

Acquisitions and Divestitures in Family Firms:  
The Role of Socioemotional Wealth

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The President:

Prof. Dr. Thomas Bieger



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This dissertation is the outcome of a scholarly venture over little more than the last two and a half years of my life. To see how far I came, I went back to one of the first emails in which I sketched my research ideas to my later supervisors Prof. Dr. Thomas Zellweger and Prof. Dr. Urs Fueglistaller. This review revealed that the outcome – though capturing some of my initial research ideas – eventually went in a slightly different direction than expected. Should I worry about that?

I don't think so. Like crafting a new product for an entrepreneurial venture, research for a scholarly venture has to meet market demands. When the product is research, market demand is determined by the scholarly community. Inexperienced researchers, just as inexperienced entrepreneurs, may adapt their ideas as they advance in crafting their product. Think of Coca-Cola that became the world's most valuable brand known for its soft drink only after an adaption of its recipe initially developed for medical applications; in other words, flexibility to deviate from its intentional goal was part of Coca-Cola's success. In my case, the deviation of my research outcome from my initial research ideas shouldn't worry me (or my supervisors); it was necessary to meet scholarly market demands about which I gratefully learned throughout the process of crafting this dissertation.

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St. Gallen, October 2012

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## List of Abbreviations

e.g.	exempli gratia (for example)
i.e.	id est (that is)
MLE	maximum likelihood estimation
OLS	ordinary least squares
S.D.	Standard deviation
SEW	Socioemotional wealth

## **Executive Summary**

Family firms are driven by more than only economic success. In academic family firm research, socioemotional wealth has been proposed as theoretical concept to embrace family owners' socioemotional utilities from organizational ownership. In essence, family firm literature puts forth that strategic decisions in family firms are primarily evaluated against their effect on socioemotional wealth, not economic wealth. As a result, the concept has recently been employed in studies on research and development spending, compliance with institutional pressures, and diversification decisions in family firms. With my research, I aim to contribute to this stream of research and, thereby, to a better understanding of socioemotional wealth's influence on family firm activity.

The dissertation consists of four academic papers. These four academic papers are guided by three central research questions: What drives family firms to act, what shapes family firm activity, and, eventually, what hinders family firms to act? The first paper builds a theoretical framework that helps understanding under which circumstances family owners may be particularly prone to develop socioemotional wealth. The second paper examines entrepreneurial exit decisions in small- to medium-sized family firms are affected by socioemotional wealth. The third paper focuses on acquisitions in large and publicly listed family firms; the findings suggest that influences of socioemotional wealth on acquisitions are limited by performance and slack. Finally, the fourth paper puts forth that publicly listed family firms exhibit socioemotional wealth-induced inertia towards divestitures, but this inertia may be overcome when negative performance and families' visibility as firm owners coincide.

In summary, this dissertation contributes to a more nuanced understanding of family firm activity. The theoretical considerations and empirical findings provided within the four academic papers may be seen as further evidence for family firms' distinctive business orientation that seems to be predominantly driven by socioemotional and not economic preferences.

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## Zusammenfassung

Das Handeln von Familienunternehmen wird mehr als nur von ökonomischen Überlegungen bestimmt. Die Familienunternehmensforschung brachte deswegen das Konzept „Socioemotional Wealth“ hervor. Hiernach werden strategische Entscheidungen in Familienunternehmen primär von sozioemotionalen Überlegungen geleitet, ökonomische Interessen nehmen oftmals nur eine nachrangige Position ein. So wurde jüngst aufbauend auf diesem Konzept untersucht, wie Familienunternehmen in Forschung und Entwicklung investieren, sich institutionellen Rahmenbedingungen unterwerfen und diversifizieren. Die vorliegende Arbeit möchte einen Beitrag zu dieser Forschung leisten.

Diese Dissertation ist in vier akademische Einzelbeiträge untergliedert, wobei alle Einzelbeiträge von drei übergeordneten Fragen geleitet werden: Was treibt Familienunternehmen zum Handeln, wie gestaltet sich das Handeln von Familienunternehmen und was hindert Familienunternehmen zu handeln? Im ersten Einzelbeitrag wird ein theoretisches Modell entwickelt, um zu ergründen, welche Umstände das Entstehen von „Socioemotional Wealth“ bei Familienunternehmern fördern. Der zweite Einzelbeitrag untersucht die Nachfolgeentscheidung in kleinen und mittleren Familienunternehmen und kommt zu dem Ergebnis, dass „Socioemotional Wealth“ die Wahl zwischen familienexternen und –internen Nachfolgern beeinflusst. Im dritten Einzelbeitrag wird dargelegt, wie Performance und finanzieller Puffer den Einfluss von „Socioemotional Wealth“ auf Akquisitionen beeinflussen. Schliesslich zeigt der vierte Einzelbeitrag, dass Zurückhaltung gegenüber Desinvestitionen, die in Familienunternehmen durch „Socioemotional Wealth“ begründet sein kann, wegen negativer Performance und unterstützt durch die öffentliche Sichtbarkeit der Familieneigentümer überwunden wird.

Die theoretischen Überlegungen und empirischen Erkenntnisse dieser Arbeit legen nahe, dass sozioemotionale Überlegungen auf das Handeln von Familienunternehmen einen Einfluss ausüben. Ein besseres Verständnis über das Handeln von Familienunternehmen wurde gewonnen.



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# 1 Introduction

## 1.1 Family Owners' Socioemotional Wealth

In 2010, Beiersdorf, a large firm from Germany active in the cosmetics industry, announced a strategic de-diversification program enforced by its family owner, the Herz family. Shortly thereafter, *Süddeutsche Zeitung* reports about Beiersdorf: The family firm divested its hair care activities (Läscher, 2010). Given family owners generally concentrated wealth position in their firms, why was Beiersdorf's family owner motivated to enforce de-diversification?

Beiersdorf might be a special case. The Herz family not only holds a large majority stake in Beiersdorf, but also in Tchibo, another large, German firm active in the coffee and retail industry. The assumption of concentrated wealth positions in family firms thus only holds with limitations for Beiersdorf's family owner. Nevertheless, holding most of the wealth in two firms – i.e., Tchibo and Beiersdorf – with relatively focused business models, the Herz family still was not well-diversified in their wealth positions when enforcing de-diversification at Beiersdorf. From a portfolio theoretical point of view, the family was supposed to attempt diversification of their wealth at the firm level, not to de-diversify. So the question remains: What may have been the motivation for the Herz family to enforce Beiersdorf to de-diversify?

Family firm research offers a potential rationale for family owners' desire to de-diversify despite wealth concentration. In contrast to mainstream strategy research perspectives (above all agency theory), family owners' ultimate objective of business activity is not only to create economic wealth, but to preserve their level of socioemotional wealth (SEW). What is SEW? The concept of SEW has been established by Gomez-Mejia and colleagues (2007) in an attempt to understand family firm activity that was inconsistent with mainstream strategy theories. In essence, the concept of SEW puts forth that strategic decisions in family firms are evaluated against their potential gains or losses in both socioemotional *and* economic wealth with the evaluation against potential gains or losses in SEW being the primary reference point for family owners' decision making.

SEW is a multi-dimensional and complex system that embraces family owners' socioemotional utilities from organizational ownership, such as upholding an entrepreneurial tradition in controlling a firm (Zellweger, Kellermanns, Chrisman, & Chua, 2012), generating a positive family image and reputation (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010), and enjoying favorable recognition in the community (Corbetta & Salvato, 2004; Schulze, Lubatkin, & Dino, 2003a). In a recent effort to advance a common understanding of the dimensions underlying SEW Berrone and colleagues (Berrone, Cruz, & Gomez-Mejia, 2012) propose, e.g., five dimensions that may form family owners' SEW. The five dimensions are: (1) families' control over the firm, (2) families' identification with the firm, (3) families' social ties from the firm, (4) families' emotional attachment, and (5) families' transgenerational intentions. In fact, the salience of such, but also related, socioemotional utilities from organizational ownership for family owners may be what separates family firms from most other organizational forms (Gomez-Mejia, Cruz, Berrone, & De Castro, 2011).

Gomez-Mejia and colleagues (2007) find that Spanish, family-controlled olive oil mills favor to remain independent rather than to follow economic logic in joining a cooperative. The authors explain this finding with the insight that – generally – SEW considerations, in this case the desire to remain independent in order to perpetuate family control, prevails over economic considerations. Evidence for family firms' responses to their family owners' SEW can further be found in family relationship contracting that produces agency contracts departing from economic rationality (Gomez-Mejia, Nunez-Nickel, & Gutierrez, 2001), maintaining family control, which engenders risk taking, creative earnings management, or the delay of business exits to assure SEW (Gomez-Mejia et al., 2007; Salvato, Chirico, & Sharma, 2010; Stockmans, Lybaert, & Voordeckers, 2010), and better compliance with institutional pressures to allay family reputation concerns (Berrone et al., 2010).

Beyond these findings, the concept of SEW also holds that family firms may be expected to exhibit low levels of diversification to tightly control investments (Gomez-Mejia, Makri, & Larraza-Kintana, 2010). Referring back to the Beiersdorf example, SEW thus may offer a consistent theoretic rationale why the Herz family enforced de-diversification which eventually resulted in subsequent divestiture activity. In support of this view, the press reports, e.g., as published in *Süddeutsche Zeitung* (Läscher, 2011), indicate that parts of the motivation for the de-diversification program were



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explained by the difficulty to exert control – a distinctive dimension of SEW that thus was threatened – over the previously diversified business portfolio at Beiersdorf; the attempt to re-focus on the firm’s core activities in the field of its high-reputation brand Nivea was the consequence. Using SEW as underlying theoretical model for family firm activity, the Herz family’s initiation of Beiersdorf’s de-diversification program seems theoretically consistent, despite the family owner’s relative wealth concentration.

## **1.2 Why Socioemotional Wealth?**

SEW, defined as the “stock of affect-related value that the family has invested in the firm” (Berrone et al., 2010; p. 82), appears to be a helpful theoretical framework in explaining family firm affairs (Berrone et al., 2012). Especially in circumstances in which family firm activity seems inconsistent with existing mainstream theoretical predictions, SEW may help as underlying theory for family firm research. In fact, family firm scholars emphasize SEW’s potential to develop into a comprehensive theory that offers a more nuanced understanding of family firms (Berrone et al., 2012; Gomez-Mejia et al., 2011; Zellweger et al., 2012).

The academic papers in this dissertation rely upon SEW in their theoretical prediction of activity in family firms. In consequence, it seems warranted to give a broader explanation why SEW may be a reasonable theoretical framework to apply throughout this dissertation. In the following, I touch the ongoing scholarly discussion on SEW as dominant paradigm in family firm research (Berrone et al., 2012; Gomez-Mejia et al., 2011; Miller, Le Breton-Miller, & Lester, 2012a) and advocate why management research in general, but family firm research and this dissertation in particular may benefit from the employment of SEW rationales in explaining family firm activity.

### **1.2.1 Definition of Family Firms**

An ongoing issue in family firm research is the definition of a family firm. What constitutes a family firm, and what not? According to Gomez-Mejia and colleagues (2011; p. 658), the answer to this question is simple from a theoretical standpoint: “Family firms are those where a family owner exercises much influence over the

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firm's affairs". In other words, as soon as a family affects decision making in a firm, a firm may be considered as family firm.

Despite family firm's definitional simplicity from a theoretical standpoint, inconsistencies in the empirical differentiation of family from nonfamily firms pertain. Miller and colleagues (2007) review empirical family firm research in top-tier finance and management journals<sup>1</sup> in the period 1999-2006 with respect to their operational definitions of family firms. Their finding is simple: They report that there is a "wide variety of types" of family firm definitions, and more importantly, "it is difficult to find consensus on the exact definition of a family firm" (Miller et al., 2007; p. 831). To date, there is still no such consensus: Some scholars define a family firm as firm in which a family holds at least 5% ownership (e.g., Berrone et al., 2010), some scholars further require a family firm to have a family member in a top-management position or as a member of the board (e.g., Chrisman & Patel, 2012; Gomez-Mejia et al., 2010), and still others use a related definition but exclude such firms in which the family owner would be a lone founder, i.e., an individual that founded the firm and remained the single individual owner (e.g., Miller, Le Breton-Miller, & Lester, 2010; Miller et al., 2012a; Miller et al., 2007). At extreme, some scholars even define family firms in the narrowest sense as only such in which one family controls all ownership rights and is simultaneously involved in the management of the firm (Gomez-Mejia et al., 2007; Zellweger et al., 2012).

Although helpful to some extent, any effort to strive for a universal, context-free family firm definition may be questionable. First of all, there may be important cultural and legal differences among countries disregarded by any universal family firm definition. In Spain, e.g., a 20% ownership cutoff seems to be more appropriate than the 5% ownership cutoff usually adopted in US-sample based studies mentioned above (Cruz, Gomez-Mejia, & Becerra, 2010b). Second, important differences may exist between publicly listed and private family firms (Miller et al., 2012a). A 25% ownership level in a publicly listed firm with an otherwise widely-dispersed ownership structure (e.g., free-float for the remaining shares) may equal a higher influence on any firm affair than a 25% ownership level in a private firm with an otherwise highly-concentrated ownership structure (e.g., private equity investor with family minority).

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<sup>1</sup> Top-tier finance and management journals were in Miller and colleagues (2007) analysis, e.g., *Academy of Management Journal*, *Administrative Science Quarterly*, *Journal of Corporate Finance*, *Journal of Financial Economics*, *Quarterly Journal of Economics*, *Review of Financial Economics*, and *The Journal of Finance*.

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Applying a universal 25% ownership cutoff would in such circumstances make no sense. Lastly, family firm research would fall short of its implicit intention to understand and explain family firm activity by unambiguously defining family and nonfamily firms. Family and nonfamily firms are not black and white; rather there might be some “grey” firms in between. Examining these firms, as well as their advantages and disadvantages, may offer the most promise for future research – both for theoretical and practical implications.

Offering a multi-dimensional framework, SEW opens up a broader definitional spectrum for family firms. This broader spectrum may facilitate a richer analysis of family firms. In the previous section, I outlined that family control, i.e., the will and power to exercise influence over the firm’s affairs, is supposed to be a distinctive dimension of SEW; thereby, family firm research’s current development with regard to the operational definition of family firms, which largely focuses on families’ power to control a firm, would be covered. SEW, however, tells more: Not the power itself may explain the distinctive behavior in many family firms, but the family owners’ SEW-driven set of objectives may impact the influence that is eventually exerted on firm-level activity. Thereby, the question as to “*What constitutes a family firm, and what not?*”, which should actually coincide with a technical specification according to the cultural and legal setting in which the research is positioned, becomes “*What drives a specific family owner?*”. In other words, research would move towards a socially-conditioned view of family ownership (Miller et al., 2010). By adding a new level of analysis, namely the family level, a more nuanced understanding of family firm activity could potentially be the consequence.

### **1.2.2 Economic Relevance of Family Firms**

Family firms are everywhere. Depending on the definition (see previous section), family firms account for roughly 90% of all firms around the world (Aldrich & Cliff, 2003) and thus are by far the most common organizational form in the world. Given the economic relevance, well-established results from strategy research could be extended since most of strategy research’s “theories and empirical findings have been largely developed without reference to the world’s most common organizational form” (Gedajlovic, Carney, Chrisman, & Kellermanns, 2012; p. 1011), that is family firms.

Some might argue that the percentage of family firms should shrink dramatically for large and especially publicly listed firms to an unsubstantial fraction of these firms, so that the potential for extensions to strategy research's theories and findings – if at all – becomes negligible. However, also for publicly listed firms, 44% in Europe (Faccio & Lang, 2002) and 33% in the US (Anderson & Reeb, 2003) can be considered family firms. If one-third to one-half of all firms is potentially affected by their family owners, a theoretical framework that is able to accommodate family owners' decision-making rationales seems warranted.

Being flexible and, to date, relatively broad, SEW offers a promising theoretical framework to be used to extend existing research on both private and publicly listed firms that include at least some firms that may be considered family firms. By enlarging the set of theoretical arguments, the SEW concept is capable of explaining empirical findings in a more nuanced way, going beyond or combining explanations provided by agency theory, stewardship theory, and resource-based view of the firm. Thereby, SEW has the promise to be the most parsimonious approach towards (empirical) family firm research.

### **1.3 Research Questions**

The guiding research question for this dissertation is:

*What drives family firms to act?*

This broad research question brings with it several more specific research questions. For example, one might ask: What drives some family firms to act differently in comparison to other family firms? This question seems to be warranted given the large array of potential definitions for “family firms”; being able to differentiate within a number of sub-dimensions defining a family firm hence offers a more nuanced approach towards understanding family firm activity.

A further research question derived from the guiding research question as to what drives family firms to act might be: What drives family firms to act differently in comparison to nonfamily firms? Given family firms economic relevance around the world (Aldrich & Cliff, 2003), strategy research's approach to disregard family firm specifics and to use mainstream theories in explaining firm activity seems to fall short of economic reality (Gedajlovic et al., 2012). Despite any model's traditionally

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simplifying approach, not accounting for specifics of family firms may in many circumstances neglect important theoretical rationales for empirical observations and, thus, inherently limit the quality of inference.

Lastly, firm activity is supposed to eventually affect firm performance. The search for the “Holy Grail” (Gomez-Mejia et al., 2011), i.e., the search for the source of family firms’ over- or under-performance, may be contingent on the identification of differences in activity within the group of family firms and between family and nonfamily firms.

Besides the guiding research question, I further intend to contribute to our understanding of a second, broad research question:

*What shapes family firms’ activity?*

Not only the activity per se, but also the shape of the activity may have important consequences for the outcome of activity. Again, this broad research question can be divided in several more specific research questions, such as: What is the shape of some family firms’ activity in comparison to other family firms’ activity? What is the shape of family firms’ activity in comparison to nonfamily firms? Answers to these questions may offer important contributions to family firm research. Especially, I argue that the identification of differences in the shape of firm activity may contribute even beyond identifying factors that trigger activity to a better understanding of family firm performance. More particularly, relating this idea back to the guiding research question (*What drives family firms to act?*), an answer to the question as to what shapes activity in family firms may be required to fully capture an explanation for performance differences within the group of family firms or between family and non-family firms.

Finally, there is a third, broad research question that I intend to address with my dissertation:

*What hinders family firms to act?*

This research question is strongly related to the guiding research question (*What drives family firms to act?*); however, it is not complementary. For instance, it may be plausible that family owners’ affective commitment – as specific dimension of SEW – hinders family firms to act, but a lack of family owners’ affective commitment, ceteris

paribus, does not stimulate family firms to act. Therefore, understanding the factors that prevent family firms to act seems for at least three reasons highly wishful and appears as crucial extension to the understanding of the activity-driving factors. First, family firms are heterogeneous – not only in regard of their definition, but also in regard of their behaviors. Identifying family firms with factors that hinder these family firms, but not other family firms, from certain activities, may help in many circumstances. For instance, individuals who think about investing in publicly listed family firms may carefully consider which family firms may exhibit inertia towards dividend payments to avoid minority expropriation. Second, family firms represent the majority of firms in most economies. Factors that prevent those firms from activity thus may quickly become systematic; understanding these factors is therefore sense-making, for example, in efficient policy making. Finally – more than factors driving family firms to act that may not be very distinct within the group of family firms or even in comparison to nonfamily firms – inertial factors may be very specific to individual family firms. Thus, the consequences for firm performance may also be very specific and particularly powerful in explaining performance differences.

#### **1.4 Research Context**

The research questions outlined above require for a research context that reveal information on how SEW drives, shapes, and / or hinders family firm activity. As specific research contexts for the academic papers of this dissertation, important events for family firms have therefore been chosen. The common theme in all of the four academic papers which are part of this cumulative dissertation are transactions in family firms, i.e., acquisitions and divestitures. Thereby it has to be noted that succession is regarded as specific form of a divestiture. Given the set of research questions, this dissertation aims to broaden our understanding of family firm activities as well as their shape both from a theoretical and an empirical perspective by specifically focusing on acquisitions and divestitures in family firms; in particular, my research builds upon the recently established concept of SEW to contribute to family firm research with regard to the forces that drive and / or shape acquisitions and divestitures in family firms compared to other family firms or to non-family firms.

There are several reasons for the choice of this specific research context. First, acquisitions may be crucial to grow the family firm in an effort to facilitate prosperity

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throughout generations, e.g., acquiring a firm to access external resources and / or capabilities (Miller et al., 2010; Sieger, Zellweger, Nason, & Clinton, 2011). Second, similar to the acquisition rationale, family firms – especially if they are large, multi-business firms – may face the need to adapt their business portfolio through divestitures to remain competitive in the long-run (Salvato et al., 2010). Furthermore, in many small- to medium-sized family firms, succession – as specific form of a divestiture – may be a fundamental event. The significance of this event in family firms, for instance, is mirrored in the large body of literature on the topic in family firm and entrepreneurship research (Handler, 1994).

In addition to the importance for family firms in general, acquisitions and divestitures in family firms have a further commonality that is crucial in the choice as research context for this dissertation: both an acquisition and a divestiture – of a unit or the whole firm – may trigger a “shock” to family owners’ level of SEW. First, acquisitions create threats for several SEW dimensions simultaneously: External financing, and thus some loss of family control, may be required, networks may need to open up for new employees, suppliers, or customers, and difficulties in post-merger integration may threaten the harmony in the family firm. Second, almost by definition, a divestiture brings with it the loss of direct family control. Especially when there is a specific emotional tie between the business unit and the family firm, such as that the business unit is the family firms origin, the negative impact of a divestiture on SEW may hinder the sale (Salvato et al., 2010). Especially in successions which require the family owner to hand over control to another person, the loss of SEW may be large: If the successor is a family member, the challenge to the SEW level may be small to non-existent, if the successor is family external though, SEW may be lost entirely.

As outlined, acquisitions and divestitures – with the subcategory of a sale of the family firm, or succession – in family firms offer a promising research context to examine SEW’s influence on family firms activity, and therefore to contribute to answering the underlying research questions of this study (*What drives family firms to act?*, *What shapes family firms’ activity?*, and *What hinders family firms to act?*).

## 1.5 Overview of the Academic Papers

This dissertation comprises four academic papers. All of them are intended to help understanding the main research questions outlined above. Besides a rough overview about the content of all four academic papers, in the following, I briefly outline the definitions applied for family firms, the role of SEW, and the measurement of SEW for each of the four academic papers following the chronology of their development stages. The first academic paper, “*Value is in the Eye of the Owner: Affect Infusion and Socioemotional Wealth among Family Owners*” develops a theoretical framework that brings together insights from cognitive psychology, i.e., the affect infusion model (Forgas, 1995), with family owners’ subjective valuation of their ownership stakes. The level of analysis in this paper is the owner who has to put a value on his family firm. The model implicitly requires family firms to be private, but does not impose any restrictions on family involvement in ownership and / or management. The main argument of this paper is that family owners’ desire for SEW may alter subjective value considerations for their ownership stakes, which may thus deviate from financial valuation logics, and that the transmission depends on target, personal, and situational features of the cognitive valuation process. As the model is developed with the aim to explain the arousal of SEW, SEW implicitly assumes the role of the dependent variable in that project. The paper is conceptual, SEW is therefore not measured explicitly; it has been accepted for publication in *Family Business Review* and is available online since August 2011. Here, I worked together with Thomas Zellweger.

In the second academic paper, “*The Role of Information Asymmetry in the Choice of Entrepreneurial Exit Routes*”, the influence of asymmetric information regarding family-internal and family-external exit routes in family firms is examined. This research was conducted in collaboration with Thomas Zellweger, Nadine Kammerlander, and Frank Halter. In particular, we argue that family owners’ asymmetric information regarding the quality of family-external succession candidates – a specific obstacle towards family-external exit routes – can be mitigated through signaling efforts by the succession candidate and through screening efforts by the family owner. Furthermore, emotional attachment as distinctive SEW dimension is expected to lower signaling’s and screening’s power to lower the information asymmetry. In other words, SEW is in this project the moderating variable whereby we only focus on the SEW dimension of emotional attachment. The measure for



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emotional attachment is firm age, which is a reasonable proxy for the time of ownership. We test our theory empirically on a large sample of family-internal and family-external successions in small- to medium-sized family firms, i.e. owner-managed firms, whereby the level of analysis remains the incumbent family owner. The paper is accepted for publication in the *Journal of Business Venturing*.

The third academic paper, “*Timing and Relatedness of Acquisitions in Family Firms: The Role of Socioemotional Wealth*”, analyzes both the occurrence and the shape of acquisitions in family firms. Both the third and the fourth paper are firm level studies. The research is conducted together with Pankaj Patel and Thomas Zellweger. Combining family firm literature on SEW and the behavioral theory of the firm (Cyert & March, 1963), hypotheses regarding the hazard rate of an acquisition and the relatedness of acquired firms are developed. SEW assumes the theoretical role of the independent variable and is approximated through percentage of family ownership. The hypotheses are then tested empirically based upon a large sample of publicly-listed family and nonfamily firms in the US manufacturing industry. The definition applied for family firms follows other papers in the US environment, i.e., a family firm is defined as a firm in which a family holds at least 5% ownership control and furthermore fills a position in the top management team and / or holds a seat in the board of directors. Together with Thomas Zellweger, I presented this research at the 2012 *Academy of Management Annual Meeting* in Boston. Furthermore, we had submitted the manuscript to a top-tier management outlet, but were rejected after the first round.

The fourth and last academic paper, “*Socioemotional Wealth, Relative Performance, and Firm-Family Media Coverage as Influences on Divestitures*”, – simultaneously the single-author paper of my dissertation – is about divestitures in family and nonfamily firms. In particular, I examine how SEW influences family firms decision to engage in divestiture activity. Thereby, SEW is considered to constitute an independent variable. My central argument is that family control – both its current level as well as its duration – hinders divestitures in family firms, but the inertial attitudes in family firms change when performance decreases. Current family control is measured through family ownership (<25% family ownership as threshold for the German context) and duration of family control is measured by the years of family ownership. I further argue that the change of attitudes regarding divestitures in family

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firms may be intensified through family firms' media coverage linking family owners visibly to their firms. The theoretical framework is tested on a large sample of German, publicly listed firms in a longitudinal setting. An earlier version of this research was presented at the 2012 *Academy of Management Annual Meeting* in Boston.

## **2 Value Is in the Eye of the Owner: Affect Infusion and Socioemotional Wealth among Family Firm Owners**

Thomas Zellweger and Tobias Dehlen

### **2.1 Abstract**

Drawing on the Affect Infusion Model (AIM) from cognitive psychology we develop a conceptual framework that explains how affect related to corporate ownership impacts the formation of socioemotional wealth perceptions among family firm owners reflected in altered subjective value perceptions for the ownership stake. We explore target, personal, and situational features in the subjective valuation process for the ownership stake and explain how these factors mediate the relationship between affect and socioemotional wealth perceptions. We further our understanding about the level of bias in family owners' subjective firm value assessments and offer new approaches for socioemotional wealth research.

### **2.2 Introduction**

Entrepreneurship research has long emphasized that owner-managers often consider more than financial utility in their possession of privately held firms (e.g., Levesque, Shepherd, & Douglas, 2002; Penrose, 1959; Schumpeter, 1934). These nonfinancial benefits from ownership are particularly prominent in the family firm literature. In fact, the observation that family firm owners are motivated by more than financial goals is one of the most prominent assertions in family business research (Sharma, Chrisman, & Chua, 1997). It is argued that family owners receive utility from exercising authority, acting altruistically regarding family members, or conserving the family firm's social capital (Arregle, Hitt, Sirmon, & Very, 2007; Schulze, Lubatkin, & Dino, 2003b).

Recently, a stream of literature on the socioemotional wealth (SEW) of organizational ownership has started examining the noneconomic utility that owning family members derive from corporate control (Berrone et al., 2010; Gomez-Mejia et al., 2007; Zellweger & Astrachan, 2008). Gomez-Mejia and colleagues (2007) suggest

that SEW should be seen as the “non-financial aspects of the firm that meet the family's affective needs” (Gomez-Mejia et al., 2007; p. 106). Building on these initial SEW writings and the insights from behavioral theories, such as prospect theory (Kahneman & Tversky, 1979), we contend that owners are willing to sell their ownership stakes only if they are compensated commensurately with the perceived loss of SEW (Ariely, Huber, & Wertenbroch, 2005; Arkes & Blumer, 1985; Thaler, 1980; Tversky & Kahneman, 1981; Tversky & Kahneman, 1991; Wiseman & Gomez-Mejia, 1998). In other words, SEW is reflected in the perceived value for the ownership stake and, more precisely, is that part of a business value (as perceived by the owner) that is unexplained by financial considerations (Astrachan & Jaskiewicz, 2008; Zellweger & Astrachan, 2008). These authors show that SEW considerations lead to biased value considerations, hence values that deviate from an objective market price, when owners have to indicate an acceptable sale price for the ownership stake (Zellweger et al., 2012).

Current SEW literature, however, is unable to explain how and under which conditions affect, that is, feelings and emotions (Baron, 2008), impacts the formation of SEW and hence drives family owners' value perceptions. This dearth of insight is striking in light of the relevance of affect for SEW (e.g., Gomez-Mejia et al., 2007) and the observation that family firm ownership represents a particularly affect-dense setting (Kellermanns & Eddleston, 2004; Schulze, Lubatkin, Dino, & Buchholtz, 2001). Moreover, failing to account for affect in our progress toward a theory of SEW is unfortunate, since affect infusion theory provides critical insights into cognitive processes in general and the subjective valuation of possessions in particular (Chung, Cohen, & Monroe, 2008; Forgas & Ciarrochi, 2001; Hirshleifer & Shumway, 2003).

Along this line of thinking, therefore, this paper draws on cognitive psychology literature (Forgas, 1995; Forgas & Ciarrochi, 2001) to answer the question as to why some family owners are more biased in assigning a value to their ownership stake than others. We develop a conceptual framework that introduces target, personal, and situational features in value perception processes as mediators in the relationship between affect related to corporate ownership and subjective value perceptions of the ownership stake. Thereby we understand the level of bias in these subjective value assessment, and hence the absolute difference between the subjective and objective value assessment, as an indicator of SEW (Astrachan & Jaskiewicz, 2008). While present SEW research considers family firm ownership to be homogenous in its ability

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to create SEW, we suggest that there is heterogeneity among family firm owners in their SEW perceptions and that such heterogeneity is related to the presence or absence of the mediating effect of target, personal, and situational features in the value perception process for the ownership stake.

Our study attempts to make four contributions to the literature. *First*, we respond to the prominent call in family business research to examine why and how family firm owners value nonfinancial utility related to corporate ownership (Sharma et al., 1997). Previous research has proposed an idiosyncratic goal-based rationale (Gomez-Mejia et al., 2007), whereby particularistic utility functions are enabled by the extended power of controlling families (Carney, 2005) and family and firm reputation concerns (Zellweger, Nason, Nordqvist, & Brush, 2011). By focusing on the AIM, we introduce an overlooked theoretical rationale rooted in cognitive psychology (Forgas, 1995). *Second*, we contribute to SEW theory by exploring under which conditions and to what degree affect biases owners' subjective value perceptions for private family firm ownership and hence drives SEW. Here, the AIM is able to open the black box between affect and SEW (Berrone et al., 2010; Zellweger & Astrachan, 2008). Thereby we accommodate calls to consider the differing degree of emotional attachment among family firm owners (Sharma & Manikuttu, 2005). *Third*, we contribute to behavioral theories, such as prospect theory, and the role of affect in shaping reference levels by arguing that the endowment effect can be explained, at least partly, by affective elements. More specifically, affect-infused information processing can create biased value estimates, directly impacting the formation of SEW (Greve, 1998). Even though this claim has been made before (Lerner, Small, & Loewenstein, 2004; Zhang & Fishbach, 2005), we are among the first to reveal a model which shows that affect infusion in reference point creation should also hold for assets that are held for seemingly purely financial reasons such as corporate ownership. *Finally*, our findings speak to the subjectivist perspective of entrepreneurship, since we account for the fact that individuals hold different preferences and expectations; more specifically, the presupposition that the contents of the human mind and, hence, decision making and value perceptions, are not rigidly determined by external events (Foss, Klein, Kor, & Mahoney, 2008; Hayek, 1948; Penrose, 1959).

First, we review SEW literature in the context of family firm ownership and introduce the AIM. Then, we discuss how affect infuses SEW perceptions and biases

the acceptable sale price of ownership stakes. To this end, we develop testable propositions and discuss the implications of our research for theory and practice.

### **2.3 Socioemotional Wealth among Family Firm Owners**

A standard assumption in traditional agency writings is that owners are driven solely by financial motivations, in particular, the financial value of the ownership stake (Fama & Jensen, 1983). However, there is widespread consensus among entrepreneurship (Schumpeter, 1934) and, especially, family firm scholars (Sharma et al., 1997) that owner-managers are also driven by nonfinancial considerations. In their study of the largest firms in Europe, Thomsen and Pedersen (2000) show that the type of owner (e.g., members of the founding family, banks, institutional investors, other nonfinancial companies, governments) has implications for firms' objectives. Key findings include that shareholder value is not a universal goal for some owner types, and that trade-off effects against the creation of shareholder value are particularly prominent in family firms. To explain this effect, strategy and family business scholars suggest that families should be seen as principals having the institutional power to reinterpret and manipulate the goal set in their firms (Scott, 2008; Thornton & Ocasio, 1999) and replace calculative decision criteria with particularistic goals, whereby nonfinancial considerations of the owning family play a critical role (Carney, 2005). Alternatively it has been argued that depending on the degree of identity overlap between family and firm, family firm owners are seen as inclined to seek nonfinancial utility (Zellweger et al., 2011). While the firm often becomes an integral and inescapable part of life for family firm owners, the relationship to the firm is more distant, transitory, and utilitarian for nonfamily shareholders (Lubatkin, Schulze, Ling, & Dino, 2005).

Most recently, and under the umbrella of SEW, researchers have started investigating the sources and components of the nonfinancial utility of family firm owners (Berrone et al., 2010; Gomez-Mejia et al., 2007; Gomez-Mejia, Larrazza-Kintana, & Makri, 2003; Gomez-Mejia et al., 2001; Zellweger & Astrachan, 2008). Topics include family relationship contracting that produces agency contracts departing from economic rationality (Gomez-Mejia et al., 2001), lower family CEO salary in exchange for job security and emotional attachment (Gomez-Mejia et al., 2003), maintaining control over the firm, which engenders risk taking or creative

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earnings management to assure SEW (Gomez-Mejia et al., 2007; Stockmans et al., 2010), low levels of diversification to tightly control investments (Gomez-Mejia et al., 2010), and better compliance with institutional pressures to allay family reputation concerns (Berrone et al., 2010). Therefore, SEW is defined as the “non-financial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty” (Gomez-Mejia et al., 2007; p. 106) and also as the “stock of affect-related value that the family has invested in the firm” (Berrone et al., 2010; p. 82 ).

SEW writings argue that socioemotional utility enters an owner's value appraisal when the owner assesses the value for the ownership stake (Astrachan & Jaskiewicz, 2008; Zellweger & Astrachan, 2008). In the presence of socioemotional utility owners tend to indicate biased value perceptions, that is their value perceptions deviate from market value as calculated based only on financial information (Zellweger & Astrachan, 2008). According to the SEW perspective rooted in the behavioral theory of the firm, prospect theory and the behavioral agency model (Cyert & March, 1963; Gomez-Mejia et al., 2007; Wiseman & Gomez-Mejia, 1998), socioemotional utilities related to family firm ownership are endowed by owners and form a reference point from which owners are willing to part only if they are compensated commensurately with the perceived loss of SEW (Ariely et al., 2005; Arkes & Blumer, 1985; Thaler, 1980; Tversky & Kahneman, 1981; Tversky & Kahneman, 1991; Wiseman & Gomez-Mejia, 1998). Following this line of argumentation, we conceptualize SEW as the absolute difference between an owner's subjective value assessment and the objective market value for the ownership stake of a firm. SEW with negative valence indicates an inclination to withdraw from the firm and to sell out, whereas SEW with positive valence indicates an inclination to be attached to the ownership and to invest the self into it. In both cases we suggest that affect biases subjective value perceptions and hence shapes SEW perceptions.

This theoretical approach is guided by the perception that SEW literature's progress is largely dependent on researchers' ability to theoretically untangle the processes through which various dimensions of SEW shape a reference point and thus bias family owners' value perceptions and ultimately firm level behavior. While control considerations and identity concerns have been discussed elsewhere (Chrisman, Chua, Pearson, & Barnett, 2012; Zellweger et al., 2011), affect and its

relationship to SEW has gathered surprisingly little attention. This is unfortunate, for at least three reasons.

First, family firms are often considered as an affect-rich organizational context. Scholars see the intermingling of emotional factors originating from family involvement with business factors as a distinct attribute of family firms (Tagiuri & Davis, 1992; Tagiuri & Davis, 1996). Such affective experiences at the ownership level may consist, for example, of satisfaction regarding achievements of the firm, trust and harmony among family members, or pride in long-term and continuous control over the firm (Kets de Vries, 1993). Family firm owners often display emotional attachment to their firms; loss of the firm represents a highly emotional event for most owners (Salvato et al., 2010; Sharma & Manikutty, 2005; Shepherd, Wiklund, & Haynie, 2009).

Second, despite the relevance of affect for SEW and its prevalence in the family firm setting, it is important to acknowledge heterogeneity among family firms and their owners (Melin & Nordqvist, 2007). Unfortunately, however, current SEW research assumes that family firms are homogeneous in their emphasis of SEW considerations; often, family firm status is used as a proxy for the existence of SEW (Berrone et al., 2010; Gomez-Mejia et al., 2007; Gomez-Mejia et al., 2010; Jones, Makri, & Gomez-Mejia, 2008; Miller et al., 2010). This frontal approach is unlucky, since it falls short of contributing beyond the theoretically uninspiring observation that family firms are different from nonfamily firms, and that family owners value socioemotional dimensions of corporate ownership while nonfamily owners are unaffected by such biases. SEW literature must reach beyond this oversimplification and explain the varying sources and degrees of SEW, thereby acknowledging family firm heterogeneity (Melin & Nordqvist, 2007). Some family-controlled firms closely resemble nonfamily firms; for example, investment vehicles in which the family point of view is limited to that of a passive shareholder (Pearson, Carr, & Shaw, 2008; Sorenson, Goodpaster, Hedberg, & Yu, 2009). In these situations, SEW considerations induced, for example, by affect, may be limited or nonexistent. Therefore, exploring how various elements of ownership infuse affect and, hence, SEW, which ultimately biases the perception of corporate value, holds promise to render the heterogeneous reality of family firm ownership more realistically.



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Third, through affect infusion literature, in particular the AIM (Forgas, 1995), cognitive psychology offers sound theoretical ways to untangle the link between affect, appraisal processes of affect, and the cognitive process of subjective value assessment of a possession. Conceptualized as an explanation for affect infusion in numerous information processing contexts, this theory has been successfully applied in the entrepreneurship context of opportunity recognition and exploitation (e.g., Baron, 2008; Foo, 2010; Foo, Uy, & Baron, 2009) and for individual valuation of possessions (Chung et al., 2008; Forgas & Ciarrochi, 2001; Hirshleifer & Shumway, 2003). We suggest, therefore, that the AIM holds valuable insights into the processes through which affect infuses family owners' value considerations and hence leads to SEW.

## **2.4 The Affect Infusion Model**

Affect infusion theory sheds light on the psychological processes through which affect primes cognitive judgments, including evaluations of personal efficacy and social performance (see Forgas & Bower, 1987 for a review). Possessions may have an affective dimension, since to a large degree they can become symbolic extensions of the self, thus taking on a significance well beyond their economic value (Forgas & Ciarrochi, 2001). Affect infusion theory suggests that merely owning an object increases its value to owners (Beggan, 1992; Kahneman, Knetsch, & Thaler, 1991); put differently, affective feelings about ownership play a key role in generating the endowment effect (Bower, 1981; Chung et al., 2008; Forgas & Ciarrochi, 2001; Hirshleifer & Shumway, 2003; Keltner, Ellsworth, & Edwards, 1993; Lerner et al., 2004; Pham, 2007; Shiv, Loewenstein, Bechara, Damasio, & Damasio, 2005).

Introducing the AIM, Forgas (1995) laid the theoretical foundation to explain the processes through which affectively loaded information influences and becomes incorporated into a judge's deliberations and colors judgmental outcomes. The AIM suggests that, depending on target, personal, and situational features, the individual chooses between four information processing strategies: direct access, motivated, heuristic, and substantive, which differ in magnitude of required effort and level of affect infusion (see, e.g., Chung et al., 2008; Hills, Hill, Mamone, & Dickerson, 2001; Hirshleifer & Shumway, 2003). Direct access processing (a low affect strategy) is applied when the target (i.e., the possession) is highly familiar, the individual is not personally involved, and circumstances require little effort; individuals routinely avail

themselves of stored information and experience in processing activities, eliminating emotionality (Forgas, 2001). For instance, we consider the value assessment of fungible commodities that are held for exchange as a prototypical example of this processing style. In motivated processing (also low affect), in turn, individuals adopt a highly targeted, selective thinking style (Forgas & George, 2001), whereby a bounded or narrow-minded information search naturally constrains the influence of affective states on judgments (Forgas, 2001). A strong motivational goal (e.g., to sell a possession) limits the power of affective states to guide information processing through specific access to prior experience or knowledge (Forgas & George, 2001). Such low affect-infusing processing may be at play, for instance, when a merchant sells products to the market. Because those transactions are highly routine-based, the merchant tends to be very familiar with the process. Furthermore, the motivation for the merchant is straightforward: she/he simply wants to generate income. We suggest, then, that affect infusion in the merchant's information processing is limited or nonexistent.

Turning to affect-infusing processing styles, heuristic information processing is chosen if information is simple, is not personally relevant for the individual, and the situation is not demanding in terms of accuracy or detailed considerations (Forgas, 1995). Heuristic processing of information relies on emotions and mood; affect is explicitly used as input in order to minimize the level of effort. Appraisals are then undertaken based solely on how the owner feels about the possession, allowing affect to minimize effort. For instance, consider a garage sale. When there is a potential buyer, the seller is likely to indicate a price according to her/his instinct, rather than expending much effort to weigh the costs against the benefits of a sale or to research prices of comparables.

