under distress (Chirico et al., 2018). As expected, the percentages of family owners and managers were the best predictors of firm continuation. Relatedly, we reconstructed the family firm dummy variable as 1 if the firm is owned and managed by two or more family members, multiple generations are involved and a family member serves as CEO of the firm. All results were confirmed, suggesting that our results are robust to different measures and operationalizations of a "family firm." We also constructed alternative archival composite measures of family involvement as follows: a) the percentage of family owners and family managers, b) the percentage of family owners and family managers and the presence of a family CEO, and c) the percentage of family owners and family managers, and intergenerational involvement. In all three of these cases, the results were consistent and in line with our predictions.

Second, we tested whether family and non-family firm exit is also a function of firm age. Our results show that compared to non-family firms, family firms' reluctance to exit increases for older firms. This finding is in line with a recent study in which firm age, conceptualized as a driver of emotional attachment, was found to be negatively related to family firm exit (Dehlen et al. 2014). Additionally, we restricted our sample to firms operating in the high-tech and

knowledge-intensive sectors, where we can expect firms to have a financial value in the market even under distress conditions so that both sale and merger should be available as options. The results remained consistent with our main findings.

Third, we ran a series of additional tests to explore the exit behaviors of founder firms. Our results show that, in general, founder firms behave differently than family firms. In particular, when comparing founder firms with other forms of organization or with family firms specifically, we obtained the following consistent results. Founder firms—firms in which at least one founder still owns the business and no other family members of the founder are involved (Miller et al., 2007)—are more likely to engage in sales, dissolutions and mergers than to continue operation. Moreover, this tendency is accentuated in the case of sale and dissolution as performance decreases. However, founder firms tend to rely less on mergers than to continue operation as performance declines, most likely because they recognize the higher risks related to the merging option. Additionally, as performance declines, founder firms are more likely to sell or dissolve the business than to merge with another entity. Finally, although we examined whether the founder was still actively involved in the business, further controlling for this did not change the results. These results corroborate multiple studies showing that founder firms behave differently from family firms (Block, 2012; Cannella, Jones & Withers, 2015; Miller et al., 2007).

Fourth, to test the sensitivity of our results, we ran further robustness tests. First, we opted for a coarser matching procedure (rather than the finer-grained exact matching). Second, we allowed for unbalanced matching within each matched strata (i.e., CEM uses maximal information, resulting in matched strata that may include different numbers of treated and control units) (Blackwell et al., 2009; Iacus et al., 2009; Iacus et al., 2011a, 2011b). Third, we ran a paired t-test after CEM. Fourth, we used other methodologies to test our hypotheses: multinomial logit, GLLAMM routine and the nested logit model. In all cases, the results did not differ substantially from our main analyses. Additionally, to test Hypothesis 1, we ran a competing risk

survival regression, and a stcox and complementary loglog specifications (Long & Freese, 2006) in which the dependent variable indicates whether business exit occurred (1) or not (0). The results confirmed that family firms are less likely to exit than non-family firms, and this difference is amplified under performance distress. We also explored firm owners' options to continue or exit the business under an external distress cue: high density (Baum & Mezias, 1992). In line with our findings with the internal measure of financial distress, our results show that increased external density in terms of the number of organizations per region renders family firms more prone to persist in continuing the business and non-family firms more prone to exit it by means of sale, dissolution or merger. We also tested whether the order of exit options predicted in Hypothesis 4 amplifies as performance deteriorates. We found that family firms opt for merger over sale and dissolution as performance decreases, while non-family firms opt for sale and dissolution over merger as performance decreases.

Finally, as a further robustness test of our results on exit options, we collected further data. We asked 93 graduate family business students from Sweden and Switzerland to rate the likelihood of following a merger, sale or dissolution if they were confronted with the necessary choice of family firm exit (scale from 1 to 5). The mean values for merger, dissolution, and sale were 3.62, 2.97, and 2.33, respectively, thus corroborating our findings of the Swedish firm population from Statistics Sweden.

DISCUSSION

Extending the behavioral agency model (Gómez-Mejía et al., 2011; Hoskisson et al., 2017; Wiseman & Gómez-Mejía, 1998), we provide a more fine-grained understanding of the unique role and diverse logic of dominant family and non-family owners of privately held firms with respect to exit choices. Extending the literature on business exit, our work specifically reveals that family owners are increasingly less sensitive than their non-family counterparts to greater negative performance feedback when confronted with the exit or continue options. In particular, we find that as performance deteriorates (see Figures 1a and 1b), the likelihood of exit

increases for non-family firms but decreases for family firms, which we attribute to family owners' greater focus on non-financial utilities and desire for transgenerational continuation. Importantly, as a novel contribution to the literature, we also consider various modes of exit and argue that family and non-family firms possess differing preferences in terms of these modes. Family firms' motivations are more focused on ensuring the ability to continue extracting SEW from the firm for future generations. As such, family firms opt for exit by merger, then dissolution, and finally sale of the business to outside owners. Conversely, non-family firms first seek the sale of the firm, then dissolution, and finally exit by merger. Figures 2a and 2b, respectively, show that the likelihood of exit by merger (versus sale or dissolution) increases for family firms but decreases for non-family firms as performance deteriorates. Thus, while non-family firms cut further financial losses, distressed family firms are more likely to exit by a merger to maintain the family owners' ability to derive SEW utilities (e.g. dynastic succession).

