



Family businesses and strategic change: the role of family ownership

Nina Schweiger¹ · Kurt Matzler¹ · Julia Hautz¹ · Alfredo de Massis²

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Abstract

In this study, we analyze how the performance-aspiration gap influences strategic change in family firms, providing evidence of the moderating role of family ownership in this relationship. According to socioemotional wealth (SEW) theory, family owners pursue non-financial as well as financial goals, are more risk-averse due to their personal wealth being tied to the firm, and seek to maintain control of the firm to preserve and build their SEW—all characteristics that influence their strategic behavior. We therefore suggest that strategic decisions in family-owned firms are less influenced by purely economic performance, and that such firms tend to persevere more strongly in their strategic direction. We test our hypotheses on a sample of publicly listed European firms between 2007 and 2016. Our findings confirm that the success of firms inhibits strategic change, and that family ownership moderates this relationship by making the overall effect smaller, indicating greater resistance to change despite economic pitfalls.

Keywords Family firms · Family ownership · Strategic change · Performance feedback theory

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✉ Nina Schweiger
nina.schweiger@uibk.ac.at

Kurt Matzler
kurt.matzler@uibk.ac.at

Julia Hautz
julia.hautz@uibk.ac.at

Alfredo de Massis
alfredo.demassis@unibz.it

¹ Department of Strategic Management, University of Innsbruck, Universitätsstraße 15, 6020 Innsbruck, Austria

² Faculty of Economics and Management, Free University of Bozen-Bolzano, Piazza Università 1, 39100 Bolzano, Italy

1 Introduction

Strategic change, an important topic in management and strategy research (Müller and Kunisch 2018; Nag et al. 2007), has been found to facilitate competitive advantages and long-term survival (Jiang et al. 2018). Especially in today's business environment, characterized by increased volatility, high inflation, international geopolitical conflict, and rapid technological developments, firms must quickly adapt to market conditions (Mourier et al. 2002). In this context, strategic change is defined as the organizational change a firm makes in allocating its resources to key business areas from one year to another (Bednar et al. 2013; Chatterjee and Hambrick 2007; Zhu et al. 2020).

Scholars have attempted to understand the drivers and impediments of such change, most recently by adopting a dialectical perspective to consider strategic change as the result of external pressures, managerial choices, and organizational factors (MacKay and Chia 2013; Quigley and Hambrick 2012). In particular, research has highlighted the role and importance of firms' past performance in relation to strategic change (Müller and Kunisch 2018), suggesting that a performance-aspiration gap in terms of poor performance triggers a firm's strategic change. However, mixed empirical findings have suggested contextual dependencies such as firm ownership (Deb et al. 2017).

In this paper, therefore, we explore the impact of a firm's past performance on its strategic change in the special context of family ownership (Anderson and Reeb 2003; Gomez-Mejia et al. 2010; Rovelli et al. 2022), which is a particularly suitable context for our inquiry for a number of reasons. In addition to their enormous presence (Rovelli et al. 2022) and undeniable importance to the economy at the local, national, and global level (Chu 2011), family-owned firms represent some of the world's oldest, longest-living companies (Cailluet et al. 2018). This longevity has often been examined in relation to their specific long-term orientation (Lumpkin and Brigham 2011) and represents an interesting tension in the context of strategic change. Despite the clear importance of strategic change for the long-term survival of firms (Müller and Kunisch 2018), the often reported reluctance of family firms to change (Broekaert et al. 2016) raises questions about how family firms manage the tensions between continuity and change and still survive in the long term, especially when threatened with poor performance. Specifically, we are interested in the question, *How does family ownership influence the relationship between poor past economic performance and strategic change?*

Very limited research has addressed the particularities of family-owned firms and how those characteristics specifically influence their willingness and ability to change (Kotlar and Chrisman 2019). Those studies that have approached this topic have adopted a very narrow focus, e.g., on R&D investments (Block 2012). Families often have substantial and unique goals, incentives, resources, and capabilities to shape firm strategies, whereas the impact of these strategies varies depending on the extent of the family's involvement (Gomez-Mejia et al. 2019; Le Breton-Miller et al. 2011; Neubaum et al. 2019; Rovelli et al. 2022). Research has thereby identified the extent of family ownership and managerial

involvement as central dimensions of family involvement (Debellis et al. 2021; Miller et al. 2010, 2013). The extent of family ownership is a situational moderator characterizing a firm's governance situation. Family owners typically have a disproportionate share of their wealth invested in a single company, resulting in high financial exposure (Zahra 2005) and therefore specific motivations and objectives centered around the pursuit of non-economic goals (Chrisman et al. 2009; Gómez-Mejía et al. 2007), such as perseverance of their socioemotional wealth (SEW) (Chrisman et al. 2009; Gómez-Mejía et al. 2007; Zellweger et al. 2012) and long-term orientation and survival (Le Breton-Miller and Miller 2006). Family owners are furthermore generally perceived as risk-averse (Ratten and Tajeddini 2017), which makes them unlikely to engage in actions that increase uncertainty (Anderson et al. 2012). Families' adherence to their values and traditions also makes them more path-dependent and likely to follow set strategic directions (Chirico and Salvato 2008), while their strong embeddedness in their communities and strong relationships with customers make them additionally resistant to change (Block 2010). Kotlar and Chrisman (2019) therefore identify a trade-off between a family firm's continuity due to history, values, and tradition and the need for strategic change arising from environmental dynamism.