In the context of value assessments of private family firm ownership, we expect these three processing strategies to be minimally relevant. Rather, we expect value assessments to be affect-infused along the lines of substantive processing, the fourth information processing strategy in the AIM. This strategy is seen as demanding the most effort, requiring individuals to carefully handle information using their own memories, associations, and comparisons (Forgas & Ciarrochi, 2001). Substantive processing will likely be chosen if there is no alternative that requires less effort (Forgas, 2001). The mechanism through which affect enters the cognitive process in

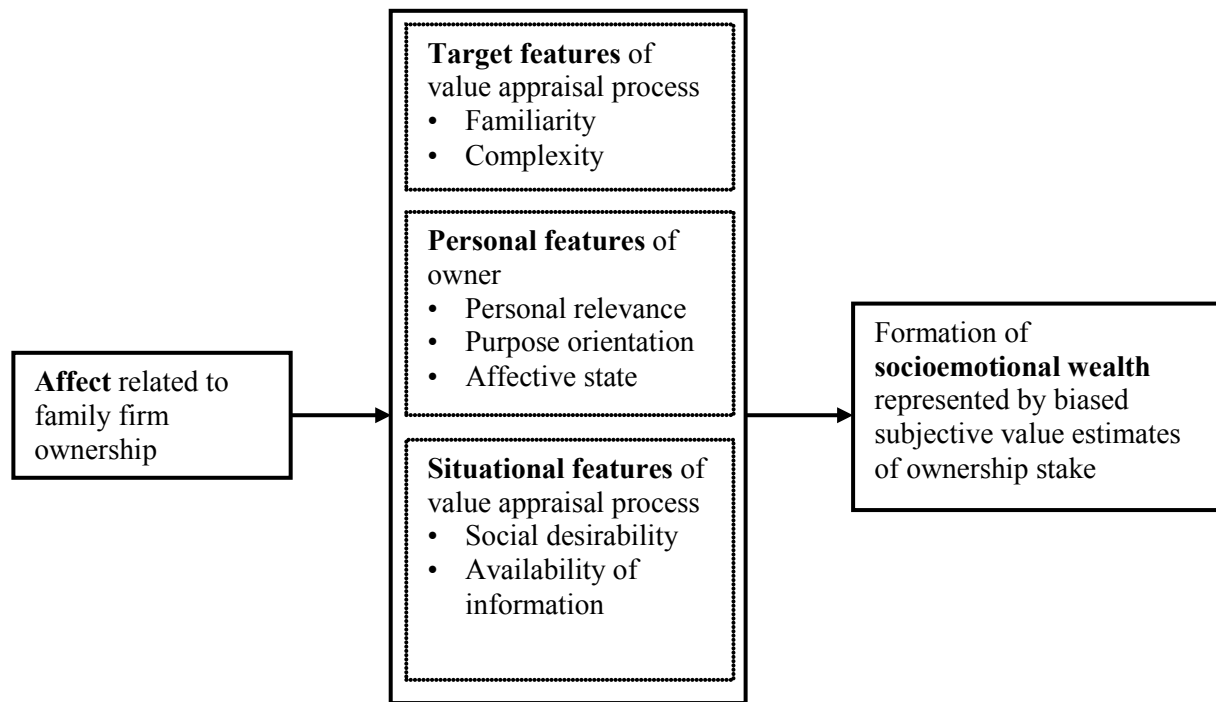
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substantive processing follows the affect-priming principle: the affective state grants access to certain categories of interpretations (Bower, 1981).

This affect-infusing processing choice seems likely to be at play in our context of interest because the private firm ownership stake is in most cases not tradable on a liquid market for corporate control, which implies the absence of less effortful value appraisal processes. Value assessments, which often imply interpretations and comparisons that require extensive information processing, make affect infusion more likely. Moreover, since ownership in family firms is often held with transgenerational sustainability intentions (Chua, Chrisman, & Sharma, 1999), the asset is originally not held for exchange, thus increasing the novelty of the value assessment task and the likelihood of affect infusion (Forgas, 1995). Similarly, because the ownership stake is most often personally relevant to the owner, both in financial and nonfinancial terms (Sharma et al., 1997), affect infusion through substantive processing is highly probable, given the necessity to carefully assess the change in asset position.

## **2.5 Affect Infusion and Family Firm Owners' Value Perceptions**

In line with the AIM and acknowledging heterogeneity among family firms as well as their owners (Melin & Nordqvist, 2007), we suggest that the degree of substantive processing, that is, the degree of affect infusion in the formation of owners' subjective ownership value assessments, is dependent on (1) the target features of the value assessment process, (2) the personal features of the owner assessing the value, and (3) the situational features under which the value is determined (Forgas, 1995). In other words, building on both SEW literature (Gomez-Mejia et al., 2007) and affect infusion theory (Forgas, 1995), our model suggests that affect exerts an influence on value perceptions and hence SEW through target, personal, and situational features of the value assessment process. Accordingly, we see target, personal and situational features of the value assessment process as mediators linking affect related to ownership on one hand and SEW on the other hand. This logic is represented in below Figure 1 and is further explored in the next sections.



**Figure 1:** Relationship between affect related to family firm ownership and socioemotional wealth mediated by target, personal and situational features

### 2.5.1 Target Features in Determining Family Firm Owner's Value Perceptions

The AIM suggests that target features (i.e., features of the owner's utility evaluation process of the ownership stake) influence the choice of information processing strategy. It is argued that the more *familiar* the target, the more likely a non-affect-infused processing strategy (i.e., low affect infusion) will be pursued (Forgas, 1995). Familiarity with value appraisals, as argued in the AIM, means that the owner (as judge) possesses detailed and extensive information about the value of the ownership stake in question; for example, when acquisitions and divestments of corporate ownership are executed regularly and necessary information is readily available. In large, family-controlled holding companies where owners regularly adjust the firm's portfolio, owners possess expertise in value assessment. As do experienced venture capitalists, family firm owners rely in that particular case on various routines and mental shortcuts that increase efficiency and minimize intensive processing (Shepherd, Zacharakis, & Baron, 2003). This allows them to make decisions in a more habitual manner — that is, through automatic processing rather than through more conscious, step-by-step systematic processing (Logan, 1990; Zacharakis & Shepherd, 2001).

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However, if the owner is inexperienced in value assessments, the task likely becomes challenging, thus slowing considerations of firm value (Shepherd & Haynie, 2009) and making it more likely that affect will infuse the unfamiliar cognitive process. For example, when owners are inexperienced with assessing objective business performance data that facilitates the value appraisal process or have limited experience with corporate control transactions, they will compensate by using an extended and elaborate processing strategy when determining the value of a firm. In sum, unfamiliarity with value assessment of the ownership stake should heighten affect infusion and increase SEW considerations, thereby biasing corporate value perceptions.

The AIM further predicts that task *complexity* is positively correlated with the choice of substantive information processing strategies and, thus, with the degree to which affect biases individual value perceptions. Experimental studies have shown that complex tasks require elaborate processing strategies to generate a coherent impression, with greater availability of affect-primed information influencing the judgment or decision (Forgas, 1992). In accordance with this explanation, the impact of mood effects is expected to be greater if the value appraisal process of the ownership stake is difficult, since this leads to more extensive processing. While the stock market eliminates such complexities through the value-revealing pricing mechanism, the challenge is considerable in privately held firms. Beyond the limited fungibility of ownership stakes, complexity of value assessments may be exacerbated when an ownership stake is vested with extended control mechanisms, such as pyramidal groups that separate ownership from control, the entrenchment of controlling families, and non-arm's-length transactions (i.e., "tunneling") between related companies (Morck & Yeung, 2003). In these cases, the ultimate value of the ownership stake may be particularly complicated to assess, given the various ways through which funds can be extracted from controlled firms and minority shareholders and accumulated at the apex of the family-controlled corporate structure (Johnson, La Porta, Lopez-de-Silanes, & Shleifer, 2000).

The complexity of subjective value assessments of corporate ownership may be even more challenging when business finances are interwoven with owners' personal finances (Haynes, Walker, Rowe, & Hong, 1999). The owner then must carefully handle private information, which likely demands substantial effort, given the absence

of comparable cases against which the task could be benchmarked. In turn, complexity of the value assessment task should heighten affect infusion and increase SEW considerations, which ultimately biases corporate value perceptions.

These considerations on unfamiliarity with and complexity of the value assessment task are summarized as follows:

***Proposition 1a:*** *Affect from corporate ownership exerts an influence on an owner's value perception for the ownership stake through owner's experiences in assessing the value of corporate ownership stakes and the transfer of corporate control. That is, the less experienced the owner, the more likely is affect infusion and hence SEW.*

***Proposition 1b:*** *Affect from corporate ownership exerts an influence on an owner's value perception for the ownership stake through the complexity of the corporate value assessment, measured through the complexity of the business structure and the intermingling of personal and business finances. That is, the higher the complexity, the more likely is affect infusion and hence SEW.*

### **2.5.2 Personal Features in Determining Family Firm Owner's Value Perceptions**

Besides target features of the value assessment process, the AIM accounts for personal features of the individual who assesses the value of a possession. For example, the owner pursues substantive processing of information, and, hence, exhibits affect infusion when the task is of high *personal relevance* (Forgas, 1995). Personal relevance of ownership stakes may arise from both financial and nonfinancial sources in the context of family firm owners. Clearly, the level of embeddedness of the firm experienced by the owner depends on the fraction the ownership stake represents within the owner's total wealth (Miller et al., 2010). When that fraction is high, personal relevance is high, given that changes in the possession's worth have a strong impact on global financial circumstances and, potentially, lifestyle choices of the owner. However, personal relevance may also be nurtured by nonfinancial elements such as identification with the asset, because affiliation with the firm increases the owner's self-distinctiveness, self-awareness, and self-enhancement (Albert & Whetten, 1985; Dukerich, Golden, & Shortell, 2002). Some family firm owners may strongly

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identify with the controlled firm; for example, if the asset represents a family legacy, thereby contributing to the owner's self-awareness. In turn, the more personally relevant the asset is to the owner, the more likely becomes affect infusion in value appraisal, thus increasing the likelihood of SEW considerations, which ultimately biases corporate value perceptions.

In addition, the AIM argues that an individual's strong *purpose orientation* leads to low affect infusion processing strategies (Forgas, 2001). When the owner who assigns a value to her / his ownership stake is influenced by a strong, pre-existing motivation, little open and constructive processing is used in interpreting the detailed features of the target, limiting the scope of affect infusion into the value judgment. For example, family firm owners with a strong motivation to realize the value of their ownership stake and an imminent motivation to sell may, therefore, exhibit low levels of affect infusion when assessing the ownership stake's value. They are then more likely to benchmark their value perceptions against a comparable company and a reasonable economic value at which it can be traded on the market for corporate control. In the absence of an imminent purpose to sell, owners are more likely to focus on perceived personal importance of ownership and their sentiment toward surrendering the asset (Carmon & Ariely, 2000; Kahneman & Knetsch, 1992; Kahneman & Miller, 1986). Consequently, when owners have no specific motivation to assess the value of the ownership stake for selling purposes, it is more likely that affect should motivate family owners to assign biased value perceptions (Ariely et al., 2005).

Moreover, the AIM suggests that the *affective state* of the judge should influence the choice of affect-infusing processing strategies. A target-specific or context-dependent mood is believed to induce substantive processing, with positive mood eliciting more positive value assessments and negative mood more negative assessments. Mood-congruent judgments in cases of substantive processing have been confirmed in a wide series of psychological studies (Clore, Parrott, & Forgas, 1991; Erber & Erber, 1994; Parrott & Sabini, 1990; Salovey et al., 1991; Schwarz & Clore, 1983; Sedikides, 1994). Judges may use their mood as a point of contrast against which other information is retrieved or evaluated; in addition, mood facilitates the recall of memories congruent with the mood during substantive processing. Good mood, in a sense, indicates that the situation is favorable and that little monitoring and

processing effort is required. This may lead to low affect infusion information processing strategies for goods to which owners are indifferent. However, positive mood in the corporate context (e.g., harmony among owners and enjoyment of exercising control) is likely to instill substantive processing and raise compensation considerations for the forgone emotional benefits caused by the loss of the asset (Douglas & Shepherd, 2000). Such mood-congruent judgments for positive moods have been confirmed even for highly analytical tasks, such as the pricing of public stock ownership (Hirshleifer & Shumway, 2003) or the valuation of inventories by auditors (Chung et al., 2008).

These considerations on personal relevance, purpose orientation, and positive affective state are summarized as follows:

**Proposition 2a:** *Affect from corporate ownership exerts an influence on an owner's value perception for the ownership stake through the personal relevance of the ownership stake for the owner, measured as the asset's value in relation to the owner's total wealth and the level of identification of the owner with the firm. That is, the stronger the personal relevance of the asset, the more likely is affect infusion and hence SEW.*

**Proposition 2b:** *Affect from corporate ownership exerts an influence on an owner's value perception for the ownership stake through purpose orientation of the owner, measured in terms of the owner's intention to assess corporate ownership value with the aim of an imminent sale. That is, the stronger the purpose orientation, the less likely is affect infusion and hence SEW.*

**Proposition 2c:** *Affect from corporate ownership exerts an influence on an owner's value perception for the ownership stake through the owner's general affective state. That is, the more positive the affect state, the more likely is affect infusion and hence SEW.*



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### 2.5.3 Situational Features in Determining Family Firm Owner's Value Perceptions

The last category within the AIM that influences information processing types is that of situation (Forgas, 1995). *Social desirability* is one such situational determinant on individual choices of information processing strategies, which leads to more thorough and substantive information processing because the meaning of the possession depends on assessment by others (Forgas, 1995). Given that social desirability concerns depend on the norms of the social context and the power of social actors to enforce these norms (Mann, 1986), the impact of social desirability on value appraisal is context-specific. In a social context with salient stakeholders who also value noneconomic goals, it is more likely that nonfinancial utility considerations and affect flood the owner's value appraisal process, resulting in biased corporate value perceptions (Villanueva & Sapienza, 2009). For instance, co-investors from the same family with a goal set that includes noneconomic elements, and firms with strong employee representation and concerns about public perception, shape a context where value perception in pure economic terms may find limited social acceptance. This is then likely to be reflected in an affect-infused value appraisal, which is most likely reflected in biased perceived ownership values.

While these considerations may be representative of the prototypical case of the locally rooted, closely held family firm, social desirability norms are expected to differ widely for salient stakeholders with pure financial goals. For example, for institutional co-investors or for firms that consider venture capital funds as owners, the social norm likely shifts to a more economic rationale (Villanueva & Sapienza, 2009). The norms of these actors and the power they hold are more likely to crowd out affect in the assessment of corporate value perceptions. Owners, therefore, are persuaded to “face the facts” and reduce sentimentality, which raises owner awareness of affect infusion and resets affect priming (Erber & Erber, 1994). Accordingly, to the extent the goal set of the most salient stakeholders of the firm coincides with a pure economic logic, social desirability concerns about the consideration of the largest co-investor leads to low affect infusion in the ownership value assessment process.

In addition, affect infusion literature purports that the *availability of information* for evaluation of a task biases information processing strategies. The AIM assumes that affective states interact with and inform cognition and judgments by

influencing the availability of cognitive constructs used in the processing of information (Forgas, 1995). In the presence of detailed information required for the task, individuals will be inclined to use low affect infusion processing strategies. In the absence of such information, however, shortcuts or simplifications are unavailable (Paulhus & Lim, 1994) and the evaluation process requires more effort. Extending this line of thinking to the availability of information to assess the value of a corporate ownership stake, literature rooted in the entrenchment hypothesis of organizational ownership (Morck, Shleifer, & Vishny, 1988) finds that certain family firms practice lower quality accounting methods to protect the family's interests at the expense of nonfamily shareholders (Schulze et al., 2003b). Firms with concentrated family ownership, therefore, have fewer incentives to engage in high-quality accounting methods; they tend to withhold such information because the perceived benefits of sharing private information with outside parties are modest (Fan & Wong, 2002). Even internally, detailed and objective information (e.g., on business performance) may be scarce, given the complexity of diversified corporate structures in which business units are cross-subsidized (Morck & Yeung, 2003). Also, a family firm owner can face incentives not to develop such information, given the efficiency benefits of trust-based approaches among board members, the managerial team, and representatives of family owners. Thus, owners are spared from expensive collection and analysis of business information used to monitor and align interests (Anderson, Mansi, & Reeb, 2003). The negative side of these relational-based approaches is that family firm owners may be inclined to conceal objective business information to protect underperforming family members.

Based on this reasoning, many family firms tend to edit lower quality accounting information (Cascino, Pugliese, Mussolino, & Sansone, 2010; Stockmans et al., 2010; Wang, Keswani, & Taylor, 2006). Accordingly, we expect that in the presence of such opaqueness, value assessments of corporate ownership are particularly challenging. Along the precepts of affect infusion theory, we argue that with decreasing availability of business-related data required to assess the value of the firm, the level of affect infusion rises, given the need for substantive information processing. In consequence, this will result in biased ownership values.

These considerations of social desirability and availability of data are summarized as follows:

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**Proposition 3a:** *Affect from corporate ownership exerts an influence on an owner's value perception for the ownership stake through the nonfinancial motivations of salient stakeholders. That is, the more salient stakeholders are motivated by nonfinancial goals, the more likely is affect infusion and hence SEW.*

**Proposition 3b:** *Affect from corporate ownership exerts an influence on an owner's value perception for the ownership stake through the availability of business performance data and quality of reporting systems. That is, the more available such data and the more developed reporting systems, the less likely is affect infusion and hence SEW.*

In sum, we propose a model predicting the influence of affect related to corporate ownership on owners' value perceptions through target, judge, and situational elements related to the value assessment task for the corporate ownership stake. Our reasoning for such a mediating effect for AIM variables just as the proposed measurement of the variables mentioned in our propositions are depicted in Table 1.

	Dimensions	Proposed measures	Direction of relationship with SEW perceptions
Target features of the value appraisal process	Familiarity	<ul style="list-style-type: none"> <li>• Familiarity with assessing the value of corporate ownership stakes</li> <li>• Familiarity with transfers of corporate control</li> </ul>	Negative Negative
	Complexity	<ul style="list-style-type: none"> <li>• Complexity of the corporate structure</li> <li>• Intermingling of personal and business finances</li> </ul>	Positive Positive
Personal features of the owner as the value judge	Personal relevance	<ul style="list-style-type: none"> <li>• Fraction of the asset in the owner's total wealth</li> <li>• Level of identification of the owner with the firm</li> </ul>	Positive Positive
	Purpose orientation	<ul style="list-style-type: none"> <li>• Intention to sell the ownership stake</li> </ul>	Negative
	Valence of affective state	<ul style="list-style-type: none"> <li>• Positive moods: joy or pride (inducing more positive value appraisals)</li> </ul>	Positive
Situational features of the value appraisal process	Social desirability	<ul style="list-style-type: none"> <li>• Presence of non-economically motivated co-investor</li> <li>• Presence of economically motivated co-investor</li> <li>• Presence of worker representation</li> </ul>	Positive Negative Positive
	Availability of information	<ul style="list-style-type: none"> <li>• Availability of relevant business performance data, reporting and monitoring systems</li> </ul>	Negative

**Table 1:** Dimensions and Measures of Affect Infusion Mediators and their Impact on SEW perceptions

#### 2.5.4 Illustrative Case: Ingvar Kamprad from IKEA

To illustrate our rationale it seems helpful to apply our thinking to a concrete example. We chose the case of Ingvar Kamprad who controls IKEA, a multinational furniture chain with annual revenues of more than EUR 20 bn, officially headquartered in Sweden (Schwarzer, 2011) and contend that SEW considerations as reflected in biased value estimates should be very prevalent for Ingvar Kamprad.

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For the case of personal features, the firm's name IKEA, which stands for *Ingvar Kamprad Elmatryd*, the name of his parents' farm, and *Agunnaryd*, the name of his home municipality (Mourkogiannis, Unger, & Vogelsang, 2007) can be seen as a symbol for the owner's sense of identification with the firm. Furthermore, Kamprad explicitly has no intention to sell his firm. To protect his entrepreneurial legacy against a possible sale Kamprad has introduced a sophisticated legal structure using multiple foundations who control the ownership rights (Schwarzer, 2011). Moreover, Ingvar Kamprad has expressed his intention not to sell out but to keep the firm under family control by appointing his sons Peter, Jonas, and Mathias to top-management positions.

Regarding target features of the firm, through the afore-mentioned governance mechanisms the firm exhibits a highly complex organizational structure, motivated not only by concerns to preserve power but also by tax considerations. This complexity is also reflected in the geographical spread of the top-management bodies of Kamprad's empire, which are located in Netherlands, Sweden, and Lichtenstein. Moreover, functional divisions are separated between a "blue", a "red", and a "green" group, which are responsible for the management of IKEA operations, brand / franchise management, and private wealth management, respectively (Schwarzer, 2011), thereby leading to an intermingling of business and private finances.

Regarding situational features, because the firm is privately held and because the Kamprad family is sole owner of the firm, there is no salient co-investor who could eventually limit affective influences and induce a more rational point of view.

Taken together, and based on these personal, target and situational features it will be likely that Kamprad experiences affect infusion when considering an acceptable sale price and hence display heightened SEW perceptions.

## **2.6 Discussion**

Building on behavioral theories, such as prospect theory, the behavioral theory of the firm and the behavioral agency model, we argued that owners are willing to part with an asset only if they are compensated commensurately with the perceived loss of SEW (Ariely et al., 2005; Tversky & Kahneman, 1991; Wiseman & Gomez-Mejia, 1998). Put differently, in the presence of SEW considerations, perceived values for ownership stakes are biased and deviate from economic value since owners strive for

compensation of the loss of SEW. Hence, SEW is reflected in biased subjective value appraisal for the ownership stake. While power and identity related reasons for the formation of SEW and acceptable sale prices have been discussed elsewhere (Zellweger et al., 2012), the present paper draws on cognitive psychology literature, more specifically the affect infusion model (AIM) (Forgas, 1995) to develop a conceptual framework exploring the role of affect in these processes. Based on this theoretical strand we introduce target, personal, and situational features in the subjective value appraisal process as mediators in the relationship between affect related to corporate ownership and subjective value perceptions of ownership stakes.

Our paper makes several important contributions to the literature. First, by using the AIM to explain under which conditions affect biases corporate value perceptions, we shed light on the impact of an underexplored source of SEW. Recent studies have examined social dimensions of SEW such as identity concerns, community status, and transgenerational sustainability intentions (Berrone et al., 2010; Gomez-Mejia et al., 2007; Zellweger et al., 2011). By failing to acknowledge affect infusion theory (especially given the context of *socioemotional* wealth), current SEW literature risks overlooking a rich stream of psychology research that holds promise for the further advancement of a SEW theory (Forgas & Bower, 1987; Forgas & Ciarrochi, 2001; Forgas & George, 2001; Hirshleifer & Shumway, 2003). In our attempt to advance towards a theory of SEW we thus outline the individual level psychological processes that lead to SEW perceptions.

Building on the AIM, we explain how target features of the value appraisal process, such as unfamiliarity with value assessments of corporate ownership stakes or complexity of the value appraisal task, induced, for example, by a complex corporate structure, make it more likely that owners are affect-infused when attributing a value to their ownership stake; thus, they indicate values for their ownership stake that significantly deviate from objective market values determined by financial considerations only. We also suggest that the more personally relevant the asset is, e.g., since the firm represents a high fraction of the owner's total wealth or the family firm has an important personal meaning to the owner, the more likely the owner is affect-infused when determining the asset's value and develops SEW leading to biased value perceptions. Similarly, we suggest that the stronger the purpose orientation of the owner to imminently realize the value of the asset (i.e., to sell), the less likely the

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owner uses affect-priming processing strategies, thus reducing the relevance of SEW considerations that would bias value considerations.

With regard to affective state, we theorize that the more positive the general affective state, the more likely the owner uses substantive information processing, thereby exhibiting mood-congruent value appraisals, and, hence, heightened SEW and biased value perceptions for the ownership stake in the family firm. Only partly in line with the AIM, we suggest that social desirability concerns should lead to affect infusion and SEW perceptions in a context that values noneconomic utility arising from corporate ownership. However, in a context in which economic rationality prevails (e.g., when strong co-investors have pure financial interests), social desirability should eliminate affect infusion. Finally, we argue that in the absence of detailed information needed to judge the value of the firm, shortcuts or simplifications are unavailable; therefore, the evaluation process requires more effort and an affect-infused analysis. In turn, SEW considerations emerge, which bias corporate value perceptions.

Our considerations about the creation of SEW reaches well beyond existing research that has chiefly considered family firm owners as homogeneous in their SEW perceptions (Berrone et al., 2010; Gomez-Mejia et al., 2007; Gomez-Mejia et al., 2010; Jones et al., 2008; Miller et al., 2010). We challenge this homogeneity assumption by exploring the varying salience of aspects of the value assessment process, aspects of the owner, and aspects of the owned asset in framing the valuation process and, ultimately, endowing owners with SEW.

As a second contribution, our study adds to the prominent call in family business and mainstream management research to address the reasons why certain types of owners, and family firm owners in particular, are expected to value nonfinancial goals (Sharma et al., 1997; Thomsen & Pedersen, 2000). By focusing on the AIM, we provide a theory-based rationale to this observation that may not be limited in its application to family firms.

Also, our study builds on a recent development in the area of behavioral theories, that considers the role of affect in shaping reference points (e.g., Greve, 1998). We argue that the biased valuation of ownership stakes can be explained, at least partly, by affective elements. Even though this claim has been made before

(Lerner et al., 2004; Zhang & Fishbach, 2005), we are among the first to show that affect infusion in the process of reference point formation should also hold for assets that are held for seemingly purely financial reasons.

Finally, these findings also speak to the subjectivist perspective of entrepreneurship, since we account for the fact that individuals hold different preferences and expectations; more specifically, the presupposition that the contents of the human mind and, hence, decision making, are not rigidly determined by external events (Foss et al., 2008; Hayek, 1948; Penrose, 1959).

### **2.6.1 Limitations and Opportunities for Future Research**

We would be remiss not to note the limitations to our study. Our considerations of affect infusion and SEW perceptions are not equally relevant for all types of corporate owners. While the spill-over of affect in the context of publicly quoted ownership stakes may be limited given the permanent availability of an objective price (albeit affect-infusion has been found to persist even in this particular setting, see Hirshleifer & Shumway, 2003), our considerations may be particularly relevant but not limited to owners of privately held family firms, especially owners who not only hold a financial stake but also work in the controlled firm (Schulze & Gedajlovic, 2010).

Also, we have to acknowledge that the AIM is an individual level theory. Therefore, we are hesitant to extend our arguments to the family group level. Our arguments seem particularly applicable to the case of a sole owner or to the case where the actors experience a shared sentiment towards the firm. Such a perspective of treating a family as a unitary actor with a common view and sentiment towards ownership in the firm is in line with a common practice among social scientists to attribute properties and opinions of an individual to that of a group (Nordqvist & Melin, 2010). For example, researchers often take a key informant approach to explore organizational behavior. Bourdieu (1996) even contends that the family acts as a collective subject even more than internally weaker institutions such as firms. Hence, even family firms with a dispersed ownership structure, through the social norms for harmony and mutual support not to mention the factual inability to leave one's family just as various types of family governance mechanisms should lead to a common point



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of view and affect towards the ownership which then suggests that family can be treated as a collective subject.

We hasten to add that we did not examine all factors that are part of the AIM (Forgas, 1995). For example, it seems arduous to us to apply predictions on situational features, such as task publicity or need for accuracy, which should lead to affect infusion (Forgas, 1995), to the corporate context. Our decision not to include these features in our theorizing is based on the argument that publicity of, or need for, accuracy in the value appraisal process may result in more rational and affect-free information processing, which is anathema to the predictions of the AIM. We theorize that task publicity and need for accuracy force owners to accept economic rationality in a “fact-based” corporate world. In a similar way, we have explored limitations of the standard precepts of the AIM regarding social desirability, which suggests that social desirability should always leads to more affect infusion. As demonstrated through proposition 3a, we take a more nuanced stance on this relationship.

Also, we excluded a potential reciprocal relationship between SEW and affect. While we argued for a causal relationship between affect and SEW via affect infusion variables, it may be possible that SEW concerns nurture certain emotions, suggesting reverse causality. For example, "seeing more than the money" in a firm may nurture feelings of joy and pride. However, in an effort to stick to the causal direction as argued in the AIM and to sustain the parsimony of our paper we refrained from introducing such reciprocal or moderating relationships into our model (Whetten, 1989).

It is important to note that SEW considerations and corporate value perceptions may not always move in parallel. We suggest that, depending on the presence of the factors outlined above, affect infusion in value appraisals creates a reference point from which owners are willing to part only if they are compensated commensurately with the loss of SEW. Therefore, one may implicitly assume a positive relationship between SEW and acceptable sale price, an argument that corresponds to the underlying rationale in current SEW literature (Gomez-Mejia et al., 2007) and improves the parsimony of our paper (Whetten, 1989). However, in the presence of negative utility (such as negative moods), the relationship can be less straightforward, since negative mood can cause both mood-congruent and incongruent, hence, reduced, but also heightened, value appraisals (DeSteno, Petty, Wegener, &

Rucker, 2000; Foo, 2010; Forgas, 1995; Keltner et al., 1993; Lerner & Keltner, 2000; Lerner et al., 2004). While certain negative moods (e.g., sadness) may instill withdrawal behavior and reduced value perceptions (Lerner et al., 2004), other negative moods (e.g., anger) may induce people to "repair" their moods (Forgas, 1995) by pricing the associated sunk costs (Arkes & Blumer, 1985); thus, value perceptions are heightened by negative feelings. In fact, it is even conceivable that in the presence of positive emotional environments of firm ownership (e.g., feelings of accomplishment and happiness), owners may be willing to sell for lower corporate value perceptions, since they may perceive that they have reached their financial and nonfinancial goals and are satisfied with their achievements. This seems to be an area ripe for future research.

Future research could empirically investigate the predictive power of our propositions. Moreover, and although we position our ideas in an ongoing ownership context, it seems fruitful to test our predictions in the context of actual transfers of corporate control. Scholars could for example investigate how the proposed measures depicted in Table 1 can help in explaining transactions likelihoods or the length of negotiation periods, assuming that strong positive SEW perceptions and hence overvaluation of the equity stake reduce the likelihood of transactions and extend negotiation periods.

More broadly, the AIM holds promise in explaining how affect biases cognitive processes beyond value perceptions. Within the family firm context it seems interesting to examine whether the AIM variables introduced in Table 1 are able to elucidate family firm behavior that has been attributed to SEW considerations (up to date measured mainly through family ownership), such as the reluctance of family firms to internationalize, to diversify or to enter less risky governance forms (Gomez-Mejia et al., 2007; Gomez-Mejia et al., 2010; Miller et al., 2010). Beyond the family firm context, introducing the AIM variables as mediators in analyses between individual level features of decision makers and firm level behavior may add additional clarity to the root causes of organizational behavior.

Finally, we see an opportunity to examine the linkages between the institutional setting as an unexplored situational variable, level of affect infusion, and the creation of SEW. Building on recent findings on the link between the institutional environment and entrepreneurial cognitions (Lim, Morse, Mitchell, & Seawright,

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2010), we propose that the institutional setting, in particular the protection of property rights, should be considered as a situational feature for affect infusion. With strong protection of property rights, assets tend to be allocated more efficiently, since secure possession of physical and intellectual assets eases their transfer to the most efficient use (McMullen, Bagby, & Palich, 2008; Whitley, 1999). In such a context, possessions are more likely to be traded and held for exchange, making value appraisals less affect-infused. In contrast, when property rights' protection is low, assets will more likely be held for use and ongoing ownership, which makes it more likely that assets are imbued with personal meaning (Strahilevitz & Loewenstein, 1998).

### **2.6.2 Implications for Practitioners**

Our study has important implications for practitioners. If owners consider more than the monetary value of the firm, they may persist with marginal activities, delay a sale, or hold on to an underperforming business, which raises the economic cost in case of bankruptcy (Shepherd et al., 2009). By exploring sources of SEW, we make owners aware of potential sources of economic costs. These costs, however, accrue not only at the level of the individual owner, but also at the societal level, since SEW perceptions restrict or impede the efficient allocation of capital. Given that in many cases SEW considerations make a transfer of corporate control less likely being aware of these affect-based drivers may encourage owners to distance themselves from their firms in order to enable timely succession (Miller, Steier, & Le Breton-Miller, 2003). Therefore, raising awareness of the sources of affect infusion seems critical, since it resets these biases and helps avoid undesired effects (Erber & Erber, 1994).

While SEW considerations may have detrimental effects on controlled firms, it is important to acknowledge their potential benefits. By lowering the impact on threshold levels of performance (Gimeno, Folta, Cooper, & Woo, 1997) and costs of owner-provided capital, SEW provides the necessary leeway for entrepreneurial activity to succeed, which may be particularly beneficial when others are unable to assess or may underestimate the value of ownership, such as in founding, innovation, and turnaround processes. Taken together, practitioners need to be aware not only of the drawbacks, but also the potential benefits of SEW.

### **2.6.3 Conclusion**

The claim that family firms (the majority of firms) should be motivated by both financial and nonfinancial value perceptions challenges some of the most fundamental assumptions of economic theory. Our paper, which explores affect as a source of such nonfinancial value perceptions, contributes to the further establishment of SEW theory regarding family firm ownership. This is a fascinating area of research that deals with the most fundamental assumptions of corporate ownership.

## **3 The Role of Information Asymmetry in the Choice of Entrepreneurial Exit Routes**

Tobias Dehlen, Thomas Zellweger, Nadine Kammerlander, and Frank Halter

### **3.1 Abstract**

Our quantitative study investigates the determinants of family external versus family internal entrepreneurial exit routes. Building on information asymmetry theory, we examine how an owner's inferior knowledge about the abilities of potential family external entrants (in contrast to family internal successors) renders a family internal transfer more likely. This information asymmetry, however, can be mitigated by activities such as owners' screening and transfer candidates' signaling efforts to reveal the candidates' abilities. Our data exhibits a positive effect of signaling and an inverted U-shaped effect of screening on the probability of external succession. Firm age, as a driver of emotional attachment, weakens these effects.

### **3.2 Introduction**

Entrepreneurial exit – the transfer of control over an entrepreneurial firm to one or several individuals or an organization, alternatively the liquidation of the firm – is an important entrepreneurial phenomenon that affects not only the entrepreneur and the firm but also the industry and, in some cases, even the regional economy (DeTienne, 2010). Each firm owner must eventually exit his or her business; however, there are various exit routes to choose from. The choice of a specific exit route influences the future prosperity of the firm. For example, a recent study by Wennberg and colleagues (2011) on Swedish family firms indicates that family external transfers of control as compared to family internal successions are associated with superior short- and long-term performance, but are more prone to firm failure.

Despite these advances in the field, particularly with respect to the performance implications of various exit routes, the determinants of an entrepreneurial owner's choice of a specific exit route still remain largely unexplored (DeTienne & Cardon, 2012). Entrepreneurship scholars have only recently begun to investigate the influence

of determining factors such as the owners' entrepreneurial characteristics (DeTienne & Cardon, 2012), their motivations (DeTienne & Chandler, 2010), and their framing (Wennberg, Wiklund, DeTienne, & Cardon, 2010) on entrepreneurial owners' exit route decisions. Until now, this stream of research has focused primarily on the incumbent's perspective and has ignored the dyadic setting of firm-transfer processes (DeTienne, 2010; Graebner & Eisenhardt, 2004). Family business scholars, on the other hand, have long emphasized the tendency of owner-managers to pass on their businesses within the family (e.g., Le Breton-Miller, Miller, & Steier, 2004; Lee, Lim, & Lim, 2003) due to nepotism (Barach, Gantisky, Carson, & Doochin, 1988; Gersick, Davis, McCollom Hampton, & Lansberg, 1997), and have even included 'transgenerational intention' in the definition of family businesses (Chandler, 1990; Chua et al., 1999; Ward, 1987). In family business research, variance in the choice of exit routes is ascribed primarily to the presence of several individual, relational, financial, and contextual factors that impede the preferred internal succession (De Massis, Chua, & Chrisman, 2008); however, most of these findings lack quantitative support.

Enhancing knowledge of the antecedents of exit route decisions is crucial because such choices fundamentally affect firm performance after the transfer (Wennberg et al., 2011). In this study, we build on information asymmetry theory to explain variance in the exit route decisions of the owner-managers of privately owned firms. Information asymmetry is a theoretical lens that has recently gained substantial attention in the entrepreneurship field (e.g., Dawson, 2011; Wennberg et al., 2011). We therefore follow the emerging stream of family business research that draws on more economic-rational explanations to investigate succession processes (e.g., Lee et al., 2003; Royer, Simons, Boyd, & Rafferty, 2008) by arguing that firm owners are economically motivated to apply measures that reduce information asymmetry which, in turn, affect the owners' exit decisions. However, family business scholars, particularly those who address socioemotional wealth considerations (e.g., Gomez-Mejia et al., 2007), have long emphasized that an owner's attachment to his or her firm is particularly rooted in non-economic reasons, such as legacy concerns, which grow stronger over time (Zellweger et al., 2012). To account for this perspective, we also investigate how the combination of economic factors and concerns regarding socioemotional wealth affects exit route decisions.

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We thus aim to answer two research questions: (1) What is the relationship between measures that affect information asymmetry and the probability of external vs. internal exits? and (2) How does this relationship vary with firm age, which is a key driver of emotional attachment? To answer these questions, we probe survey responses of owner-managers of SMEs in three European countries, who have recently taken over the management and ownership of their firms.

Our study contributes in several ways to research on entrepreneurial exit, family businesses, and information asymmetry. First, we provide a novel economics-based, so far under-investigated explanation for owners' preference for family internal successions. Second, by studying the effect of measures that reduce information asymmetry between incumbents and their successors, we advance the literature on antecedents of entrepreneurial exit route decisions. Third, this study integrates two important but previously unconnected strands of literature: information asymmetry and research on socioemotional wealth. Considering economic and non-economic factors together makes it possible to draw a more nuanced picture of how these factors affect exit route decisions. Fourth, by investigating simultaneous transfers of ownership and management instead of merely management transitions, this study extends beyond the previous work conducted by family business scholars. Finally, this is, to the best of our knowledge, the first study to quantitatively investigate the role of information asymmetry in entrepreneurs' exit choices.

### **3.3 Theoretical Foundations**

#### **3.3.1 Asymmetric Information**

The asymmetric information perspective highlights that “information is imperfect, obtaining information can be costly, [and] there are important asymmetries of information” (Stiglitz, 2000; p. 1441). Information asymmetry occurs when the knowledge of one contracting party is inferior to that of the other party regarding the counterparty's true intentions and planned activities (Mas-Colell, Whinston, & Green, 1995; Spence, 1976) or the quality of exchanged goods (Akerlof, 1970). Examples of the latter include employers who are eager to know a potential employee's abilities prior to the job offer (Stiglitz, 2000), boards that lack sufficient knowledge on the characteristics of firm-external CEO candidates (Zajac, 1990), and investors who want

to know the true value of a firm before they acquire it (Capron & Shen, 2007) or invest in it (Cohen & Dean, 2005).

The literature proposes several mechanisms that may be used to overcome information asymmetry. According to the agency literature, information asymmetry regarding intentions and planned activities can be alleviated via contingency or incentive contracting and monitoring (e.g., Fama, 1980; Jensen, 1986; Kreps, 1997; Wiseman & Gomez-Mejia, 1998). Information symmetry regarding the quality of goods exchanged can be reduced via signaling (the active conveyance of information by the knowledgeable party) and screening (the active seeking of additional information by the uninformed party) (Carpentier, L'Her, & Suret, 2010; Janney & Folta, 2003, 2006; Lee & Venkataraman, 2006; Stiglitz, 2000).

In entrepreneurship studies, information asymmetry has recently gained substantial attention and research based on this theoretical perspective has been conducted to investigate the decision-making of private equity firms regarding the acquisition of family firms (Dawson, 2011), the choice of founder vs. non-founder CEOs in firms issuing IPOs (Jain & Tabak, 2008), and entrepreneurial vs. non-entrepreneurial career choices (Lee & Venkataraman, 2006).

### ***3.3.1.1 Asymmetric Information and Entrepreneurial Exit Decisions***

In general, retiring entrepreneurs can choose among several types of exit routes: liquidation; public quotation; family internal succession; or sale to employees, to an independent party, or to another firm (Birley & Westhead, 1993; DeTienne & Cardon, 2012; Petty, 1997). Among the SMEs that are not liquidated upon the entrepreneur's exit, only a small number is introduced to the stock market (Westhead, 2003). Given our focus on exit routes that involve individual entrepreneurs as incumbents and successors and information asymmetry between those two parties, we henceforth limit our discussion to family internal succession on the one hand and sale to employees (management buy-out; MBO) or independent individuals (management buy-in; MBI) on the other hand, the two latter labeled external succession. As such, our study focuses on the most prominent exit routes within SMEs in Western economies (Howorth et al., 2004).



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Asymmetric information is a crucial determinant of entrepreneurial exit routes (Howorth, Westhead, & Wright, 2004; Scholes, Wright, Westhead, Burrows, & Bruining, 2007) because such transactions are affected by four types of asymmetric information (Halter, Dehlen, Sieger, & Wolter, 2012). First, the succession candidate lacks information about the ‘quality’ of the transaction goods (i.e., the current state of the firm, in particular, its financial soundness). Second, the succession candidate is unaware of the incumbent’s intentions and planned post-succession behavior. For example, the potential successor typically does not know whether the former business owner plans to re-open a competing business after closing the deal. Third, the incumbent has inferior information about the successor’s abilities (i.e., whether he or she is capable of successfully continuing the business operations). Finally, the incumbent is unable to determine or predict the successor’s intentions and post-succession behavior (i.e., whether the successor will comply with contractual and non-contractual agreements related, for example, to the incumbent’s opportunity for future involvement in the business and future access to information). Due to this lack of information, each contracting party is likely to assume the worst-case scenario in order to minimize his or her own risk (Dawson, 2011) and may ultimately refrain from engaging in the transaction. Hence, the four types of information asymmetry between the incumbent and the successor may exacerbate and, in some cases, ultimately hinder entrepreneurial firm transfers.

### ***3.3.1.2 Incumbent’s Information Asymmetry on the Abilities of Successor Candidates***

We focus on the incumbent’s lack of information about the candidate’s abilities because, despite some recent advances, the incumbent’s perspective still remains under-investigated (DeTienne, 2010; Graebner, 2009; Graebner & Eisenhardt, 2004). Most entrepreneurship research until now has focused on the successor’s perspective (Capron & Shen, 2007; Dawson, 2011) and has thereby neglected the pivotal role of the incumbent who ultimately decides when and to whom he or she will transfer the business.