Contributions

Our study offers several important theoretical contributions. First, our study offers a first attempt to examine the effect of non-economic preservation motivations on multiple exit options and the related owners' order of exit preferences. The SEW logic has predicted that family firms are loss averse to SEW and thus prioritize non-financial over financial utilities under normal conditions, yet they prioritize financial returns when stressed and paradoxically focus less on SEW (Gómez-Mejía et al., 2011; Hoskisson et al., 2017; Zellweger, 2017). That is, "family firms are willing to trade risk reduction for SEW conservation when performance hazard is higher" (Gómez-Mejía et al., 2010: 232). Our theory extends this logic by suggesting that the SEW preservation motive becomes stronger, *not* weaker (Gómez-Mejía et al., 2011; Hoskisson et al., 2017), when paired with greater performance hazards. Under duress, family owners do not make strategic choices that result in increased financial benefits but tend to increasingly prioritize socioemotional objectives in deciding whether to exit or continue the business. Accordingly, our theory contrasts with most previous theoretical and empirical research suggesting that poor firm

performance is a strong predictor of firm exit (Brauer, 2006; Johnson, 1996; Sullivan et al., 1997). Maksimovic and Phillips (2001: 2019), for instance, argue that firms exit to improve the allocation of resources in a manner "consistent with a simple neoclassical model of profit maximizing by firms".

Second, we extend the conventional version of the SEW framework, which assumes that SEW preservation tends to deny economic rationality (Gómez-Mejía et al., 2007). Instead, in choosing among multiple exit options when performance heuristics suggest that exit is unavoidable, we argue that family owners consider both financial and SEW factors. Faced with a tradeoff between avoiding financial losses and preserving non-economic wealth, family owners are likely to reach a compromise between financial and non-financial utilities by exiting the distressed business to mitigate financial losses while choosing an exit option (merger) that attenuates SEW losses. In making this argument, we contribute to the classical version of behavioral agency theory that focuses specifically on the impact of financial inducements on decision makers' risk-taking behavior (Gómez-Mejía, Welbourne & Wiseman, 2000; Wiseman & Gómez-Mejía, 1998). Our theory instead predicts that some decision makers may specifically consider various financial and non-financial frames of reference when interpreting loss and gain contexts and respond accordingly.

This study raises another interesting theoretical issue concerning whether some ownership forms are more attractive to a potential merging partner. Clearly, a merging exit decision must be reciprocated by the willingness of a potential partner to enter into such an arrangement. That is, a merger clearly requires "*two to tango.*" In a family firm (distressed) merger, both a SEW driver (motivation to exit by merger, even if financially suboptimal) and an attraction driver to partner (willingness of partners to merge with the family firm due to its SEW features) may exist. That is, a merger implies engaging in a relationship with another firm, and this dual pulling effect is probably more likely to exist in a family firm than in a non-family firm, where the SEW motive is less relevant. As such, a partner may be less attracted to the

(distressed) non-family firm. Potential merger partners may find prospective value in the family firm's SEW, such as a "high trust" family culture, greater commitment to the business, a longer-term orientation, lower turnover and thus greater continuity in key managerial and technical talent, all of which may provide stronger motivation to make the merger successful (Gómez-Mejía et al., 2011). Future research using alternative methodologies (e.g., surveys, interviews or qualitative observations) may attempt to discern the extent to which family firms are found to be generally more attractive to potential merger partners so that the merger option may be more widely available to family than non-family firms, and whether these mergers are more successful. According to the logic of Graebner and Eisenhardt (2004), a mutual self-selection process may even occur between family parties when they form a partnership given their "family" synergistic combination potential.

Our study also contrasts with the widely held theoretical premise that firm dissolution is uniformly less preferable for family than for non-family firms because of non-economic reasons (DeTienne & Chirico, 2013; Feldman et al., 2016; Gedajlovic et al., 2012) and thus offers interesting theoretical insights. Our theory and results suggest a paradox: family owners, when faced with challenging strategic exit choices that lead to the irrevocable loss of all SEW (namely, dissolution and sale), dismantle the firm rather than transfer full ownership and control rights to an external party and allow the firm to continue operations outside the realm of the family. This finding contrasts with the general notion that SEW preservation takes priority as long as firm survival is not in question (Gómez-Mejía et al., 2011). We suggest that as a result of SEW loss aversion, family owners may sacrifice firm survival as an ongoing concern (through an outright sale) given their reluctance to pass their "baby" to strangers outside the family as well as a tendency to overvalue their company, thus making it less attractive in the eyes of a potential buyer (Akhter et al., 2016). It is worth noting that our arguments suggest that family owners may accept a less lucrative offer from a potential partner to prolong part of the firm's existence and thus obtain higher prospective SEW returns through a merger; however, when selling the firm as

an ongoing concern, family owners may be more prone to overvalue their company to compensate for the total loss of prospective SEW.