Recent research shows that private firm owners care about the company’s post-succession prosperity and indicates that the outlook for the firm’s future affects their exit decisions (Cardon, Zietsma, Saparito, Matherne, & Davis, 2005; DeTienne, 2010;

Graebner & Eisenhardt, 2004). This finding is consistent with family business research that purports the inextricable intertwining of owner and business and the subsequent concern about the future wellbeing of the organization and its stakeholders (Chrisman, Chua, & Litz, 2003; Howorth et al., 2004; Niedermeyer, Jaskiewicz, & Klein, 2010; Sharma & Manikuttu, 2005). We thus expect a firm owner to carefully consider the ability of the potential successor to operate the firm successfully before making an exit decision. In the presence of information asymmetry regarding the candidate's abilities, the firm owner cannot be sure that the potential successor will be able to successfully continue the firm's business operations.

The level of information asymmetry regarding a successor's abilities is profoundly different for family internal as opposed to family external candidates (Howorth et al., 2004). Whereas incumbent owners often have limited information about an external candidate's abilities before the succession takes place, they are usually highly informed about the level of education, experience, and ultimately ability of family members. Extensive knowledge and, thus, low information asymmetry regarding the abilities of family internal candidates is based on the long-term intimate relationships that are typical between senior and junior generations. Senior generation family members are able to observe the junior family member's level of knowledge, behavior, and abilities in various contexts, be it in personal and rather private settings, in private conversations about the firm at home or frequently also in part-time employment in different functional departments of the firm. This results in a detailed and comprehensive understanding of the family candidate's abilities. The incumbent possesses first-hand insight not only into the potential successor's level of ability but also into his or her learning capacity. Thus, the incumbent will have an enhanced understanding of the candidate's potential to operate the firm successfully (Holmstrom, 1982). Just as insurers can learn about contractors' risk profiles or employers can learn about employees' abilities through information accumulation via multiple interactions (Farber & Gibbons, 1996; Palfrey & Spatt, 1985), incumbents have a natural informational advantage in assessing family internal candidates. Similar to board decisions regarding CEO succession (Zhang, 2008), an incumbent's decision regarding the potential succession of a family member "will generally be one in which the problem of information asymmetry is less severe" (Zajac, 1990; p. 220). Ultimately, when the successor is a member of the family, the incumbent's

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information set tends to converge with that of the candidate such that the incumbent's level of information about the candidate's abilities is near perfect.

This line of argument will not generally apply to family external candidates such as employees (MBO) or, even less so, to firm external buyers (MBI) due to the reduced time of assessment, number of observation points, and variation of contexts of such appraisals. Due to this information asymmetry, incumbent owners can choose either internal succession candidates with known abilities or external ones with unknown abilities, whereby the pool of potential external successors is larger than the pool of internal candidates. Assuming a similar distribution of actual abilities among the candidates from both pools, there is a high probability that the most capable individual will be external due to the larger external pool size. At the same time, however, it is likely that the external pool contains candidates with abilities that are inferior to those of the internal candidates. Because of the lack of knowledge about which of the external candidates is a "star" and which one is a "lemon," firm owners show an inherent preference for family successors if there is an internal candidate with at least a minimum level of ability<sup>2</sup>.

### ***3.3.1.3 Mechanisms to Reduce the Level of Information Asymmetry***

Prior research shows that individuals rely primarily on two types of mechanisms, signaling and screening, to lower the level of information asymmetry (Stiglitz, 2000). Signaling is the active disclosure of information by the better-informed party (Connelley et al., 2011). In the context of our study, signaling denotes external succession candidates' attempts to demonstrate their abilities to the incumbent decision makers and to differentiate themselves from other, less capable potential candidates. To be effective, a signal must be "alterable" (Spence, 1973; p. 357), "difficult or costly for others to imitate and [...] visible" (Arthurs, Busenitz, Hoskisson, & Johnson, 2009; p. 362).

As Spence (1973) suggests, a variety of potential signals to reveal one's abilities exists. In the context of entrepreneurial succession, human capital attributes that positively affect entrepreneurial success – such as education, experience,

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<sup>2</sup> From a statistical standpoint, this assumption requires risk averse behavior by the decision maker. This assumption is reasonable because the incumbent owner in a transfer situation will feel connected to the firm and is therefore likely to be loss averse in contemplating the transfer of the firm to a successor.

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knowledge and skills (Reuber & Fischer, 1994; Unger, Keith, Hilling, Gielnik, & Frese, 2009; Unger, Rauch, Frese, & Rosenbusch, 2011) – could serve as signals of a candidate’s entrepreneurial abilities. Henceforth, we will concentrate on two of these signals, education and prior work experience, which will serve as proxies in our quantitative testing of the hypotheses.

One of the most commonly studied signals to express superior individual abilities is education (Spence, 1973). A capable candidate can obtain a high level of education at a lower cost and with a lower level of effort than a less capable candidate and can easily communicate his or her educational achievements to outsiders. As the potential future benefits (e.g., the transfer of a business) are likely to outweigh the cost of education for – and in most cases only for – a highly capable candidate, education fulfills the formal criteria outlined above for signaling.

Education serves as a valid signal not only in the job market (Spence, 1973) and in the selection of CEO successors for large corporations (Hitt & Tyler, 1991; Zhang & Wiersema, 2009) but also in the entrepreneurial transfer context.<sup>3</sup> As many scholars have noted, “[e]ducational level reflects an individual’s cognitive ability and skills” (Jiang, Zimmerman, & Guo, 2012; p. 51) as well as his or her capacity to perform important leadership tasks such as processing information, handling administrative complexities and driving change (Westphal & Zajac, 1995). Jiang and colleagues (2012; p. 51) argue that “a higher level of education earned by the entrepreneur may increase stakeholders’ confidence in their capability of managing a new business (Carter et al., 2003) and signal potential lenders, employees, and customers about the future productivity of the business (Backes-Gellner & Werner, 2007).”

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<sup>3</sup> Moreover, job markets and entrepreneurial markets exhibit many similarities. In both markets, the decision maker (i.e., the employer or the entrepreneur) needs to make decisions under uncertainty because of the dearth of information regarding the abilities of the candidate (i.e., the prospective employee or successor). In both cases, there is a great deal at stake for the decision maker. Just as the employer fears hiring an unproductive person and consequently having to pay wages for inferior job performance, the entrepreneur is apprehensive about risking the future prosperity of the firm. Depending on the job requirements (which Spence (1973) did not clearly specify in great detail), the level of task complexity faced by an entrepreneurial successor may be fairly comparable to that described by Spence for some positions (e.g., CEO, business unit director, manager) but not for others (e.g., blue collar worker). Two fundamental differences between the two markets exist. First, an employer can reverse erroneous decisions at a later point in time by terminating the work contracts of employees with insufficient abilities, but a former owner does not usually have a way to alter the ownership and management status of the successor after the sale of the firm. Second, in the course of his or her professional life, an employer typically makes a large number of employment decisions, but unless firm owners are habitual entrepreneurs, they usually exit a business only once. A probable consequence of these two differences is that firm owners who are making decisions about a successor will be less likely than employers who are making decisions about employees to learn about the actual effectiveness of signals and screening measures.

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As an effective signal, high levels of education indicate candidates' superior abilities to the incumbent firm owner, thus dismantle the information asymmetry between the incumbent and the external succession candidate, and ultimately diminish the owner's natural tendency to favor a family internal successor. As a consequence the probability of an external succession increases. We therefore argue that the higher the succession candidate's level of education, the more likely is an external as compared to an internal succession. Put formally:

**H1a:** *The probability of a family external as opposed to a family internal succession increases with the succession candidate's level of education.*

A second effective signal in the context of entrepreneurial exits is the prior general work experience of the succession candidate (Unger et al., 2011). Similar to the argumentation applied for education as a signal, professional experience is alterable by the candidate and visible to the outsider, that is the incumbent owner. Moreover, the cost and effort associated with obtaining appropriate work experience are lower for a candidate who has superior abilities than for a candidate who has inferior abilities. As a human capital investment, there is a (modest) positive association between professional experience and entrepreneurial success (Unger et al., 2011), rendering such experience an effective signal in the context of entrepreneurial exit (Aidis and van Praag, 2007; Kim et al., 2006). A long period of professional experience may be associated with the accumulation of task-specific and general knowledge, increased familiarity with challenging professional situations, and previous exposure to a variety of business and entrepreneurial contexts. As a consequence, one can assume that due to various learning effects, individuals with longer professional experience have acquired the capabilities over time that they require to successfully manage a firm (Parker & van Praag, 2012).

In analogy to our theorizing regarding the effect of candidates' education on the probability of external exit routes, we argue that longer periods of a candidate's professional experience prior to the incumbent entrepreneur's exit reveal the capable candidate's abilities to the owner, diminish the information asymmetries, and consequently increase the probability of an external succession. Put formally:

**H1b:** *The probability of a family external as opposed to a family internal succession increases with the duration of the succession candidate's professional work experience.*

In addition to signaling that is accomplished by the individual with the superior information (here, the succession candidate), screening activities conducted by the individual with the inferior information (here, the incumbent) effectively reduce information asymmetry (Garen, 1985; Lee & Venkataraman, 2006; Stiglitz, 1975). Screening comprises all active efforts that the less-informed party initiates to acquire improved knowledge about the transaction partner. In general, greater investments of money and effort for screening purposes yield superior information (Riley, 1979). A frequently cited example of screening is an employer's assessment of job-application documents that reflect a candidate's prior achievements (Lee & Venkataraman, 2006; Riley, 1979) for hiring or salary decisions.

In the context of entrepreneurial succession, incumbents can use a broad spectrum of screening techniques that require varying levels of effort to obtain information about the abilities of an external succession candidate. Similar to the arguments on education, job market screening mechanisms can be adapted to entrepreneurial exits: low-effort screening includes the application of formal selection criteria based, for instance, on previous entrepreneurial experience; more advanced and costly routines, which in turn are likely to render more detailed and reliable information, encompass assessment centers or temporary employment before the transfer.

High investments in screening activities yield superior information about the external candidate's abilities, thus mitigating information asymmetry. In line with our earlier reasoning, we thus hypothesize that this decreased information asymmetry heightens the probability of an external transfer. We also propose, however, that such a monotonically increasing relationship is only valid until a certain level of screening. Although high levels of screening further decrease (albeit marginally) the incumbent's information asymmetry, potential candidates might be deterred by excessive screening for two major reasons: First, excessive screening such as probationary contracts might be costly for highly qualified succession candidates due to their opportunity costs (Riley, 1979). Second, based on the assumption that intrinsically motivated candidates act as stewards rather than as agents, they might feel demotivated by the incumbent's

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control mechanisms (Chrisman, Chua, Kellermanns, & Chang, 2007) which "lower stewards' motivation, negatively affecting their pro-organizational behavior" (Corbetta & Salvato, 2004; p. 360). Both factors might reduce a potential candidate's interest in pursuing the succession process and could ultimately block what might otherwise have been a successful external transfer of control.

In summary, information asymmetry can be diminished via screening activities, which in turn could increase the likelihood of an external ownership transfer rather than an internal one. Above a certain level of screening, however, potentially eligible candidates will lose interest in becoming successors; thus, the probability of an external vs. internal succession will decrease with rising screening activities above the threshold level.

**H2:** *The probability of a family external as opposed to a family internal succession is related to the incumbent's screening effort in an inverted U-shaped form.*

### **3.3.2 Firm Age as Driver of Emotional Attachment**

Our reasoning up until this point has been based on the role of asymmetric information in entrepreneurial exit choices and has emphasized the economic factors that influence such decision making. However, owners' preferences regarding these decisions are also likely to be influenced by non-economic factors such as legacy concerns. For example, firm age, which serves as proxy for the duration of its ownership by the incumbent owner and his/her family (Zellweger et al., 2012), is associated with heightened emotional attachment to the firm (DeTienne, 2010). It subsequently increases the reluctance to pass the business to a family outsider (Salvato et al., 2010; Sharma & Manikutty, 2005) because over a long period of ownership, the identity of incumbent owners often becomes inextricably intertwined with that of their firms (Berrone et al., 2010; Cruz, Justo, & De Castro, 2010a). This is in line with recent research on the concept of socioemotional wealth (SEW) among firm owners (Chrisman & Patel, 2012; Gomez-Mejia et al., 2007), which encompasses all socioemotional elements of the owner's utility functions that relate to the "stock of affect-related value" (Berrone et al., 2010, p. 82) invested in the firm. Research on SEW and behavioral theory reveals that, over time, owners build up non-economic

utility and attachment to the firm, which, in turn, influences entrepreneurial behavior substantially (Cyert & March, 1963; Wiseman & Gomez-Mejia, 1998).

Zellweger and colleagues (2012) argue that SEW perceptions grow over time as a result of extended self-attribution (Belk, 1988; Boyce, Brown, McClelland, Peterson, & Schulze, 1992). Over time, possession rituals imbue the owned asset with a personal meaning that establishes a connection between owner and asset, resulting in a perceived singularity in the owner-asset-relationship (Grayson & Shulman, 2000). If ownership has been passed on within the family during a long period of time, the asset will possess a high level of historicity. In such cases, the ownership stake in the firm becomes part of the owner's legacy and comes to be seen as a sort of heirloom. As a consequence of those increased stocks of SEW, with mounting experience owners exhibit increasing preference for the status (Burmeister & Schade, 2007), which is the internal succession mode in our setting.

We therefore argue that incumbents of old firm are less willing to "let their business go" to family external successors because doing so would decrease SEW, whereas family internal succession would preserve SEW. We accordingly propose that emotional attachment, which increases with time, decreases the probability of an external vs. internal ownership transfer.

**H3:** *Firm age, as a driver of emotional attachment, is negatively related to the probability of a family external as opposed to a family internal succession.*

In addition to the direct impact of firm age respectively emotional attachment on choices regarding exit routes, we also hypothesize that a moderating effect exists. SEW affects the reference point that incumbent owners use as a baseline for their entrepreneurial decisions (Zellweger et al., 2012). When the level of SEW is high, this reference point is closely tied to the incumbent owner's preference for an internal succession due to reluctance to become entirely detached from their firms, as discussed above. Therefore, the decisions made by these incumbent owners are likely to reflect their desire to keep the business in the family. Any information that is inconsistent with this preference is likely to be underestimated or neglected (Lord, Ross, & Lepper, 1979).

In many cases, signaling and screening efforts yield information that indicates that there are indeed external succession candidates whose capabilities exceed those of



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the internal candidates. However, because this information will contradict an incumbent owner's natural preference for family internal succession candidates, we argue that the incumbent owner will be prone to under-estimate or dismiss such information. As a result, firm age, as a driver of emotional attachment and SEW, weakens the effectiveness of signaling and screening mechanisms. Put formally:

**H4a:** *The positive effect of education on the probability of a family external as opposed to a family internal succession is attenuated by firm age as driver of emotional attachment.*

**H4b:** *The positive effect of work experience on the probability of a family external as opposed to a family internal succession is attenuated by firm age as driver of emotional attachment.*

**H4c:** *The inverted U-shaped effect of screening on the probability of a family external as opposed to a family internal succession is attenuated by firm age as a driver of emotional attachment.*

## **3.4 Methods**

### **3.4.1 Sample**

We test our hypotheses using a sample of small- and medium-sized (less than 250 employees), privately held firms from Germany, Switzerland, and Austria that had been transferred to one or several individuals within the previous 10 years. We restricted our sample to small- and medium-sized firms because transfers to one or several individuals (which constitute the focus of our investigation) occur more frequently with such businesses than with large enterprises.

To create our sample, we obtained the addresses of 42,500 randomly chosen small- and medium-sized from the Dun & Bradstreet databases for the countries in question. One third of these businesses were medium (50-249 employees), one third small (10 to 49 employees) and one third micro enterprises (0 to 9 employees).

We mailed a comprehensive questionnaire to the current owner-managers of the sampled firms. The response rate was 10.3%, which is comparable to the response rates of other studies that targeted entrepreneurs and top-managers (Cruz et al., 2010;

Eddleston et al., 2012; Schulze et al., 2001). We restricted our final analysis to the responses of owner-managers who had taken over their businesses within the previous 10 years (1,036 survey responses). 423 of those returned questionnaires contained missing data and were thus excluded from the analysis, resulting in a final sample size of 613 observations.<sup>4</sup> Following other studies of privately held firms (e.g., Kellermanns, Eddleston, Barnett, & Pearson, 2008), we employed a key informant approach (Kumar, Stern, & Anderson, 1993; Seidler, 1974) based on the assumption that CEOs are the individuals who are most substantially and directly involved in the entrepreneurial exit processes.

To assess the risk of non-response bias, we compared the data obtained from early and late respondents using a one-way ANOVA for which the order in which the responses were returned was used as the determining factor. This test is based on the assumption that late respondents are more similar to non-respondents than to early respondents (c.f., Chrisman, Chua, & Litz, 2004; Oppenheim, 1966). We found no statistically significant differences between early and late responses in terms of our explanatory variables mitigating concerns about non-response bias.<sup>5</sup>

Next, we assessed the likelihood of common method variance, which is caused either by drawing on the same source to obtain the dependent and the independent variables or by specific item characteristics that strengthen respondents' tendency to answer the survey questions in a distorted way. We took several *ex ante* procedural

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<sup>4</sup> As a post-hoc test to scrutinize any bias caused by the missing data, we used multiple imputation techniques, based on STATA's multiple imputation command set (*mi*), hence following Rubin (1987). We had a non-nested missingness pattern in our controls. The results of the analysis with three imputations used to simulate plausible values for our missing controls (Schafer, 1999) were not substantially different from the original results we obtained (which are reported in section 3.4). This finding suggests that systematic bias generated by excluding cases with missing values – one threat of missing values (Schafer and Graham, 2002) – is unlikely to be a concern in our study. Except for the firm age/screening interaction, all of the hypothesized effects were supported. We thank one anonymous reviewer for pointing us to this additional robustness test.

<sup>5</sup> To assess the degree to which our sample is representative of the total population of SMEs that have recently undergone succession in the countries in question, we compared the descriptive characteristics of our sample with the characteristics of the samples used in comparable studies. The average age of the firms in our sample (62 years) is comparable to the average age of the firms in a sample containing German and Swiss family businesses investigated by Zellweger and colleagues (Zellweger et al., 2012) (67 years for Swiss firms and 49 years for German firms), and it is older than the average age of the firms in a sample of startup firms included in the 2007 Global Entrepreneurship Monitor's (GEM) report on Swiss firms (17 years) (Volery et al., 2007) and German firms (19 years) (Sternberg and Lückgen, 2005). The average age of the owner-managers of the firms in our sample (45 years) is similar to the average ages of the owner-managers of the Swiss firms (46 years) and the German firms (44 years) in the GEM reports, and it is younger than the average age of the owner-managers of the firms studied by Zellweger and colleagues (2012) (51 years for firms in Switzerland and 52 years for firms in Germany). This difference is reasonable because our focus is owner-managers who only recently succeeded the incumbent owners, whereas the sample studied by Zellweger and colleagues includes successors as well as incumbent owners. GEM, on the other hand, focuses on founders, i.e., individuals who recently started new businesses.

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steps during the data collection process to decrease the risk of this type of error. First, the items were fact-based and constructed in the simplest manner possible (Tourangeau, Rips, & Rasinski, 2000). As common method bias is mostly related to perceptual measures, the fact-based variables used in our questionnaire are unlikely to be affected by such problems (Chang, Van Witteloostuijn, & Eden, 2010). Second, the questionnaire that we used was embedded in a comprehensive survey on the economic relevance of entrepreneurial exits within the German-speaking areas of Europe. This overall design and the particular order of the questions within the questionnaire did not provide the respondents any indication of the expected correlations. It is therefore unlikely that the respondents “edit[ed] their responses to be more [...] consistent with how they [thought] the researcher want[ed] them to respond” (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; p. 888). Third, we assured the respondents of the strict confidentiality of their anonymous responses, thereby decreasing the probability of social desirability bias in respondents’ answers (Podsakoff et al., 2003). For an ex-post verification that our procedural efforts to reduce common method variance were effective, we performed a single-factor test, as suggested by Podsakoff and Organ (1986). An exploratory factor analysis of all of the variables used in this study revealed two factors with Eigenvalues greater than one, jointly accounting for 50.1% of the total variance. To further eliminate concerns regarding common method bias, we conducted a confirmatory factor analysis (Podsakoff et al., 2003). The corresponding structure fits the data (CFI= 0.2685, RMSEA= 0.1128) better than the one-factor structure (CFI=0.0000, RMSEA=0.1286). In sum, the various ex-ante precautions and the results of the post-hoc analyses indicate that common method variance is unlikely to distort the results of our study (Podsakoff et al., 2003).

## **3.4.2 Variables**

### **3.4.2.1 *Dependent Variable***

We measured the dependent binary variable, choice of exit route, by asking survey respondents whether the last entrepreneurial exit (i.e., the most recent transfer of ownership and management of their firm) was family internal (0) or external (1). Family internal successions were defined as handing over the firm to a child, another relative by blood or law (spouse, nephew, etc.), or several relatives as group. External

exits include transfers to individuals or groups of individuals to whom the incumbent has no familial ties; thus, in line with Wennberg et al. (2011), encompassing MBOs and MBIs, but excluding transfers to institutional buyers. Our sample does not include any ambiguous cases in which two or more individuals who were internal and external to the family jointly assumed control.

### ***3.4.2.2 Independent Variables***

We assessed the level of education by ranking survey respondents' indications of their highest educational achievement on a 7-point scale: no completed education (0), elementary and secondary school (1), high school diploma (2), apprenticeship (3), master craftsman (4), university degree (5), and doctoral degree (6). Moreover, we asked the respondents to indicate in years the length of their general work experience prior to the succession. To determine the level of screening, we asked the survey respondents to indicate screening efforts made by the incumbent before the transfer of the firm to the successor on a 7-point scale: review of certificates (0), review of recommendation letters (1), the use of head-hunters (2), trial work (short-term) (3), the use of assessment centers (4), management participation (short-term) (5), and management participation (long-term) (6). To test the hypothesized curvilinear relationship for screening activity, we also calculated the squared value of the term for screening.

### ***3.4.2.3 Moderating Variables***

Building on recent research (Zellweger et al., 2012), we used firm age as a conservative proxy for emotional attachment. To obtain information regarding firm age (in years), we asked the respondents about the year the firm was founded. We calculated the interaction term for firm age and education, work experience, screening as well as screening squared. To avoid multi-collinearity of the squared and interaction terms, we centered all of the variables by subtracting their respective means (Aiken & West, 1991; Li & Tang, 2010).

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#### **3.4.2.4 Control Variables**

We controlled for firm size using the natural logarithm of the number of employees. Two types of influence are conceivable: First, small firms might find family external succession more difficult because it is challenging to attract the interest of qualified external candidates. Alternatively, it might be more difficult for larger firms to employ family external succession because of the increased investment that would be involved and the consequential financing obstacles that the successor might encounter.

Moreover, we controlled for the number of shareholders at the time of the firm transfer, since more shareholders might hamper consensus regarding a family internal candidate. Similarly, we controlled for the number of managing directors at the time of the transfer because a larger number of managing directors could potentially increase the number of candidates interested in a buyout. Next, we included a time dummy variable indicating whether the succession took place more than 5 years earlier (with a value of 1 for distant succession). The purpose of this control was to rule out any time-effects and/or to check for unobserved environmental effects that might have affected exit decisions that occurred more than 5 years before the date the respondent completed the survey. To control for any cultural or legal differences that might have affected the choice of external vs. internal succession, we included country-level dummies (Germany, Switzerland, and Austria). We also controlled for industry as a proxy for the level of risk and the economic outlook of the firm because such factors could potentially influence particularly the interest of external buyers.

Last, we included a dummy variable for the financing structure used in the transfer process to account for whether an earn-out structure was applied. When the incumbent maintains an ownership stake post succession, he or she experiences ongoing risk exposure and is likely to continue participating in business-related decisions. Earn-outs, which are intended to reduce information asymmetry regarding the behavior post succession, are potentially related to external succession. We coded transfers structured as earn-outs as 1 and others as 0.

#### **3.4.3 Controlling for Endogeneity**

As the availability of willing and capable family members is necessary for successful family internal succession (De Massis et al., 2008), we had to account for the

possibility that some incumbent owners may have been forced to choose a family external exit route in the absence of family members as succession candidates. Even though we lack detailed data about the family structure of the incumbents, we believe that such potential self-selection bias does not undermine our reasoning and findings for two reasons. First, we employed a broad definition of family internal succession, including not only transfers to direct descendants of the incumbent but also transfers to more distant relatives, including in-laws. Therefore, it is unlikely that the incumbent owners would not have had any potential family candidates to consider and would thus have been forced into the external category. Second, to further allay endogeneity concerns, we employed the two-step approach developed by Heckman (1979). We first estimated a binary dependent variable model to identify the probability of selection into either of the two succession groups. As a selection variable, we used a binary variable indicating whether ownership and management were transferred simultaneously or at separate points in time. We argue that simultaneous transfer is more likely in cases involving an external successor and sequential transfer in cases involving an internal successor (Sharma & Manikutty, 2005). Based on this estimation, we calculated the inverse Mills ratio, which we include in our second-step logit estimation to control for the potential of self-selection bias.

### **3.4.4 Analyses and Results**

#### **3.4.4.1 *Descriptive Data***

Table 2 presents a correlation matrix and descriptive statistics for all of the variables used in the models reported. In general, the correlations only reach low to moderate levels. To rule out the possibility of multicollinearity, we analyzed the variance inflation factor in our model. Because none of the values in question exceed critical levels, we can conclude that multicollinearity was not a problem in our analyses (Hair, Black, Babin, Anderson, & Tatham, 2006; Tabachnick & Fidell, 1996).

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13
1 External	0.24	0.43													
2 Log Employees	3.07	1.43	-0.1311*												
3 No. of Shareholders	2.41	2.63	0.1150*	0.2346*											
4 Number of MDs	1.95	1.24	0.0177	0.3448*	0.2311*										
5 Distant Takeover	0.64	0.48	-0.1144*	0.0999*	-0.0048	0.0084									
6 Germany	0.54	0.50	-0.2498*	0.3587*	-0.0084	-0.0734	0.1285*								
7 Switzerland	0.29	0.45	0.3245*	-0.0910*	0.1177*	0.1545*	-0.0257	-0.6944*							
8 Primary Sector	0.14	0.35	-0.0984*	-0.1902*	-0.0846*	-0.0454	0.0189	-0.1540*	0.0106						
9 Secondary Sector	0.35	0.48	0.0866*	0.1047*	0.0409	0.0189	0.0415	-0.0664	0.1584*	-0.3000*					
10 Earn-out	0.20	0.40	0.0867*	0.0334	0.0029	0.1013*	0.0058	-0.1435*	0.1867*	-0.0004	0.0750				
11 Education	4.02	1.23	0.0545	0.3604*	0.2019*	0.1505*	0.0248	0.2005*	0.038	-0.0455	0.0446	-0.0425			
12 Prof. Experience	12.69	8.78	0.3040*	-0.0860*	0.0280	0.0429	-0.3099*	-0.1463*	0.1440*	-0.0776	0.0452	0.0229	-0.1213*		
13 Screening	3.80	2.76	-0.0869*	0.2833*	0.0192	0.0389	0.0254	0.2725*	0.0195	-0.0785	0.0125	0.0634	0.1004*	0.0615	
14 Firm Age	62.15	48.54	-0.2252*	0.0709	-0.0177	-0.0068	0.0981*	0.0745	-0.0918*	0.1971*	-0.0678	-0.0502	0.0710	-0.1054*	-0.0553

\* p<.05

**Table 2:** Means, standard deviations and Pearson correlations

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As Table 2 shows, slightly more than 75% of the businesses were transferred to owner-managers with familial ties to the incumbent owner, whereas the remaining 25% were transferred to external successors. The average level of education was 4.02 (standard deviation 1.23), the average level of prior work experience was 12.69 years (standard deviation 8.78), and the average level of screening was 3.80 (standard deviation 2.76). In terms of these values, there were no substantial differences between old and young firms.

To account for any differences between MBO and MBI, we ran a multinomial logit estimation for the three outcomes categories: “internal”, “external (MBO)”, and “external (MBI)” prior to our analysis of family internal vs. external (MBO and MBI) exit routes, treating MBO as the baseline category. The results obtained from the multinomial logit estimation reveal significant differences between the MBO and MBI options regarding only two predictor variables. First, the effect of education is positive and significant ( $\beta = 0.566$ ;  $p < .05$ ) for MBI as compared to MBO. This result is consistent with our theory because it indicates that education is particularly important as a signal in situations in which information asymmetry is severe (owners have less information about the abilities of MBI candidates than those of MBO candidates). Second, the effect of the interaction between education and firm age is positive and significant for MBI as compared to MBO ( $\beta = 0.015$ ;  $p < .05$ ). Because the theoretical arguments that are presented above suggest that there should be no difference between MBI and MBO in relation to this variable, we will discuss the implications of this result in the discussion section.

#### ***3.4.4.2 Results of Logit Regression***

To analyze the direct and moderated effects of the independent variables on the binary dependent outcome, we employed logit regression (see Table 3). In Models 1 through 3, the occurrence of an external succession (1) as opposed to an internal succession (0) constitutes the dependent variable. Model 1 includes only the control variables; the independent variables and the interactions terms of the moderator were added subsequently in Models 2 to 3.

The coefficients of Models 1 to 3 indicate the influence of the variables on the logarithmic odds ratios of family external vs. internal succession (Folta & O'Brien,



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2004; Hoetker, 2007; Li & Tang, 2010). Model 1 shows that the logarithmic odds that a firm will be externally transferred are negatively and significantly related to the size of the firm ( $\beta = -0.232$ ;  $p < .05$ ). In contrast, the number of shareholders exerts a positive and significant effect on the logarithmic odds of firms being sold to external parties ( $\beta = .113$ ;  $p < .05$ ), whereas temporal distance exerts a negative and significant effect on these odds ( $\beta = -.503$ ;  $p < .05$ ). Furthermore, there are national and industry-related differences in these odds (with Switzerland having  $\beta = 1.459$ ;  $p < .001$  and primary sector having  $\beta = -0.968$ ;  $p < .01$ ). Overall, Model 1, which contains only the control variables, yielded a  $\chi^2$  value of 102.501. In Model 2, we added education, professional experience, screening, and firm age to the equation as independent variables. Education level affected the logarithmic odds of external succession positively and significantly ( $\beta = .296$ ;  $p < .01$ ). Furthermore, professional experience had a positive and highly significant influence ( $\beta = 0.080$ ;  $p < .001$ ). The linear term of screening had a positive and significant effect ( $\beta = 0.545$ ;  $p < .05$ ), whereas the squared term of screening had a negative and significant influence ( $\beta = -.140$ ;  $p < .01$ ). Firm age had a negative and highly significant influence ( $\beta = -.017$ ;  $p < .001$ ). Thus, H1a, H1b, H2, and H3 were all fully supported. The model fit is higher at a  $\chi^2$  value of 180.380.

Finally, Model 3 includes the interaction effects. We found that the interaction between education and firm age had a negative and significant effect ( $\beta = -0.008$ ;  $p < .05$ ) consistent with H4a. We found no significant effect for the interaction between professional experience and firm age, which lead us to reject H4b. We also found that firm age moderated the screening and screening squared variables ( $\beta = .012$ ;  $p < .05$ ;  $\beta = -0.003$ ;  $p < .05$ ), which confirmed H4c. The  $\chi^2$  value for Model 3 (189.035) is the highest value of all models, and the model's Akaike information criterion (528.340) is the lowest. These findings suggest that Model 3 is the best fitting model (Hoetker, 2007).

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>
Log Employees	-0.232*	-0.233*	-0.211*
Number of Shareholders	0.113*	0.102+	0.124*
Number of Managing Directors	-0.011	-0.049	-0.058
Distant Takeover	-0.503*	0.026	0.015
Germany	0.018	0.088	0.07
Switzerland	1.459***	1.375***	1.304***
Primary Sector	-0.968**	-0.507	-0.373
Secondary Sector	0.100	0.093	0.146
Earn-out	0.320	0.414	0.400
Education		0.296**	0.208+
Professional Experience		0.080***	0.080***
Screening		0.545*	0.585*
Screening (sq.)		-0.140**	-0.147**
Firm Age		-0.017***	-0.005
Education x Firm Age			-0.008*
Prof. Experience x Firm Age			0.000
Screening x Firm Age			0.012*
Screening (sq.) x Firm Age			-0.003*
Constant	0.283	0.083	0.155
Inverse mills ratio (IMR)	-0.078**	-0.072**	-0.071**
Chi2	102.501	180.380	189.305
prob > Chi2	0	0	0
AIC	597.145***	529.266***	528.340***
Observations	613	613	613

+p<0.1; \*p<.05; \*\*<.01; \*\*\*p<.001

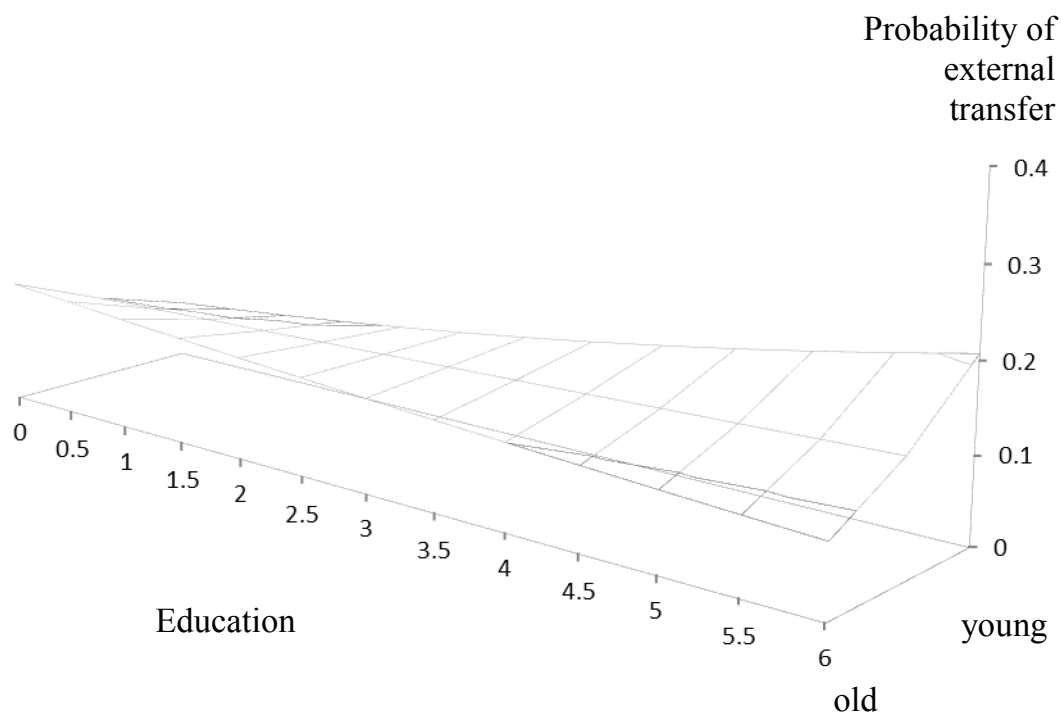
**Table 3:** Logit regression for external versus internal succession

### 3.4.4.3 Interpretation of Results

As logit estimation is a non-linear model, its coefficients cannot be directly interpreted as the marginal effects of an independent variable on the dependent variable because each marginal effect also depends on the level of all of the others (Hoetker, 2007; Wiersema & Bowen, 2009). In order to account for differences in data interpretation between OLS and logit estimation, we provide a graphic illustration as supplementary analysis (Zelner, 2009), which is particularly relevant in analyses w interaction terms (Wiersema & Bowen, 2009); it “provide[s] a richer understanding of variables’ effects” (Hoetker, 2007; p. 335) as the central focus of the analysis is the effect of the variables on the predicted probabilities rather than the logarithmic odds.

Following Hoetker (2007), we predicted the probability of the external succession route according to Model 3 by varying educational levels (Figure 1),

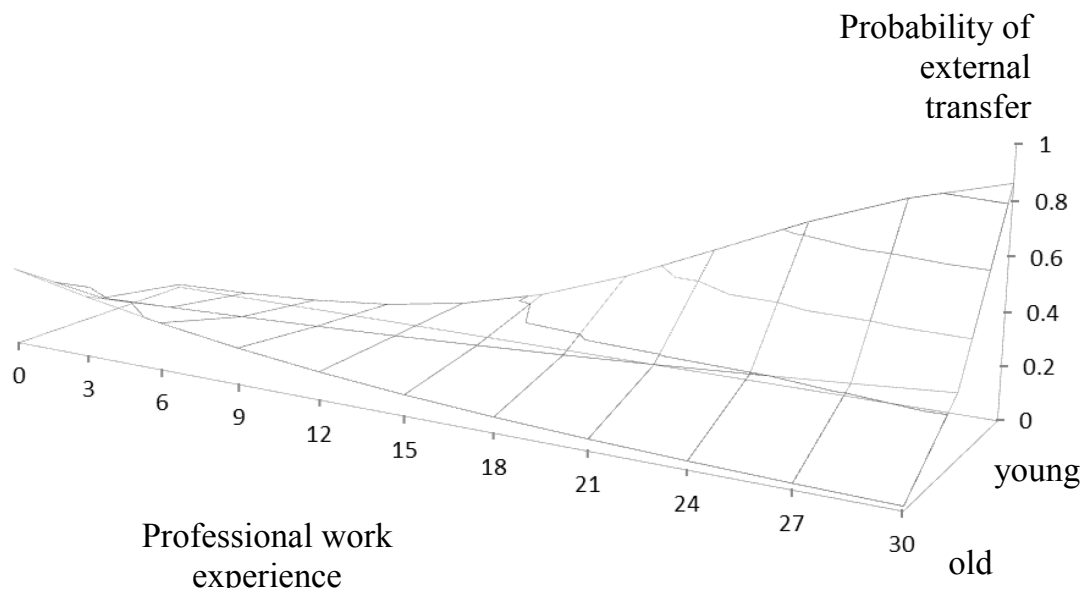
duration of work experience (Figure 2) and screening activities (Figure 3) for different levels of firm age. We set the sector dummy at 1 for the secondary sector (all other sector dummies were set at 0), the nationality dummy at 1 for Germany (the Switzerland dummy was set at 0), and the values for all of the other variables at their means (see also Mishina, Dykes, Block, & Pollock, 2010) thus following best practice (Long & Freese, 2005). To calculate the predicted probabilities, we used the STATA-Spost package.<sup>6</sup> Figures 1, 2 and 3 show the relationships between each of the independent variables, the moderator and the probability of an external transfer.



**Figure 2:** Effect of education and emotional attachment on the probability of external exit routes

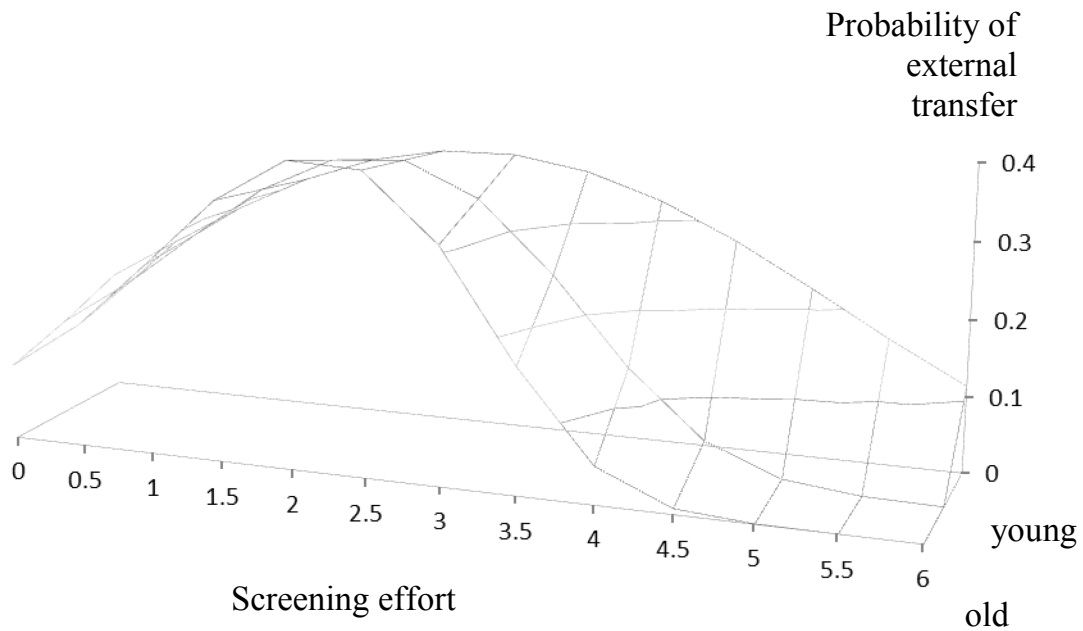
Figure 2 shows that for young firms (i.e., those whose levels of emotional attachment were assumed to be low), the probability of an external transfer rises from 7.0% to 20.8% as the education level of the successor increases. This effect of education weakens when firms age, however. The probability of an external successor with a high level of education decreases from 20.8% for young firms to 8.2% for old firms. These findings are consistent with H1a and H4a.

<sup>6</sup> <http://www.indiana.edu/~jslsoc/spost.htm>



**Figure 3:** Effect of professional experience and emotional attachment on the probability of external exit routes

Figure 3 shows the effects of work experience and firm age on the probability of external succession. Similar to education but to a greater degree, work experience increases the probability of an external transfer from 1.2% (0 years of experience) to more than 90% (24 years of experience) for young firms. On the other hand, the effect of work experience is largely absent for old firms (probability of external succession below 1%). These findings support H1b as well as the previously rejected H4b. Interestingly, the graphical illustrations in Figure 1 and 2 show that for old firms, the probability of an external successor with a low ability level (in terms of education/work experience) is slightly higher than it is for a young firm. This case, which is not covered by our hypotheses, is interpreted in the discussion section.



**Figure 4:** Effect of screening and emotional attachment on the probability of external exit routes

Figure 4 displays the effect of the incumbents' screening activities and firm age on the probability of an external transfer. For young firms, we find evidence of an inverted U-shaped relationship, as predicted in H2, with the probability rising from 15.9% (when there is no screening) to 37.0% (at a medium level of screening) and then declining again to 11.5% (under extensive screening). For older firms, the effect of high screening levels is weaker, as predicted in H4c, resulting in a probability of external transfers of less than 5%. Moreover, the probability that an external will be selected as the successor when there is no screening decreases further, yet, contrary to our hypothesis, the effect under medium levels of screening is not weakened.

### 3.5 Discussion

The objective of our study was to investigate the role of information asymmetry as an antecedent for external versus internal entrepreneurial exit routes in privately owned SMEs of various ages. We hypothesized and empirically demonstrated that owners, *ceteris paribus*, prefer family succession. In fact, we found that the overall probability of external transfers in our sample was less than 25% (see Table A.1). When no measures were used to reduce information asymmetry this ratio declined even more (to

less than 16%), as illustrated in Figures 1, 2 and 3. As such our findings are in line with those of other theoretical and empirical studies in the family business literature that address the tendency of incumbent owners to choose internal transfer (e.g., De Massis et al., 2008; Le Breton-Miller et al., 2004; Lee et al., 2003). However, our findings extend the literature by addressing not only transfers of management (e.g., Bocatto, Gispert, & Rialp, 2010; Le Breton-Miller et al., 2004; Lee et al., 2003; Sharma, Chrisman, & Chua, 2003) but also the simultaneous transfer of ownership and management. This broader scope has been recognized as important yet sparsely studied (e.g., Birley & Westhead, 1993; Le Breton-Miller et al., 2004). Our study also makes a theoretical contribution by using information asymmetry to explain the tendency of firm owners to prefer internal transfers. Therefore, our study has heeded the call for more nuanced research on succession (Sharma, Chrisman, & Gersick, 2012) and invoked the emerging stream of literature that explains succession as a function of economic factors (Lee et al., 2003; Royer et al., 2008).

Moreover, our descriptive data show that incumbent entrepreneurs are highly inclined to screen succession candidates (average of 3.8 on a scale from 0 to 6), although screening techniques are by nature costly and time-consuming. As such, our quantitative data provide support for the qualitative findings of Graebner and Eisenhardt (2004), and the conceptual arguments presented by DeTienne (2010) who insisted that an owner's caring for his or her firm will often not end when the business is sold; yet the owner is concerned about the future prosperity of the business and thus searches for a capable candidate to continue business operations. Most family business studies address emotional attachment and SEW among members of business families only for the duration of family ownership, yet, our quantitative data indicate that concerns regarding the prosperity of the firm may continue beyond this period.

The results of our logit model, combined with the graphical interpretation of the results support our initial hypotheses (H1a, H1b, H2) that several mechanisms that alleviate information asymmetries – education and work experience of the succession candidate as signal of his or her superior abilities as well as the incumbents' screening efforts – affect the probability of an external transfer of ownership and management. As such, our study follows the call for more quantitative, empirical research on entrepreneurial exits (Morris & Williams, 1997) and contributes to the emerging stream of literature that examines the antecedents of exit route decisions (Cardon et al.,

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2005; DeTienne, 2010; DeTienne & Cardon, 2012; Wennberg et al., 2010), which, ultimately, influence firm performance and survival. Our study extends beyond previous work, however, by not exclusively considering the owner's perspective (e.g., DeTienne & Cardon, 2012; Graebner & Eisenhardt, 2004); rather, we ensure a more comprehensive account of this dyadic setting by considering how incumbent owners and succession candidates attempt to eliminate information asymmetry. By doing so, we demonstrate that asymmetrical information – a theoretical perspective that, despite its relevance, has only recently been employed in this context (Howorth et al., 2004; Scholes, Westhead, & Burrows, 2008; Scholes et al., 2007) and has thus far been applied solely to the successor (e.g., Dawson, 2011; Wennberg et al., 2011) – is a critical determinant that influences incumbents' exit route choices.

Our results regarding firm age (H3, H4a, H4c) show how emotional factors are likely to influence exit route choices. To the best of our knowledge, this is the first study to integrate the information asymmetry and research on SEW and to provide empirical evidence of the combined effect of economic and non-economic antecedents of exit route decisions. Moreover, our study contributes to the growing body of research on SEW (Chrisman & Patel, 2012; Gomez-Mejia et al., 2007; Zellweger et al., 2012) by shifting the unit of analysis from the widely studied family level to the sparsely studied entrepreneurial level. While our logit results mostly confirm the prediction that increasing firm age directly decreases the probability of an external transfer and weakens the relationship between signaling or screening and the probability of an external transfer, the results of our graphical analysis provide first evidence that these mechanisms might be more complex than assumed. For example, the 3D graph of the interaction between screening and firm age (Figure 3) shows that firm age weakens the probability of external transfers in cases of either low or high screening efforts but has no influence under medium-level screening efforts. One possible explanation for this effect lies in a potentially ambiguous impact of firm age, assuming that for some owners of old firms the desire to find the most capable successor granting future firms prosperity might transcend his or her preference for internal successors. As a consequence, such owners might be inclined to use medium-effort screening techniques to identify the most capable (external) successor. Moreover, the unexpected increase in the probability of an external transfer among old firms when the level of the candidates' education or work experience is low requires further investigation. While there is no information regarding the significance of these

specific data points, the findings could be preliminary indicators of further “irrational” decision making in old firms when the owner’s level of emotional attachment is high. Another indication that emotional attachment may play a more complex role is the difference between MBO and MBI successions (see also 3.4.1), showing a significant positive effect of the interaction of education and firm age on the probability of an external transfer for MBI versus MBO: If – for any reason – an incumbent owner “self-selected” him- or herself into the group of external exits, increased emotional attachment might lead to increased concern about the future prosperity of the firm and hence increase the owner’s sensitivity for and acceptance of firm-external (educational) signals.

Lastly, our findings are also important for research on information asymmetry (e.g., Spence, 1973, 1976; Stiglitz, 1975, 1977, 2000) as we theorized on and found empirical support for a “flip side of the coin” regarding the effects of screening. Our results show that alleviating information asymmetry does not have a monotonous effect on the outcome variable because screening initiatives above a certain level may have a reverse effect on the probability of an external transfer, as shown by the inverse U-shaped curve. We argue that this effect stems from the succession candidate’s discouragement and the opportunity cost caused by such extensive screening efforts. Additionally, our findings regarding the interaction of screening and signaling with firm age/emotional attachment demonstrate how non-economic considerations may offset purely economic decision criteria. Our study thus heeds Connelly and colleagues (2011)’s call to investigate effects that moderate the influence of signals.

### **3.5.1 Practical Implications**

The practical implications of our work are fourfold. First, our results generally reveal the complex decision-making process in the context of entrepreneurial exits in privately held firms. Thus, from the perspective of the involved individuals, paying attention to the incumbent's characteristics, needs, and emotions may be beneficial (e.g., Graebner, 2009; Graebner & Eisenhardt, 2004). Second, more specifically, external succession candidates will profit from their educational achievements and prior work experience when they attempt to purchase privately held firms. This is because incumbent owners do indeed care about the capabilities of the person to whom they transfer their businesses and because prior achievements are effective indicators



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that may lower an owner's concerns about an external successor's abilities. Education is particularly effective for firm external candidates. Third, it is important for incumbent owners to note that moderate screening efforts increase the probability of external successors, whereas excessive screening levels decrease it. Fourth, our results may be taken as an additional indication that the market for the transfer of ownership and management within SMEs is affected by asymmetric distribution of information. As Akerlof (1970) demonstrated with regard to car sales, asymmetric information causes each party to assume a worst-case scenario and ultimately leads to a market breakdown ("adverse selection"). It is crucial for policy makers to acknowledge the information asymmetry inherent to the succession market for SMEs so they will be aware of the potentially detrimental effects of adverse selection and adjust their activities accordingly.

### **3.5.2 Limitations and avenues for Future Research**

Like any other empirical work, our study has limitations that open up avenues for further research. First and foremost, we draw on data provided by the successor who reflected back on the circumstances of the succession thus rendering additional information about the incumbent such as his or her age, education, and industry experience (DeTienne & Cardon, 2012), as well as the firm's characteristics at the time of transfer unavailable. Such limitations are inherent in most succession studies and need to be weighed against the size of our sample, which allowed succinct empirical testing. Also, we believe that our respondents are not likely to be affected by retrospective bias because our key variables are objective, fact-based and known to the incumbent (Podsakoff et al., 2003).

Second, we include firms' industry sector to control for risk and concerns about the economic outlook of the firm, but we did not control for firm performance at the time of the transfer. Previous research, however, has shown that firm performance is not a clear predictor of entrepreneurial exit routes (Graebner & Eisenhardt, 2004; Wennberg et al., 2010). Nevertheless, it might be desirable for future research to consider these possible effects. It would also be advisable for researchers to control for the sale price associated with each transaction so as to generate further inferences about incumbent owners' motivation to choose particular candidates.

Third, our use of firm age as a proxy for emotional attachment is not without limitation; yet it constitutes a conservative estimator, as it likely overrates the effect of emotional attachment and hence underrates the effects under investigation. While firm age provides interesting first quantitative insights into the effect of emotional barriers on external successions, scholars are encouraged to extend this view and combine the effects of information asymmetry with barriers identified by previous literature (De Massis et al., 2008).

Fourth, our study focuses on the effects of asymmetrical information but omits other aspects of the owner-entrant relationship such as the effect of asymmetrical trust (Graebner, 2009). Trust asymmetry might influence the outcome of our analysis, as the level of such asymmetry between the incumbent and potential successors may be lower for internal candidates. Moreover, the use of education and prior work experience which are human capital investments without task relation (Unger et al., 2011) is not without limitation. Replication studies that consider task-specific, knowledge and skill-related variables could improve the robustness of our findings and rule out alternative explanations (e.g., that education yields better negotiation skills).

Fifth, a more comprehensive consideration of the incumbent's familial circumstances, such as marriage, number of children willing to succeed with a minimum of abilities, and eventually also cultural and religious beliefs (Justo & DeTienne, 2008), may open up interesting avenues of further research, not only on actual successions but also on succession intentions. For example, scholars might investigate which family configurations motivate firm owners to heavily screen both external and internal candidates (Schulze et al., 2001).

Finally, our study only investigates successful transfers of ownership and management. Due to the nature of the data collection process, we were unable to gather information on failed successions – for instance, those that resulted in the liquidation of the firm.

### **3.6 Conclusion**

Explaining the variance in the exit paths chosen by entrepreneurs is crucial for predicting those firms' future. Economic factors provide a promising explanation for the tendency of incumbents to transfer their businesses within the family. We show

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that variance in information asymmetry, caused by variation in the extent to which measures used to alleviate information asymmetry are applied, results in variation in the probability that an incumbent will choose a particular exit path. Moreover, economic-rational factors interact with emotional attachment to the firm, which sheds a new and intriguing light on entrepreneurial exits.

## **4 Timing and Relatedness of Acquisitions in Family Firms: The Role of Socioemotional Wealth**

Pankaj C. Patel, Tobias Dehlen, and Thomas Zellweger

### **4.1 Abstract**

Drawing on the behavioral theory of the firm and the socioemotional wealth perspective of family firm ownership, we assess acquisition timing and target relatedness in family firms. Under problemistic search, in addition to the prospect of economic loss, family firms face increased threats of losing socioemotional wealth. Family firms are, therefore, increasingly inclined to acquire; when they do, they are likely to buy unrelated targets. Under slack search, however, family firms are more likely to acquire related targets to enhance their stock of socioemotional wealth. Based on a sample of 8,736 acquisition events from 1990 to 2010 representing 884 firms (9,468 firm-years), we find support for the proposed model that extends family business literature and the behavioral theory of the firm.

### **4.2 Introduction**

Current literature discusses three main motives for firms to engage in acquisitions: economic motives, such as increasing synergy and market power (Haleblian, Devers, McNamara, Carpenter, & Davison, 2009); managerial motives, such as empire building, entrenchment, enrichment, hubris, defense tactics, and desperation (Deutsch, Keil, & Laamanen, 2007; Jensen, 1986; Kim, Haleblian, & Finkelstein, 2011; Morck, Shleifer, & Vishny, 1989; Shleifer & Vishny, 1989); and firm-specific drivers, such as acquisition experience and performance feedback (Barkema & Schijven, 2008a; Haleblian, Kim, & Rajagopalan, 2006; Iyer & Miller, 2008; Zollo & Singh, 2004).

Interest in acquisition research recently moved beyond these well-established acquisition motives to those of owners. Combining agency theory and portfolio risk considerations to examine the impact of family owners on acquisition activity, Miller, Le Breton-Miller and Lester (2010; p. 202) conclude that family owners' "particular social priorities and risk preferences" exert a unique impact on firm acquisition

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activity, which is distinct from other blockholders' impact. Understanding the utility function of a specific owner type is key to exploring the predisposition toward acquisition (Daily, Dalton, & Rajagopalan, 2003). However, the nature and theoretical basis of these "social priorities" remain largely unexplored. In addition, Miller et al.'s (2010) findings conflict with those of Gomez-Mejia et al. (2010) who find a hesitation to engage in acquisitions among family firms because such activity disrupts the status quo and detracts from socioemotional wealth (SEW).<sup>7</sup> To advance our understanding of the distinctive impact of family owner preferences on acquisition activity, a reconciliation of these conflicting perspectives in the specific context of family firms seems warranted.

To reconcile these conflicting views, we draw from the emerging SEW perspective in the family business literature (Gomez-Mejia et al., 2007) and synthesize it with the behavioral theory of the firm (Cyert & March, 1963). Blending theoretical lenses in this study seems appropriate, given Daily et al.'s (2003; p. 153) assertion that "any one theoretical perspective is insufficient for capturing the complexity of the differing interests of ownership types." SEW literature purports that family owners seek to preserve their stock of SEW even if this means forgoing financial performance and personal financial wealth. Applied to the acquisition context, SEW literature implies that family firms' goal to preserve SEW biases firm behavior, in that acquisitions are evaluated with regard to their impact on both economic wealth and SEW. While SEW research sheds light on the goal sets of owners, behavioral theory clarifies their impact on the behavior of firms. The behavioral theory also sees the role of slack as providing leeway to experiment. From an SEW perspective, slack may serve as a cushion, thereby reducing owners' inclination to experiment through acquisitions.

Our study makes several contributions to the literature. First, by exploring family ownership that exhibits a preference for SEW preservation, we extend the literature on the influence of ownership types on strategic actions (e.g., Amihud & Lev, 1981; Connelly, Hoskisson, Tihanyi, & Certo, 2010; David, O'Brien, Yoshikawa, & Delios, 2010; Lane, Cannella, & Lubatkin, 1998; Ramaswamy, Li, & Veliyath, 2002; Thomsen & Pedersen, 2000) to encompass acquisition research (Barkema &

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<sup>7</sup> Socioemotional wealth refers to "nonfinancial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty" (Gomez-Mejia, Haynes, Nunez-Nickel, Jacobson, and Moyano-Fuentes 2007; p. 106).

Schijven, 2008a; Haleblan et al., 2009). In particular, we show that social priorities in the form of SEW concerns alter acquisition activity over and above previously known economic determinants. Our study also reconciles previously conflicting views on the relatedness of family firm acquisitions (cf. Gomez-Mejia et al., 2010; Miller et al., 2010). Second, we complement SEW and family business literatures (Gomez-Mejia et al., 2011; Schulze & Gedajlovic, 2010) by showing that exhibiting socioemotional goals does not uniformly reduce owners' inclination to alter the status quo, as has been argued previously (Berrone et al., 2010; Gomez-Mejia et al., 2010). Combining SEW with arguments from the behavioral theory of the firm, we show that, although family firms are hesitant to acquire, they increasingly do so when performance is below aspiration levels, with decline in performance accelerating this process. Third, our study speaks to the behavioral theory of the firm by supporting the argument that behavioral rationales attributable to owners can explain corporate-level phenomena (Audia & Greve, 2006). We also show that the positive effect of slack on unrelated acquisitions is tempered in the presence of SEW. Endowed with high levels of SEW, family owners are more inclined to consider slack as a cushion that enables further pursuit of socioemotional goals.

### **4.3 Theory and Hypotheses**

#### **4.3.1 Literature Review and Theoretical Foundations**

The literature provides diverse motives for firms to engage in acquisition activity (for an overview refer to Haleblan et al., 2009), which can be divided into two broad categories, non-synergistic and synergistic (Mulherin & Boone, 2000). Non-synergistic motives include managerial empire building, entrenchment, enrichment, hubris, defense tactics, and desperation (Deutsch et al., 2007; Jensen, 1986; Kim et al., 2011; Morck et al., 1989; Shleifer & Vishny, 1989); synergistic motives include developing operating synergies (Porter, 1980), increasing economies of scale and scope, developing more efficient firm-internal markets (Coase, 1937), commanding greater market power through industry consolidation (Hitt, Harrison, & Ireland, 2001), and reaping the benefits from informational advantages (Laamanen, 2007; Reuer, Tong, & Wu, 2012). Early studies on acquisition activity, which are generally concerned with the effect of acquisition on shareholder wealth, attempt to determine

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which set of motives receives the most empirical support (Haleblian et al., 2009; King, Dalton, Daily, & Covin, 2004; Laamanen & Keil, 2008).

Against the backdrop of performance consequences, scholars also delve into the antecedents of acquisition activity. For example, some find that acquisitions are driven by economic shocks to an industry such as deregulation, changes in input costs, and innovations (McNamara, Haleblian, & Dykes, 2008; Mitchell & Mulherin, 1996). Other scholars stress the role of stock market miscalculations for acquisition waves (Rhodes-Kropf, Robinson, & Viswanathan, 2005; Shleifer & Vishny, 2003); still others contend that stock market liquidity drives acquisition activity (Harford, 1999, 2005). The extensive body of research concerned with identifying antecedents of acquisition activity is complemented by managerial motives, such as empire building, entrenchment, enrichment, hubris, defense tactics, and desperation (Deutsch et al., 2007; Jensen, 1986; Kim et al., 2011; Morck et al., 1989; Shleifer & Vishny, 1989); institution-based rationales (Lin, Peng, Yang, & Sun, 2009); and firm-specific factors, such as acquisition experience (Barkema & Schijven, 2008a; Haleblian et al., 2006; Zollo & Singh, 2004), alliance existence (Yang, Lin, & Peng, 2011), and performance feedback (Iyer & Miller, 2008).

Ownership types and related preferences, however, have been largely disregarded in acquisition research (exceptions are: Cronqvist & Fahlenbrach, 2009; Miller et al., 2010), which is surprising in light of the widely documented influence of large shareholders on key strategic decisions. Amihud and Lev (1981) assert that large shareholders with at least 5% ownership stake (that is, blockholders) exert a strong influence on firm governance and dictate firm strategy according to their preferences. Based on agency theoretical reasoning, these authors find that ownership concentration leads to less diversification; risk-averse managers who try to diversify their employment risk encounter opposition from wealth maximizing and diversified shareholders. Despite their meaningful contribution to blockholder literature, some of Amihud and Lev's assumptions, for example, (1) only managers, and not owners, care about unsystematic risk, and (2) owners consider only shareholder value, are debated in strategic management literature (Lane et al., 1998). Scholars seem to converge on the idea that "not ownership *per se*, but rather *who the owners are and their priorities and preferences*" (Miller et al., 2010; p. 202) explain much of the variation in firm

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activities (e.g., Claessens, Djankov, Fan, & Lang, 2002; Miller et al., 2010; Ramaswamy et al., 2002; Thomsen & Pedersen, 2000).

In light of these findings, the limited focus on ownership type in acquisition research is particularly unfortunate. We thus explore a particular ownership type, namely, family owners, and how this ownership type biases timing and relatedness of acquisitions. Family firms compose more than 30% of all firms in the S&P 500 (Anderson & Reeb, 2003); more important, from a theoretical vantage point, is that family ownership is associated with the pursuit of financial in addition to financial goals (Villalonga & Amit, 2006).

*Behavioral theory of the firm.* According to the behavioral theory of the firm, organizational behavior mirrors the interests of a dominant coalition of stakeholders whose goals prevail as a result of a political bargaining process (Cyert & March, 1963; Greve, 2008; Shimizu, 2007). Firm behavior is thus shaped according to the relative power of the parties involved in the firm-specific bargaining process over which goals to pursue. Shareholders, especially when equipped with substantial control rights (as is often the case for family blockholders), are seen as particularly powerful coalition members who influence the goal-setting process and infuse it with their particularistic priorities (Carney, 2005; Thomsen & Pedersen, 2000).

The behavioral theory of the firm views organizations as goal-directed systems that initiate “problem search when performance fails to reach aspired-for levels” (Shimizu, 2007; p. 1496). Firm decision makers begin to consider the need for change as soon as performance lags certain goal variables (Greve, 2011), such as profitability, productivity, and sales growth. The critical levels of such goal variables – levels that trigger firm search activity – are commonly referred to as performance aspiration levels, which are set “to simplify evaluation by transforming a continuous measure of performance into a discrete measure of success or failure” (Greve, 1998; p. 59). Cyert and March (1963) label the activity triggered by below-aspiration performance *problemistic search*. In response to below-aspiration performance (or, negative performance discrepancy), firms intensify their efforts and engage in intensive search for solutions to regain performance aspiration levels (e.g., acquiring another firm). Empirical evidence for this type of search process is abundant: When faced with performance below aspirations, firms have changed formats in the radio broadcast industry (Greve, 1998), expanded production sites in the ship-building industry (Audia



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& Greve, 2006), divested acquired business units (Shimizu, 2007), increased growth initiatives in the insurance industry (Greve, 2008), and increased acquisition activity in manufacturing (Iyer & Miller, 2008).

In addition to problemistic search, the behavioral theory of the firm proposes that slack enhances experimentation and facilitates risk taking (Cyert & March, 1963; Greve, 2003a). *Slack search*, the process that is triggered by the availability of slack, “occurs when firms possess excess resources that allow for experimentation” (Iyer & Miller, 2008; p. 808). In other words, firms with abundant resources search for opportunities to invest these resources (Cyert & March, 1963; Levinthal & March, 1981); examples include expanding R&D activity (Greve, 2003a) and increasing acquisitions (Iyer & Miller, 2008).

As noted by Halebian et al. (2006), the behavioral theory of the firm provides a useful framework for understanding acquisition behavior, in particular the effects of prior acquisition performance on future acquisitions. Although it seems particularly promising to treat performance as an input rather than an output variable for acquisitions, this perspective has rarely been applied in the acquisition context (see Iyer & Miller, 2008, for an exception).

*Socioemotional wealth*. The argument that family firms are driven by more than the monetary outcome of business activity is prominent in family business research. In an attempt to disentangle the noneconomic utility of organizational ownership, recent research has established the concept of SEW, which is defined as the “financial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty” (Gomez-Mejia et al., 2007; p. 106) and as the “stock of affect-related value that the family has invested in the firm” (Berrone et al., 2010; p. 82 ). Socioemotional utility, which is endowed by owners, forms a reference point from which owners are willing to part only if they are compensated commensurately with the perceived loss in SEW (Thaler, 1980; Tversky & Kahneman, 1991; Zellweger et al., 2012).

SEW can be traced to utility dimensions that fall into four broad categories (Gomez-Mejia et al., 2011). The first dimension captures the dynastic family control exerted by owners (Chua et al., 1999; Zellweger et al., 2012). Control is essential for setting a socioemotional reference point, since it allows owners to replace economic

with socioemotional criteria. But in contrast to other forms of controlling ownership, such as private equity, family ownership is unique because of its high level of historicity that reaches back in family history and then forward in time through transgenerational outlook.

The second dimension of SEW relates to benevolent social ties with family and nonfamily members through the affiliation with the firm. Family firms are often deeply embedded in social communities, whereby many business relationships, such as with clients, develop a personal meaning over time, in addition to the altruistic ties among family members involved in the firm (Berrone et al., 2010; Schulze et al., 2003a). These ties are valued because they are accompanied by mutual support, trust, and reciprocity (Uzzi, 1997; Wade-Benzoni, 2002).

The third dimension of SEW consists of the status and reputation derived from identity overlaps between the firm and the family. Controlling families are concerned about the firm's public reputation; a negative reputation stains not only the firm name but also the family name. In contrast, a positive reputation allows the family to bask in the reflected reputation of the firm (Berrone et al., 2010; Dyer & Whetten, 2006; Zellweger et al., 2011).

The fourth dimension of SEW is considered to be the affect derived from corporate ownership and consequent emotional attachment to the possession. Intense and long-term involvement in the firm, as well as personal investments of time, energy, and finances, lead to a personalized relationship between owner and firm, whereby ownership is loaded with affect, such as pride, joy, and satisfaction (Forgas, 1995; Schultz Kleine & Menzel Baker, 2004).

Family firm responses to family owners' SEW can be found in family relationships that produce agency contracts departing from economic rationality (Gomez-Mejia et al., 2001), lower family CEO salary in exchange for job security and emotional attachment (Gomez-Mejia et al., 2003), maintain control over the firm that engenders risk taking (Gomez-Mejia et al., 2007), enhance earnings management to assure SEW (Stockmans et al., 2010), and improve compliance with institutional pressures to allay family reputation concerns (Berrone et al., 2010).

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### 4.3.2 Timing of Acquisitions

In a family firm's bargaining processes, important strategic choices such as the acquisition of a new business are likely to be determined by the controlling family (Thomsen & Pedersen, 2000). Given the importance of maintaining SEW for family owners, we contend that the threat of losing SEW along any of its four dimensions – dynastic control, social ties, status, and affect – hinders family firms in acquiring other firms.

Because they often require external financing, acquisitions are likely to weaken dynastic family control, which may lower the family's autonomy in business decisions or result in a direct loss of current and future control (Dreux, 1990). The acquirer's well-established social networks may be disrupted by the acquisition of a new firm (Friedland, Palmer, & Stenbeck, 1990). In the post-acquisition process, resources often have to be redeployed to adapt the post-acquisition structure of the combined firms (Capron, Dussauge, & Mitchell, 1998). For example, in order to make an acquisition successful, availability of social networks to the acquired firm may be required or external consultants mandated, making pre-existing, close-knit networks more porous (Bergh & Gibbons, 2011; Capron & Pistre, 2002). For successful acquisitions, acquirers have to build relationships with key stakeholders in acquired firms, which naturally weakens formerly existing social ties to employees, suppliers, and other stakeholders in the acquiring firm (Beckhard & Dyer, 1983; Porrini, 2004; Zollo & Reuer, 2010).

Acquisitions inevitably alter a firm's identity and, potentially, its reputation. Threats to the firm's and the family's reputation may arise from the resulting change in combined product and resource portfolios (Valentini, 2012). In comparison to organic growth, acquisitive growth brings with it the challenges of integration (Cording, Christmann, & King, 2008; Zaheer, Castañer, & Souder, 2011): "no two acquisitions are ever quite the same" (Heimeriks & Schijven, 2012; p. 703). Simultaneously, such growth also expands existing products, brands, and markets, which makes it hard to uphold a desired image and projection of self that is linked to the historic activity of the family firm. Even more threatening to family reputation may be that, for the acquiring firm, acquisitions often lead to decreased performance effects (Capron & Pistre, 2002; Finkelstein & Halebian, 2002) and to increased public awareness of the firm's ability to generate value through acquisitions (Muehlfeld, Rao Sahib, & Van

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Witteloostuijn, 2012). Failed acquisitions, which require the acquiring entity to inject resources or to divest once-acquired firms (Chatterjee, Harrison, & Bergh, 2003), are likely to be catastrophic not only from the owner's financial wealth position but also from a SEW standpoint because of damage to the family's reputation.

Finally, possession attachment and positive affect from ownership are more likely to develop with a possession that remains intact, which is then more easily singularized over time (Schultz Kleine & Menzel Baker, 2004). Singularized, affect-dense attachment is often present if a possession has been nurtured and protected across family generations; the possession then conveys family traditions and serves as a symbolic representation of the self and a reminder of interpersonal ties (Pratt & Foreman, 2000; Zellweger & Astrachan, 2008). Because firm acquisitions often alter the very core of this heirloom asset ("what we represent as a family"), emotional attachment is likely to suffer from such strategic actions.

In light of the negative impact of acquisitions on SEW, we argue that the level of family ownership and, hence, the degree to which the family exhibits SEW and infuses the goal set of the firm with socioemotional priorities, is negatively related to the temporal proximity of acquisitions. More formally:

**H1:** *Family ownership lowers the hazard rate of acquisitions.*

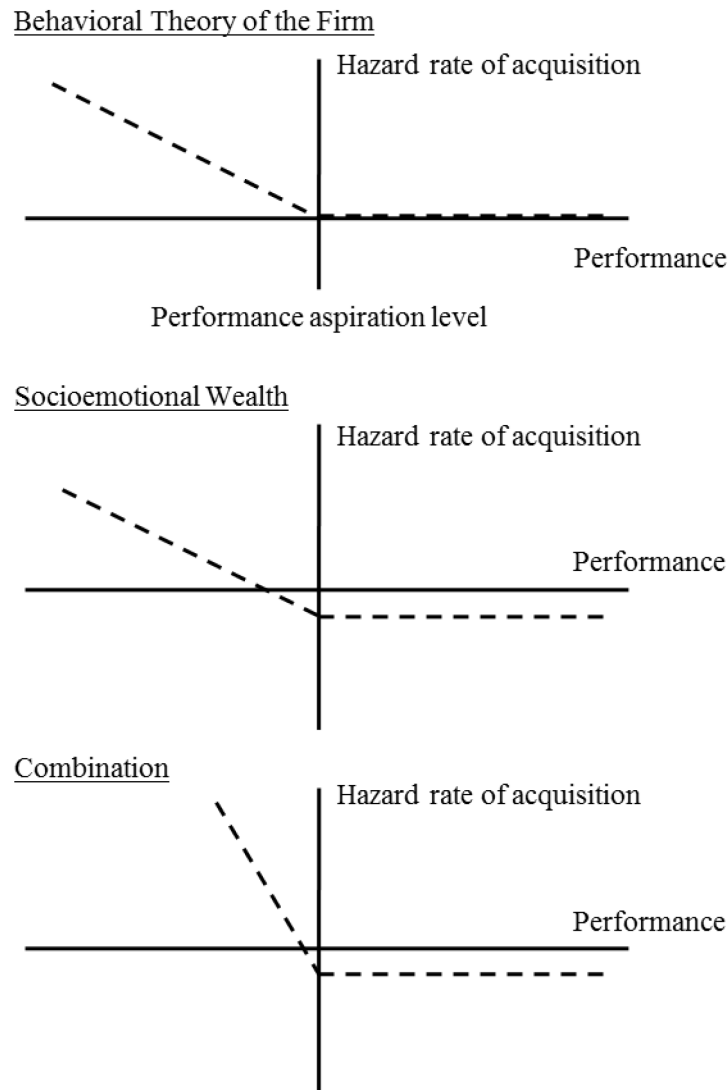
Assuming that acquisition policies are unaffected by firm performance aspiration levels neglects the complexity inherent in firm decision making (Cyert & March, 1963). Behavioral theorists predict that when performance is below aspiration levels, firms are more likely to engage in organizational change such as acquisitions (Audia & Greve, 2006; Cyert & March, 1963; Greve, 1998, 2008; Iyer & Miller, 2008; Shimizu, 2007), because the acquirer expects acquisitions to positively affect firm performance (Deutsch et al., 2007; Kaul, 2011). We graphically depict this behavioral logic in the upper graph in Figure 1.

In partial contrast to this view, the SEW perspective suggests that acquisition hazard rates are diminished given the loss in SEW through acquisitions, as outlined in Hypothesis 1. However, SEW logic also contends that family owners are neither blinded by their SEW considerations nor unable to consider economic necessities to act. Threatened by negative performance discrepancy, family and economic goals are expected to converge (Chrisman & Patel, 2012). In such situations, family influence

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should raise the willingness to act and to tolerate an acquisition, because both finances and the family's entrepreneurial legacy are at stake (Gomez-Mejia et al., 2010). With decreasing performance, family owners face the choice of either accepting some transient loss in SEW through acquisitions or risking the overall failure of the firm and, hence, a complete loss of family financial wealth and SEW. Put simply, confronted with the fear of losing the very basis of SEW, that is, the firm's existence, family owners are willing to accept losses in control, social ties, status, or affect and are likely to engage in acquisitions. This theoretical scenario is depicted in the middle graph in Figure 5.

Combining the behavioral and SEW perspectives, while we contend that family ownership is negatively related to acquisition hazard rates (as suggested in Hypothesis 1 and depicted in the vertical shift of the line in the middle and bottom graph in Figure 5), when performance is below aspiration levels, family ownership and, hence, SEW concerns should strengthen the positive relationship between negative performance discrepancy and the hazard rate of acquisitions. Thus, the effects from both theoretical lenses are compounded (see bottom graph in Figure 5).



**Figure 5:** Hazard rate of acquisition under different theoretical regimes

This moderating effect of family ownership on the relationship between below-aspiration performance levels and acquisitions' temporal proximity can be stated as:

**H2:** *Family ownership strengthens the positive influence of negative performance discrepancy on the hazard rate of acquisitions.*

According to the behavioral theory of the firm, slack allows firms to experiment, leading to an increased rate of engagements in new projects (Greve, 2003a). Slack, defined as “unused capacity, employees, unexploited opportunities, and financial resources” (Iyer & Miller, 2008: 811), enables firms to increase search, thereby making acquisitions more likely, irrespective of a firm's current performance level. Departing from this logic, we argue that SEW weakens the positive relationship between slack and the hazard rate of acquisitions. When combined with high levels of

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SEW, a slack-induced inclination to experiment through acquisitions is likely to be mitigated. To family owners, slack represents leeway for the firm to pursue socioemotional goals. With excess resources present, the danger of defaulting due to performance shortfalls is less pronounced, thereby protecting the survival of the firm and allowing family firm owners to preserve SEW. Consequently, in the presence of SEW, slack signals prosperity and less need to engage in SEW-threatening acquisitions, even if such inactivity bears financial opportunity costs. When high levels of SEW coincide with abundant firm resources, family firms are less inclined to consider experimentation, such as acquisitions. In partial contrast to the behavioral theory of the firm, from an SEW perspective, family ownership should thus curtail the positive effect of slack on the temporal proximity of acquisition. More formally stated:

**H3:** *Family ownership weakens the positive influence of slack on the hazard rate of acquisitions.*

### **4.3.3 Relatedness of Acquisitions**

Empirical evidence on family firm levels of diversification is mixed. On one side, finance literature suggests that family firms should have a strong incentive to diversify because of the controlling owners' under-diversified asset position (Faccio, Lang, & Young, 2001; Shleifer & Vishny, 1997). Similarly, Miller et al. (2010) view the family firm as an investment vehicle and suggest that the controlling family should diversify at the corporate level.

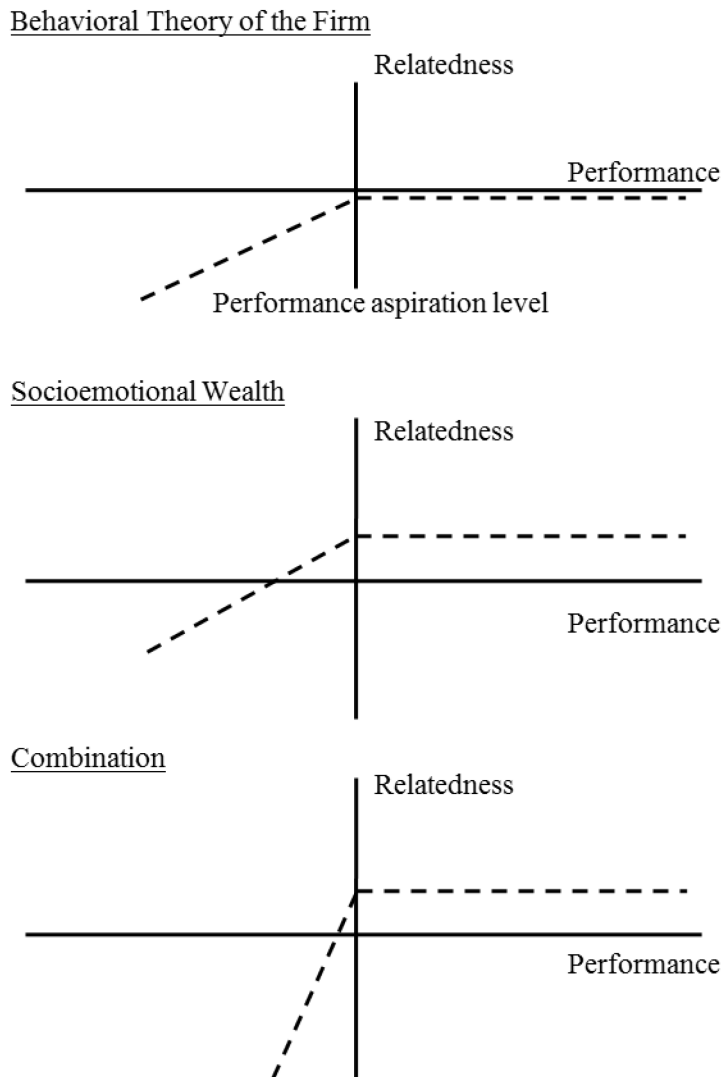
On the other side, from a SEW point of view, portfolio risk considerations in the decision to acquire new businesses play only a subordinate role. Concerns about losses of SEW as a consequence of acquisitions prevail; thus, family firms prefer “financial wealth concentration rather than deal with the drawbacks associated with the pursuit of diversification activities” (Gomez-Mejia et al., 2010; p. 204). We suggest that unrelated acquisitions lead to losses in SEW because of the involvement of expertise and managerial talent that is likely not available within the family firm (e.g., hiring outside managers). Integrating and eventually operating unrelated firms require new routines that stray from time-proven methods (Eisenmann, 2002; Vermeulen & Barkema, 2001). As noted by Barkema and Schieven (2008b), achieving organizational fit and reaping the rewards from the acquisition often require important restructuring of the acquirer, which erodes familial control. Such changes also

undermine information symmetries and dissolve the trust-based network among family owners and managers. Unrelated acquisitions make existing social ties less valuable because new connections with unfamiliar suppliers, clients, and advisors have to be secured.

The public face of the firm and the controlling family may be especially diluted as a result of an unrelated acquisition because it is difficult to derive a coherent family identity from a firm that bundles dissimilar products, uses unrelated technologies, and serves several markets (Pratt & Foreman, 2000). With a higher degree of uncertainty and greater potential to disrupt the status quo (Gomez-Mejia et al., 2010), unrelated acquisitions likely engender negative affective states, such as fear of losing control of the firm or anxiety about conflicts among owners and managers over acquisition and operation. We therefore contend that increasing levels of family ownership and, hence, SEW, are negatively related to unrelated acquisitions.

Although family firms may be biased by SEW considerations, they must confront economic realities. It seems unlikely that family firms endowed with SEW will continually invest in activities that have proved to be financially unsound. We suggest that the willingness to invest in unrelated businesses alters with situational framing, that is, performance levels relative to aspiration levels (Argote & Greve, 2007; Cyert & March, 1963). Following a behavioral logic similar to that for acquisition hazard rates, we expect that when performance fails to reach aspiration levels, “relatively simple alternatives fail, [and] organizations need to search for more drastic alternatives” (Shimizu, 2007; p. 1500). To overcome performance shortfalls, firms must search for more distant solutions, which are less likely to be found in related environments. This line of argumentation rooted in the behavioral theory is depicted in the upper graph in Figure 6.





**Figure 6:** Relatedness of acquisitions under different theoretical regimes

Drawing on prospect theory (Kahneman & Tversky, 1979) and the behavioral agency model (Wiseman & Gomez-Mejia, 1998), recent work focuses on the importance of framing for decision making in family firms through the reference point of SEW. In this regard, Gomez-Mejia et al. (2010; p. 232) note that “when faced with greater performance hazard it seems reasonable that family firms (whose ownership is more highly concentrated than nonfamily firms) would be more willing to diversify the firm” to mitigate portfolio risks. In other words, family owners’ preference for relatedness in acquisitions is not static. Rather, and as argued by the behavioral theory of the firm, whether preserving SEW takes precedence over the portfolio diversification goal depends on performance and, thus, the riskiness of the environment (Matusik & Fitza, 2012). We argue, therefore, that if performance falls short of aspiration levels, high levels of family ownership and SEW will induce firms

to engage in portfolio diversification (i.e., unrelated acquisitions) to overcome performance shortfalls, if this is what it takes to save the firm, which is the ultimate basis for SEW. This effect is depicted in the middle graph in Figure 2.

Combining the arguments of the behavioral theory of the firm and the SEW perspective on relatedness of acquisitions, family ownership is expected to increase the negative influence of performance shortfalls on relatedness of acquired firms. This combined view is represented in the bottom graph in Figure 2. More formally:

**H4:** *Family ownership strengthens the negative influence of negative performance discrepancy on the relatedness of acquired firms.*

According to the behavioral theory of the firm, organizational slack also impacts the relatedness of acquired businesses. When resources exceed organizational needs, organizations may turn their attention to new business opportunities and organizational changes “that would not be approved in the face of scarcity” (Cyert & March, 1963; p. 279). Distant choices are more likely to be implemented when a firm’s resources allow for experimentation. Performance monitoring will be less strict, enabling decision makers with ample scope to enter uncharted waters (Iyer & Miller, 2008).

Analogous to the moderating impact of slack on the temporal proximity of acquisitions, the SEW perspective views slack as a filter that allows opportunities to enter unrelated industries to appear less attractive. Preservation of SEW being the most salient goal, family firms are reluctant to change, particularly if change is deemed unnecessary in light of sufficient slack. If high levels of SEW coincide with abundant firm resources, family firms are less inclined to consider experimentation through an unrelated acquisition. In partial contrast to behavioral theory, family ownership should attenuate the negative effect of slack on the relatedness of acquired firms. We therefore expect:

**H5:** *Family ownership weakens the negative influence of slack on relatedness of acquired firms.*

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## 4.4 Data and Methods

### 4.4.1 Data and Measures

We draw on acquisition information from Thomson SDC Platinum database in the manufacturing sector (SIC codes from 2000 to 3999) for the period 1990 to 2010. As services and utilities sectors are considerably different from manufacturing firms in terms of operational and strategic goals, we focus only on manufacturing firms. We define an acquisition event as the announcement date when an acquirer owning less than 50% of voting shares before the announcement date increases voting share ownership to at least 50%. Therefore, we include only acquisitions that involve a change of ownership control and, thus, reflect major strategic decisions by the acquirer (Haleblian et al., 2006); 14,259 such acquisition events were identified. We eliminate acquiring firms that are not listed on NYSE, NASDAQ, or AMEX, as well as subsidiaries and acquisitions with a transaction value of less than \$10 million and more than \$500 million. We eliminate firms with less than a \$3 closing price a month before the announcement, removing from consideration very small or distressed firms. As cross-border acquisitions add an additional layer of complexity related to cultural, social, and institutional embeddedness, we eliminate such acquisitions.