Finally, given the prevalence of family ownership in firms around the world and the strategic importance of divestment decisions, comparing business exit options between family and non-family firms is central to advancing entrepreneurship and strategy research. In particular, entrepreneurship and strategy researchers have been increasingly aware that decision makers often face important key choices other than firm creation and growth (Brauer, 2006; Decker & Mellewigt, 2007; DeTienne, 2010). Indeed, as DeTienne (2010) has argued, an understanding of the entrepreneurial process is not complete without an understanding of business exit and exit options. Our theory sheds light on why owners decide to (not) exit and what exit form they eventually choose. In particular, by detailing the order of exit options of family (i.e., merger, dissolution, and sale) and non-family owners (i.e., sale, dissolution, and merger) in their pursuit of different forms of wealth, this study advances our understanding of business exit—a critical strategic decision—and exit options. Thus, the present study makes an important contribution to the existing exit literature, which, to the best of our knowledge, has neglected the *order* of exit options for different types of dominant owners. Business exit is theoretically relevant given that it offers a context in which both financial and SEW logics strongly manifest.

Future Research and Limitations

By extending significant related studies, our work provides important future research areas. First, our work expands the concept of performance thresholds to the family firm context (Gimeno et al., 1997). Our results suggest that the ultimate level of performance at which owners may exit the organization will be lower for family than for non-family firms given the importance that family owners place on non-financial utilities in addition to profitability concerns. Accordingly, the lowest-performing organization may not be the most likely to exit because SEW plays a crucial role in the exit choice of family versus non-family firms. Extending

this perspective, future research may examine how the idiosyncratic differences in performance thresholds derived from ownership preferences may influence decisions, such as CEO succession, scapegoating, and organizational turnaround efforts.

Second, unlike prior studies that use the SEW construct in an "all or nothing" fashion (Hoskisson et al., 2017), our theory and results suggest that while all the SEW stock is completely lost in the case of firm sale or liquidation, some SEW flow can be preserved by family owners (Chua et al., 2015) in the case of a merger, rendering this option the preferred choice when business exit is unavoidable. Faced with a tradeoff between avoiding financial losses and preserving non-economic wealth, family owners are likely to choose a mode of exit that mitigates financial losses and ensures the future option of continuing to extract some SEW from the firm. Extending these ideas, future research may examine strategic decisions in which owners attempt to ensure the continued future flows of non-financial utilities under uncertainty (Kaplan, 2008). For example, these considerations may be particularly important when examining the likelihood of family firms engaging in strategic alliances (Kogut, 1991) and how the relationships are governed (Reuer & Ariño, 2007).

Our work has also some limitations that should be noted. First, consistent with all prior research using the SEW (e.g., Chrisman & Patel, 2012) or similar constructs (e.g., Cannella et al., 2015), we did not directly measure SEW through a psychometric procedure for all firms in the population. Instead, we relied on reasonable archival proxies of family involvement that load on a single factor and are internally consistent. A psychometric study on a sample of Swedish family firms (Nordqvist et al., 2018) has shown that such a composite archival measure of family involvement is significantly and positively correlated with the psychometric SEW scale from Berrone *et al.* (2012). This result based on independent data sources offer nomological validity

for the composite measure we use in this study to capture family SEW and also supports the notion that SEW is more salient for higher levels of family involvement (Miller & Le Breton-Miller, 2014; Schulze & Kellermanns, 2015). Additionally, it provides empirical justification for the use of archival family control measures as proxies for the effect of SEW. Second, while our results may perhaps vary by country or cultural settings, our study benefits greatly from the comprehensiveness of our dataset on the population of private firms in Sweden – information that would be almost impossible to obtain in most other countries. One distinct advantage of Sweden is the availability of detailed sources of data on non-publicly traded firms, which enabled us to test our hypotheses. Finally, although one of this study's strengths is its focus on privately owned firms, it would be interesting to examine exit in publicly traded companies and to explore whether (or not) publicly traded family firms behave differently than privately held family firms, especially given the higher level of market pressures and competition that they face. Relatedly, future research may try to ascertain the extent to which the prevalence of different types of business exits by family ownership status are partly driven by the market rather than just be a function of these firms' discretionary choices.

Implications for Practice

Our study has also important practical implications. Owners need to recognize that there is a tendency to escalate commitment when one becomes locked into a course of action and that this effect can be amplified in family business to preserve SEW. Kaye (1998: 280) remarked that "in family business terms, it is a successful ending when the whole family survives with their capital free to create new opportunities for all." Efforts must be made to decouple emotions from economic realities. Awareness of the possibility of business exit, especially in distressed situations, and consideration of business exit as a potential way to free up resources for the

strategic regeneration of a firm are fundamental issues. As such, business exit should be viewed

as a way to identify and evaluate new opportunities for owners. Toward this purpose, traditional

ways of thinking and acting are of little help. To foster radical change, it is essential to

continually evaluate prior strategic patterns and consider new potential approaches in a process

of continuous learning. Firms—especially family firms—need to balance emotional and

economic perspectives; otherwise, even when the need for exit is recognized, it may not occur.