The preliminary sample consists of 12,387 acquisition events. We then match acquiring firms listed in the acquisition events with CRSP, COMPUSTAT, ExecuComp, Hoover's Company records, yearly proxy statements, and Investor Responsibility Research Center (IRRC). We identify 8,736 acquisition events with complete information, representing 884 firms containing 9,468 firm-year observations. Ownership information comes from the IRRC database, which also identifies external institutional blockholders. We use alternative definitions of family firms in the main analysis, but for descriptive purposes, a firm with family blockholders owning more than a 5% equity stake and with at least one family member serving as a top-level executive or member of the board of directors is considered a family firm (Allen & Sharon, 1982; Anderson & Reeb, 2003; Miller et al., 2007; Villalonga & Amit, 2006). To identify the presence of family members, including family and founder CEOs, we triangulate family member presence from Hoover's, ExecuComp, company proxy statements, annual reports (particularly Item 404 or Regulation S-K that identifies transactions with related persons, promoters, and certain control persons), and

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Ancestry.com. We find 2,654 acquisitions by family firms and 6,082 by nonfamily firms. Table 4 lists these acquisitions across different SIC codes.

	Total acq.	% acq. by fam. firms	Fam. firms	Nonfam. firms	Fam. firm – acq. value in millions	Nonfam. firm – acq. value in millions	Total acq. value	% value by fam. firms
20: Food and Kindred Products	168	22.02%	37	131	7,141	28,034	35,175	20.30%
21: Tobacco Products	198	34.85%	69	129	8,901	34,572	43,473	20.47%
22: Textile Mill Products	460	26.09%	120	340	13,200	99,960	113,160	11.66%
23: Apparel and Other Textile Products	263	27.76%	73	190	15,914	42,560	58,474	27.22%
24: Lumber and Wood Products	66	21.21%	14	52	2,394	11,388	13,782	17.37%
25: Furniture and Fixtures	131	26.72%	35	96	8,120	16,224	24,344	33.36%
26: Paper and Allied Products	213	39.44%	84	129	15,540	29,025	44,565	34.87%
27: Printing and Publishing	185	22.70%	42	143	9,366	35,750	45,116	20.76%
28: Chemicals and Allied Products	526	25.48%	134	392	30,150	106,624	136,774	22.04%
29: Petroleum and Coal Products	225	32.44%	73	152	12,118	40,888	53,006	22.86%
30: Rubber and Misc. Plastics Products	179	24.02%	43	136	7,482	16,456	23,938	31.26%
31: Leather and Leather Products	109	18.35%	20	89	3,840	26,344	30,184	12.72%
32: Stone, Clay, and Glass Products	52	34.62%	18	34	2,340	8,874	11,214	20.87%
33: Primary Metal Industries	581	36.66%	213	368	36,210	109,296	145,506	24.89%
34: Fabricated Metal Products	406	32.51%	132	274	20,328	29,592	49,920	40.72%
35: Industrial Machinery and Equipment	1386	29.94%	415	971	100,845	209,736	310,581	32.47%
36: Electronic	1499	35.69%	535	964	80,250	116,644	196,894	40.76%
37: Transportation Equipment	243	36.63%	89	154	16,732	35,112	51,844	32.27%
38: Instruments and Related Products	1057	35.29%	373	684	83,179	196,308	279,487	29.76%
39: Miscellaneous Manufacturing Industries	789	17.11%	135	654	24,975	151,728	176,703	14.13%
<b>Total</b>	<b>8736</b>	<b>28.98%</b>	<b>2654</b>	<b>6082</b>	<b>499,025</b>	<b>1,345,115</b>	<b>1,844,140</b>	<b>25.54%</b>

Note: 8,736 acquisition events from 1990 and 2010 representing 884 firms (9,468 firm-years)

**Table 4:** Acquisition outcomes across 23 SIC Codes

#### 4.4.2 Dependent Variables

*Hazard of acquisition.* Hazard of acquisition is represented by time to acquisition announcement. Announcement is coded as 1 in the year of the event and 0 otherwise. If a firm acquired more than one firm in a year, we code this also as 1 for two reasons: (1) the underlying rationale for acquisition activity according to our theory is the same, irrespective of the number of acquired firms in a given year, and (2) coding single and multiple events as 1 is a more conservative approach. However, only 3.7% of firms have multiple acquisitions in a year.

*Relatedness.* Wang and Zajac (2007) measure relatedness in diversification by measuring the degree of overlap in NAICS codes of the acquirer and the target. Relatedness is operationalized as follows: if the first four digits of target and acquirer are the same, we code as 1; if only the first three digits are the same, we code as 0.75; if only the first two digits match, we code as 0.5; if only the first digit is common, we code as 0.25; otherwise, we code as 0.

#### 4.4.3 Independent Variables

*Family ownership.* We distinguish family from nonfamily firms based on ownership and family involvement in governance and management (e.g. Allen & Sharon, 1982; Anderson & Reeb, 2003; Gomez-Mejia et al., 2010; Villalonga & Amit, 2006). Family firms are those where founders or other family members related by blood or marriage have significant shareholdings and are executives or directors. We classify family firms as those in which a family owns a minimum of 5% of firm shares and at least one family member serves as a top-level executive or member of the board of directors. Top management is defined as executives above the rank of vice-president.

We further classify family firms into two additional categories. The first consists of family firm percentage equity in which the founder still plays an active role in management or governance (*founder-led firm ownership*). This distinction allows us to control for the founder effect that may explain variance in family firm behavior (Villalonga & Amit, 2006). For the second category, we use family firm percentage equity in which members of later family generations are involved in management or governance (*later-generation controlled firm ownership*). All three measures of family

firms are truncated because all nonfamily firms are coded as zero (0) and percentage equity ownership is coded for family firms.

*Performance discrepancy.* Decision makers use return on assets (ROA), return on sales (ROS), or return on equity (ROE) to assess discrepancies between actual performance and aspirations. Since ROE and ROS may be affected by numerous external factors, we assess gaps between aspirations and performance using ROA, which is not only internally oriented, but also under greater direct control by firm activities. Drawing on Greve (2003a) and Iyer and Miller (2008), the performance gap that triggers activity such as acquisitions is measured by discrepancies between performance in time  $t-1$  and *historical* performance or performance relative to competitors (*social comparison*) (Baum & Haveman, 1997; Greve, 1998). For *historical aspiration level*, we measure firm performance in time  $t-2$ ; for *social aspiration level*, we measure the median performance of firms in the relevant four-digit SIC category in  $t-1$ . Following Iyer and Miller (2008), we construct four performance discrepancy variables. The first two variables capture positive performance discrepancy; we use the absolute value of the performance discrepancy (performance in  $t-1$  minus historical aspiration and social aspiration levels) if discrepancy is positive and 0 otherwise. Similarly, for the negative performance discrepancy variables, we take the absolute value of the discrepancy if discrepancy is negative; otherwise, the variable is coded as 0.

*Slack.* We use three different measures initially proposed by Bourgeois (1981) as common proxies for slack (see, e.g., Bromiley, 1991; Iyer & Miller, 2008): absorbed slack, unabsorbed slack, and potential slack. Absorbed slack is the ratio of selling, general, and administrative expenses to sales; unabsorbed slack is the ratio of current assets to current liabilities; potential slack is the equity to debt ratio.

#### 4.4.4 Control Variables

Unless stated otherwise, control variables are lagged by one year. We calculate Altman's Z-score as *distance from bankruptcy*, one of the most popular measures for predicting bankruptcy risks (Altman, 1968). A single financial ratio is unlikely to predict bankruptcy due to the large scope of public firm activities. The Z-score is calculated as  $Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$  with:  $X_1 = \text{Working Capital} /$

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Total Assets, (WC/TA);  $X_2$  = Retained Earnings / Total Assets, (RE/TA);  $X_3$  = Earnings Before Interest and Taxes / Total Assets, (EBIT/TA);  $X_4$  = Market Value Equity / Book Value of Total Liabilities, (MVE/TL);  $X_5$  = Sales / Total Assets, (S/TA).

As larger firms are likely to engage in acquisitions, we control for *firm size* as a natural logarithm of firm assets in annual reports. Following Iyer and Miller (2008), we control for *R&D intensity* ( $\ln[\text{R\&D}]/\ln[\text{Sales}]$ ), *capital intensity* ( $\ln[\text{capital expenditures}]/\ln[\text{Sales}]$ ), and *advertising intensity* ( $\ln[\text{advertising expenses}]/\ln[\text{Sales}]$ ).

Research increasingly emphasizes the importance of learning effects in acquisitions (Haleblian et al., 2006). Based on *prior acquisition experience*, firms may become increasingly inclined to engage in acquisitions. Following recent literature, we control for total number and value of acquisitions in the previous five years of the respective acquisition (Barkema & Schijven, 2008a).

Furthermore, growth opportunities could require firms to rapidly acquire resources and capabilities through acquisitions (Hoang & Rothaermel, 2005). To control for *growth opportunities*, we use Tobin's Q. Because *availability of cash* might affect acquisition decisions, we control for free cash flows.

*Unsystematic risk* could significantly affect the level of acquisitions, especially with *high wealth concentrations* in family firms (Gomez-Mejia et al., 2010). To measure unsystematic risk, we compile market returns and firm stock market returns. Market return is based on daily market returns in S&P 1500 firms over 252 trading days in a year. We weight market returns by market capitalization of individual manufacturing firms in the S&P 1500. Next, daily firm returns over a minimum of 100 trading days to a maximum 252 trading days are regressed on market returns; standard deviation of errors is the measure of unsystematic risk (Bansal & Clelland, 2004; Bushman, Dai, & Wang, 2010; Goyal & Santa-Clara, 2003). In addition to directly controlling for unsystematic risk, we also control for the interaction between our family firm measure and unsystematic risks.

Although family firm blockholders are driven by both social and economic motives, nonfamily blockholders are more likely to be driven by economic motives (Thomsen & Pedersen, 2000). Under problemistic search, outside blockholders' motives to maintain firm value may overlap with family blockholders' motives to preserve SEW by mitigating negative performance discrepancy. Drawing on Anderson



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et al. (2003), we identify outside nonfamily blockholders who control more than 5% of equity. Such blockholders (e.g., institutional investors) have no other relationship with the firm beyond equity ownership.

Finally, to control for industry effects, we use *industry dummies* (reference industry – 39: Miscellaneous Manufacturing Industries).

#### 4.4.5 Analytical Approach

*Hazard of acquisition.* We analyze the independent variables' influence on the hazard rate of acquisition (Hypotheses 1, 2, and 3). As Haleblian et al. (2006) note, the "crucial issue in modeling the hazard rate of organizational events is selecting an appropriate functional specification for the duration dependence of an event's occurrence" (p. 364). Behavioral theory of the firm implies that the baseline hazard of making an acquisition is higher at the start of the performance discrepancy episode as managers seek solutions to address performance discrepancy. Therefore, we use a Weibull specification, which seems appropriate to account for such a time-varying pattern in the baseline hazard rate (Box-Steffensmeier & Jones, 2004).<sup>8</sup> If the shape parameter is below 1, then event hazard is likely to occur at the early stages rather than later; the opposite is true if the shape parameter is above 1 (Box-Steffensmeier & Jones, 2004, p. 25-31).

*Two-limit Tobit regression analysis.* To test proposed hypotheses on relatedness of acquisitions (Hypotheses 4 and 5), we build upon the measure introduced previously (Wang & Zajac, 2007). Relatedness is a latent variable; its level is either zero or increases by increments of 0.25. As firms with different first-digit NAICS codes are coded zero, the values of relatedness are left-censored. Similarly, degree of relatedness between acquirers and targets with similar four-digit SIC codes may not be fully captured. Therefore, relatedness on the right side could be censored as well. As the data consist of pooled cross-sections, the use of panel specification for two-limit Tobit regressions is most appropriate. Because the Hausman test for fixed effects is not statistically significant ( $p=0.193$ ), we use a random effects specification. There are two reasons why heteroscedasticity could be a problem in our data. First, firms active in similar industries or having the same governance structure could share similar

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<sup>8</sup> Our findings are robust to the non-parametric (Cox) baseline hazard specification.

acquisition motives. Second, as firms are more likely to acquire in waves, the potential for heteroscedasticity in the error terms increases. Using the Breusch-Pagan procedure, we test for the null hypothesis that error variances are equal; this hypothesis is rejected ( $\chi^2=238.029$ ,  $df=30$ ,  $p<0.000$ ). Therefore, we apply a Feasible Generalized Least Squares (FGLS) approach to our data.

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1 Family Ownership	0.283	0.163										
2 Founding CEO ownership	0.222	0.233	0.434									
3 Later Generation Ownership	0.196	0.192	0.446	0.569								
4 level), historical <0 (Performance - aspiration	-0.064	0.112	0.106	0.097	0.122							
5 level), historical >0 (Performance - aspiration	0.052	0.096	0.052	0.043	0.093	-0.122						
6 level), social <0 (Performance - aspiration	-0.074	0.144	0.048	0.066	0.039	0.062	-0.168					
7 level), social >0	0.073	0.094	0.036	0.022	0.032	-0.048	0.058	-0.143				
8 Absorbed Slack	0.564	1.795	0.058	0.108	0.033	-0.12	0.157	-0.041	0.039			
9 Unabsorbed Slack	2.097	1.932	0.038	0.063	0.058	-0.06	0.051	-0.056	0.061	0.269		
10 Potential Slack	0.484	3.591	0.062	0.071	0.051	-0.05	0.037	-0.086	0.144	0.266	0.163	
11 Distance from Bankruptcy	2.371	8.663	-0.027	-0.059	-0.132	0.053	-0.113	0.142	-0.053	-0.147	-0.145	0.115
12 ln(Assets)	5.192	2.087	0.043	0.034	0.05	0.083	0.077	0.064	0.033	0.128	0.055	0.13
13 R&D Intensity	0.084	0.512	0.066	0.023	0.239	-0.141	0.032	-0.135	0.137	0.119	0.093	0.089
14 Advertising Intensity	0.052	0.073	0.041	0.061	0.071	-0.069	0.051	-0.114	0.05	0.118	0.139	0.127
15 Capital Intensity	0.074	0.093	0.067	0.048	0.042	-0.048	0.123	-0.114	0.133	0.141	0.17	0.158
16 No. of Prior Acquisitions	8.193	11.371	-0.064	-0.073	-0.136	0.052	0.122	0.098	0.143	0.086	0.119	0.127
17 Value of Prior Acquisitions	19.531	7.89	-0.102	-0.137	-0.084	0.033	0.137	0.05	0.117	0.065	0.122	0.03
18 Tobin's Q	1.986	2.285	-0.058	-0.039	-0.065	-0.082	0.078	-0.074	0.101	0.065	0.159	0.148
19 ln(Free Cash Flow)	0.151	6.727	0.063	0.151	0.049	-0.134	0.097	-0.12	0.031	0.071	0.169	0.128
20 Unsystematic Market Risk	0.985	0.617	-0.081	-0.062	-0.097	0.089	-0.127	0.118	-0.06	-0.124	-0.085	0.004
21 Outside Blockholders	0.594		0.041	0.047	0.045	0.037	0.04	0.033	0.034	0.035	0.037	0.044
22 Relatedness	0.598	0.273	-0.106	-0.144	-0.12	-0.087	0.101	-0.073	0.021	0.113	0.123	0.032
23 Acquisition	0.175	0.421	-0.153	-0.168	-0.129	-0.106	0.136	-0.109	0.033	0.157	0.124	0.07

**Table 5:** Means, standard deviations, and correlations

	11	12	13	14	15	16	17	18	19	20	21	22
1 Family Ownership												
2 Founding CEO ownership												
3 Later Generation Ownership												
4 (Performance - aspiration level), historical <0												
5 (Performance - aspiration level), historical >0												
6 (Performance - aspiration level), social <0												
7 (Performance - aspiration level), social >0												
8 Absorbed Slack												
9 Unabsorbed Slack												
10 Potential Slack												
11 Distance from Bankruptcy												
12 ln(Assets)	0.057											
13 R&D Intensity	-0.053	0.16										
14 Advertising Intensity	-0.065	0.044	0.125									
15 Capital Intensity	-0.031	0.12	0.038	0.107								
16 No. of Prior Acquisitions	-0.052	0.124	0.044	0.146	0.115							
17 Value of Prior Acquisitions	-0.095	0.125	0.131	0.094	0.117	0.338						
18 Tobin's Q	-0.098	0.117	0.037	0.129	0.16	0.071	0.067					
19 ln(Free Cash Flow)	-0.103	0.081	0.167	0.112	0.123	0.213	0.173	0.244				
20 Unsystematic Market Risk	0.17	0.057	0.121	0.043	-0.037	-0.029	-0.046	0.081	-0.053			
21 Outside Blockholders	0.044	0.04	0.032	0.043	0.044	0.05	0.048	0.046	0.041	0.104		
22 Relatedness	0.05	0.037	0.132	0.075	0.036	0.219	0.155	0.163	0.171	-0.223	0.019	
23 Acquisition	-0.088	0.067	0.119	0.072	0.085	0.249	0.153	0.151	0.153	0.197	0.122	0.126

**Table 5 (cont.):** Means, standard deviations, and correlations

	<i>Percentage Family Ownership (5% + family member in TMT)</i>		<i>Percentage Founding CEO ownership</i>		<i>Percentage Later Generation Ownership</i>	
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>
	Historical	Social	Historical	Social	Historical	Social
Family Firm Variable (Performance - aspiration level) < 0	-0.63**	-1.09***	-1.3***	-1.41***	-1.63***	-1.57***
Family Firm Variable (Performance - aspiration level) > 0	1.31*	0.92*	1.52*	0.76*	1.36*	0.88*
Absorbed slack	-0.08	-0.06	-0.05	-0.04	-0.02	-0.03
Unabsorbed slack	0.13*	0.14*	0.15*	0.15*	0.13*	0.17*
Potential slack	0.27**	0.21**	0.25**	0.3**	0.14*	0.17*
Family Firm x (Performance - aspiration level) < 0	0.58*	0.44*	0.48*	0.37*	0.62**	0.36*
Family Firm x (Performance - aspiration level) > 0	-0.37*	-0.4*	-0.39*	-0.26*	-0.21	-0.11
Family Firm x Absorbed Slack	0.01	0.02	0.01	0.01	0.03	0.02
Family Firm x Unabsorbed Slack	-0.09*	-0.06*	-0.06*	-0.08*	-0.07*	-0.06*
Family Firm x Potential Slack	-0.12*	-0.08*	-0.11*	-0.09*	-0.11*	-0.10*
Distance from Bankruptcy	-0.02	-0.03	-0.03	-0.04	-0.3	-0.01
ln(Assets)	0.13**	0.11*	0.14*	0.12*	0.18**	0.17**
R&D Intensity	-0.09*	-0.07	-0.06	-0.06	-0.03	-0.07
Advertising Intensity	-0.07	-0.04	-0.06	-0.04	-0.06	-0.06
Capital Intensity	-0.13*	-0.09*	-0.09*	-0.05	-0.04	-0.05
No. of Prior Acquisitions	0.10**	0.12**	0.11**	0.17**	0.15**	0.15**
Value of Prior Acquisitions	0.10**	0.08**	0.07**	0.04	0.06	0.05
Tobin's Q	0.40***	0.34***	0.23**	0.12	0.19*	0.15*
ln(Free Cash Flow)	0.36***	0.21**	0.34**	0.27***	0.28**	0.26**
Unsystematic Risk	0.14*	0.12**	0.11*	0.12*	0.13*	0.11*
Unsystematic Risk x Family Firm	0.08*	0.07*	0.09*	0.08*	0.09*	0.08*
Outside Blockholders	0.15*	0.17	0.05	0.05	0.13*	0.19**
Weibull Shape Parameter	0.871	0.843	0.864	0.834	0.829	0.844
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	9136	10524	5305	6003	3831	4521
Number of Acquisitions	654	827	507	536	366	438
Likelihood Ratio (chi2)	389.457***	303.044***	399.387***	398.604***	306.734***	308.786***
-LL2	770.533	743.303	750.336	737.843	789.033	834.837

\*\*\* p<0.001; \*\* p<0.01; \* p<0.05

**Table 6:** Weibull regression for hazard of acquisition

	Percentage Family Ownership (5% + family member in TMT)		Percentage Founding CEO ownership		Percentage Later Generation Ownership	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Historical	Social	Historical	Social	Historical	Social
Family Firm Variable (Performance - aspiration level) < 0	0.17*	0.15*	0.17*	0.14*	0.07	0.16*
Family Firm Variable (Performance - aspiration level) > 0	-0.27*	-0.15*	-0.3*	-0.07	-0.12*	-0.13
Absorbed slack	0.03	0.02	0.03	0.03	0.02	0.01
Unabsorbed slack	0.02	0.02	0.02	0.01	0.01	0.00
Potential slack	-0.08*	-0.07*	-0.13*	-0.16*	-0.14*	-0.12*
Family Firm x (Performance - aspiration level) < 0	-0.11*	-0.14*	-0.12*	-0.13*	-0.08*	-0.1*
Family Firm x (Performance - aspiration level) > 0	-0.10*	-0.07*	-0.08*	-0.05	-0.07*	-0.08*
Family Firm x Absorbed Slack	0.03	0.01	0.01	0.4	0.02	0.01
Family Firm x Unabsorbed Slack	-0.01	0.02	0.01	0.01	0.01	0.01
Family Firm x Potential Slack	0.04*	0.03*	0.07*	0.06*	0.05*	0.04*
Distance from Bankruptcy	0.08*	0.07*	0.07*	0.07*	0.07*	0.06*
ln(Assets)	-0.01	-0.02	-0.03	-0.01	-0.04	-0.01
R&D Intensity	-0.13**	-0.12**	-0.10*	-0.05	-0.08*	-0.09*
Advertising Intensity	0.17**	0.15**	0.22**	0.24**	0.15*	0.02
Capital Intensity	0.04	0.03	0.05	0.03	0.04	0.04
No. of Prior Acquisitions	0.06	0.08	0.03	0.06	0.11**	0.12**
Value of Prior Acquisitions	0.13*	0.19*	0.10	0.07	0.13*	0.11*
Tobin's Q	0.21**	0.17**	0.22**	0.16*	0.09*	0.07
ln(Free Cash Flow)	0.39***	0.27***	0.15*	0.14*	-0.19*	-0.014*
Unsystematic Risk	0.43***	0.26**	0.14*	0.11*	-0.33***	0.24**
Unsystematic Risk x Family Firm	-0.13*	-0.12*	-0.12*	-0.12*	-0.13*	-0.11*
Outside Blockholders	-0.07*	-0.06*	-0.07*	-0.06*	-0.11**	-0.06*
	0.16**	0.14*	0.09	0.06	0.17***	0.19***
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	9136	10524	5305	6003	3831	4521
Number of Acquisitions	654	827	507	536	366	438
Likelihood Ratio (chi2)	100.78***	108.78***	196.27***	103.69***	117.94***	113.53***
-LL2	299.53	396.6	416.2	512.06	493.61	518.26

\*\*\* p<0.001; \*\* p<0.01; \* p<0.05

**Table 7:** Random effects FGLS two-limit Tobit regression

#### 4.4.6 Results

Table 5 shows the mean, standard deviations, and zero-order correlations. Table 6 shows the results of Weibull regression to test the hypotheses on hazard of acquisition,<sup>9</sup> and Table 7 presents the results of random effects FGLS two-limit Tobit regression to test the hypotheses on relatedness of acquisitions.

In Tables 6 and 7, performance discrepancy calculations are based on historical comparisons (Models 1, 3, and 5) and on social comparisons (Models 2, 4, and 6). Hypothesis 1 proposes that family ownership lowers the likelihood of acquisition (percentage Family Ownership:  $\beta = -0.63$ ,  $p < 0.01$ ,  $\beta = -1.09$ ,  $p < 0.01$ ; percentage founding CEO ownership:  $\beta = -1.30$ ,  $p < 0.01$ ,  $\beta = -1.41$ ,  $p < 0.001$ ; percentage later generation ownership:  $\beta = -1.63$ ,  $p < 0.001$ ,  $\beta = -1.57$ ,  $p < 0.001$ ).

Hypothesis 2 proposes that with increasing gaps in historic aspirations (percentage family ownership:  $\beta = 0.58$ ,  $p < 0.05$ ; percentage founding CEO ownership:  $\beta = 0.48$ ,  $p < 0.05$ ; percentage later generation ownership:  $\beta = 0.62$ ,  $p < 0.05$ ) and social aspirations (percentage family ownership:  $\beta = 0.44$ ,  $p < 0.05$ ; percentage founding CEO ownership:  $\beta = 0.37$ ,  $p < 0.05$ ; percentage later generation ownership:  $\beta = 0.36$ ,  $p < 0.05$ ), the likelihood of acquisition increases.

We find support for the behavioral argument that both unabsorbed and potential slack have a positive effect on acquisition hazard rates. Absorbed slack remains insignificant in both models. In Hypothesis 3, we argue that under increased slack search, family firms are less likely to engage in acquisitions. Although the coefficients for unabsorbed slack and family firm interaction are insignificant, coefficients for unabsorbed slack and potential slack are negative and significant for all three types of family firm measures. Therefore, supporting Hypothesis 3, family firms engaging in unabsorbed and potential slack search are less likely to acquire firms.

Table 7 displays the estimates for FGLS random effects two-limit Tobit regression of acquisition relatedness. Even though not explicitly hypothesized, we find evidence that family ownership increases the relatedness of acquisitions. Hypothesis 4 suggests that family ownership strengthens the tendency to acquire unrelated targets (percentage family ownership:  $\beta = -0.10$ ,  $p < 0.05$ ,  $\beta = -0.07$ ,  $p < 0.05$ ; percentage

<sup>9</sup> Taking the exponential function of the estimated coefficient indicates the contribution of the coefficient to the overall hazard rate.

founding CEO ownership:  $\beta = -0.08$ ,  $p < 0.05$ ,  $\beta = -0.05$ ,  $p > 0.10$ ; percentage later generation ownership:  $\beta = -0.07$ ,  $p < 0.05$ ,  $\beta = -0.08$ ,  $p < 0.05$ ). Therefore, except for social problemistic search under founding CEO ownership, family firms are more likely to acquire unrelated firms under problemistic search. Alternatively, family firms are more likely to acquire related firms under unabsorbed slack (percentage family ownership:  $\beta = 0.04$ ,  $p < 0.05$ ,  $\beta = 0.03$ ,  $p < 0.05$ ; percentage founding CEO ownership:  $\beta = 0.07$ ,  $p < 0.05$ ,  $\beta = 0.06$ ,  $p < 0.05$ ; percentage later generation ownership:  $\beta = 0.05$ ,  $p < 0.05$ ,  $\beta = 0.04$ ,  $p < 0.05$ ) and potential slack (percentage family ownership:  $\beta = 0.08$ ,  $p < 0.05$ ,  $\beta = 0.07$ ,  $p < 0.05$ ; percentage founding CEO ownership:  $\beta = 0.07$ ,  $p < 0.05$ ,  $\beta = 0.07$ ,  $p < 0.05$ ; percentage later generation ownership:  $\beta = 0.07$ ,  $p < 0.05$ ,  $\beta = 0.06$ ,  $p < 0.05$ ).

#### 4.4.7 Post-hoc Analysis – Stock Market Penalty for SEW preservation

To further support our argument that acquisitions in family firms are driven by SEW motives, assessing differences in stock market reaction following acquisitions by family and nonfamily firms could indirectly explain the presence of SEW. If family firm acquisitions are driven by SEW motives, then stock market investors focusing on economic gains should discount these acquisitions, as such decisions are not likely to enhance family firm value. Therefore, stock market reaction for family firms should be more negative (or less positive) compared to nonfamily firms, *ceteris paribus*. If the stock market discounts the SEW component, stock market reaction will be less positive for a favorable event and more negative for an unfavorable event.

*Stock market reaction.* To assess this possibility, we start by measuring long- and short-term stock market reactions: (1) 3-day cumulative abnormal return (CAR), (2) 7-day CAR, (3) 12-month buy-hold return (BHAR), and (4) 36-month BHAR. The long- and short-term effects of acquisitions are increasingly central to measuring acquisition outcomes (Cording, Christmann, and Weigelt, 2010). CAR is based on standard event study methodology. The acquirer's predicted stock return is calculated on trading day  $t = -170$  to ending day  $t = -21$  to estimate daily returns; abnormal returns are calculated using:

$$r_t = \alpha + \beta r_{m_t} + \varepsilon_t$$



where  $r_t$  is daily return for the acquirer on day  $t$ ,  $rm_t$  is the daily return for value-weighted S&P 500,  $\alpha$  and  $\beta$  are firm specific parameters, and  $\varepsilon_t$  is independent and identically distributed. Using  $\alpha$  and  $\beta$ , we predict daily return  $R_t$  on day  $t$ , or the day of the announcement. We then subtract predicted return  $R_t$  from actual return  $r_t$ . The cumulative abnormal return is the sum of abnormal returns over the three-day window  $[-1, 1]$  for three-day CAR and seven-day window  $[-3, 3]$  for seven-day CAR. We calculate returns for both 12-month and 36-month periods after the announcements using the following equation:

$$BHAR_{iT} = \prod_{t=1}^T (1 + AR_{it}) - 1.$$

*Matching family and nonfamily firms.* To capture differences in stock market reaction for family and nonfamily firms, we code each firm to indicate whether it faces problemistic search (=1, =0 otherwise) or slack search (=1, if slack above 4-digit SIC code median), and the nature of acquisitions (=related [=1] if three digit SIC code matches the acquirer; =0 otherwise, or unrelated). Using *psmatch2* package in Stata 11, we match firms based on nearest neighbor approach without replacement.<sup>10</sup> The matching variables are control variables and the closest announcement window in the six-month period. Next, we create ten pools of matched announcements (Supplementary Material for Review [SMR]; first column of Table SMR.1). In each pool, we compare stock market reaction to announcement by matched family and nonfamily firms.

Difference in stock market reactions for each pool is measured by assessing difference in means.<sup>11</sup> As shown in Table SMR.1 (in Supplementary Material for Review [SMR]), differences in stock market reaction in the long run are not significant. Short-term stock market reactions are more negative when family firms acquire unrelated targets under negative performance discrepancy. The stock market reacts more negatively when family firms acquire related targets under unabsorbed or potential slack. More negative stock market reaction indicates that acquisition decisions by family firms are considered value-reducing in the short run; the stock market could be discounting for family firm preference for preserving SEW.

<sup>10</sup> The findings are robust to alternate matching processes: nearest neighbor, radius, kernel, caliper, genetic matching (genetic matching algorithm *GenMatch* by Sekhon (2007)).

<sup>11</sup>  $z = \frac{b_1 - b_2}{\sqrt{(s.e._1)^2 + (s.e._2)^2}}$

#### **4.4.8 Additional Robustness Analysis**

To assess the robustness of our inferences, instead of using a 5% cutoff for our three operationalizations for family firms, we use 10% (Supplementary Material for Review [SMR] Table SMR.2) and 20% cutoffs (Supplementary Material for Review [SMR] Table SMR.3). Although effect sizes are stronger with higher cutoffs, we do not find differences in direction of estimates. Thus, our statistical inferences remain the same.

Second, based on Miller, Breton-Miller, and Lester (2010) we use two additional operationalizations of related diversification: (1) three-digit [1=related; 0=unrelated] and (2) four-digit [1=related; 0=unrelated] SIC code match. Results in Table SMR.4, based on random effects logit, support our inferences for Hypotheses 4 and 5.

### **4.5 Discussion**

Management research shows an increasing interest in ownership types as opposed to ownership levels to explain differences in firms' strategic actions (e.g., Claessens et al., 2002; Connelly et al., 2010; Daily et al., 2003; David et al., 2010; Miller et al., 2010; Ramaswamy et al., 2002; Thomsen & Pedersen, 2000). In the present paper, we explore family ownership that exhibits a preference for SEW preservation (Gomez-Mejia et al., 2011) and discuss how this ownership type biases timing and relatedness of acquisitions. We thus add to a socially conditioned view of ownership (Fiss & Zajac, 2004; Miller et al., 2010) and make three distinct contributions to the literature.

First, by combining the SEW perspective and the behavioral theory of the firm, we extend prior acquisition research with regard to the influence of ownership types on firm acquisition activity. We show that family firms are more likely to acquire when performance falls below aspiration levels, with further performance decreases accelerating this process. In the face of financial decline, family firms are inclined to acquire as a way to control declining performance, and enhance financial wealth and SEW. We thus find further evidence for Iyer and Miller's (2008) arguments that firm actors are not constantly searching for targets and that acquisition timing is biased by performance feedback. Accordingly, we open the black box of the interplay between nonfinancial and financial motivations to engage in acquisitions, a topic recently raised in acquisition research (Haleblian et al., 2006).

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Our results also answer the question of what is acquired, that is, how related are the resource bases of the acquired and the acquiring firm. We reconcile the partly conflicting views of Miller et al. (2010) and Gomez-Mejia et al. (2010): While the former emphasize portfolio risk considerations that should lead to more unrelated acquisitions, the latter draw from the SEW perspective and implicitly suggest that family firms should acquire more related firms. Through our contingency perspective, we solve this puzzle and suggest that when performance falls below aspiration levels, concerns for losses of SEW outweigh benefits from portfolio risk diversification via (unrelated) acquisitions. When performance falls below aspiration levels, however, preferences progressively reverse, with wealth diversification receiving a higher priority.

Second, we complement SEW and family business literatures (Gomez-Mejia et al., 2011; Schulze & Gedajlovic, 2010) by examining how SEW biases family firm acquisition behavior. By drawing from the behavioral theory of the firm and blending it with the SEW perspective, we hope to place family business studies on more solid theoretical ground. We extend previous family business research by showing that owners who exhibit SEW concerns do not necessarily engage in stable business behaviors, as previously argued (e.g., Berrone et al., 2010; Gomez-Mejia et al., 2007). We also bridge silos of knowledge (Okhuysen & Bonardi, 2011). While the SEW perspective makes general predictions about the relative attractiveness to engage in corporate-level strategies, behavioral theory considers the context in which actions likely occur. While SEW writings shed light on the goal set of owners, behavioral theory clarifies how these goals impact the decisions of firms. The behavioral theory emphasizes the role of slack; SEW writings overlook its role. Both theoretical lenses benefit and inform each other; when combined, they portray family firm behavior more realistically than either does alone.

Third, we speak to the behavioral theory of the firm, supporting the argument that behavioral theory can explain corporate-level phenomena (Iyer & Miller, 2008). We also show that the positive effect of slack on experimentation, such as through acquisitions, is tempered in the presence of SEW. Equipped with high levels of SEW, owners are less inclined to see slack as extended leeway to experiment but rather as a cushion that enables further pursuit of socioemotional goals. Slack, then, disguises opportunities related to acquisitions, lowers perceived threats of performance

decreases, and absorbs stimuli for strategic experimentation in the firm. We lend further support to a social theory of the firm that allows for an extended utility function of owners (Wiseman, Cuevas-Rodríguez, & Gomez-Mejia, 2012).

#### **4.5.1 Limitations and Future Research**

We acknowledge limitations in our study as well as the opportunities these limitations provide for future research. Our theoretical arguments focus on below-aspiration performance levels only (although we empirically control for effects of performance above aspiration levels), even though above-aspiration performance triggers changes in firm activities in other settings (Mishina et al., 2010). This choice seems warranted because the behavioral theory of the firm suggests that most activity is triggered when firms fail to achieve performance aspirations levels (Greve, 2003b), rather than when surpassing them. We do not investigate if the shortfall persists over time or is transient. Such interpretations might reverse the prediction of higher risk taking at low levels of goal fulfillment, since studies in organizational decline corroborate a conservative and inward-looking tendency among organizations confronted with poor performance or threats (Cameron, Kim, & Whetten, 1987; Chattopadhyay, Glick, & Huber, 2001; Staw, Sandelands, & Dutton, 1981). Temporal myopia (Levinthal & March, 1993), as well as using a single aspiration point, are parsimonious assumptions that represent good starting points for further theoretical refinement (Greve, 2003b).

A drawback of our analysis relates to its empirical design, which assumes that performance aspiration levels are identically constructed in family and nonfamily firms. One can infer, however, that the aspiration levels themselves, and not the behavior that follows from achieving or not achieving those levels, may alter with SEW, causing the levels to shift. It is intriguing to speculate on the direction and size of such a shift, which represents an area ripe for future research.

Based on possession attachment literature (Schultz Kleine & Menzel Baker, 2004), we argue that affect from ownership, one dimension of SEW, is threatened by acquisitions. This view, however, overlooks circumstances in which family firms make acquisitions based upon emotional motivation, such as when an owner becomes captivated by a target or purchases a firm with which the family has a particular

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emotional connection. In such circumstances, positive affect and, hence, SEW may rise, making the acquisition more likely.

Future research should also acknowledge institutional context. In settings with lax protection and enforcement of property rights, family firms may be less hesitant to acquire because acquisitions may fill an institutional void and represent the most promising way to establish and grow family wealth (Khanna & Palepu, 2000; Khanna & Rivkin, 2001).

#### **4.5.2 Implications for Practice**

Family owners need to understand that their decision making in the face of acquisitions tends to be biased by an interplay between socioemotional and financial concerns. Because the relative weight assigned to SEW in comparison to financial goals is not constant, SEW should be managed in order to help owners make more rational choices, especially in the face of performance shortfalls. Our findings are relevant not only for owners but also for managers in family-controlled firms so that managers gain a better understanding of owners' preferences. Less biased by SEW considerations, managers should make owners aware of the sources and consequences of SEW when making acquisitions.

Investment banks and corporate finance advisors may gain insights from our results that help them assess the likelihood and type of future acquisitions by family firms and advise their clients about potential biases. These insights should help to refine sales processes, for instance, screening the market for potential buyers.

#### **4.6 Conclusion**

We examine the timing and relatedness in family firm acquisition activities. By blending the concept of SEW (Gomez-Mejia et al., 2007) and the behavioral theory of the firm in novel ways (Cyert & March, 1963), our findings emphasize the impact of financial preferences by family owners and their influence on corporate-level activity. We hope that our arguments will foster further research on the various ways in which certain types of firms deviate from purely economic decision making.

## **5 Socioemotional Wealth, Relative Performance, and Firm-Family Media Coverage as Influences on Divestitures**

Tobias Dehlen

### **5.1 Abstract**

Divestiture research treats ownership largely as measure for governance quality. As a result, this body of research puts forth that ownership concentration increases divestiture activity, but findings may be limited by the assumption that owners seek to maximize profitability. This study argues that, despite concentrated family ownership, socioemotional wealth induced by families' desire for both current as well as duration of family control may hinder divestitures in family firms. However, family firms' inertia changes when performance decreases. Furthermore, the reversal of inertia towards divestitures in family firms imposed by negative performance may be intensified through family firms' media coverage linking family owners visibly to their firms.

### **5.2 Introduction**

Divestiture research is dominated by agency theory perspectives (Shimizu & Hitt, 2005). Agency theory is especially prominent in defending concentrated ownership, i.e., ownership that is equipped with the power to monitor managers effectively, as antecedent of divestiture activity (Bergh, 1995; Chatterjee et al., 2003; Hoskisson, Johnson, & Moesel, 1994; Tuschke & Sanders, 2003; Villalonga & McGahan, 2005). Based on the agency assumption that large owners homogeneously share the same motive, i.e., they seek to maximize profits (Bergh & Sharp, 2012), concentrated ownership may limit managers' opportunities to serve their selfish interests and may thereby drive value-enhancing divestiture activity.

However, the question whether the underlying assumption of agency-based studies represents an over-simplification seems legitimate. There is compelling evidence that large owners are heterogeneous with respect to their motives (Connelly et al., 2010; Fiss & Zajac, 2004; Kang & Sorensen, 1999). Divestiture research may

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thus run the risk of overseeing an important aspect of ownership influences on divestiture activity: Concentrated ownership positions per se offer the power to influence firm outcomes, but accounting for distinctive motives of different ownership types may be necessary to develop a comprehensive understanding of ownership concentration as firm-level driver for divestiture activity. For instance, family firm literature suggests that family owners exert a unique influence on various firm-level activities, such as R&D expenditures, diversification, and acquisitions (Chrisman & Patel, 2012; Gomez-Mejia et al., 2010; Miller et al., 2010). Consequently, the analysis of family owners' influence on divestiture activity offers the opportunity to augment our understanding of ownership concentration as a firm-level driver of divestiture activity.

In this study, I examine divestitures in large, publicly listed firms in order to determine the influence of ownership types on divestiture activity, understood as the occurrence of at least one divestiture in a given year. More particular, I ask what may drive family firms' inertia towards divestiture activity and under which circumstances this inertia may be eliminated. My central argument is that family control – both its current level as well as its duration – hinders divestitures in family firms, but that the inertial attitudes in family firms change when performance decreases. I further argue that the change of attitudes regarding divestitures in family firms may be intensified through family firms' media coverage linking family owners visibly to their firms. Literature on family firms, in essence, contends that strategic decisions in family firms are evaluated primarily against socioemotional criteria (Gomez-Mejia et al., 2007; Gomez-Mejia et al., 2010). The preference for socioemotional wealth<sup>12</sup> (SEW) in family firms, though, lowers with deteriorating performance. In other words, when performance decreases in large, public family firms, family-external stakeholders' scrutiny will increase (Miller et al., 2012a) and, consequently, family owners may allow economic criteria to gain prominence in an effort to restore support for the SEW agenda (Cennamo, Berrone, Cruz, & Gomez-Mejia, 2012; Gomez-Mejia et al., 2010). Increasing the salience of family owners' responsibility for firm outcomes, family firms' media coverage in conjunction with family owners strengthens this effect further and activities, such as divestitures in situations of deteriorating performance,

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<sup>12</sup> Socioemotional wealth refers to “financial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty” (Gomez-Mejia et al., 2007; p. 106).

may be even more likely in an effort to protect family owners' dominant role (Bednar, 2012; Bednar, Boivie, & Prince, 2012).

This study may contribute to the literature threefold. First, examining how ownership types, beyond ownership concentration, influence firm-level divestiture activity may help to advance divestiture research. Examples of several studies that have taken a socioemotional view of ownership and broadened our understanding of many other firm-level phenomena support this view (Chrisman & Patel, 2012; Connelly et al., 2010; Miller et al., 2010, 2012a). Moreover, the interplay of noneconomic rationales, such as family owners' SEW, and economic rationales in explaining divestiture activity promises a richer understanding of divestiture antecedents (Shimizu, 2007). Second, this study may further our understanding of SEW as driver for firm-level activity in family firms. Delineating two dimensions of SEW, i.e., current level of family control and duration of family control, in the analysis of firm-level divestiture activity, a more nuanced understanding of the underlying forces is warranted (Berrone et al., 2012). Third, my study offers further support for the growing research of media's effect on firm-level activity. Beyond family owners' desire to preserve SEW, family owners are specific in another regard: In contrast to many other concentrated ownership types, a family, literally, "is not a faceless owner" and many times "the face of the family mirrors that of the firm" (Berrone et al., 2010; p. 87). The chances of being stigmatized as lacking the qualifications for ownership or being an irresponsible corporate citizen may be especially high for family owners when media coverage visibly links the family to the firm. Firm-family media coverage may consequently be seen as catalyst for family firm activity in response to threats of losing external support for a family's agenda.

## **5.3 Theoretical Framework and Hypotheses**

### **5.3.1 Antecedents to Divestiture Activity**

What causes firms to divest? Research on divestitures in the fields of management and finance identified "a long list" (Brauer, 2006; p. 767) of antecedents to divestiture activity. On the firm level, first and foremost, poor performance has been proposed as a trigger of divestiture activity (see, e.g., Dranikoff, Koller, & Schneider, 2002; Duhaime & Grant, 1984; Harrigan, 1981; Hoskisson et al., 1994; Montgomery &



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Thomas, 1988). Given the abundant body of literature demonstrating the positive effect of divestitures on firm performance (Lee & Madhavan, 2010), a commonly accepted view is that divestiture activity represents the norm rather than the exception in responding to poor performance. Besides poor financial performance, excessive diversification caused, for instance, by unrelated acquisitions has been found to increase firms' propensity to divest. In these cases, divestitures of unrelated units are executed in an effort to return to industry-average levels of diversification (Bergh, 1997; Markides, 1992), as could be observed, for example, after the conglomerate waves during the 1980s (Markides, 1995). Firm size and firm age have also been proposed as influences on divestiture activity. However, mixed evidence has been found by studies analyzing various size and age variables (for an overview see Brauer, 2006). More recently, technological change (Kaul, 2011) and better opportunities in new fields (Berry, 2010) have been suggested as factors affecting firms' propensity to divest outdated business.

Governance mechanisms, i.e., the incentive and supervisory systems that determine how a firm is governed, have been proposed as further firm-level antecedent to firms' decision to divest (Brauer, 2006; Moschieri & Mair, 2008). Within this context, studies have increasingly focused on the role of concentrated ownership, i.e., ownership that is equipped with the power to monitor managers effectively, as an antecedent to divestiture activity (Bergh, 1995; Chatterjee et al., 2003; Hoskisson et al., 1994; Tuschke & Sanders, 2003; Villalonga & McGahan, 2005) and find evidence that blockholders, i.e., shareholders with concentrated ownership positions (normally more than 5%), "often serve as driving force behind divestitures" (Bergh & Sharp, 2012; p. 2). Deriving hypotheses from agency-theoretical frameworks that assume profit-maximizing owners, most research of this governance stream suggests that ownership concentration limits managers' opportunities in avoiding divestitures to satisfy their desire to manage large firms. With only few exceptions (see, e.g., Sanders, 2001), concentrated ownership, and thus effective governance according to agency theory, has therefore been found to be favorable for value-enhancing divestitures.

### **5.3.2 Family Owner's Socioemotional Wealth and Divestiture Activity**

Research that treats ownership solely as measure of governance quality may oversee important aspects related to this construct that go beyond agency theory. As a result,

the explanatory power of such approaches may be limited. More particular, despite evidence of heterogeneity between ownership types (Connelly et al., 2010; Fiss & Zajac, 2004), agency theory's assumption that ownership concentration may first and foremost serve as a corporate governance mechanism implicitly disregards this heterogeneity (Kang & Sorensen, 1999). Consequently, scholars argue that research concerned with the influence of ownership on firm-level activities may benefit from a differentiation between ownership types (Connelly et al., 2010). Family owners, for instance, differ from other blockholders, such as banks, institutional investors, or governments, with regard to their specific priorities: Whereas in most bank-, institutional investor-, or government-controlled firms profit (or shareholder value) maximization may be the dominant motive, such economic decision criteria may be overlain by socioemotional decision criteria in family firms (Miller et al., 2010).

The concept of SEW (Gomez-Mejia et al., 2007) embraces family owners' socioemotional utilities from organizational ownership, such as upholding an entrepreneurial tradition in controlling a firm (Zellweger et al., 2012), generating a positive family image and reputation (Berrone et al., 2010), and enjoying favorable recognition in the community (Corbetta & Salvato, 2004; Schulze et al., 2003a); in fact, both the salience and the worshipping of socioemotional utilities from organizational ownership may be what separates family firms from firms with other ownership configurations (Gomez-Mejia et al., 2011).

Theoretically, SEW goes back to scholars who develop behavioral models for decision making. In their views, decision making changes with problem framing (see, e.g., Wiseman & Gomez-Mejia, 1998). Prospect theory (Kahneman & Tversky, 1979), with its fundamental argument that decision makers fear first and foremost losses, not risks, serves as the theoretical foundation for many of these models, especially in the field of management (Holmes, Bromiley, Devers, Holcomb, & McGuire, 2011). As framing depends on reference points, i.e., points from which alternatives are evaluated as gain or loss, the reference point is decisive for strategic decision making. As put forth by family firm scholars (Berrone et al., 2010; Gomez-Mejia et al., 2007; Gomez-Mejia et al., 2010; Zellweger et al., 2012), SEW is expected to influence the reference point in a fashion that most strategic decisions have a dual meaning in family firms: They are directed by socioemotional *and* economic considerations; moreover, the

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evaluation against potential gains or losses in SEW are considered to be the dominant consideration for family owners.

The essence from the literature on SEW is that family owners are loss averse with respect to their SEW (Chrisman & Patel, 2012b; Gomez-Mejia et al., 2007). More specifically, “family firms are likely to frame relinquishing their socioemotional wealth as a crucial loss” and, therefore, may be expected to avoid any activity that might do so (Gomez-Mejia et al., 2007; p. 111). More formally, SEW may impose a strong inertial pressure in family firms (Hannan & Freeman, 1984). In other words, SEW may induce inertia in family firms when it comes to activities that would threaten any socioemotional benefit or, even worse, impose socioemotional costs.

However, SEW is a non-trivial system, consisting of dimensions individually defined by family owners’ specific utility functions. Hence, family firm literature proposes a variety of dimensions defining family owners’ SEW that may be understood as distinctive drivers for potential socioemotional costs and benefits of strategic actions, such as divestitures, in family firms (Berrone et al., 2012; Gomez-Mejia et al., 2011). A well-established SEW dimension is family owners’ desire to perpetuate family control and, thus, to uphold the entrepreneurial legacy of the family (Chua et al., 1999; Zellweger et al., 2012). Moreover, earlier SEW research suggests that family control may be further differentiated into current family control and the duration of family control (Zellweger et al., 2012).

Current family control is essential for setting a socioemotional reference point, since control is what allows owners to replace economic reasoning with socioemotional criteria of their own choosing (Carney, 2005). However, arguments for why current family control in itself creates SEW can also be developed. First, the power to implement decision criteria so that firm outcomes approximate family owners’ specific values and aspirations may endow families with satisfaction or, in other words, may be understood as socioemotional benefit (Carney, 2005). Second, fulfillment of belonging, affect, and intimacy – drivers of socioemotional wealth – may be understood as direct consequence of family control (Zellweger et al., 2012). Third, enhanced family control may lower external stakeholders’ voices in questioning particularistic firm practices in family firms (Miller et al., 2012a). That is, when family control limits external stakeholders’ power in questioning legitimacy, threats for

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negative consequences from family firms' SEW-driven nonconformity, e.g., damage to the family's reputation, vanish and family owners may enjoy higher levels of SEW.

Divestitures may be perceived as crucial SEW loss in family firms, irrespective of any potential for economic gain, since such activity represents an obstacle to family owners' desire to perpetuate the current level of family control (Salvato et al., 2010; Sharma & Manikutty, 2005). Any divestiture goes hand in hand with a loss of direct control in the divested unit. There are few other decisions in family firms in which the loss of family control becomes more salient than in the case of a divestiture, meaning that the difficulty – if not impossibility – of retaining the same level of family control while divesting business units hinders divestiture activity in family firms (Salvato et al., 2010). More particularly, divestitures decrease family owners' control over critical decisions within the firm, e.g., employment decisions. Family owners may no longer be able to constitute family control by assigning family members to responsible positions within the family firm, e.g., appointing a family member as head of a business unit, reducing their opportunities for nepotism and / or providing family members with an income source (Cruz et al., 2010b).

In large, public family firms, family ownership may be understood as family owners' desire for current control. In other words, high family ownership levels signal the strong wish of the family to exercise control over the family firm, since family owners interested in economic wealth rather than SEW could easily sell the shares on the market to diversify their wealth. Accordingly, I argue that current family control influences the socioemotional reference point, meaning that a loss in SEW from divestitures appears larger when family ownership – a measure of a family's desire for current family control – is high. Hypothesis 1 summarizes this argument.

***H1:*** *Family ownership lowers the probability of divestiture activity in family firms.*

A further source of SEW is seen in family owners' duration of control. Research finds that family firms with similar levels of family ownership appear to behave with substantial further heterogeneity (Zellweger et al., 2012). An argument that has been put forth to explain such heterogeneity is the difference between a family's desire for current control and the duration of family control. In contrast to current family control, which is associated with power and legitimacy rationales for SEW influences on family firm activities, a focus on the duration of family control

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highlights family owners' emotional attachment and the resulting wish for continuity as a rationale for SEW influences. Drawing parallels to marketing literature, it may be argued that psychological appropriation and the personal meaning of the ownership – which creates a perceived singularity in the relationship between a family and the firm and, thus, an SEW benefit – is just as likely for family firms as for the inanimate objects which are the unit of analysis in marketing research (Belk, 1988; Belk, 1991; Schultz Kleine, Kleine, & Allen, 1995; Schultz Kleine & Menzel Baker, 2004). Hence, just as emotional attachment to inanimate objects grows over time, family owners' level of SEW has been found to increase with the duration of family control (Zellweger et al., 2012).

Divestitures not only affect SEW negatively through their effect on current levels of control, but may also threaten SEW that was created from the duration of family control. Given a history of family control, family firms may be locked-in in their current strategic positioning (König, Kammerlander, & Enders, 2012; Sydow, Schreyögg, & Koch, 2009); inertia towards changes of this position induced by duration of family control may be the consequence. Furthermore, duration of family control can be understood as an expression of family owners' desire for continuity, but divestitures, in many regards, may be an obstacle to this desire (Salvato et al., 2010). In an extreme scenario, divesting a unit, irrespective of the economic rationality, may for some family owners feel like betraying the family firm's legacy – something that would harm SEW dramatically.

Divestitures threaten SEW induced by duration of family control and, given family firms' loss aversion with respect to SEW (Berrone et al., 2010; Gomez-Mejia et al., 2007; Gomez-Mejia et al., 2010), such activities become less likely when family owners influence firm affairs. Hence, I argue that longer durations of family control, measured by the duration of family ownership, lower the probability of divestiture activity in family firms.

**H2:** *The duration of family ownership lowers the probability of divestiture activity in family firms.*

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### 5.3.3 Relative Performance Levels and the Influence of Socioemotional Wealth

SEW induced by both family owners' desire for current family control and their worshipping of duration of family control creates inertial pressures towards divestitures in family firms. Literature on organizational inertia, however, suggests that inertia, i.e., the tendency to prefer the status quo over change, may be overcome by market forces that could represent a threat if not responded to adequately, such as unfavorable performance levels (D'Aunno, Succi, & Alexander, 2000; Huff, Huff, & Thomas, 1992; Lant, Milliken, & Batra, 1992). In support of this view, divestiture research finds that relatively poor unit performance lowers inertial forces from non-SEW domains, namely firm size and age (Shimizu & Hitt, 2005). Family firm literature adds further evidence to the argument that relative performance levels affect inertial forces in family firms, finding that performance hazard limits the influence of SEW motives on strategic decision making in family firms (Gomez-Mejia et al., 2007; Gomez-Mejia et al., 2010). Relative performance levels may, therefore, be seen as a factor that limits SEW's inertial influence on family firms' divestiture activity.

The process underlying the emergence of SEW inertia in large, public family firms may help to further explain why relative performance levels might counteract SEW-induced inertia to divest. When performance is relatively positive, it may be easier to implement – or uphold – practices that represent family owners' SEW-driven values and aspirations more closely than when performance would be poor (Kellermanns, Eddleston, & Zellweger, 2012). The reason for the relative ease in implementing family-specific strategies might be, e.g., that other stakeholders being involved in defining large, public family firms' orientation, such as banks, employees, family-external managers, or family-external stakeholders, may be tranquilized by positive performance feedback (Carney, 2005; Lant et al., 1992); in other words, positive performance may serve as shelter for pressures exerted by family-external stakeholders in publicly listed family firms (Gomez-Mejia et al., 2003). External stakeholders' readiness to concede to family owners' SEW preservation, though, may vanish with deteriorating performance, resulting in a revival of external stakeholders' suspicion towards many family firms (Miller et al., 2012a). Enhanced scrutiny, induced by this revived suspicion, in stressful situations may lead to a thorough reconsideration of the current strategy (Huff et al., 1992). Depending on the gravity of the performance shortfall, the family's role as the dominant coalition in the firm may

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be called into question, causing family firms' conformity to overt strategic practices as a result of family owners' effort to restore support for their broader SEW agenda (Cennamo et al., 2012). In poorly-performing family firms, family owners may be forced to allow for more deviation from SEW goals; inertia towards divestitures may thus be broken.

Beyond the well-established direct effect of performance on firms' propensity to engage in divestiture activity (see, e.g., Dranikoff et al., 2002; Duhaime & Grant, 1984; Harrigan, 1981; Hoskisson et al., 1994; Montgomery & Thomas, 1988), relative performance levels may, hence, also have an indirect effect on the probability of divestiture activity in family firms. More particular, I argue that family owners enjoy greater discretion to adapt family firms' orientation according to their SEW preferences when family firm performance is relatively positive, i.e., the SEW-driven inertia towards divestitures will be more pronounced when performance is positive. When family firm performance deteriorates, however, family owners' discretion in adapting family firms' orientation towards SEW preferences will be limited, i.e., the SEW-driven inertia towards divestitures will be weaker. For both drivers of SEW, current family ownership and duration of family ownership, these arguments are summarized in Hypotheses 3a and 3b.

***H3a:** Family ownership will lower the probability of divestiture activity more strongly in high-performing family firms and more weakly in low-performing family firms.*

***H3b:** Duration of family ownership will lower the probability of divestiture activity more strongly in high-performing family firms and more weakly in low-performing family firms.*

#### **5.3.4 Firm-Family Media Coverage and the Effect of Relative Performance Levels**

When performance deviates from benchmark levels in family firms, either by under- or over-performance, it seems plausible that such deviations may be made attributable to family firms' distinctive SEW orientation (Miller et al., 2012a). The abundant body of literature that examines a family effect on firm performance may serve as evidence for the plausibility of that view (Miller et al., 2007; O'Boyle Jr, Pollack, & Rutherford,

2012); in the eyes of many, in fact, both the salience and the worshipping of SEW may be what separates family firms from other organizational forms.

But is the attribution of family firms' performance deviations to family owners' SEW preferences similar for all family firms? My argument is that the effect necessarily hinges on the salience of the family owner as an active participant in firms' affairs. When not much is known about which family owns the firm, or that a family owns the firm at all, it may be more difficult to trace back the cause for any under- or over-performance to family owners' SEW preference. In the opposite case, when the family owner is highly salient, it might be obvious for external stakeholders to identify the "black sheep" in negative circumstances and the "savior" in positive circumstances: In both cases, the family owners' unique SEW preferences will most likely be brought up as cause for the performance deviation.

Media coverage proves a powerful instrument to increase the salience of critical issues in the environment of firms by shining "a light on issues that would otherwise be less salient to firm constituents" (Bednar, 2012; p. 131). In fact, because of its power to increase the salience of critical issues on the firm level, media coverage has also been found to affect strategic change (Bednar et al., 2012). Given a common understanding of family owners' tendency to worship SEW more than economic wealth, media coverage that visibly links a firm to family owners (firm-family media coverage) assumes an important role in family firms: Firm-family media coverage may intensify both external stakeholders' criticism when performance deteriorates and external stakeholders' benevolence when family firm performance is superior to comparable firms' performance. Making things worse for family owners, reducing the buffer for external stakeholders' criticism in situations of economic peril challenges family owners' legitimacy as firm owner (Cennamo et al., 2012; Desai, 2008). As family owners' reputation is a reflection of the firms' success, such a challenge may ruin family owners' reputation (Berrone et al., 2010; Miller et al., 2012a). Furthermore, lack of external support for crucial resources – such as bank capital, employee support, family-external managerial talent, or family-external equity capital – may result in a serious escalation of economic problems for the firm, especially when it is already in a weak economic position, risking the basis for all SEW.

As a consequence, firm-family media coverage, i.e., the extent to which firms are visibly linked to family owners, may have an intensifying effect on the



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contingency that relative performance levels exert on the relationship between family owners' SEW and the probability of divestiture activity. In other words, firm-family media coverage may serve as a catalyst for external stakeholders' criticism when performance deteriorates and for external stakeholders' benevolence when family firm performance is superior to that of nonfamily firms. My arguments are summarized in Hypotheses 4a and 4b.

***H4a:** The tendency that family ownership lowers the probability of divestiture activity more strongly in high-performing family firms and more weakly in low-performing family firms will be intensified by firm-family media coverage.*

***H4b:** The tendency that duration of family ownership lowers the probability of divestiture activity more strongly in high-performing family firms and more weakly in low-performing family firms will be intensified by firm-family media coverage.*

## **5.4 Methods**

### **5.4.1 Data and Methods**

To test the proposed hypotheses, I analyzed the divestiture activity of large, public family firms in Germany. In order to do so, I identified all (i.e., family and nonfamily) firms listed in the Prime Standard segment of Deutsche Börse as of the end of April 2012. The Prime Standard segment includes firms that adhere to the highest levels of transparency in the German stock market, e.g., they publish both quarterly results and ad-hoc news in German and English, apply international accounting standards, and have at least one analyst conference per year. To avoid survival bias and have a balanced panel, I only included firms that were listed throughout the period from 2002 to 2010. Excluding Real Estate Investment Trusts (or REITs), I ended up with 197 firms.

For these firms, I collected data on divestiture activity for the years 2002 to 2010 using information from the Mergermarket database. More particularly, I searched Mergermarket's database for divestitures of these firms and acquisitions in which these firms were the seller. Mergermarket defines divestitures as the "agreed sale of an asset or assets from one company to another, distinguished from other transactions by

the fact that it is the vendor which actually initiates the transaction” and acquisitions as the “part or whole procurement of one company by another”.<sup>13</sup> The search resulted in 844 unequivocally identifiable transactions. In other words, on average, a sample firm divested in every third year.

The data was then supplemented with hand-collected information on the ownership, management board, and board of directors of these firms from Thomson ONE. In a first step, the largest 5+% owner, if available, was classified according to Thomsen and Pedersen (2000) as a bank, nonfinancial company, family and individual<sup>14</sup>, government, or institutional investor. Simultaneously, ownership levels and family / single person names were collected. In a second step, individual and / or family participation in the management (incl. CEO position) and the supervision (incl. chairman of the board) of the firm was collected from Thomson ONE as well. Financial and general firm information was added from Worldscope, Thomson Financials, Reuters, and Bureau van Dijk’s Dafne databases. In addition, data was supplemented or verified with information from corporate homepages and annual reports, such as information on firm founding year and individual / family takeover year.

## 5.4.2 Measures

### 5.4.2.1 *Dependent Variable*

*Divestiture activity.* Divestiture activity is defined as an indicator variable, i.e., it is coded ‘1’ when a firm divested at least one business unit in a given year and ‘0’ otherwise. There were two reasons for the choice of this approach. *First*, examining the probability of divestiture activity instead of, e.g., the divestiture counts seemed to be the more conservative approach since noise from extreme outliers in terms of divestiture intensity could be excluded from the analysis. *Second*, the study’s research design required this approach since the aim was not to predict the count but the probability of divestiture activity, irrespective of intensity.

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<sup>13</sup> <http://www.mergermarket.com/home/glossary.asp>

<sup>14</sup> Individuals with family ties through blood or marriage were summed to families.

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#### 5.4.2.2 *Independent and Moderator Variables*

*Family firm variables.* In this study, SEW is further delineated in *current family control* and *duration of family control*. Family ownership is used as measure of *current family control*. Family firm literature emphasizes the context dependence of cutoff points for family ownership levels that define family vs. nonfamily firms (Cruz et al., 2010b; Gomez-Mejia et al., 2011). According to the German Public Companies Act, 25 percent ownership equips owners with important control rights. Given the specific empirical context of Germany, a cutoff point of 25 percent family ownership to define a family firm seems most applicable. Hence, I define family ownership as the ownership percentage if a family (or individuals related by blood or marriage) holds at least 25 percent of firm ownership and ‘0’ otherwise; the variable is left-censored. In line with previous research, *duration of family control* was measured by years of family ownership (Zellweger et al., 2012); for nonfamily firms, the variable takes the value ‘0’.

*Relative performance levels.* Relative performance levels, i.e., firms’ performance levels in comparison to comparable firms’ performance levels, are theoretically motivated as moderator in my model. Firms’ return on assets (ROA) in comparison to industry-average levels was used as measure for relative performance levels. Industry-average levels of ROA are estimated as the median ROA of within-sample firms from the same industry according to SIC codes. Industry adjusted performance levels are lagged in the estimation analysis. Alternative performance measures, i.e., return on equity (ROE) and return on sales (ROS), are used to assess the robustness of the results.

*Firm-family media coverage.* The second moderator variable according to the theory is supposed to be firm-family media coverage. This variable is chosen to capture the degree of family owners’ visibility in owning the family firm. To measure this visibility, I executed a computer-aided content analysis searching for articles in three leading daily newspapers from Germany, in which the family firm and the family owners’ name was mentioned, using the Factiva database.<sup>15</sup> These three newspapers – *Süddeutsche Zeitung*, *Die Welt*, and *Financial Times Deutschland* – are among the most influential daily newspapers in Germany, with a combined circulation of roughly

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<sup>15</sup> *Frankfurter Allgemeine Zeitung*, another German daily newspaper with a high circulation, is not available in Factiva database in full text format and therefore had to be excluded from the content analysis.

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one million copies a day.<sup>16</sup> For example, in case of BMW AG, I searched the Factiva database for articles about the firm BMW AG in which the name “*Quandt*” and / or “*Klatten*”, last names of the family owner, were mentioned (for the period 2002-2010, this particular search resulted in 79 newspaper articles). The search for all 69 family firms in the sample resulted in 5,522 newspaper articles. The number of articles in a given year in which the family owner was mentioned in relation to the family firm is used to measure firm-family media coverage.

### 5.4.2.3 Control Variables

*Firm Size.* In addition to our variables of primary theoretical interest, I included several control variables to isolate the hypothesized effects. Various factors have been found to antecede firms’ decision to divest. If not stated explicitly, all controls are lagged by one year. This approach seems warranted since it is more likely that previous years’ variable values influence current years’ divestiture policies. To control for firm size effects on the probability of divestiture activity and performance, I included the natural logarithm of total sales in the analysis. I took the natural logarithm, as the variable’s distribution was significantly different from normal before the transformation.

*Leverage.* Leverage may have a major influence on firms’ tendency to divest. Understood as inverse measure of slack, a high level of leverage might increase the need of a firm to adjust its business portfolio (Bourgeois III, 1981). I measured leverage as the ratio of total long-term debt to total assets.

*Firm age.* Firm age is an ambiguous factor in explaining divestiture activity (Brauer, 2006). On the one hand, firm age is said to be positively related to professionalism. Thus, divestitures should be more easily facilitated in such environments. On the other hand, it has been argued that old firms exhibit inertia, e.g., toward divestiture activity. To control for either of the theoretically proposed relationships, I included the natural logarithm of firm age as control in my analysis.

*Business diversification.* Research on antecedents of firms’ divestiture activity reveals that business diversification impacts the probability of divestiture activity in a

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<sup>16</sup> According to *IVW Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern e.V.*, an association that collects information on circulations in the German media industry.

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positive way (Brauer, 2006). In other words, firms that previously diversified extensively have more opportunities to divest reasonably. In addition, family firms may have the tendency to diversify at corporate level in order to hedge risk from wealth concentration within the firm (Miller et al., 2010). Therefore, I examined business diversification as the share of sales from the largest business unit as opposed to total sales. For a better understanding of the effect of this control variable, I reversed the influence by multiplying the fraction by minus one.

*Divestiture experience.* Firms that divested in the past may have learned from their experience, and the probability for those firms to divest again may be higher (Brauer, 2006). Therefore, I added divestiture experience as a control. Divestiture experience was operationalized as an indicator variable of divestiture activity in the year before the given year. Furthermore, I included *acquisition experience* to control for the heightened propensity of an acquiring firm to divest, operationalized in the same way for acquisition activity in the year before the given year.

*CEO change.* Governance seems to be a strong predictor of divestiture activity. Changes at the top level of a firm's management, e.g., the appointment of new CEO, has been put forth as frequent facilitator of strategic change (Weisbach, 1995). Consequently, it is reasonable to assume that the appointment of a new CEO will have a strong influence on a firm's propensity to divest (Shimizu, 2007; Shimizu & Hitt, 2005). To control for any effect triggered by the appointment of a new CEO, I included a dummy variable that took the value '1' for the first full year of a newly appointed CEO, and '0' otherwise.

*Blockholders controls.* Not only family owners, but also other ownership types may exert a specific influence on firm activities (Bergh & Sharp, 2012; Thomsen & Pedersen, 2000). Miller and colleagues furthermore stress the importance of controlling for lone founder firms, i.e., firms in which the founder is the largest individual owner, as that type is erroneously collapsed with family owners in many studies (Miller et al., 2010; Miller et al., 2007). Hence, I included dummy variables indicating whether the largest owner in a firm was a government authority, an institutional investor, or an individual lone founder.

*Industry controls.* I also added industry controls to the analysis, since industry dynamics have been shown to influence firms' probability of divestiture activity. I

constructed industry dummy variables for five industries according to the SIC codes. As I excluded financial service firms from my analysis, I included three dummies in the analysis. Table 1 provides descriptive statistics and correlations of all variables in this analysis. In addition, *year controls* were included to avoid any year-specific, unobserved heterogeneity affecting the results. To reduce nonessential multicollinearity, I further centered all non-dummy variables by subtracting their respective means (Aiken & West, 1991; Li & Tang, 2010).

### **5.4.3 Results**

Table 8 presents the correlation matrix and descriptive statistics for all of the variables used in the models reported. In general, the correlations only reach low to moderate levels. As Table 1 further shows, slightly more than 17% of the firm-year observations had at least one divestiture. The mean of family ownership is depressed to around 16% because it is the mean for family and nonfamily firms. Roughly 31% of the firm-year observations were family firms (not reported). For family firms, the mean family ownership level is 50.54%. The same holds true for duration of family ownership and media coverage: The mean of duration of family ownership rises from 13.94 to 48.79 years, the mean of media coverage from 2.72 to 7.99 articles per firm-year observation.

Variable	Mean	S.D.	1	2	3	4	5	6
1 Divestiture Activity	0.174	0.380						
2 Sales PY	5045.937	15468.980	0.4796*					
3 Adj. ROA PY	-0.833	13.209	0.0151	0.2380*				
4 Leverage PY	0.201	0.213	0.0586*	0.1045*	-0.2924*			
5 Firm Age	52.615	49.556	0.2326*	0.5864*	0.1628*	0.0303		
6 Divestiture Experience	0.170	0.376	0.4513*	0.4779*	0.0114	0.0589*	0.2438*	
7 Business Diversification	-0.661	0.214	0.1817*	0.2704*	0.032	-0.0254	0.1915*	0.1726*
8 CEO Change	0.085	0.280	0.0461*	0.0510*	-0.0451*	0.0331	0.018	0.0665*
9 Government	0.033	0.179	0.2106*	0.2815*	0.0159	0.0495*	0.1280*	0.2163*
10 Inst. Investor	0.103	0.305	0.0072	-0.0113	-0.0468*	-0.0217	0.0064	0.0285
11 Individual (lone founder)	0.075	0.264	-0.0775*	-0.1004*	0.0475*	-0.0465*	-0.1214*	-0.0661*
12 Family Ownership	15.610	24.655	-0.0466*	0.0449*	0.0944*	-0.0332	0.1660*	-0.0573*
13 Duration of Fam. Ownership	13.940	31.268	0.0727*	0.1960*	0.0721*	0.0009	0.3472*	0.0575*
14 Media Coverage	2.721	16.935	0.0967*	0.1419*	0.0377	-0.004	0.1257*	0.0822*

**Table 8:** Means, standard deviations, and correlations

Variable	7	8	9	10	11	12	13
1 Divestiture Activity							
2 Sales PY							
3 Adj. ROA PY							
4 Leverage PY							
5 Firm Age							
6 Divestiture Experience							
7 Business Diversification							
8 CEO Change	0.0214						
9 Government	0.1455*	0.0106					
10 Inst. Investor	-0.0236	0.0249	-0.0513*				
11 Individual (lone founder)	-0.0682*	-0.0683*	-0.0445*	-0.0848*			
12 Family Ownership	0.0493*	-0.0207	-0.0834*	-0.1589*	-0.1380*		
13 Duration of Fam. Ownership	0.0902*	0.0093	-0.0529*	-0.1007*	-0.0875*	0.6525*	
14 Media Coverage	0.0615*	0.0267	-0.0215	-0.0411*	-0.0356	0.2735*	0.3157*

\* p<.05

**Table 8 (cont.):** Means, standard deviations, and correlations



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Given the dichotomous dependent variable in my analysis, divestiture activity, the hypotheses were tested by means of a logit specification with firm-clustered standard errors to account for the possibility of error term dependencies within groups. It is important to note that logit specifications are nonlinear, and interpretation hence differs from standard approaches used in the context of most linear models. More particularly, coefficient estimates from maximum likelihood estimation (MLE) of nonlinear models cannot be interpreted as the direct marginal effect of an independent variable on the dependent variable, as would be the case in the linear / OLS situation (Hoetker, 2007; Wiersema & Bowen, 2009); interaction effects in nonlinear models add further complexity to the interpretation (Boyd, Takacs Haynes, Hitt, Bergh, & Ketchen, 2012). The interpretation of the estimation results will thus be supplemented by a simulation-based technique proposed by Zelner (2009).

Divestiture Activity Y/N	Model 1	Model 2	Model 3	Model 4	Model 5
log Sales PY	0.593549***	0.598256***	0.599163***	0.593480***	0.593192***
Adj. ROA PY	-0.022589**	-0.019844*	-0.018826*	-0.019828*	0.007411
Leverage PY	-0.24298	-0.205352	-0.189775	-0.159375	-0.175160
log Firm Age	-0.217393*	-0.241409*	-0.239737*	-0.235733*	-0.210055+
Diversification PY	1.112488*	1.086484*	1.098258*	1.067741*	1.112975*
Divestiture Experience	1.154829***	1.123009***	1.121431***	1.117496***	1.090110***
Acquisition Experience	0.291308	0.286213	0.285282	0.272943	0.265144
CEO change	0.413638	0.406228	0.414710	0.404720	0.399722
Government	0.166746	0.061379	0.058825	0.065768	0.050615
Inst. Investor	-0.377297	-0.506370	-0.507191	-0.503700	-0.502615
Individual (lone founder)	-0.497004	-0.688704	-0.687355	-0.705592	-0.685516
Manufacturing	0.240500	0.336656	0.336651	0.326001	0.320809
Wholesale & Retailing	-0.624552+	-0.312704	-0.307695	-0.269902	-0.22529
Service	-0.528934	-0.435716	-0.427728	-0.425353	-0.463450
Fam. Ownership		-0.014814*	-0.015437+	-0.017252*	-0.017072*
Duration of Fam. Ownership		0.005715+	0.005698	0.005847	0.005540
Fam. Own. x Adj. ROA PY			0.000156	0.000035	-0.000489
Dur. of Fam. Own. x Adj. ROA PY			0.000023	0.000003	-0.000479
Media Coverage				0.004507*	-0.031943
Fam. Own. x Media Coverage					0.001049+
Dur. of Fam. Own. x Media Coverage					-0.000112
Media Coverage x Adj. ROA PY					0.019132**
Fam. Own. x Adj. ROA PY x x Med. Cov.					-0.000460***
Dur. of Fam. Own. x Adj. ROA PY x Med. Cov.					0.000059
Constant	-3.174248***	-3.240316***	-3.252135***	-3.230266***	-3.299268***
Year effects	Yes	Yes	Yes	Yes	Yes
McFadden Pseudo R2	0.3787	0.3835	0.3835	0.3845	0.3951
Firm-year observations	1383	1382	1382	1382	1382
Firms	179	179	179	179	179

+ p<0.1, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

**Table 9:** Logit estimation with firm-clustered standard errors

According to the conception of logit specifications, I argue regarding the variables' estimated influence on the logarithmic odds of divestiture activity to interpret the significance of the estimation coefficients (Folta & O'Brien, 2004; Hoetker, 2007; Li & Tang, 2010). Model 1 in Table 9 serves as a baseline model. Firm size, measured as the natural logarithm of previous years' sales, has a positive and highly significant influence on the logarithmic odds of divestiture activity taking place ( $p < .001$ ). Furthermore, adjusted ROA in previous years seems to lower the logarithmic odds of divestiture activity ( $p < 0.01$ ). This makes intuitive sense because, when adjusted ROA was high, i.e., positive, the logarithmic odd of divestiture activity

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decreases (positive x negative) and when adjusted ROA was low, i.e., negative, the logarithmic odd increases (negative x negative). Leverage has no significant influence on firms' propensity to divest. The logarithmic odds of divestiture activity are decreased by the natural log of firm age ( $p < .05$ ), supporting the inertia argument for this variable. As expected, high levels of business diversification in previous years influence the logarithmic odds of divestiture activity positively ( $p < .05$ ). According to results from previous research, divestiture experience from divestitures undertaken in previous years increases the logarithmic odds of making a divestiture in a positive and strongly significant manner ( $p < .001$ ). In contrast, acquisition experience seems to have no influence, just as CEO change does not affect the logarithmic odds. Also surprisingly, no blockholder dummy exerts any influence on firms' divestiture activity in model 1. Finally, the industry environment seems to have a significant impact on the logarithmic odds of making a divestiture ('Wholesale & Retailing' with  $p < .1$ ).

To test Hypotheses 1 and 2 – the effect of current family control and duration of family control on the probability of divestiture activity – I add the two variables family ownership and duration of family ownership to the analysis in model 2. At this point, the estimation results support Hypothesis 1: family ownership influences the logarithmic odds of firms' divestiture activity negatively ( $p < .05$ ). Hypothesis 2, however, does not seem to find support. In contrast, duration of family ownership seems have a weakly significant, positive effect on the logarithmic odds of firms' divestiture activity. I will comment on this finding in the discussion section.

In Hypotheses 3a and 3b, the moderating role of relative performance levels is introduced. I do not find any support for the moderation effect of relative performance levels on the direct effect of either family ownership or duration of family ownership on the logarithmic odds of firms' divestiture activity in model 3. Without firm-family media coverage, Hypotheses 3a and 3b are, thus, not supported.

In the theoretical framework, I argued that firm-family media coverage may be a catalyst for the effects hypothesized under H3a and H3b. As an intermediary step, I first included firm-family media coverage as explanatory variable in my analysis (see model 4). I find that firm-family media coverage increases the logarithmic odds of firms' divestiture activity ( $p < .05$ ). Model 5 then includes all hypothesized effects. In the full model, the two-way interaction term between family ownership and firm-family media coverage is positive and weakly significant ( $p < .1$ ), the two-way

interaction effect between firm-family media coverage and adjusted ROA is also positive and significant ( $p < .01$ ), and the three-way interaction effect of family ownership, adjusted ROA, and firm-family media coverage is negative and significant ( $p < .001$ ). Important to note is that the negative three-way interaction coefficient is equal to an increase in the logarithmic odds of divestiture activity when adjusted ROA is negative (i.e., relative low performance levels) and to an decrease in the logarithmic odds of divestiture activity when adjusted ROA is positive (i.e., relative high performance levels). Hypothesis 4a thus seems to be supported, whereas Hypothesis 4b receives no support.

To check the robustness of our results I took several steps. The results seem stable for a separate analysis of the two SEW variables that revealed relatively high correlations (Miller et al., 2012a) and support our initial analysis; therefore, nonessential multicollinearity seems not to be a concern for the stability our results (Dalal & Zickar, 2012). Furthermore, I replicated the estimation results with different measures for performance. The results remained the same (i.e., sign and significance) across estimations with return on equity (ROE) and return on sales (ROS) as performance measure.

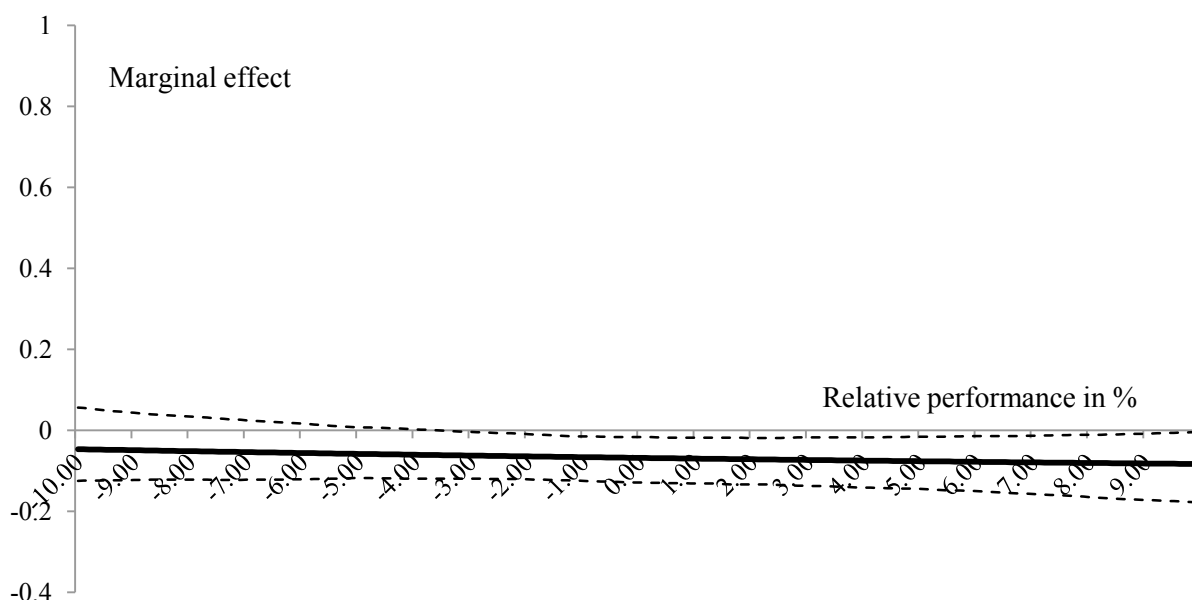
#### **5.4.4 Interpretation of Estimation Results**

Hoetker (2007) identifies interpretation of estimation coefficients as major issue in the use of logit and probit models. A widespread misconception is that coefficients from logit or probit models can be interpreted just as coefficients in linear regression models; the truth is, however, that logit and probit models are nonlinear, and marginal effects are dependent on the level of other variables. “A researcher must [therefore] identify meaningful values for all of the variables to calculate the impact of changes in a focal variable” (Hoetker, 2007; p. 334).

The aim of logit and probit model specifications is further to draw sound statistical conclusions for changes in probabilities caused by independent variables. Zelner (2009; p. 1338) notes, however, that “predicted probabilities are also estimates” and that it is therefore “necessary to test whether the difference in predicted probabilities is statistically different from zero” by constructing a confidence interval around the changes in predicted probabilities. Following Zelner (2009) who draws on

methodological progress in the field of political sciences (King, Tomz, & Jason, 2000; King, Tomz, & Wittenberg, 2001), I therefore use a simulation-based technique to improve the interpretation of marginal effects for nonlinear model specifications.

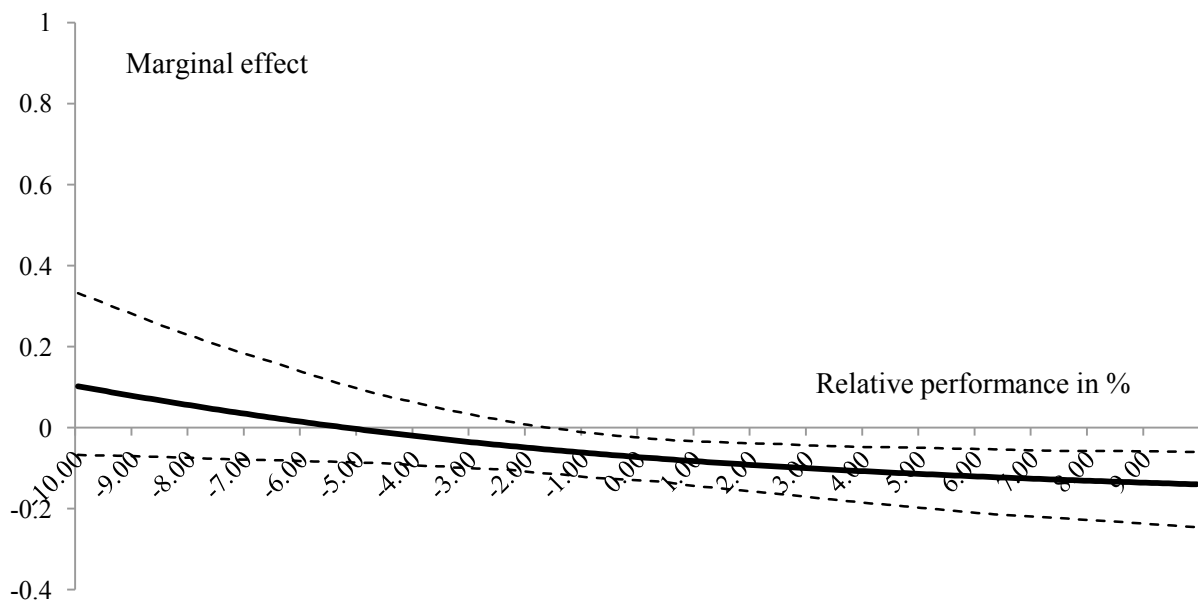
The results of this simulation-based technique are summarized in Figures 1, 2, and 3. In each of the figures, the changes in the probabilities (and the 95% confidence intervals) between nonfamily and average family firms with three different levels of firm-family media coverage are depicted, varying for different adjusted ROA levels. In an average family firm, the family holds 50.54% of the ownership shares and the duration of ownership is 48.79 years (for non-family firms both is zero by definition). The three firm-family media coverage levels are 0, 8, and 35 articles that link the family visibly to the firm in a given year (for nonfamily firms all three are zero by definition). Sales, leverage, firm age, and business diversification are set to their respective sample mean values; the industry is set to manufacturing; the year is set to 2004; all other control variables are set to zero. In other words, the figures exhibit the marginal effect on divestiture activity when a nonfamily firm would become an “invisible”, average-“visible”, and “visible” family firm, respectively.