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TABLE 1. Correlation Table and Descriptive Statistics

		Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	Continuation	0.87	0.33	1.00																						
2	Sale	0.05	0.22	-0.59	1.00																						
3	Dissolution	0.03	0.16	-0.43	-0.04	1.00																				
4	Merger	0.05	0.22	-0.61	-0.05	-0.04	1.00																			
5	Inverse Z-score (Z)	-4.38	2.10	-0.02	0.02	-0.02	0.03	1.00																		
6	Family firm dummy (FF)	0.50	0.50	0.14	-0.11	-0.06	-0.05	-0.01	1.00																	
7	Family involvement composite (FI)	-0.00	3.77	0.14	-0.11	-0.06	-0.05	-0.01	0.99	1.00																
8	ZxFF (mcenter)	-0.01	1.05	0.02	-0.02	-0.03	0.00	0.04	0.04	-0.00	1.00															
9	ZxFI (mcenter)	-0.09	7.95	0.02	-0.02	-0.03	0.00	0.04	-0.00	-0.00	0.99	1.00														
10	CEO age	49.01	9.84	0.06	0.02	-0.06	-0.06	0.03	0.05	0.03	-0.01	-0.01	1.00													
11	Slacks	0.02	1.02	-0.03	0.00	0.06	0.01	-0.03	-0.01	-0.01	-0.02	-0.02	-0.01	1.00												
12	Assets	8.27	1.01	0.09	0.07	-0.18	-0.08	0.17	0.03	0.03	0.01	0.01	0.13	-0.02	1.00											
13	Dynamism	1.02	0.03	0.01	0.02	-0.03	-0.01	0.02	0.00	0.00	-0.01	-0.01	0.03	0.01	0.12	1.00										
14	Munificence	0.99	0.05	0.00	-0.01	0.04	-0.02	-0.00	0.01	0.01	-0.01	-0.01	0.01	0.016	-0.04	-0.00	1.00									
15	Density	10.22	0.98	-0.03	0.00	0.03	0.02	-0.04	-0.06	-0.06	0.01	0.01	0.02	-0.01	-0.01	0.02	-0.04	1.00								
16	Log of time	0.67	0.53	0.08	0.00	-0.09	-0.05	-0.06	0.06	0.05	0.02	0.02	0.11	-0.12	0.12	-0.05	-0.00	-0.00	1.00							
17	Firm age	7.29	5.22	0.17	0.03	-0.15	-0.03	0.06	0.06	0.01	0.01	0.23	-0.05	0.26	-0.05	-0.03	0.29	1.00									
18	Firm size	16.57	9.34	-0.04	0.04	0.02	-0.00	-0.04	0.01	0.01	-0.00	0.00	-0.02	0.03	0.31	0.02	0.01	0.01	-0.06	-0.10	1.00					
19	Founder	0.32	0.47	-0.20	-0.05	0.17	0.23	0.02	-0.05	-0.04	0.02	0.02	-0.13	0.03	-0.27	-0.05	0.01	0.02	-0.15	-0.52	-0.06	1.00				
20	# of owners (cut offs)	1.08	0.28	0.06	-0.015	-0.04	-0.04	0.01	0.04	0.03	-0.01	-0.00	0.09	-0.01	0.11	0.02	-0.02	0.01	0.04	0.06	0.03	-0.14	1.00			
21	# of managers (cut offs)	1.31	0.51	0.04	0.03	-0.05	-0.06	-0.01	0.08	0.06	-0.03	-0.03	0.09	0.00	0.23	0.06	-0.01	-0.00	0.01	0.08	0.17	-0.20	0.38	1.00		
22	Financial condition (cut offs Z-score)	1.28	0.57	-0.03	-0.00	0.03	0.03	0.59	0.015	0.016	0.016	0.02	-0.02	0.016	0.13	-0.00	0.01	-0.06	-0.11	-0.11	-0.04	0.07	-0.06	-0.06	1.00	
23	Industries	6.74	2.05	-0.07	-0.00	0.08	0.04	-0.07	-0.02	-0.015	0.01	0.01	-0.07	0.02	-0.20	-0.18	0.12	0.09	-0.06	-0.16	-0.02	0.17	-0.02	-0.09	-0.04	1.00

Correlations with values of |.02| or greater are significant at p < .05.

TABLE 2. Mixed Logit Analysis (base outcome: continuation)