**Figure 7:** Marginal effect on the probability of divestiture activity of becoming a typical family firm with no firm-family media coverage (confidence intervals as dotted line)

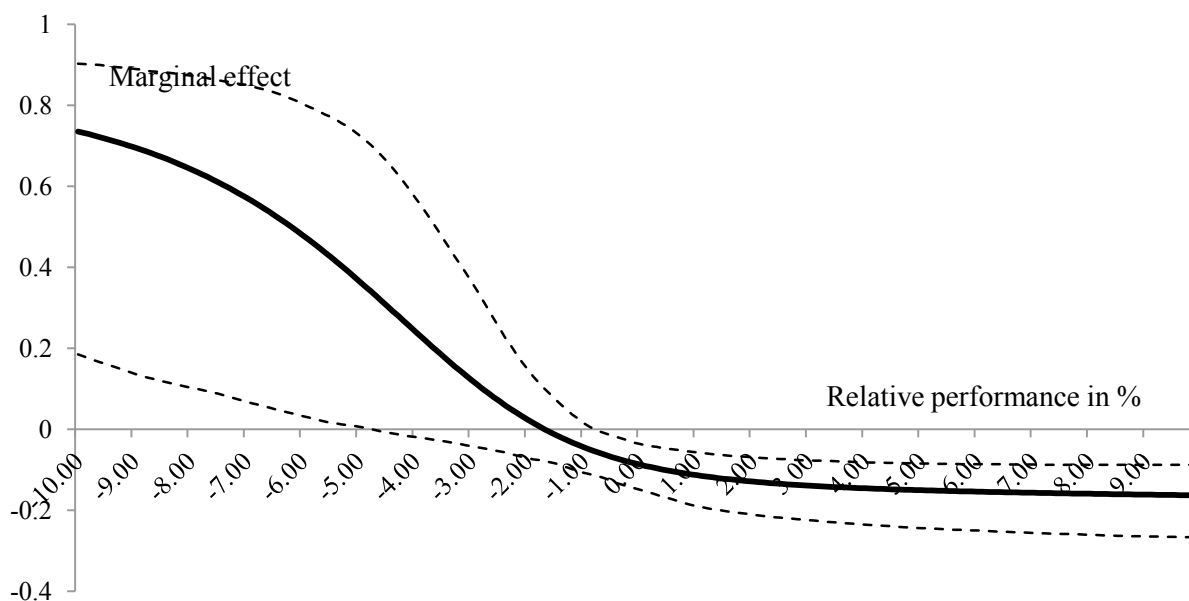
Figure 7 shows that becoming an “invisible” family firm, i.e., a firm that is not visibly linked through media coverage to the owning family, exerts a negative

influence on the probability of divestiture activity, unless adjusted ROA reaches around -2%. Beyond adjusted ROA levels of -2%, the family firm's propensity to divest is not statistically different from a nonfamily firm's propensity to divest (the upper bound intersects the horizontal zero line). In interpretation, this means that family firms with no firm-family media coverage seem to have a lower probability of divestiture activity than nonfamily firms, but with sufficient performance hazard, i.e., adjusted performance below 0 (here, -2%), they may act just as nonfamily firms.



**Figure 8:** Marginal effect on the probability of divestiture activity of becoming a typical family firm with firm-family media coverage at average value (confidence intervals as dotted line)

The result changes only slightly for average-“visible” family firms. Figure 8 adds only a nuance to the interpretation given for Figure 7: The relative performance level at which family firms' probability of divestiture activity is indistinguishable from nonfamily firm's probability of divestiture activity is positioned slightly more to the right, at -1%. In terms of performance deviation, family firms with some firm-family media coverage may thus be quicker in responding to negative adjusted ROA levels in previous years.



**Figure 9:** Marginal effect on the probability of divestiture activity of becoming a typical family firm with firm-family media coverage at mean plus one standard deviation (confidence intervals as dotted line)

Figure 9 fits well in the interpretations of Figure 7 and 8. When the family owner is highly visible, i.e., when there is high firm-family media coverage, family firms are even quicker in responding to negative adjusted ROA levels in previous years than family firms with average-“visible” family owners. But furthermore, for very low performance levels, i.e., adjusted performance below -5%, family firms in which the family receives a lot of media attention in conjunction with the firm tend to exhibit higher probabilities of divestiture activity than nonfamily firms. The argument that firm-family media coverage functions as a catalyst for the effect of negative performance levels seems to be supported.

## 5.5 Discussion

It is understood that large ownership positions offer blockowners the power to influence decision making processes in firms (Connelly et al., 2010; Fiss & Zajac, 2004; Thomsen & Pedersen, 2000). In that tradition, Bergh and Sharp (2012) find that blockowners’ influence goes beyond initiating broad strategic initiatives and reaches to very specific firm activities, such as divestitures. However, different ownership types may pursue different motives and, henceforth, blockowners may differ in their influence on divestiture activity. In this study, therefore, I ask what the specific

influence is that family owners exert on divestiture decisions in family firms. More particular, what may drive family firms' reluctance towards divestitures and under which circumstances may this reluctance be eliminated?

The findings of this study help to answer the above research question. The results suggest that family owners' current level of control exerts an inertial influence on divestiture activity, i.e., current level of family control lowers family firms' probability to engage in divestiture activity. Furthermore, positive performance, dissipating any caveat from external stakeholders against family owners' particularistic SEW motives, seems to lower the external pressure for family firms to deviate from their SEW-induced inertia towards divestitures, i.e., the tendency to exhibit lower probability of divestiture activity will be pronounced. However, when the family is under high public scrutiny as the owner of the firm, negative performance seems to increase family firms' probability to engage in divestiture activity in an effort to assert or restore family owners' role as the dominant coalition. In contrast to family owners' current level of control, the findings suggest also that family owners' duration of control has no meaningful influence on family firms' propensity to divest.

This study contributes to a recent shift of interest in divestiture research towards the role of ownership in predicting firms' divestiture decisions. For a long time, ownership concentration has been solely considered a corporate governance mechanism. In line with much of what agency theory predicts, this stream of research contends that blockholders, i.e., principals with concentrated ownership positions, have the power to limit managers', i.e., agents', selfish interest to avoid value-increasing divestitures (Hoskisson et al., 1994). The study of Bergh and Sharp (2012) further advances this thought by finding how blockowners not only influence firms' decision processes so that a divestiture takes place, but also implementation of such divestitures.

Bergh and Sharp (2012; p. 21), however, note that findings from these – mostly – agency-based theoretical frameworks “can be generalized only to the view that blockholder owners seek to maximize profitability” and thereby highlight an important limitation of these studies. In fact, family firm literature offers a strong case for the perspective that family owners, a prominent blockowner type, may be expected to deviate from the assumption that blockowners seek to maximize profits. Studying family firms thus offers a unique opportunity to include owners' preferences in



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research on ownership's influence on divestiture decisions and, thus, to overcome the theoretical limitations imposed by agency approaches. The findings from this study indeed exhibit the distinctive influence family owners exert on firms' divestiture activity. As a result, the findings may contribute to a better understanding of ownership as driver of divestiture activity and may be seen as a response to divestiture research's call to investigate differences in ownership types with regard to divestiture initiation and implementation.

A further important contribution to divestiture research may be seen in the finding that noneconomic, i.e., family owners' SEW, and economic, i.e., relative performance levels, factors interplay in antecedent divestitures. Divestiture research has already evidenced that behavioral theories help to explain divestiture activity (Shimizu, 2007), but further evidence seems warranted. Finding that family owners' noneconomic SEW motives influence the decision to divest is limited by family firms' performance situation may contribute to a stronger argument for the inclusion of noneconomic antecedents in the analysis of divestitures.

Furthermore, the study contributes to family firm literature, and more specifically to research that establishes family owners' SEW as driver or obstacle for firm level activity. The findings suggest that family owners' SEW may be both a driver and an obstacle to divestiture activity in family firms, contingent on the level of performance and firm-family media coverage. More importantly, the findings discover that the influence of SEW dimensions are not aligned: Although I find that family owners' current level of control influences their divestiture attitudes, family owners' duration of control proves not to have any meaningful influence on their divestiture attitudes.

Especially interesting are these findings in juxtaposition with earlier research. Few empirical studies so far differentiated between SEW dimensions such as current family control and duration of family control. An exception are Zellweger et al. (2012), who find some empirical support that duration of family control increases family owners' subjective valuation of family firms, whereas current family control exerts no significant influence in the analysis of family CEO's firm valuation.<sup>17</sup> How

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<sup>17</sup> Due to their data based on a unique survey, Zellweger et al. (2012) were also able to include a measure for family owners' transgenerational control intentions as another dimension of SEW that proved highly powerful as variable predicting family owners' subjective firm valuations. I do not juxtapose my result with these findings as I was not able to control for any transgenerational control intentions in the sample firms.

can these findings be reconciled with the findings of this study? I argue that divesting a unit, the focal point of this study, may differ substantially from selling the family firm, the focal point of Zellweger et al.'s (2012) study, so that different dimensions of SEW are affected. Thus, in these two scenarios, different SEW dimensions are taken into consideration by family owners when evaluating the alternatives. On the one hand, divesting a business unit primarily affects current family control negatively, whereas duration of family control may not be affected to a meaningful extent. For instance, a unit that is divested may, e.g., have been an acquisition; should this acquisition have been made recently, little SEW would be lost if such a unit was divested. On the other hand, for family owners willing to sell, loss of control seems to be given, i.e., it is a *conditio sine qua non*. However, what may dominate family owners' considerations in such situations may be the feeling of betrayal of the family's entrepreneurial legacy, an unrecoverable and ultimate act as a family firm for which they only can be compensated by higher sale prices.

The contribution to SEW research is, therefore, not only the support for the finding that SEW dimensions do not necessarily align, but also that the applicability of SEW dimensions as drivers of firm-level activities seems to be context-specific. In light of recent developments in SEW literature that aim to establish a scale of SEW dimension (Berrone et al., 2012), this insight may be helpful to further advance research in that regard.

Finally, this study adds to the growing body of literature on media's effect on firm-level activity (Bednar et al., 2012). Although related, it does, however, differentiate from much of this literature stream in that this study does not emphasize the role of the media as a specific corporate governance mechanism, but points to its intensifying role for feedback and external pressure from negative performance in family firms. The findings of this study suggest that divestitures in family firms as a response to negative performance levels are a – not solely, but at least partly, symbolic – effort to console external stakeholders in order to perpetuate family owners' opportunity to uphold broader SEW preferences. In that view, family firms behavior seems much like that of firms which appoint formally independent, but socially dependent directors in order to create a favorable image in the media (Bednar, 2012).

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### **5.5.1 Limitation and Future Research**

This study may suffer from certain limitations. As outlined in the theory section, SEW is a complex, multidimensional system. The current level of family control and the duration of family control are only two dimensions that, theoretically, could be extended by numerous further dimensions (Berrone et al., 2012; Gomez-Mejia et al., 2011). The empirical design, i.e., the analysis of longitudinal, archival data, however, hindered a broader approach towards the theoretical construct of SEW, but other dimensions of SEW may have an influence on family firms' decisions to divest. Furthermore, the data structure imposes limitations on the analysis. By focusing the analysis on firm-level divestiture activity and, consequently, aggregating divestiture activity to firm-year variables, it was impossible to use unit-level data in a meaningful way. However, our understanding of divestiture dynamics in family firms could be extended by also studying the unit level. Further research could, e.g., explore how unit-level factors, such as the duration of family control over a specific unit, may influence family firms' decision to divest.

Other limitations of this study may be imposed by the computer-aided content analysis. In fact, there is a trade-off between the accuracy of hand-coding and the opportunity to search through a larger sample of daily newspapers to identify relevant articles. The common threat of sampling too many unintended articles may be less severe in the given case, since this study focused on the number of articles in a given year in which the family owner was mentioned in relation to the family firm; therefore, the parameters for the computer-aided content analysis were trivial, and no interpretation of valence was required (Bednar, 2012). Nevertheless, limitations from this novel approach for variable creation remain.

### **5.5.2 Conclusion**

What specific influences do family owners exert on divestiture decisions in family firms? More particularly, what may drive family firms' reluctance towards divestitures, and under which circumstances may this reluctance be eliminated? Starting with these research questions, the findings from this study suggest that family owners' current level of control lowers family firms' probability to engage in divestiture activity. Furthermore, positive performance seems to lower the external

pressure for family firms to deviate from their family-induced inertia towards divestitures, i.e., the tendency to exhibit a lower probability of divestiture activity will be pronounced. However, when the family is under high public scrutiny as the owner of the firm, negative performance seems to increase family firms' probability to engage in divestiture activity in an effort to assert or restore family owners' legitimacy as the controlling owner and not to threaten the family's reputation.

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## 6 Concluding Chapter

### 6.1 General Discussion

This dissertation started out with three research questions: *What drives family firms to act? What shapes family firms' activity? And, what hinders family firms to act?* To help answering these broad research questions, SEW is applied as overarching theoretical lens in the four academic papers of this dissertation. In summary, findings from this dissertation suggest that threats to lose SEW seem to be an important driver of family firms' activity, SEW preferences furthermore offer insights in the shape of family firm activity, and – to avoid a loss of SEW in the first place – SEW preservation may also hinder family firm activity. But this concise summary of the research findings may benefit from some further elaboration.

Family firm literature puts forth that family owners are, first and foremost, loss averse with respect to their level of SEW (Gomez-Mejia et al., 2007); in family firms, any activity that threatens SEW is generally avoided. So, according to theoretical predictions from the concept of SEW, what drives family firms to act? In both family and nonfamily firms, poor performance, either in terms of deviations from historical or social benchmarks, trigger activity. However, in family firms, poor performance also imposes risks on the current level of SEW. In the paper *“Timing and Relatedness of Acquisitions in Family Firms: The Role of Socioemotional Wealth”*, my co-authors and I find therefore that problemistic search rationales from the behavioral theory of the firm (Cyert & March, 1963) and family owners' SEW loss aversion coincide when performance is below historical or social reference levels, increasing the hazard of acquisitions in family firms in comparison to nonfamily firms. Furthermore, I find in the paper *“Socioemotional Wealth, Relative Performance, and Firm-Family Media Coverage as Influences on Divestitures”* that inertial pressures from SEW in family firms are overcome by relatively negative performance levels, making divestitures more likely in family firms than in nonfamily firms in an effort of visible family owners to uphold or to restore family-external support for their specific SEW agenda. Hence, it seems plausible to conclude from the empirical evidence provided within this dissertation that, especially under certain conditions of financial peril, SEW may drive family firm activity.

Given the insight that SEW may influence family firm activity, what shapes family firms' activity? The paper "*Value is in the Eye of the Owner: Affect Infusion and Socioemotional Wealth among Family Owners*" adds to an answer to this question. Integrating the affect infusion model from cognitive psychology (Forgas, 1995) into the process of how family owners' subjective valuations may manifest in SEW, the conceptual model offers theoretical guidance as to what shapes family firm activity. The analogy could be seen in the cognitive processes: Just as target, personal, and situational features of the cognitive valuation process may bring family owners to deviate from financial valuation logics, these features may bring family owners as well to deviate from SEW-unaffected thinking in strategic decision making. Support for SEW's influence on the shape of family owners activity can further be found in the paper "*The Role of Information Asymmetry in the Choice of Entrepreneurial Exit Routes*". Here, my co-authors and I find that SEW's dimension of emotional attachment, which is driven by long ownership durations, shapes the power of signaling, e.g., through succession candidates' education or professional experience, and screening initiated by the incumbent in entrepreneurial exit decisions: Signaling and screening devices are expected to decrease information asymmetries between family-external succession candidates and the incumbent owner but prove less powerful when SEW is high. Furthermore, on the firm level, SEW may help to reconcile findings from family firm literature that previously seemed incompatible (Gomez-Mejia et al., 2010; Miller et al., 2010). In the paper "*Timing and Relatedness of Acquisitions in Family Firms: The Role of Socioemotional Wealth*", we find that, generally, family firms tend to acquire more related targets to satisfy SEW preferences for tight control and despite concentrated family wealth positions. However, when SEW is threatened, family firms increasingly opt to acquire less related targets in an effort to diversify business and wealth risks. Hence, conceptual insight and empirical evidence in this dissertation underlines SEW's power to shape family firm activity.

Finally, the question what may hinder family firms to act remains. All empirical papers in this dissertation suggest that SEW imposes a tendency for family firms to prefer the status quo over change as long as no "shock", e.g., induced by financial threats, occurs. It seems thus unambiguous that SEW leads family firms to be inert towards acquisitions and divestitures.

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## 6.2 General Limitations

As with every research, it is important to discuss the limitations of this dissertation in order to provide a comprehensive understanding of the contributions. Aside from the specific limitations inherent to the individual academic papers, this dissertation may suffer from some principal limitations discussed in the following. First, SEW is a theoretically infant concept and, though offering several benefits, poses important challenges for studies that rely on SEW as theoretical cornerstone (Berrone et al., 2012). Established to grasp all “nonfinancial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty” (Gomez-Mejia et al., 2007; p. 106), it has to be mentioned that SEW remains broad in its potential for application. To date, there is neither an unequivocal agreement on the dimensions defining family owners' SEW nor a well-accepted definition of family owners' SEW, although, a move towards theoretical convergence in order to gain academic legitimacy for the field can be observed. Family firm scholars started to attempt a consolidation of SEW research to advance a common understanding of the underlying theoretical dimensions of SEW (Berrone et al., 2012). Nevertheless, it remains unanswered whether a general SEW definition, i.e., a definition that is generalizable to the universe of family firms, may be feasible (and desirable) given family firms' heterogeneity driven by individual family owners that initially served as motivation to establish the concept of SEW (Gomez-Mejia et al., 2011). To summarize the above in light of this research, readers should be cautious in generalizing the findings of this dissertation; further SEW aspects not controlled for may limit the predictability of family firm outcomes based on the conceptual models and empirical evidence provided within this dissertation. Furthermore, I highlight the potentially very specific motivation of different family owners as inherent and inevitable limitation of SEW research.

Second, this dissertation may also be limited by measurement error related to SEW. Not only the theoretical foundation of SEW suffers from the concept's infancy, also the measurement of SEW poses limitations on empirical studies that included SEW as predictor variable. The measurement problems are aggravated for studies based on archival data which generally do not offer the possibility to measure family-specific variables. Early empirical studies often equated family firm status with the presence of SEW preferences in strategic decision making (Gomez-Mejia et al., 2011).

This black-and-white perspective, however, changed and, in empirical studies nowadays, efforts are undertaken to circumvent this issue and to approach SEW in a more nuanced way (e.g., Zellweger et al., 2012). However, except for the divestiture paper, data limitation imposed that the academic papers of this dissertation did not differentiate for distinctive dimensions of SEW in their empirical measures. Hence, measurement error may influence the findings in this dissertation to some extent.

Finally, all academic papers implicitly assume that families act as group cohesively. In other words, except for the entrepreneurial exit paper that examines family owners as individuals, this dissertation examines SEW influences induced by the family as a group on firm-level activities and, thus, disregards any dynamics in the creation of SEW on the family level. However, different family constellations may exert an influence on how families decide as groups. In consequence, SEW that is induced by these groups may differ. Thereby, findings of this dissertation are only applicable to family firms whose owning families act according to this assumption and collectively follow family motives.

### **6.3 Avenues for Future Research**

This dissertation is an attempt to contribute to family firm research. Nevertheless, the theoretical considerations and the empirical findings of the four academic papers may also pose new questions and offer new perspective on family firms. There might be several interesting avenues for future research with regard to the role of SEW in family firms. I would like to highlight two of these avenues that seem especially relevant for both academic and practical purposes.

First, deliberately untouched by this dissertation remains the performance effect of SEW in family firms, though Gomez-Mejia and colleagues (2011; p . 689) go so far to call research on families' influence on family firm performance the "Search for the Holy Grail". Although these words appear very strong, SEW may indeed serve as powerful theoretical lens to advance the understanding of the circumstances under which family firms outperform nonfamily firms (or other family firms), and under which circumstances not. As evidenced by findings from this dissertation and other SEW research, SEW seems to drive, shape, and hinder family firm activity – it seems plausible that also performance will be affected by SEW. Family firm literature, both



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from an academic and a practical standpoint, would most likely benefit from a better understanding of the link between family owners' SEW and firm performance.

Second, as discussed in the introduction, family firms are ubiquitous and account for a substantial share of economic activity in most countries (Aldrich & Cliff, 2003). But, contrary to the view of many, family firms are not only private firms. Among publicly listed firms, 44% in Europe (Faccio & Lang, 2002) and 33% in the US (Anderson & Reeb, 2003) can be considered family firms. This might raise the question whether SEW, a highly family-specific concept, holds promise to add to theoretical models for publicly listed family firms, in which aside from the family also other powerful stakeholders such as, for instance, family-external shareholders, banks, or family-external managers influence strategic decision making, to the same extent as for private family firms, in which a family may have free rein since opposing forces are largely absent (Cennamo et al., 2012; Kellermanns et al., 2012). The findings from the acquisition and divestiture paper in this dissertation offer preliminary support for the presence of SEW in publicly listed family firms, but scholars may be interested more particularly in the boundary conditions of SEW orientation. Some research on the contingencies of being public (Miller et al., 2012a) and having more or less concentrated ownership (Miller, Minichilli, & Corbetta, 2012b) on family owners influence on firm activity and performance has been conducted, but further research in that domain might be promising.

## 6.4 Conclusion

The underlying three research questions for this dissertation are: *What drives family firms to act? What shapes family firms' activity? And, what hinders family firms to act?* Acquisitions and divestitures in family firms were the research context to study these three research questions and SEW has been applied as overarching theoretical lens in four academic papers. In essence, findings from this dissertation suggest that threats to lose SEW may be an important driver of family firms' acquisition and divestiture activity, SEW preferences furthermore offer insights in the shape of such family firm activity, and – to avoid a loss of SEW in the first place – SEW preservation may also hinder acquisitions and divestitures in family firms.

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## References

- Aiken, L. S., & West, S. G. 1991. *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage.
- Akerlof, G. A. 1970. The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *Quarterly Journal of Economics*, 84(3): 488-500.
- Albert, S., & Whetten, D. A. 1985. Organizational Identity. In L. L. Cummings, & B. M. Staw (Eds.), *Research in Organizational Behavior*, Vol. 7: 263-295. Greenwich, CT: JAI Press.
- Aldrich, H. E., & Cliff, J. E. 2003. The Pervasive Effects of Family on Entrepreneurship: Toward a Family Embeddedness Perspective. *Journal of Business Venturing*, 18(5): 573-596.
- Allen, M. P., & Sharon, K. P. 1982. Power, Performance, and Succession in the Large Corporation. *Administrative Science Quarterly*, 27(4): 538-547.
- Altman, E. I. 1968. Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy. *The Journal of Finance*, 23(4): 589-609.
- Amihud, Y., & Lev, B. 1981. Risk Reduction as a Managerial Motive for Conglomerate Mergers. *Bell Journal of Economics*, 12(2): 605-617.
- Anderson, R. C., Mansi, S. A., & Reeb, D. M. 2003. Founding Family Ownership and the Agency Cost of Debt. *Journal of Financial Economics*, 68(2): 263-285.
- Anderson, R. C., & Reeb, D. M. 2003. Founding-Family Ownership and Firm Performance: Evidence from the S&P 500. *Journal of Finance*, 58(3): 1301-1328.
- Argote, L., & Greve, H. R. 2007. A Behavioral Theory of the Firm—40 Years and Counting: Introduction and Impact. *Organization Science*, 18(3): 337-349.
- Ariely, D., Huber, J., & Wertenbroch, K. 2005. When Do Losses Loom Larger Than Gains? *Journal of Marketing Research*, 42(2): 134-138.
- Arkes, H. R., & Blumer, C. 1985. The Psychology of Sunk Cost. *Organizational Behavior and Human Decision Processes*, 35(1): 124-140.
- Arregle, J.-L., Hitt, M. A., Sirmon, D. G., & Very, P. 2007. The Development of Organizational Social Capital: Attributes of Family Firms. *Journal of Management Studies*, 44(1): 73-95.
- Arthurs, J. D., Busenitz, L. W., Hoskisson, R. E., & Johnson, R. A. 2009. Signaling and Initial Public Offerings: The Use and Impact of the Lockup Period. *Journal of Business Venturing*, 24(4): 360-372.
- Astrachan, J. H., & Jaskiewicz, P. 2008. Emotional Returns and Emotional Costs in Privately Held Family Businesses: Advancing Traditional Business Valuation. *Family Business Review*, 21(2): 139-149.
- Audia, P. G., & Greve, H. R. 2006. Less Likely to Fail: Low Performance, Firm Size, and Factory Expansion in the Shipbuilding Industry. *Management Science*, 52(1): 83-94.

- 
- Backes-Gellner, U., & Werner, A. 2007. Entrepreneurial Signaling Via Education: A Success Factor in Innovative Start-Ups. *Small Business Economics*, 29(1-2): 173-190.
- Bansal, P., & Clelland, I. 2004. Talking Trash: Legitimacy, Impression Management, and Unsystematic Risk in the Context of the Natural Environment. *Academy of Management Journal*, 47(1): 93-103.
- Barach, J. A., Gantisky, J., Carson, J. A., & Doochin, B. A. 1988. Entry of the Next Generation: Strategic Challenge for Family Business. *Journal of Small Business Management*, 26(2): 49-56.
- Barkema, H. G., & Schijven, M. 2008a. How Do Firms Learn to Make Acquisitions? A Review of Past Research and an Agenda for the Future. *Journal of Management*, 34(3): 594-634.
- Barkema, H. G., & Schijven, M. 2008b. Toward Unlocking the Full Potential of Acquisitions: The Role of Organizational Restructuring. *Academy of Management Journal*, 51(4): 696-722.
- Baron, R. A. 2008. The Role of Affect in the Entrepreneurial Process. *Academy of Management Review*, 33(2): 328-340.
- Baum, J., & Haveman, H. A. 1997. Love Thy Neighbor? Differentiation and Agglomeration in the Manhattan Hotel Industry, 1898-1990. *Administrative Science Quarterly*, 42: 304-338.
- Beckhard, R., & Dyer, W. G. 1983. Smr Forum: Managing Change in the Family Firm - Issues and Strategies. *Sloan Management Review*, 24(3): 59-65.
- Bednar, M. K. 2012. Watchdog or Lapdog? A Behavioral View of the Media as a Corporate Governance Mechanism. *Academy of Management Journal*, 55(1): 131-150.
- Bednar, M. K., Boivie, S., & Prince, N. R. 2012. Burr under the Saddle: How Media Coverage Influences Strategic Change. *Organization Science*, forthcoming.
- Beggan, J. K. 1992. On the Social Nature of Nonsocial Perception: The Mere Ownership Effect. *Journal of Personality and Social Psychology*, 62: 229-237.
- Belk, R. W. 1988. Possessions and the Extended Self. *Journal of Consumer Research*, 15: 139-168.
- Belk, R. W. 1991. The Ineluctable Mysteries of Possessions. *Journal of Social Behavior & Personality*, 6(6): 38.
- Bergh, D. D. 1995. Size and Relatedness of Units Sold: An Agency Theory and Resource-Based Perspective. *Strategic Management Journal*, 16(3): 221-239.
- Bergh, D. D. 1997. Predicting Divestiture of Unrelated Acquisitions: An Integrative Model of Ex Ante Conditions. *Strategic Management Journal*, 18(9): 715-731.
- Bergh, D. D., & Gibbons, P. 2011. The Stock Market Reaction to the Hiring of Management Consultants: A Signalling Theory Approach. *Journal of Management Studies*, 48(3): 544-567.
- Bergh, D. D., & Sharp, B. M. 2012. How Far Do Owners Reach into the Divestiture Process? Blockholders and the Choice between Spin-Off and Sell-Off. *Journal of Management*, forthcoming.
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. 2012. Socioemotional Wealth in Family Firms: Theoretical Dimensions, Assessment Approaches, and Agenda for Future Research. *Family Business Review*, 25(3): 258-279.

- Berrone, P., Cruz, C., Gomez-Mejia, L. R., & Larraza-Kintana, M. 2010. Socioemotional Wealth and Corporate Responses to Institutional Pressures: Do Family-Controlled Firms Pollute Less? *Administrative Science Quarterly*, 55: 82-113.
- Berry, H. 2010. Why Do Firms Divest? *Organization Science*, 21(2): 380-396.
- Birley, S., & Westhead, P. 1993. The Owner-Managers Exit Route. In H. Klandt (Ed.), *Entrepreneurship and Business Development*. Avebury: Gower.
- Bocatto, E., Gispert, C., & Rialp, J. 2010. Family-Owned Business Succession: The Influence of Pre-Performance in the Nomination of Family and Nonfamily Members: Evidence from Spanish Firms. *Journal of Small Business Management*, 48(4): 497-523.
- Bourdieu, P. 1996. On the Family as a Realized Category. *Theory, Culture and Society*, 13(3): 19-26.
- Bourgeois III, L. J. 1981. On the Measurement of Organizational Slack. *Academy of Management Review*, 6(1): 29-39.
- Bower, G. H. 1981. Mood and Memory. *American Psychologist*, 36(2): 129-148.
- Box-Steffensmeier, J. M., & Jones, B. S. 2004. *Event History Modeling: A Guide for Social Scientists*: Cambridge University Press.
- Boyce, R. R., Brown, T. C., McClelland, G. H., Peterson, G. L., & Schulze, W. D. 1992. An Experimental Examination of Intrinsic Values as a Source of the Wta-Wtp Disparity. *American Economic Review*, 82(5): 1366-1373.
- Boyd, B. K., Takacs Haynes, K., Hitt, M. A., Bergh, D. D., & Ketchen, D. J. 2012. Contingency Hypotheses in Strategic Management Research. *Journal of Management*, 38(1): 278-313.
- Brauer, M. 2006. What Have We Acquired and What Should We Acquire in Divestiture Research? A Review and Research Agenda. *Journal of Management*, 32(6): 751-785.
- Bromiley, P. 1991. Testing a Causal Model of Corporate Risk-Taking and Performance. *Academy of Management Journal*, 34(1): 37-59.
- Burmeister, K., & Schade, C. 2007. Are Entrepreneurs' Decisions More Biased? An Experimental Investigation of the Susceptibility to Status Quo Bias. *Journal of Business Venturing*, 22(3): 340-362.
- Bushman, R., Dai, Z., & Wang, X. 2010. Risk and Ceo Turnover. *Journal of Financial Economics*, 96(3): 381-398.
- Cameron, K. S., Kim, M. U., & Whetten, D. A. 1987. Organizational Effects of Decline and Turbulence. *Administrative Science Quarterly*(32): 222-240.
- Capron, L., Dussauge, P., & Mitchell, W. 1998. Resource Redeployment Following Horizontal Acquisitions in Europe and North America, 1988–1992. *Strategic Management Journal*, 19(7): 631-661.
- Capron, L., & Pistre, N. 2002. When Do Acquirers Earn Abnormal Returns? *Strategic Management Journal*, 23(9): 781-794.
- Capron, L., & Shen, J. C. 2007. Acquisitions of Private Vs. Public Firms: Private Information, Target Selection, and Acquirer Returns. *Strategic Management Journal*, 28(9): 891-911.
- Cardon, M. S., Zietsma, C., Saporito, P., Matherne, B. P., & Davis, C. 2005. A Tale of Passion: New Insights into Entrepreneurship from a Parenthood Metaphor. *Journal of Business Venturing*, 20(1): 23-45.

- 
- Carmon, Z., & Ariely, D. 2000. Focusing on the Forgone: How Value Can Appear So Different to Buyers and Sellers. *Journal of Consumer Research*, 27(3): 360-370.
- Carney, M. 2005. Corporate Governance and Competitive Advantage in Family-Controlled Firms. *Entrepreneurship Theory & Practice*, 29(3): 249-265.
- Carpentier, C., L'Her, J.-F., & Suret, J.-M. 2010. Stock Exchange Markets for New Ventures. *Journal of Business Venturing*, 25(4): 403-422.
- Cascino, S., Pugliese, A., Mussolino, D., & Sansone, C. 2010. The Influence of Family Ownership on the Quality of Accounting Information. *Family Business Review*, 23(3): 246-265.
- Cennamo, C., Berrone, P., Cruz, C., & Gomez-Mejia, L. R. 2012. Socioemotional Wealth and Proactive Stakeholder Engagement: Why Family-Controlled Firms Care More About Their Stakeholders. *Entrepreneurship Theory and Practice*, forthcoming.
- Chandler, A. D. 1990. *Scale and Scope: The Dynamics of Industrial Capitalism*. Cambridge, MA: Belknap Press.
- Chang, S. J., Van Witteloostuijn, A., & Eden, L. 2010. From the Editors: Common Method Variance in International Business Research. *Journal of International Business Studies*, 41(2): 178-184.
- Chatterjee, S., Harrison, J. S., & Bergh, D. D. 2003. Failed Takeover Attempts, Corporate Governance and Refocusing. *Strategic Management Journal*, 24(1): 87-96.
- Chattopadhyay, P., Glick, W. H., & Huber, G. P. 2001. Organizational Actions in Response to Threats and Opportunities. *Academy of Management Journal*, 44(5): 937-955.
- Chrisman, J., Chua, J. H., Pearson, A. W., & Barnett, T. 2012. Family Involvement, Family Influence, and Family-Centered Non-Economic Goals in Small Firms. *Entrepreneurship Theory & Practice*, 36(2).
- Chrisman, J. J., Chua, J. H., Kellermanns, F. W., & Chang, E. P. C. 2007. Are Family Managers Agents or Stewards? An Exploratory Study in Privately Held Family Firms. *Journal of Business Research*, 60(10): 1030-1038.
- Chrisman, J. J., Chua, J. H., & Litz, R. 2004. Comparing the Agency Costs of Family and Non-Family Firms: Conceptual Issues and Exploratory Evidence. *Entrepreneurship Theory and Practice*, 28(4): 335-354.
- Chrisman, J. J., Chua, J. H., & Litz, R. A. 2003. A Unified Systems Perspective of Family Firm Performance: An Extension and Integration. *Journal of Business Venturing*, 18(4): 467-472.
- Chrisman, J. J., & Patel, P. 2012. Variations in R&D Investments of Family and Non-Family Firms: Behavioral Agency and Mopic Loss Aversion Perspectives. *Academy of Management Journal*, 55(4): 976-997.
- Chua, J. H., Chrisman, J. J., & Sharma, P. 1999. Defining the Family Business by Behavior. *Entrepreneurship Theory & Practice*, 23(4): 19-39.
- Chung, J. O. Y., Cohen, J. R., & Monroe, G. S. 2008. The Effect of Moods on Auditor's Inventory Valuation Decisions. *Auditing: A Journal of Practice & Theory*, 27(2): 22.

- Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P. 2002. Disentangling the Incentive and Entrenchment Effects of Large Shareholdings. *Journal of Finance*, 57(6): 2741-2771.
- Clore, G. L., Parrott, W. G., & Forgas, J. P. 1991. Moods and Their Vicissitudes: Thoughts and Feelings as Information, *Emotion and Social Judgments.*: 107-123. Elmsford, NY US: Pergamon Press.
- Coase, R. H. 1937. The Nature of the Firm. *Economica*, 4(16): 386-405.
- Cohen, B. D., & Dean, T. J. 2005. Information Asymmetry and Investor Valuation of Ipos: Top Management Team Legitimacy as a Capital Market Signal. *Strategic Management Journal*, 26(7): 683-690.
- Connelly, B. L., Hoskisson, R. E., Tihanyi, L., & Certo, S. T. 2010. Ownership as a Form of Corporate Governance. *Journal of Management Studies*, 47(8): 1561-1589.
- Corbetta, G., & Salvato, C. 2004. Self-Serving or Self-Actualizing? Models of Man and Agency Costs in Different Types of Family Firms: A Commentary on 'Comparing the Agency Costs of Family and Non-Family Firms: Conceptual Issues and Exploratory Evidence'. *Entrepreneurship: Theory & Practice*, 28(4): 355-362.
- Cording, M., Christmann, P., & King, D. R. 2008. Reducing Causal Ambiguity in Acquisition Integration: Intermediate Goals as Mediators of Integration Decisions and Acquisition Performance. *Academy of Management Journal*, 51(4): 744-767.
- Cronqvist, H., & Fahlenbrach, R. 2009. Large Shareholders and Corporate Policies. *Review of Financial Studies*, 22(10): 3941-3976.
- Cruz, C., Justo, R., & De Castro, J. O. 2010a. Does Family Employment Enhance Mses Performance?: Integrating Socioemotional Wealth and Family Embeddedness Perspectives. *Journal of Business Venturing*, 27(1): 62-76.
- Cruz, C. C., Gomez-Mejia, L. R., & Becerra, M. 2010b. Perceptions of Benevolence and the Design of Agency Contracts: Ceo-Tmt Relationships in Family Firms. *Academy of Management Journal*, 53(1): 69-89.
- Cuzin, R., & Fayolle, A. 2004. Les Dimensions Structurantes De L'accompagnement En Création D'entreprise. *La Revue des Sciences de Gestion : Direction et Gestion*, 39(210): 77.
- Cyert, R. M., & March, J. G. 1963. *A Behavioral Theory of the Firm* (1 ed.). Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- D'Aunno, T., Succi, M., & Alexander, J. A. 2000. The Role of Institutional and Market Forces in Divergent Organizational Change. *Administrative Science Quarterly*, 45(4): 679-703.
- Daily, C. M., Dalton, D. R., & Rajagopalan, N. 2003. Governance through Ownership: Centuries of Practice, Decades of Research. *Academy of Management Journal*, 46(2): 151-158.
- Dalal, D. K., & Zickar, M. J. 2012. Some Common Myths About Centering Predictor Variables in Moderated Multiple Regression and Polynomial Regression. *Organizational Research Methods*, 15(3): 339-362.
- David, P., O'Brien, J. P., Yoshikawa, T., & Delios, A. 2010. Do Shareholders or Stakeholders Appropriate the Rents from Corporate Diversification? The

- 
- Influence of Ownership Structure. *Academy of Management Journal*, 53(3): 636-654.
- Dawson, A. 2011. Private Equity Investment Decisions in Family Firms: The Role of Human Resources and Agency Costs. *Journal of Business Venturing*, 26(2): 189-199.
- De Massis, A., Chua, J. H., & Chrisman, J. J. 2008. Factors Preventing Intra-Family Succession. *Family Business Review*, 21(2): 183-199.
- Desai, V. M. 2008. Constrained Growth: How Experience, Legitimacy, and Age Influence Risk Taking in Organizations. *Organization Science*, 19(4): 594-608.
- DeSteno, D., Petty, R. E., Wegener, D. T., & Rucker, D. D. 2000. Beyond Valence in the Perception of Likelihood: The Role of Emotion Specificity. *Journal of Personality and Social Psychology*, 78(3): 397-416.
- DeTienne, D. R. 2010. Entrepreneurial Exit as a Critical Component of the Entrepreneurial Process: Theoretical Development. *Journal of Business Venturing*, 25(2): 203-215.
- DeTienne, D. R., & Cardon, M. 2012. Impact of Founder Experience on Exit Intentions. *Small Business Economics*, 38(4): 351-374.
- DeTienne, D. R., & Chandler, G. N. 2010. The Impact of Motivation and Causation and Effectuation Approaches on Exit Strategies. *Frontiers of Entrepreneurship Research*, 30(1): 1-13.
- Deutsch, Y., Keil, T., & Laamanen, T. 2007. Decision Making in Acquisitions: The Effect of Outside Directors' Compensation on Acquisition Patterns. *Journal of Management*, 33(1): 30-56.
- Douglas, E. J., & Shepherd, D. A. 2000. Entrepreneurship as a Utility Maximizing Response. *Journal of Business Venturing*, 15(3): 231-251.
- Dranikoff, L., Koller, T., & Schneider, A. 2002. Divestiture: Strategy's Missing Link. *Harvard Business Review*, 80(5): 75-83.
- Dreux, D. R. 1990. Financing Family Business: Alternatives to Selling out or Going Public. *Family Business Review*, 3(3): 225-243.
- Duhaime, I. M., & Grant, J. H. 1984. Factors Influencing Divestment Decision-Making: Evidence from a Field Study. *Strategic Management Journal*, 5(4): 301-318.
- Dukerich, J. M., Golden, B., & Shortell, S. M. 2002. Beauty Is in the Eye of the Beholder: The Impact of Organizational Identification, Identity, and Image on the Cooperative Behaviors of Physicians. *Administrative Science Quarterly*, 47: 507-533.
- Dyer, W., & Whetten, D. 2006. Family Firms and Social Responsibility: Preliminary Evidence from the S&P 500. *Entrepreneurship Theory & Practice*, 30(6): 785-802.
- Eisenmann, T. 2002. The Effects of Ceo Equity Ownership and Firm Diversification on Risk Taking. *Strategic Management Journal*, 23: 513-534.
- Erber, R., & Erber, M. W. 1994. Beyond Mood and Social Judgment: Mood Incongruent Recall and Mood Regulation. *European Journal of Social Psychology*, 24(1): 79-88.
- Faccio, M., Lang, L., & Young, L. 2001. Dividends and Expropriation. *American Economic Review*, 91: 54-78.