	Base outcome: Continuation											
	family firm dummy						family involvement					
	Model 1			Model 2			Model 3			Model 4		
	merger	sale	dissol.	merger	sale	dissol.	merger	sale	dissol.	merger	sale	dissol.
CEO age	-0.02; p=.000	0.01; p=.176	-0.02; p=.006	-0.02; p=.000	0.01; p=.184	-0.02; p=.007	-0.02; p=.000	0.01; p=.229	-0.02; p=.005	-0.02; p=.000	0.01; p=.237	-0.02; p=.006
	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)
Slacks	0.01; p=.805	0.02; p=.603	0.06; p=.060	0.01; p=.790	0.02; p=.631	0.06; p=.083	0.01; p=.799	0.02; p=.595	0.06; p=.059	0.01; p=.786	0.02; p=.621	0.06; p=.083
	(0.03)	(0.04)	(0.03)	(0.03)	(0.05)	(0.03)	(0.03)	(0.05)	(0.03)	(0.03)	(0.05)	(0.03)
Assets	-0.38; p=.000	0.29; p=.000	-1.22; p=.000	-0.38; p=.000	0.29; p=.000	-1.22; p=.000	-0.38; p=.000	0.29; p=.000	-1.22; p=.000	-0.38; p=.000	0.29; p=.000	-1.22; p=.000
	(0.04)	(0.04)	(0.07)	(0.04)	(0.04)	(0.07)	(0.04)	(0.04)	(0.07)	(0.04)	(0.04)	(0.07)
Dynamism	-0.35; p=.834	0.85; p=.193	-8.55; p=.003	-0.36; p=.830	0.80; p=.213	-8.51; p=.003	-0.35; p=.833	0.87; p=.185	-8.56; p=.002	-0.36; p=.830	0.83; p=.204	-8.52; p=.003
	(1.67)	(0.65)	(2.83)	(1.67)	(0.65)	(2.88)	(1.67)	(0.66)	(2.83)	(1.68)	(0.65)	(2.88)
Munificence	-2.08; p=.006	-0.69; p=.324	3.98; p=.002	-2.07; p=.006	-0.69; p=.324	3.85; p=.003	-2.07; p=.006	-0.67; p=.337	3.99; p=.002	-2.07; p=.006	-0.67; p=.337	3.87; p=.003
	(0.76)	(0.70)	(1.31)	(0.76)	(0.70)	(1.31)	(0.76)	(0.70)	(1.31)	(0.76)	(0.70)	(1.31)
Density	0.08; p=.073	-0.01; p=.714	0.16; p=.005	0.08; p=.075	-0.01; p=.739	0.16; p=.005	0.08; p=.073	-0.02; p=.712	0.16; p=.005	0.08; p=.075	-0.01; p=.734	0.16; p=.005
	(0.04)	(0.04)	(0.06)	(0.04)	(0.04)	(0.06)	(0.04)	(0.04)	(0.06)	(0.04)	(0.04)	(0.06)
Log of time	-0.32; p=.000	-0.05; p=.456	-0.70; p=.000	-0.32; p=.000	-0.05; p=.495	-0.70; p=.000	-0.32; p=.000	-0.05; p=.458	-0.70; p=.000	-0.32; p=.000	-0.05; p=.491	-0.70; p=.000
	(0.08)	(0.07)	(0.12)	(0.08)	(0.07)	(0.12)	(0.08)	(0.07)	(0.12)	(0.08)	(0.07)	(0.12)
Inverse Z-score	0.11; p=.000	0.03; p=.158	0.05; p=.079	0.09; p=.001	0.05; p=.014	0.12; p=.001	0.11; p=.000	0.03; p=.159	0.05; p=.079	0.12; p=.000	0.01; p=.528	0.03; p=.374
	(0.02)	(0.02)	(0.03)	(0.03)	(0.02)	(0.04)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)
Family firm dummy (FF)	-0.51; p=.000	-1.16; p=.000	-0.81; p=.000	-0.32; p=.091	-1.51; p=.000	-1.73; p=.000						
	(0.08)	(0.09)	(0.12)	(0.19)	(0.19)	(0.30)						
Inverse Z-score * FF				0.05; p=.245	-0.08; p=.030	-0.19; p=.001						
				(0.04)	(0.04)	(0.06)						
Family involvement composite (FI)							-0.07; p=.000	-0.16; p=.000	-0.11; p=.000	-0.04; p=.077	-0.20; p=.000	-0.23; p=.000
							(0.01)	(0.01)	(0.02)	(0.02)	(0.03)	(0.04)
Inverse Z-score * FI										0.01; p=.283	-0.01; p=0.05	-0.02; p=.001
										(0.01)	(0.01)	(0.01)
Log likelihood	-6415.25			-6405.29			-6413.65			-6404.34		
Wald Chi2	6103.20			6177.16			6091.59			6107.98		
Prob > Chi2	0.000			0.000			0.000			0.000		

TABLE 3. Mixed Logit Analysis (base outcomes: merger or dissolution)

	Base outcome: Merger								Base outcome: Dissolution			
	family firm dummy				family involvement				family firm dummy		family involvement	
	Model 1		Model 2		Model 3		Model 4		Model 5	Model 6	Model 7	Model 8
	sale	dissol.	sale	dissol.	sale	dissol.	sale	dissol.	sale	sale	sale	sale
CEO age	0.03; p=.000	0.01; p=.433	0.03; p=.000	0.01; p=.424	0.03; p=.000	0.01; p=.443	0.03; p=.000	0.01; p=.432	0.02; p=.002	0.02; p=.003	0.02; p=.003	0.02; p=.003
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Slacks	0.01; p=.789	0.05; p=.222	0.01; p=.822	0.05; p=.269	0.01; p=.783	0.05; p=.219	0.01; p=.815	0.05; p=.271	-0.04; p=.498	-0.03; p=.524	-0.04; p=.500	-0.03; p=.532
	(0.05)	(0.04)	(0.05)	(0.04)	(0.05)	(0.04)	(0.05)	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)
Assets	0.65; p=.000	-0.86; p=.000	0.65; p=.000	-0.86; p=.000	0.65; p=.000	-0.86; p=.000	0.65; p=.000	-0.86; p=.000	1.50; p=.000	1.50; p=.000	1.50; p=.000	1.50; p=.000
	(0.06)	(0.08)	(0.06)	(0.08)	(0.06)	(0.08)	(0.06)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Dynamism	1.21; p=.487	-8.30; p=.010	1.18; p=.502	-8.22; p=.012	1.24; p=.479	-8.30; p=.010	1.20; p=.494	-8.24; p=.011	9.39; p=.001	9.31; p=.002	9.42; p=.001	9.34; p=.001
	(1.74)	(3.22)	(1.75)	(3.25)	(1.74)	(3.22)	(1.75)	(3.25)	(2.89)	(2.94)	(2.89)	(2.94)
Munificence	1.36; p=.157	6.05; p=.000	1.35; p=.159	5.92; p=.000	1.37; p=.154	6.06; p=.000	1.36; p=.156	5.93; p=.000	-4.68; p=.001	-4.56; p=.002	-4.68; p=.001	-4.56; p=.002
	(0.96)	(1.45)	(0.96)	(1.44)	(0.96)	(1.45)	(0.96)	(1.44)	(1.46)	(1.45)	(1.46)	(1.45)
Density	-0.09; p=.102	0.08; p=.231	-0.09; p=.109	0.08; p=.216	-0.09; p=.101	0.08; p=.231	-0.09; p=.108	0.08; p=.215	-0.17; p=.011	-0.17; p=.011	-0.17; p=.011	-0.18; p=.011
	(0.06)	(0.07)	(0.06)	(0.07)	(0.06)	(0.07)	(0.06)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Log of time	0.28; p=.006	-0.37; p=.009	0.29; p=.005	-0.37; p=.009	0.28; p=.005	-0.37; p=.009	0.29; p=.005	-0.37; p=.009	0.66; p=.000	0.66; p=.000	0.65; p=.000	0.66; p=.000
	(0.10)	(0.14)	(0.10)	(0.14)	(0.10)	(0.14)	(0.10)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Inverse Z-score	-0.08; p=.003	-0.05; p=.117	-0.04; p=.294	0.03; p=.454	-0.08; p=.003	-0.05; p=.116	-0.10; p=.000	-0.09; p=.011	-0.03; p=.461	-0.07; p=.112	-0.03; p=.461	-0.01; p=.720
	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.04)
Family firm dummy (FF)	-0.66; p=.000	-0.31; p=.023	-1.20; p=.000	-1.42; p=.000					-0.35; p=.014	0.21; p=.543		
	(0.12)	(0.14)	(0.26)	(0.34)					(0.14)	(0.35)		
Inverse Z-score * FF			-0.13; p=.016	-0.24; p=.000						0.11; p=.111		
			(0.05)	(0.07)						(0.07)		
Family involvement composite (FI)					-0.09; p=.000	-0.04; p=.023	-0.16; p=.000	-0.18; p=.000			-0.05; p=.010	0.03; p=.554
					(0.02)	(0.02)	(0.03)	(0.05)			(0.02)	(0.05)
Inverse Z-score * FI							-0.02; p=.028	-0.03; p=.001				0.01; p=.098
							(0.01)	(0.01)				(0.01)
Log likelihood	-6416.14		-6406.22		-6414.50		-6405.24		-6416.40	-6406.44	-6414.79	-6405.48
Wald Chi2	9322.20		9361.66		9323.04		9356.85		8606.28	8711.32	8641.7	8738.48
Prob > Chi2	0.000		0.000		0.000		0.000		0.000	0.000	0.000	0.000