- Faccio, M., & Lang, L. H. P. 2002. The Ultimate Ownership of Western European Corporations. *Journal of Financial Economics*, 65(3): 365-395.
- Fama, E. F. 1980. Agency Problems and the Theory of the Firm. *Journal of Political Economy*, 88: 288-307.
- Fama, E. F., & Jensen, M. C. 1983. Separation of Ownership and Control. *Journal of Law and Economics*, 26: 301-325.
- Farber, H. S., & Gibbons, R. 1996. Learning and Wage Dynamics. *The Quarterly Journal of Economics*, 111(4): 1007-1047.
- Finkelstein, S., & Halebian, J. 2002. Understanding Acquisition Performance: The Role of Transfer Effects. *Organization Science*, 13: 36-47.
- Fiss, P. C., & Zajac, E. J. 2004. The Diffusion of Ideas over Contested Terrain: The (Non)Adoption of a Shareholder Value Orientation among German Firms. *Administrative Science Quarterly*, 49(4): 501-534.
- Folta, T. B., & O'Brien, J. P. 2004. Entry in the Presence of Dueling Options. *Strategic Management Journal*, 25(2): 121-138.
- Foo, M.-D. 2010. Emotions and Entrepreneurial Opportunity Evaluation. *Entrepreneurship Theory & Practice*, 35(2): 375-397.
- Foo, M.-D., Uy, M. A., & Baron, R. A. 2009. How Do Feelings Influence Effort? An Empirical Study of Entrepreneurs' Affect and Venture Effort. *Journal of Applied Psychology*, 94(4): 1086-1094.
- Forgas, J. P. 1992. Mood and the Perception of Unusual People: Affective Asymmetry in Memory and Social Judgments. *European Journal of Social Psychology*, 22(6): 531-547.
- Forgas, J. P. 1995. Mood and Judgment: The Affect Infusion Model (AIM). *Psychological Bulletin*, 117(1): 39-66.
- Forgas, J. P. 2001. The Affect Infusion Model (AIM): An Integrative Theory of Mood Effects on Cognition and Judgments. In L. L. Martin, & G. L. Clore (Eds.), *Theories of Mood and Cognition - a User's Guidebook*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Forgas, J. P., & Bower, G. H. 1987. Mood Effects on Person-Perception Judgments. *Journal of Personality and Social Psychology*, 53(1): 53-60.
- Forgas, J. P., & Ciarrochi, J. 2001. On Being Happy and Possessive: The Interactive Effects of Mood and Personality on Consumer Judgments. *Psychology & Marketing*, 18: 239-260.
- Forgas, J. P., & George, J. M. 2001. Affective Influences on Judgments and Behavior in Organizations: An Information Processing Perspective. *Organizational Behavior and Human Decision Processes*, 86(1): 3-34.
- Foss, N. J., Klein, P. G., Kor, Y. Y., & Mahoney, J. T. 2008. Entrepreneurship, Subjectivism, and the Resource-Based View: Towards a New Synthesis. *Strategic Entrepreneurship Journal*, 2(1): 73-94.
- Friedland, R., Palmer, D., & Stenbeck, M. 1990. The Geography of Corporate Production. *Sociological Forum*, 5(3): 335-359.
- Garen, J. E. 1985. Worker Heterogeneity, Job Screening, and Firm Size. *The Journal of Political Economy*, 93(4): 715-739.
- Gedajlovic, E., Carney, M., Chrisman, J. J., & Kellermanns, F. W. 2012. The Adolescence of Family Firm Research. *Journal of Management*, 38(4): 1010-1037.



- 
- Gersick, K. E., Davis, J. A., McCollom Hampton, M., & Lansberg, I. 1997. *Generation to Generation: Life Cycles of the Family Business*. Boston, MA: Harvard Business School Press.
- Gimeno, J., Folta, T. B., Cooper, A. C., & Woo, C. Y. 1997. Survival of the Fittest? Entrepreneurial Human Capital and the Persistence of Underperforming Firms. *Administrative Science Quarterly*, 42(4): 750-783.
- Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. 2011. The Bind That Ties: Socioemotional Wealth Preservation in Family Firms. *The Academy of Management Annals*, 5(1): 653-707.
- Gomez-Mejia, L. R., Haynes, K. T., Nunez-Nickel, M., Jacobson, K. J. L., & Moyano-Fuentes, J. 2007. Socioemotional Wealth and Business Risks in Family-Controlled Firms: Evidence from Spanish Olive Oil Mills. *Administrative Science Quarterly*, 52(1): 106-137.
- Gomez-Mejia, L. R., Larraza-Kintana, M., & Makri, M. 2003. The Determinants of Executive Compensation in Family-Controlled Public Corporations. *Academy of Management Journal*, 46(2): 226-237.
- Gomez-Mejia, L. R., Makri, M., & Larraza-Kintana, M. 2010. Diversification Decisions in Family-Controlled Firms. *Journal of Management Studies*, 47(2): 223-252.
- Gomez-Mejia, L. R., Nunez-Nickel, M., & Gutierrez, I. 2001. The Role of Family Ties in Agency Contracts. *Academy of Management Journal*, 44(1): 81-95.
- Goyal, A., & Santa-Clara, P. 2003. Idiosyncratic Risk Matters! *The Journal of Finance*, 58(3): 975-1008.
- Graebner, M. E. 2009. Caveat Venditor: Trust Asymmetries in Acquisitions of Entrepreneurial Firms. *Academy of Management Journal*, 52(3): 435-472.
- Graebner, M. E., & Eisenhardt, K. M. 2004. The Seller's Side of the Story: Acquisition as Courtship and Governance as Syndicate in Entrepreneurial Firms. *Administrative Science Quarterly*, 49: 366-403.
- Grayson, K., & Shulman, D. 2000. Indexicality and the Verification Function of Irreplaceable Possessions: A Semiotic Analysis. *Journal of Consumer Research*: 17-30.
- Greve, H. R. 1998. Performance, Aspirations, and Risky Organizational Change. *Administrative Science Quarterly*, 43(1): 58-86.
- Greve, H. R. 2003a. A Behavioral Theory of R&D Expenditures and Innovations: Evidence from Shipbuilding. *The Academy of Management Journal*, 46(6): 685-702.
- Greve, H. R. 2003b. *Organizational Learning from Performance Feedback: A Behavioral Perspective on Innovation and Change*. Cambridge: Cambridge University Press.
- Greve, H. R. 2008. A Behavioral Theory of Firm Growth: Sequential Attention to Size and Performance. *Academy of Management Journal*, 51(3): 476-494.
- Greve, H. R. 2011. Positional Rigidity: Low Performance and Resource Acquisition in Large and Small Firms. *Strategic Management Journal*, 32(1): 103-114.
- Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. 2006. *Multivariate Data Analysis* (6th ed.): Prentice Hall.

- Haleblian, J., Devers, C. E., McNamara, G., Carpenter, M. A., & Davison, R. B. 2009. Taking Stock of What We Know About Mergers and Acquisitions: A Review and Research Agenda. *Journal of Management*, 35(3): 469-502.
- Haleblian, J. J., Kim, J. Y. J., & Rajagopalan, N. 2006. The Influence of Acquisition Experience and Performance on Acquisition Behavior: Evidence from the US Commercial Banking Industry. *Academy of Management Journal*, 49(2): 357-370.
- Halter, F., Dehlen, T., Sieger, P., & Wolter, H. J. 2012. Informationsasymmetrien Zwischen Übergeber Und Nachfolger: Herausforderungen Und Lösungsmöglichkeiten Am Beispiel Des Management Buy Ins in Familienunternehmen. *Zeitschrift für KMU und Entrepreneurship*, forthcoming.
- Handler, W. C. 1994. Succession in Family Business: A Review of the Research. *Family Business Review*, 7(2): 133-157.
- Hannan, M. T., & Freeman, J. 1984. Structural Inertia and Organizational Change. *American Sociological Review*, 49(2): 149-164.
- Harford, J. 1999. Corporate Cash Reserves and Acquisitions. *The Journal of Finance*, 54(6): 1969-1997.
- Harford, J. 2005. What Drives Merger Waves? *Journal of Financial Economics*, 77(3): 529-560.
- Harrigan, K. R. 1981. Deterrents to Divestiture. *The Academy of Management Journal*, 24(2): 306-323.
- Hayek, F. A. 1948. *Individualism and Economic Order*. Chicago, IL: University of Chicago Press.
- Haynes, G. W., Walker, R., Rowe, B. R., & Hong, G. S. 1999. The Intermingling of Business and Family Finances in Family-Owned Businesses. *Family Business Review*(12): 225-239.
- Heckman, J. J. 1979. Sample Selection Bias as a Specification Error. *Econometrica*, 47(1): 153-161.
- Heimeriks, K. H., & Schijven, M. 2012. Manifestations of Higher-Order Routines: The Underlying Mechanisms of Deliberate Learning in the Context of Post-Acquisition Integration. *Academy of Management Journal*, 55(2): 703-726.
- Hills, A. M., Hill, S., Mamone, N., & Dickerson, M. 2001. Induced Mood and Persistence at Gaming. *Addiction*, 96(11): 1629-1638.
- Hirshleifer, D., & Shumway, T. 2003. Good Day Sunshine: Stock Returns and the Weather. *Journal of Finance*, 58(3): 1009-1032.
- Hitt, M. A., Harrison, J. S., & Ireland, R. D. 2001. *Mergers and Acquisitions: A Guide to Creating Value for Stakeholders*. New York: Oxford University Press.
- Hitt, M. A., & Tyler, B. B. 1991. Strategic Decision Models: Integrating Different Perspectives. *Strategic Management Journal*, 12(5): 327-351.
- Hoang, H., & Rothaermel, F. T. 2005. The Effect of General and Partner-Specific Alliance Experience on Joint R&D Project Performance. *Academy of Management Journal*, 48(2): 332-345.
- Hoetker, G. 2007. The Use of Logit and Probit Models in Strategic Management Research: Critical Issues. *Strategic Management Journal*, 28(4): 1335-1348.

- 
- Holmes, R. M., Bromiley, P., Devers, C. E., Holcomb, T. R., & McGuire, J. B. 2011. Management Theory Applications of Prospect Theory: Accomplishments, Challenges, and Opportunities. *Journal of Management*, 37(4): 1069-1107.
- Holmstrom, B. 1982. Managerial Incentive Problems - a Dynamic Perspective, *Essays in Economics and Management in Honor of Lars Wahlbeck*: 209-230: Swedish School of Economics.
- Hoskisson, R. E., Johnson, R. A., & Moesel, D. D. 1994. Corporate Divestiture Intensity in Restructuring Firms - Effects If Governance, Strategy, and Performance. *Academy of Management Journal*, 37(5): 1207-1251.
- Howorth, C., Westhead, P., & Wright, M. 2004. Buyouts, Information Asymmetry and the Family Management Dyad. *Journal of Business Venturing*, 19(4): 509-534.
- Huff, J. O., Huff, A. S., & Thomas, H. 1992. Strategic Renewal and the Interaction of Cumulative Stress and Inertia. *Strategic Management Journal*, 13(S1): 55-75.
- Iyer, D. N., & Miller, K. D. 2008. Performance Feedback, Slack, and the Timing of Acquisitions. *Academy of Management Journal*, 51(4): 808-822.
- Jain, B. A., & Tabak, F. 2008. Factors Influencing the Choice between Founder Versus Non-Founder Ceos for Ipo Firms. *Journal of Business Venturing*, 23(1): 21-45.
- Janney, J. J., & Folta, T. B. 2003. Signaling through Private Equity Placements and Its Impact on the Valuation of Biotechnology Firms. *Journal of Business Venturing*, 18(3): 361-380.
- Janney, J. J., & Folta, T. B. 2006. Moderating Effects of Investor Experience on the Signaling Value of Private Equity Placements. *Journal of Business Venturing*, 21(1): 27-44.
- Jensen, M. C. 1986. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *American Economic Review*, 76(2): 323-329.
- Jiang, C. X., Zimmerman, M. A., & Guo, G. C. 2012. Growth of Women-Owned Businesses: The Effects of Intangible Resources and Social Competence. *Journal of business Diversity*, 12(1): 47-71.
- Johnson, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. 2000. Tunneling. *American Economic Review*, 90: 22-27.
- Jones, C. D., Makri, M., & Gomez-Mejia, L. R. 2008. Affiliate Directors and Perceived Risk Bearing in Publicly Traded, Family-Controlled Firms: The Case of Diversification. *Entrepreneurship Theory & Practice*, 32(6): 1007-1026.
- Justo, R., & DeTienne, D. R. 2008. Family Situation and the Exit Event: An Extension of Threshold Theory. *Frontiers of Entrepreneurship Research*, 28(14): 1-13.
- Kahneman, D., & Knetsch, J. L. 1992. Valuing Public Goods: The Purchase of Moral Satisfaction. *Journal of Environmental Economics and Management*, 22(1): 57-70.
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. 1991. Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias. *Journal of Economic Perspectives*, 5(1): 193-206.
- Kahneman, D., & Miller, D. T. 1986. Norm Theory: Comparing Reality to Its Alternatives. *Psychological Review*, 93(2): 136-153.
- Kahneman, D., & Tversky, A. 1979. Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2): 263-291.

- Kang, D. L., & Sorensen, A. B. 1999. Ownership Organization and Firm Performance. *Annual Review of Sociology*, 25: 121-144.
- Kaul, A. 2011. Technology and Corporate Scope: Firm and Rival Innovation as Antecedents of Corporate Transactions. *Strategic Management Journal*, 33(4): 347-367.
- Kellermans, F. W., Eddleston, K., Barnett, T., & Pearson, A. W. 2008. An Exploratory Study of Family Member Characteristics and Involvement: Effects on Entrepreneurial Behavior in the Family Firm. *Family Business Review*, 21(1): 1-14.
- Kellermans, F. W., & Eddleston, K. A. 2004. Feuding Families: When Conflict Does a Family Firm Good. *Entrepreneurship: Theory & Practice*, 28(3): 209-228.
- Kellermans, F. W., Eddleston, K. A., & Zellweger, T. M. 2012. Extending the Socioemotional Wealth Perspective: A Look at the Dark Side. *Entrepreneurship Theory and Practice*, forthcoming.
- Keltner, D., Ellsworth, P. C., & Edwards, K. 1993. Beyond Simple Pessimism: Effects of Sadness and Anger on Social Perception. *Journal of Personality and Social Psychology*, 64(5): 740-752.
- Kets de Vries, M. F. 1993. The Dynamics of Family Controlled Firms: The Good and the Bad News. *Organizational Dynamics*, 21(3): 59-71.
- Khanna, T., & Palepu, K. 2000. The Future of Business Groups in Emerging Markets: Long-Run Evidence from Chile. *Academy of Management Journal*, 43(3): 268-285.
- Khanna, T., & Rivkin, J. 2001. Estimating the Performance of Business Groups in Emerging Markets. *Strategic Management Journal*, 22: 45-74.
- Kim, J.-Y., Halebian, J., & Finkelstein, S. 2011. When Firms Are Desperate to Grow Via Acquisition: The Effect of Growth Patterns and Acquisition Experience on Acquisition Premiums. *Administrative Science Quarterly*, 56(1): 26-60.
- King, D. R., Dalton, D. R., Daily, C. M., & Covin, J. G. 2004. Meta-Analyses of Post-Acquisition Performance: Indications of Unidentified Moderators. *Strategic Management Journal*, 25(2): 187-200.
- King, G., Tomz, M., & Jason, W. 2000. Making the Most of Statistical Analyses: Improving Interpretation and Presentation. *American Journal of Political Science*, 44(2): 347-361.
- King, G., Tomz, M., & Wittenberg, J. 2001. Clarify: Software for Interpreting and Presenting Statistical Results. Cambridge, MA: Harvard University.
- König, A., Kammerlander, N., & Enders, A. 2012. The Family Innovator's Dilemma: How Family Influence Affects the Adoption of Discontinuous Technologies by Incumbent Firms. *Academy of Management Review*, forthcoming.
- Kreps, D. M. 1997. Intrinsic Motivation and Extrinsic Incentives. *American Economic Review*, 87(2): 359.
- Kumar, N., Stern, L. W., & Anderson, J. C. 1993. Conducting Interorganizational Research Using Key Informants. *Academy of Management Journal*, 36(6): 1633-1651.
- Laamanen, T. 2007. On the Role of Acquisition Premium in Acquisition Research. *Strategic Management Journal*, 28(13): 1359-1369.

- 
- Laamanen, T., & Keil, T. 2008. Performance of Serial Acquirers: Toward an Acquisition Program Perspective. *Strategic Management Journal*, 29(6): 663-672.
- Lane, P., Cannella, A., & Lubatkin, M. 1998. Agency Problems as Antecedents to Unrelated Mergers and Diversification: Amihud and Lev Reconsidered. *Strategic Management Journal*, 19(6): 555-578.
- Lant, T. K., Milliken, F. J., & Batra, B. 1992. The Role of Managerial Learning and Interpretation in Strategic Persistence and Reorientation: An Empirical Exploration. *Strategic Management Journal*, 13(8): 585-608.
- Läscher, K. 2010. Weg Mit Der Haarpflege, *Süddeutsche Zeitung*. München: Süddeutsche Zeitung GmbH.
- Läscher, K. 2011. Zurück Zum Tiefen Blau, *Süddeutsche Zeitung*. München: Süddeutsche Zeitung GmbH.
- Le Breton-Miller, I., Miller, D., & Steier, L. P. 2004. Toward an Integrative Model of Effective Fob Succession. *Entrepreneurship Theory & Practice*, 28(4): 305-328.
- Lee, D. D., & Madhavan, R. 2010. Divestiture and Firm Performance: A Meta-Analysis. *Journal of Management*, 36(6): 1345-1371.
- Lee, J.-H., & Venkataraman, S. 2006. Aspirations, Market Offerings, and the Pursuit of Entrepreneurial Opportunities. *Journal of Business Venturing*, 21(1): 107-123.
- Lee, K. S., Lim, G. H., & Lim, W. S. 2003. Family Business Succession: Appropriation Risk and Choice of Successor. *Academy of Management Review*, 28(4): 657-666.
- Lerner, J. S., & Keltner, D. 2000. Beyond Valence: Toward a Model of Emotion-Specific Influences on Judgement and Choice. *Cognition & Emotion*, 14(4): 473-493.
- Lerner, J. S., Small, D. A., & Loewenstein, G. 2004. Heart Strings and Purse Strings: Carryover Effects of Emotions on Economic Decisions. *Psychological Science*, 15(5): 337-341.
- Levesque, M., Shepherd, D. A., & Douglas, E. J. 2002. Employment or Self-Employment: A Dynamic Utility-Maximizing Model. *Journal of Business Venturing*, 17(3): 189-210.
- Levinthal, D., & March, J. G. 1981. A Model of Adaptive Organizational Search. *Journal of Economic Behavior & Organization*, 2(4): 307-333.
- Levinthal, D., & March, J. G. 1993. The Myopia of Learning. *Strategic Management Journal*, 14(4): 95-112. .
- Li, J. T., & Tang, Y. 2010. Ceo Hubris and Firm Risk Taking in China: The Moderating Role of Managerial Discretion. *Academy of Management Journal*, 53(1): 45-68.
- Lim, D. S. K., Morse, E. A., Mitchell, R. K., & Seawright, K. K. 2010. Institutional Environment and Entrepreneurial Cognitions: A Comparative Business Systems Perspective. *Entrepreneurship: Theory & Practice*, 34(3): 491-516.
- Lin, Z., Peng, M. W., Yang, H., & Sun, S. L. 2009. How Do Networks and Learning Drive M&As? An Institutional Comparison between China and the United States. *Strategic Management Journal*, 30(10): 1113-1132.

- Logan, G. D. 1990. Repetition Priming and Automaticity: Common and Underlying Mechanisms? *Cognitive Psychology*, 22: 1-35.
- Long, S., & Freese, J. 2005. *Regression Models for Categorical Dependent Variables Using Stata.*: Stata Press.
- Lord, C. G., Ross, L., & Lepper, M. R. 1979. Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence. *Journal of Personality and Social Psychology*, 37(11): 2098.
- Lubatkin, M. H., Schulze, W. S., Ling, Y., & Dino, R. N. 2005. The Effects of Parental Altruism on the Governance of Family-Managed Firms. *Journal of Organizational Behavior*, 26(3): 313-330.
- Mann, T. 1986. *The Source of Social Power. Volume 1: A History of Power from the Beginning to A.D. 1760.* New York: Cambridge University Press.
- Markides, C. C. 1992. Consequences of Corporate Refocusing - Ex Ante Evidence. *Academy of Management Journal*, 35(2): 398-412.
- Markides, C. C. 1995. Diversification, Restructuring and Economic Performance. *Strategic Management Journal*, 16(2): 101-118.
- Mas-Colell, A., Whinston, M. D., & Green, J. R. 1995. *Microeconomic Theory.* New York City, New York: Oxford University Press.
- Matusik, S. F., & Fitza, M. A. 2012. Diversification in the Venture Capital Industry: Leveraging Knowledge under Uncertainty. *Strategic Management Journal*, 33(4): 407-426.
- McMullen, J. S., Bagby, D. R., & Palich, L. E. 2008. Economic Freedom and the Motivation to Engage in Entrepreneurial Action. *Entrepreneurship: Theory & Practice*, 32(5): 875-895.
- McNamara, G. M., Halebian, J., & Dykes, B. J. 2008. The Performance Implications of Participating in an Acquisition Wave: Early Mover Advantages, Bandwagon Effects, and the Moderating Influence of Industry Characteristics and Acquirer Tactics. *Academy of Management Journal*, 51(1): 113-130.
- Melin, L., & Nordqvist, M. 2007. The Reflexive Dynamics of Institutionalization: The Case of the Family Business. *Strategic Organization*(5(4)): 321-333.
- Miller, D., Le Breton-Miller, I., & Lester, R. H. 2010. Family Ownership and Acquisition Behavior in Publicly-Traded Companies. *Strategic Management Journal*, 31(2): 201-223.
- Miller, D., Le Breton-Miller, I., & Lester, R. H. 2012a. Family Firm Governance, Strategic Conformity, and Performance: Institutional Vs. Strategic Perspectives. *Organization Science*, forthcoming.
- Miller, D., Le Breton-Miller, I., Lester, R. H., & Cannella Jr, A. A. 2007. Are Family Firms Really Superior Performers? *Journal of Corporate Finance*, 13(5): 829-858.
- Miller, D., Minichilli, A., & Corbetta, G. 2012b. Is Family Leadership Always Beneficial? *Strategic Management Journal*, forthcoming.
- Miller, D., Steier, L., & Le Breton-Miller, I. 2003. Lost in Time: Intergenerational Succession, Change, and Failure in Family Business. *Journal of Business Venturing*, 18(4): 513.
- Mishina, Y., Dykes, B. J., Block, E. S., & Pollock, T. G. 2010. Why "Good" Firms Do Bad Things: The Effects of High Aspirations, High Expectations, and

- Prominence on the Incidence of Corporate Illegality. *Academy of Management Journal*, 53(4): 701-722.
- Mitchell, M. L., & Mulherin, J. H. 1996. The Impact of Industry Shocks on Takeover and Restructuring Activity. *Journal of Financial Economics*, 41(2): 193-229.
- Montgomery, C. A., & Thomas, A. R. 1988. Divestment: Motives and Gains. *Strategic Management Journal*, 9(1): 93-97.
- Morck, R., Shleifer, A., & Vishny, R. W. 1988. Management Ownership and Market Valuation: An Empirical Analysis. *Journal of Financial Economics*, 20: 293-315.
- Morck, R., Shleifer, A., & Vishny, R. W. 1989. Do Managerial Objectives Drive Bad Acquisitions? *National Bureau of Economic Research Working Paper Series*, No. 3000.
- Morck, R., & Yeung, B. 2003. Agency Problems in Large Family Business Groups. *Entrepreneurship Theory & Practice*, 27(4): 367-382.
- Morris, M. H., & Williams, R. O. 1997. Correlates of Success in Family Business Transitions. *Journal of Business Venturing*, 12(5): 385-401.
- Moschieri, C., & Mair, J. 2008. Research on Corporate Divestitures: A Synthesis. *Journal of Management & Organization*, 14(4): 399-422.
- Mourkogiannis, N., Unger, S., & Vogelsang, G. 2007. Der Altruismus Des Ingvar Kamprad, *Manager Magazin*. Hamburg: manager magazin Verlagsgesellschaft mbH.
- Muehlfeld, K., Rao Sahib, P., & Van Witteloostuijn, A. 2012. A Contextual Theory of Organizational Learning from Failures and Successes: A Study of Acquisition Completion in the Global Newspaper Industry, 1981–2008. *Strategic Management Journal*, 33(8): 938-964.
- Mulherin, J. H., & Boone, A. L. 2000. Comparing Acquisitions and Divestitures. *Journal of Corporate Finance*, 6(2): 117-139.
- Niedermeyer, C., Jaskiewicz, P., & Klein, S. B. 2010. 'Can't Get No Satisfaction?' Evaluating the Sale of the Family Business from the Family's Perspective and Deriving Implications for New Venture Activities. *Entrepreneurship and Regional Development*, 22(3-4): 293-320.
- Nordqvist, M., & Melin, L. 2010. Entrepreneurial Families and Family Firms. *Entrepreneurship & Regional Development*, 22(3): 1-29.
- O'Boyle Jr, E. H., Pollack, J. M., & Rutherford, M. W. 2012. Exploring the Relation between Family Involvement and Firms' Financial Performance: A Meta-Analysis of Main and Moderator Effects. *Journal of Business Venturing*, 27(1): 1-18.
- Okhuysen, G., & Bonardi, J.-P. 2011. Editor's Comments: The Challenges of Building Theory by Combining Lenses. *Academy of Management Review*, 36(1): 6-11.
- Oppenheim, A. N. 1966. *Questionnaire Design and Attitude Measurement*. New York: Free Press.
- Palfrey, T. R., & Spatt, C. S. 1985. Repeated Insurance Contracts and Learning. *The RAND Journal of Economics*, 16(3): 356-367.
- Parrott, W. G., & Sabini, J. 1990. Mood and Memory under Natural Conditions: Evidence for Mood Incongruent Recall. *Journal of Personality and Social Psychology*, 59(2): 321-336.

- Paulhus, D. L., & Lim, T. K. 1994. Arousal and Extremity in Social Judgments: A Dynamic Complexity Model. *European Journal of Social Psychology*, 24: 89-100.
- Pearson, A. W., Carr, J. C., & Shaw, J. C. 2008. Toward a Theory of Familiness: A Social Capital Perspective. *Entrepreneurship Theory & Practice*, 32(6): 949-969.
- Penrose, E. T. 1959. *The Theory of the Growth of the Firm*. Oxford: Basil Blackwell.
- Petty, J. 1997. Harvesting Firm Value: Process and Results. In D. L. Sexton, & R. W. Smilor (Eds.), *Entrepreneurship 2000*. Chicago: Upstart.
- Pham, M. T. 2007. Emotion and Rationality: A Critical Review and Interpretation of Empirical Evidence. *Review of General Psychology*, 11(2): 23.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. 2003. Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5): 879-903.
- Podsakoff, P. M., & Organ, D. W. 1986. Self-Reports in Organizational Research: Problems and Perspectives. *Journal of Management*, 12: 531-544.
- Porrini, P. 2004. Can a Previous Alliance between an Acquirer and a Target Affect Acquisition Performance? *Journal of Management*, 30(4): 545-562.
- Porter, M. E. 1980. *Competitive Strategy: Techniques Afor Analyzing Industries and Competitors*. New York: Free Press.
- Pratt, M. G., & Foreman, P. O. 2000. Classifying Managerial Responses to Multiple Organizational Identities. *Academy of Management Review*, 25: 18-42.
- Ramaswamy, K., Li, M., & Veliyath, R. 2002. Variations in Ownership Behavior and Propensity to Diversify: A Study of the Indian Corporate Context. *Strategic Management Journal*, 23(4): 345-358.
- Reuber, A. R., & Fischer, E. M. 1994. Entrepreneurs' Experience, Expertise, and the Performance of Technology-Based Firms. *Engineering Management, IEEE Transactions on*, 41(4): 365-374.
- Reuer, J. J., Tong, T. W., & Wu, C.-W. 2012. A Signaling Theory of Acquisition Premiums: Evidence from Ipo Targets. *Academy of Management Journal*, 55(2): 667-683.
- Rhodes-Kropf, M., Robinson, D. T., & Viswanathan, S. 2005. Valuation Waves and Merger Activity: The Empirical Evidence. *Journal of Financial Economics*, 77(3): 561-603.
- Riley, J. G. 1979. Testing the Educational Screening Hypothesis. *The Journal of Political Economy*, 87(5): 25.
- Royer, S., Simons, R., Boyd, B., & Rafferty, A. 2008. Promoting Family: A Contingency Model of Family Business Succession. *Family Business Review*, 21(1): 15-30.
- Salovey, P., O'Leary, A., Stretton, M. S., Fishkin, S. A., Drake, C. A., & Forgas, J. P. 1991. Influence of Mood on Judgments About Health and Illness, *Emotion and Social Judgments*.: 241-262. Elmsford, NY US: Pergamon Press.
- Salvato, C., Chirico, F., & Sharma, P. 2010. A Farewell to the Business: Championing Entrepreneurial Exit in Family Firms. *Entrepreneurship & Regional Development*, 22(3): 321-348.
- Sanders, W. G. 2001. Behavioral Responses of Ceos to Stock Ownership and Stock Option. *Academy of Management Journal*, 44(3): 477-492.



- 
- Scholes, L., Westhead, P., & Burrows, A. 2008. Family Firm Succession: The Management Buy-out and Buy-in Routes. *Journal of Small Business and Enterprise Development*, 15(1): 8-29.
- Scholes, L., Wright, M., Westhead, P., Burrows, A., & Bruining, H. 2007. Information Sharing, Price Negotiation and Management Buy-Outs of Private Family-Owned Firms. *Small Business Economics*, 29.
- Schultz Kleine, S., Kleine, R. E., & Allen, C. T. 1995. How Is a Possession "Me" or "Not Me"? Characterizing Types and an Antecedent of Material Possession Attachment. *The Journal of Consumer Research*, 22(3): 327-343.
- Schultz Kleine, S., & Menzel Baker, S. 2004. An Integrative Review of Material Possession Attachment. *Academy of Marketing Science Review*, 1: 35.
- Schulze, W. S., & Gedajlovic, E. R. 2010. Whither Family Business? *Journal of Management Studies*, 47(2): 191-204.
- Schulze, W. S., Lubatkin, M. H., & Dino, R. N. 2003a. Exploring the Agency Consequences of Ownership Dispersion among the Directors of Private Family Firm. *Academy of Management Journal*, 46(2): 179-194.
- Schulze, W. S., Lubatkin, M. H., & Dino, R. N. 2003b. Toward a Theory of Agency and Altruism in Family Firms. *Journal of Business Venturing*, 18(4): 473-490.
- Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. 2001. Agency Relationships in Family Firms: Theory and Evidence. *Organization Science*, 12(2): 99-116.
- Schumpeter, J. A. 1934. *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.
- Schwarz, N., & Clore, G. L. 1983. Mood, Misattribution, and Judgments of Well-Being: Informative and Directive Functions of Affective States. *Journal of Personality and Social Psychology*, 45(3): 513-523.
- Schwarzer, U. 2011. Ärger in Smaland, *Manager Magazin*. Hamburg: manager magazin Verlagsgesellschaft mbH.
- Scott, W. R. 2008. Approaching Adulthood: The Maturing of Institutional Theory. *Theory and Society*, 37: 427-442.
- Sedikides, C. 1994. Incongruent Effects of Sad Mood on Self-Conception Valence: It's a Matter of Time. *European Journal of Social Psychology*, 24(1): 161-172.
- Seidler, J. 1974. On Using Key Informants: A Technique for Collecting Quantitative Data and Controlling Measurement Error in Organization Analysis. *American Sociological Review*, 39(December): 816-831.
- Sharma, P., Chrisman, J. J., & Chua, J. H. 1997. Strategic Management of the Family Business: Past Research and Future Challenges. *Family Business Review*, 10(1): 1-35.
- Sharma, P., Chrisman, J. J., & Chua, J. H. 2003. Predictors of Satisfaction with the Succession Process in Family Firms. *Journal of Business Venturing*, 18(5): 667-687.
- Sharma, P., Chrisman, J. J., & Gersick, K. E. 2012. 25 Years of Family Business Review: Reflections on the Past and Perspectives for the Future. *Family Business Review*, 25(1): 5-15.
- Sharma, P., & Manikutty, S. 2005. Strategic Divestments in Family Firms: Role of Family Structure and Community Culture. *Entrepreneurship Theory & Practice*, 29(3): 293-311.

- Shepherd, D., & Haynie, J. M. 2009. Family Business, Identity Conflict, and an Expedited Entrepreneurial Process: A Process of Resolving Identity Conflict. *Entrepreneurship: Theory & Practice*, 33(6): 1245-1264.
- Shepherd, D. A., Wiklund, J., & Haynie, J. M. 2009. Moving Forward: Balancing the Financial and Emotional Costs of Business Failure. *Journal of Business Venturing*, 24(2): 134-148.
- Shepherd, D. A., Zacharakis, R. A., & Baron, R. 2003. Vcs' Decision Processes: Evidence Suggesting More Experience May Not Always Be Better. *Journal of Business Venturing*, 18: 381-401.
- Shimizu, K. 2007. Prospect Theory, Behavioral Theory, and the Threat-Rigidity Thesis: Combinative Effects on Organizational Decisions to Divest Formerly Acquired Units. *Academy of Management Journal*, 50(6): 1495-1514.
- Shimizu, K., & Hitt, M. A. 2005. What Constrains or Facilitates Divestitures of Formerly Acquired Firms? The Effects of Organizational Inertia. *Journal of Management*, 31(1): 50-72.
- Shiv, B., Loewenstein, G., Bechara, A., Damasio, H., & Damasio, A. R. 2005. Investment Behavior and the Negative Side of Emotion. *Psychological Science*, 16(6): 435-439.
- Shleifer, A., & Vishny, R. 1997. A Survey of Corporate Governance. *Journal of Finance*, 52: 737-783.
- Shleifer, A., & Vishny, R. W. 1989. Management Entrenchment: The Case of Manager-Specific Investments. *Journal of Financial Economics*, 25(1): 123-139.
- Shleifer, A., & Vishny, R. W. 2003. Stock Market Driven Acquisitions. *Journal of Financial Economics*, 70(3): 295-311.
- Sieger, P., Zellweger, T., Nason, R. S., & Clinton, E. 2011. Portfolio Entrepreneurship in Family Firms: A Resource-Based Perspective. *Strategic Entrepreneurship Journal*, 5(4): 327-351.
- Sorenson, R. L., Goodpaster, K. E., Hedberg, P. R., & Yu, A. 2009. The Family Point of View, Family Social Capital, and Firm Performance: An Exploratory Test. *Family Business Review*, 22(3): 239-253.
- Spence, M. 1973. Job Market Signaling. *Quarterly Journal of Economics*, 87(3): 355-374.
- Spence, M. 1976. Informational Aspects of Market Structure: An Introduction. *The Quarterly Journal of Economics*, 90(4): 591-597.
- Staw, B. M., Sandelands, L. E., & Dutton, J. E. 1981. Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis. *Administrative Science Quarterly*, 26(4): 501-524.
- Stiglitz, J. E. 1975. The Theory of "Screening," Education, and the Distribution of Income. *The American Economic Review*, 65(3): 283-300.
- Stiglitz, J. E. 1977. Symposium on Economics of Information: Introduction. *Review of Economic Studies*, 44(138): 389.
- Stiglitz, J. E. 2000. The Contributions of the Economics of Information to Twentieth Century Economics. *The Quarterly Journal of Economics*, 115(4): 1441-1478.
- Stockmans, A., Lybaert, N., & Voordeckers, W. 2010. Socioemotional Wealth and Earnings Management in Private Family Firms. *Family Business Review*, 23(3): 280-294.

- 
- Strahilevitz, M. A., & Loewenstein, G. 1998. The Effect of Ownership History on the Valuation of Objects. *Journal of Consumer Research*, 25(3): 276-289.
- Sydow, J., Schreyögg, G., & Koch, J. 2009. Organizational Path Dependence: Opening the Black Box. *Academy of Management Review*, 34(4): 689-709.
- Tabachnick, B. G., & Fidell, L. S. 1996. *Using Multivariate Statistics* (3 rd. ed.). New York: HarperCollins College Publishers.
- Tagiuri, R., & Davis, J. A. 1992. On the Goals of Successful Family Companies. *Family Business Review*, 5(1): 43-62.
- Tagiuri, R., & Davis, J. A. 1996. Bivalent Attributes of the Family Firm. *Family Business Review*, 9(2): 199-209.
- Thaler, R. 1980. Toward a Positive Theory of Consumer Choice. *Journal of Economic Behavior & Organization*, 1(1): 39-60.
- Thomsen, S., & Pedersen, T. 2000. Ownership Structure and Economic Performance in the Largest European Companies. *Strategic Management Journal*, 21(6): 689.
- Thornton, P. H., & Ocasio, W. 1999. Institutional Logics and the Historical Contingency of Power in Organizations: Executive Succession in the Higher Education Publishing Industry 1958-1990. *American Journal of Sociology*, 105: 801-843.
- Tourangeau, R., Rips, L. J., & Rasinski, K. 2000. *The Psychology of Survey Response*. Cambridge, England: Cambridge University Press.
- Tuschke, A., & Sanders, W. G. 2003. Antecedents and Consequences of Corporate Governance Reform: The Case of Germany. *Strategic Management Journal*, 24(7): 631-649.
- Tversky, A., & Kahneman, D. 1981. The Framing of Decisions and the Psychology of Choice. *Science*, 211(4481): 453-458.
- Tversky, A., & Kahneman, D. 1991. Loss Aversion in Riskless Choice: A Reference-Dependent Model. *Quarterly Journal of Economics*, 106(4): 1039-1061.
- Unger, J. M., Keith, N., Hilling, C., Gielnik, M. M., & Frese, M. 2009. Deliberate Practice among South African Small Business Owners: Relationships with Education, Cognitive Ability, Knowledge, and Success. *Journal of Occupational and Organizational Psychology*, 82(1): 21-44.
- Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. 2011. Human Capital and Entrepreneurial Success: A Meta-Analytical Review. *Journal of Business Venturing*, 26(3): 341-358.
- Uzzi, B. 1997. Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness. *Administrative Science Quarterly*, 42: 35-67.
- Valentini, G. 2012. Measuring the Effect of M&a on Patenting Quantity and Quality. *Strategic Management Journal*, 33(3): 336-346.
- Vermeulen, F., & Barkema, H. 2001. Learning through Acquisitions. *Academy of Management Journal*, 44(3): 457-476.
- Villalonga, B., & Amit, R. 2006. How Do Family Ownership, Control and Management Affect Firm Value? *Journal of Financial Economics*, 80(2): 385-417.
- Villalonga, B., & McGahan, A. M. 2005. The Choice among Acquisitions, Alliances, and Divestitures. *Strategic Management Journal*, 26(13): 1183-1208.

- Villanueva, J., & Sapienza, H. J. 2009. Goal Tolerance, Outside Investors, and Family Firm Governance. *Entrepreneurship: Theory & Practice*, 33(6): 1193-1199.
- Wade-Benzoni, K. 2002. A Golden Rule over Time: Reciprocity in Intergenerational Allocation Decisions. *Academy of Management Journal*, 45: 1011-1028.
- Wang, L., & Zajac, E. J. 2007. Alliance or Acquisition? A Dyadic Perspective on Interfirm Resource Combinations. *Strategic Management Journal*, 28(13): 1291-1317.
- Wang, Y.-H., Keswani, A., & Taylor, S. J. 2006. The Relationships between Sentiment, Returns and Volatility. *International Journal of Forecasting*, 22(1): 109-123.
- Ward, J. L. 1987. *Keeping the Family Business Healthy*. San Francisco, CA: Jossey-Bass.
- Weisbach, M. S. 1995. Ceo Turnover and the Firm's Investment Decisions. *Journal of Financial Economics*, 37(2): 159-188.
- Wennberg, K., Wiklund, J., DeTienne, D. R., & Cardon, M. S. 2010. Reconceptualizing Entrepreneurial Exit: Divergent Exit Routes and Their Drivers. *Journal of Business Venturing*, 25(4): 361-375.
- Wennberg, K., Wiklund, J., Hellerstedt, K., & Nordqvist, M. 2011. Implications of Intra-Family and External Ownership Transfer of Family Firms: Short-Term and Long-Term Performance Differences. *Strategic Entrepreneurship Journal*, 5(4): 352-372.
- Westphal, J. D., & Zajac, E. J. 1995. Who Shall Govern? Ceo/Board Power, Demographic Similarity, and New Director Selection. *Administrative Science Quarterly*, 40(1): 60-83.
- Whetten, D. 1989. What Constitutes a Theoretical Contribution? *Academy of Management Review*, 14(4): 490-495.
- Whitley, R. 1999. *Divergent Capitalisms: The Social Structuring and Change of Business Systems*. New York: Oxford University Press.
- Wiersema, M. F., & Bowen, H. P. 2009. The Use of Limited Dependent Variable Techniques in Strategy Research: Issues and Methods. *Strategic Management Journal*, 30(6): 679-692.
- Wiseman, R. M., Cuevas-Rodríguez, G., & Gomez-Mejia, L. R. 2012. Towards a Social Theory of Agency. *Journal of Management Studies*, 49(1): 202-222.
- Wiseman, R. M., & Gomez-Mejia, L. R. 1998. A Behavioral Agency Model of Managerial Risk Taking. *Academy of Management Review*, 23(1): 133-153.
- Yang, H., Lin, Z. J., & Peng, M. W. 2011. Behind Acquisitions of Alliance Partners: Exploratory Learning and Network Embeddedness. *Academy of Management Journal*, 54(5): 1069-1080.
- Zacharakis, A. L., & Shepherd, D. A. 2001. The Nature of Information and Vcs' Overconfidence. *Journal of Business Venturing*, 6: 311-332.
- Zaheer, A., Castañer, X., & Souder, D. 2011. Synergy Sources, Target Autonomy, and Integration in Acquisitions. *Journal of Management*, forthcoming.
- Zajac, E. J. 1990. Ceo Selection, Succession, Compensation and Firm Performance: A Theoretical Integration and Empirical Analysis. *Strategic Management Journal*, 11(3): 217-230.
- Zellweger, T., & Astrachan, J. 2008. On the Emotional Value of Owning a Firm. *Family Business Review*, 21(4): 347-363.

- 
- Zellweger, T., Nason, R., Nordqvist, M., & Brush, C. 2011. Why Do Family Firms Strive for Nonfinancial Performance? *Entrepreneurship Theory & Practice*, forthcoming.
- Zellweger, T. M., Kellermanns, F. W., Chrisman, J. J., & Chua, J. H. 2012. Family Control and Family Firm Valuations by Family Ceos: The Importance of Intentions for Transgenerational Control. *Organization Science*, 23(3): 851-868.
- Zelner, B. A. 2009. Using Simulation to Interpret Results from Logit, Probit, and Other Nonlinear Models. *Strategic Management Journal*, 30(12): 1335-1348.
- Zhang, V., & Fishbach, A. 2005. The Role of Anticipated Emotions in the Endowment Effect. *Journal of Consumer Psychology*, 15(4): 15(14), 316–324.
- Zhang, Y. 2008. Information Asymmetry and the Dismissal of Newly Appointed Ceos: An Empirical Investigation. *Strategic Management Journal*, 29(8): 859-872.
- Zhang, Y., & Wiersema, M. F. 2009. Stock Market Reaction to Ceo Certification: The Signaling Role of Ceo Background. *Strategic Management Journal*, 30(7): 693-710.
- Zollo, M., & Reuer, J. J. 2010. Experience Spillovers across Corporate Development Activities. *Organization Science*, 21(6): 1195-1212.
- Zollo, M., & Singh, H. 2004. Deliberate Learning in Corporate Acquisitions: Post-Acquisition Strategies and Integration Capability in Us Bank Mergers. *Strategic Management Journal*, 25: 1233-1256.

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### *Ausbildung*

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