TABLE 4. Ordinal Logit Model with GLLAMM & Generalized Ordered Logit Model

	Ordinal Logit Model with GLLAMM				Generalized Ordered Logit Model							
	family firm dummy		family involvement		family firm dummy				family involvement			
	Ordered dep. Variable for family firms (3-merger; 2-dissol; 1-sale)	Ordered dep. Variable for nonfamily firms (3-sale; 2-dissol; 1-merger)	Ordered dep. Variable for family firms (3-merger; 2-dissol; 1-sale)	Ordered dep. Variable for nonfamily firms (3-sale; 2-dissol; 1-merger)	Ordered dep. Variable for family firms (3-merger; 2-dissol; 1-sale)		Ordered dep. Variable for nonfamily firms (3-sale; 2-dissol; 1-merger)		Ordered dep. Variable for family firms (3-merger; 2-dissol; 1-sale)		Ordered dep. Variable for nonfamily firms (3-sale; 2-dissol; 1-merger)	
	Model 1a	Model 2a	Model 1b	Model 2b	Panel 1a	Panel 2a	Panel 1b	Panel 2b	Panel 1c	Panel 2c	Panel 1d	Panel 2d
CEO age	-0.09; p=.000	0.09; p=.000	-0.09; p=.000	0.09; p=.000	-0.06; p=.001	-0.07; p=.000	0.07; p=.000	0.06; p=.001	-0.06; p=.001	-0.07; p=.000	0.07; p=.000	0.06; p=.001
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Slacks	0.37; p=.000	-0.37; p=.000	0.37; p=.000	-0.37; p=.000	0.18; p=.111	0.26; p=.015	-0.26; p=.015	-0.18; p=.111	0.18; p=.112	0.26; p=.016	-0.26; p=.016	-0.18; p=.112
	(0.09)	(0.09)	(0.09)	(0.09)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Assets	-1.75; p=.000	1.75; p=.000	-1.74; p=.000	1.74; p=.000	-1.39; p=.000	-1.08; p=.001	1.08; p=.001	1.39; p=.000	-1.39; p=.000	-1.08; p=.002	1.08; p=.002	1.39; p=.000
	(0.27)	(0.27)	(0.27)	(0.27)	(0.34)	(0.34)	(0.34)	(0.34)	(0.34)	(0.34)	(0.34)	(0.34)
Dynamism	-4.65; p=.033	4.65; p=.033	-4.66; p=.033	4.66; p=.033	-14.06; p=.000	2.20; p=.306	-2.21; p=.306	14.06; p=.000	-14.16; p=.000	2.22; p=.303	-2.22; p=.303	14.16; p=.000
	(2.18)	(2.18)	(2.18)	(2.18)	(2.35)	(2.16)	(2.16)	(2.35)	(2.36)	(2.16)	(2.16)	(2.36)
Munificence	-8.60; p=.000	8.60; p=.000	-8.55; p=.000	8.55; p=.000	-9.06; p=.000	-6.19; p=.001	6.19; p=.001	9.06; p=.000	-9.05; p=.000	-6.15; p=.001	6.15; p=.001	9.05; p=.000
	(1.58)	(1.58)	(1.58)	(1.58)	(1.89)	(1.92)	(1.92)	(1.89)	(1.89)	(1.92)	(1.92)	(1.89)
Density	0.55; p=.000	-0.55; p=.000	0.55; p=.000	-0.55; p=.000	0.15; p=.007	0.03; p=.626	-0.03; p=.626	-0.15; p=.007	0.15; p=.007	0.03; p=.619	-0.03; p=.619	-0.15; p=.007
	(0.11)	(0.11)	(0.11)	(0.11)	(0.06)	(0.05)	(0.05)	(0.06)	(0.06)	(0.05)	(0.05)	(0.06)
Log of time	-2.27; p=.000	2.27; p=.000	-2.26; p=.000	2.26; p=.000	-1.58; p=.003	-1.54; p=.004	1.54; p=.004	1.58; p=.003	-1.57; p=.003	-1.53; p=.004	1.53; p=.004	1.57; p=.003
	(0.43)	(0.43)	(0.43)	(0.43)	(0.53)	(0.53)	(0.53)	(0.53)	(0.53)	(0.53)	(0.53)	(0.53)
Inverse Z-score	0.07; p=.001	-0.07; p=.001	0.07; p=.001	-0.07; p=.001	0.08; p=.000	0.06; p=.009	-0.06; p=.009	-0.08; p=.000	0.08; p=.000	0.06; p=.009	-0.06; p=.009	-0.08; p=.000
	(0.22)	(0.22)	(0.22)	(0.22)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Family firm dummy	0.70; p=.000	-0.70; p=.000			0.76; p=.000	0.78; p=.000	-0.78; p=.000	-0.76; p=.000				
	(0.10)	(0.10)			(0.12)	(0.12)	(0.12)	(0.12)				
Family involvem. comp.			0.09; p=.000	-0.09; p=.000					0.10; p=.000	0.10; p=.000	-0.10; p=.000	-0.10; p=.000
			(0.01)	(0.01)					(0.02)	(0.02)	(0.02)	(0.02)
Inverse Mills Ratio	-31.40; p=.000	31.40; p=.000	-31.25; p=.000	31.25; p=.000	-14.09; p=.088	-24.98; p=.002	24.98; p=.002	14.09; p=.088	-14.03; p=.090	-24.87; p=.002	24.87; p=.002	14.03; p=.090
	(6.33)	(6.33)	(6.33)	(6.33)	(8.27)	(7.97)	(7.97)	(8.27)	(8.26)	(7.99)	(7.99)	(8.26)
Log (pseudo)likelihood	-1711.47	-1711.47	-1711.29	-1711.29	-1509.63	-1509.63	-1509.63	-1509.63	-1509.63	-1509.30	-1509.30	-1509.30

Note: Table 4 reports opposite coefficients for family and non-family firms because the dependent variables of the order of exit preferences are reversed for the two forms of organization.

Figure 1a. Probability of exit by sale (versus continuation) at different levels of the Inverse Z-scores
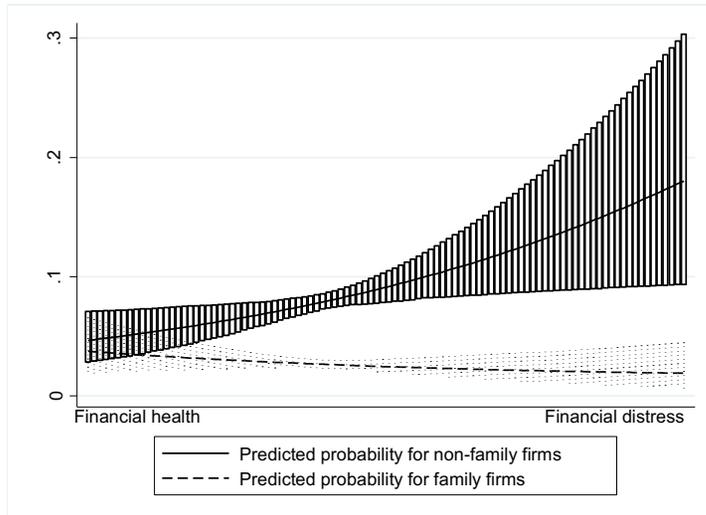
Predicted probability for non-family firms
Predicted probability for family firms

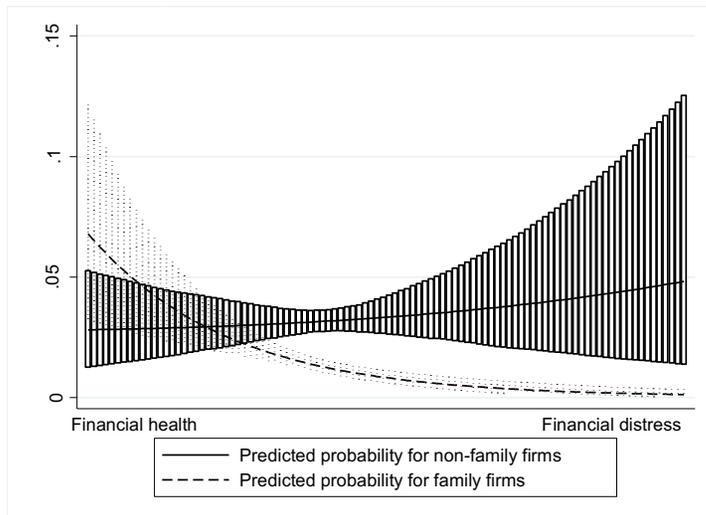**Figure 1b. Probability of exit by dissolution (versus continuation) at different levels of the Inverse Z-scores**

Predicted probability for non-family firms
Predicted probability for family firms

Figure 2a. Probability of exit by merger (versus sale) at different levels of the Inverse Z-scores

Predicted probability for non-family firms
Predicted probability for family firms
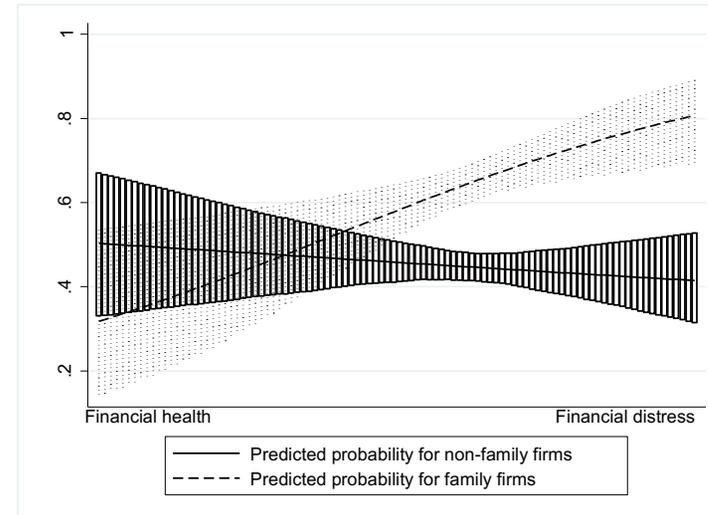
Figure 2b. Probability of exit by merger (versus dissolution) at different levels of the Inverse Z-scores

Predicted probability for non-family firms
Predicted probability for family firms

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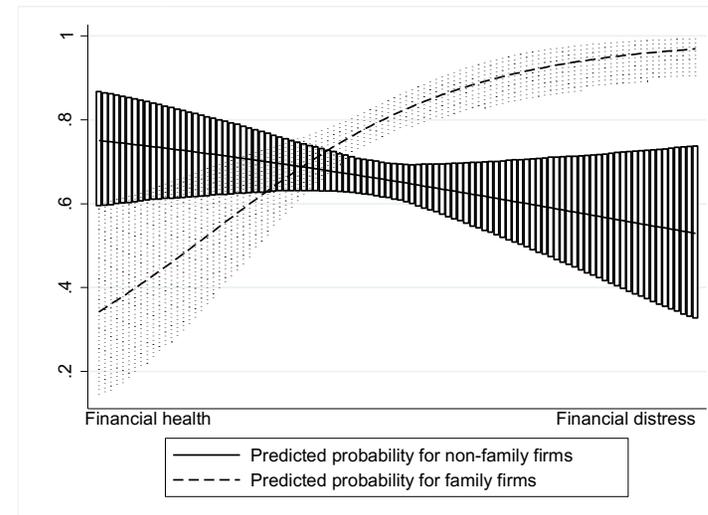
[i] Individuals working part-time were also considered.

[ii] Information on "firm age" is not available for all firms (missing if firm age>21 years). CEM offers a method to address missing values by "matching on missingness" (Blackwell et al., 2009).

[iii] Case2alt is intended to convert the data to the form in which each observation corresponds to an alternative for a specific case. In our study, the outcome has four alternatives (continuation, sale, dissolution, merger). Case2alt reshapes the data so that there are n*4 observations (more details can be found in Long & Freese, 2006: 294-297). Thus, the coefficients reported in Tables 2 and 3 are the result of the interactions between the variable of interest and the related exit choice to be confronted with the selected exit alternative of the dependent variable, i.e. the base outcome.

[iv] Sale does not include cases in which the new owner-managers entering the firm belonged to the existing family.

[v] In family firms, a merger is coded as such if the family is present in the new post-merger entity.

[vi] A = Earnings Before Interest & Taxes/ Total Asset – measures productivity of firm assets; B = Net Sales/ Total Assets – measures the sales-generating ability of firm assets; C = Book Value of Equity/ Total Liabilities – measures potential for insolvency; D = Working Capital/ Total Assets – measures net liquid assets relative to total capitalization; and E = Retained Earnings/ Total Assets – measures the amount of reinvested earnings and/or losses in the firm.

[vii] A proper specification of the inverse Mills ratio requires the variable to be correlated with the first-stage probit model's outcome (i.e., continue or not) but not with the second-stage model's outcome (i.e., order of exit options) (Wooldridge, 2002). We identified the total gross investments as an exclusion restriction meeting these criteria. In fact, existing literature suggests that financial investments are crucial for firm survival (Brauer, 2006), but it is less likely that they will directly affect the order of potential exit strategies. This logic was also confirmed empirically by our data.