On the other hand, studies have shown that family firms can leverage existing resources more efficiently by "doing more with less" (Duran et al. 2016, p. 2). Families' strong social ties with employees, for example, strengthen company-wide commitment to changes in strategy (Cassia et al. 2012), and family owners' conservative attitudes, independence from external investors, and relatively low level of organizational formalization (Faghfoury et al. 2015) give considerable flexibility to quickly react to changes in their environments and to engage in change themselves (Minichilli et al. 2016). In short, based on the arguments from research listed above, we suggest that with increasing family ownership, the ability of firms to engage in strategic change increases, even as their willingness to do so decreases.

In this paper, we first build on performance feedback theory (PFT) to argue that in general, firms compare their performance relative to their aspirations based on internal and external reference points, resulting in a negative impact of overperformance on strategic change. In firms where family ownership is higher, the family will have both a greater opportunity to influence the strategy of the firm and motivation to seek alignment with its interests (Gomez-Mejia et al. 2018; Randolph et al. 2019). Hence, drawing on arguments based on the SEW perspective (Gómez-Mejía et al. 2007), we further hypothesize that, especially when threatened with poor performance, the willingness of family owners to engage in strategic change declines with their share of ownership, resulting in a negative moderating effect on the relationship between firms' performance-aspiration gap and strategic change. Hence, with increasing ownership, families will be more motivated and in a stronger position to resist strategic change.

We investigate our hypotheses by conducting a longitudinal analysis on a sample of publicly listed European firms from 2007 to 2016. We thereby empirically analyze the strategic change following performance relative to previous performance and relative to performance by their competitors. Our findings provide support for the hypothesized relationships. Our results show that an increase in the

performance-aspiration gap—i.e., performance above the aspirational level—negatively affects willingness to change. In addition, in line with our hypotheses, we find that as the level of family ownership in a firm increases, family firms show less willingness to change, even if their performance falls below their set goals.

Our work contributes to current research in several ways. First of all, we add to family firm literature. Past research has provided inconsistent findings to answer the questions of when family firms change strategically (Calabrò et al. 2019). Change, the need to continuously adapt and adjust to the environment, is essential for any firm's long-term survival (Müller and Kunisch 2018). Researchers who have investigated family firms, however, have often characterized them as stable, long-lasting organizations unwilling to change (Broekaert et al. 2016). Thus, the importance of change for the long-term survival of firms highlights the inherent tension in family firms between continuity and change. With our study, we explore the under-researched interaction between the pressure for change created by poor performance and family interests, such as SEW. This study thereby contributes to a more nuanced understanding of this tension by shedding new light on the effects of desired performance on strategic change in the context of family ownership.

In addition, we add to the wider literature on strategic change by examining the outlined relationship in a particular context. While the majority of previous studies have considered the effect of a performance-aspiration gap on firm risk, we consider how this organizational factor affects an organization's strategic change. Furthermore, we are using a multidimensional construct to gauge strategic change, which offers a more holistic measure as compared to focusing on any single dimension of such change—for instance, investment in R&D (Block 2012).

Finally, given that prior research has mainly focused on earlier or shorter periods and/or smaller samples (Gordon et al. 2000), our longitudinal sample contributes empirically to the literature. By operationalizing family firms according to the family's stake in firm ownership, our study also provides a differentiated understanding of the effects of family ownership, unlike previous studies that have used dichotomous measures to identify family firms (e.g.: Miroshnychenko et al. 2020).

2 Theory and hypotheses development

Strategic change is a major theme in strategic management research. Globalization, more knowledgeable customers, and the increasingly interwoven nature of businesses around the world make it more important for firms to adapt to different circumstances through strategic change (Mourier et al. 2002). Past research has used different terms to describe firms' strategic change process, including strategic change, strategic renewal, and corporate entrepreneurship (Schmitt et al. 2016). Common to all these terms, however, is the conceptualization of strategic change as a process (Schmitt et al. 2016). Indeed, in building on the logic of conceptualizing strategy as a process (Mintzberg 1979), past research has analyzed firms' patterns of resource allocation either annually or over a longer period of time (Fang et al. 2021; Finkelstein and Hambrick 1990). Scholars looking at the absence of strategic change have examined long-term patterns to explore strategic

continuity, conformity (Miller et al. 2013), and persistence (Fang et al. 2021), whereas scholars researching strategic change are interested in the annual changes in firms' allocation of resources (Bednar et al. 2013; Chatterjee and Hambrick 2007; Zhu et al. 2020). Traditionally, researchers have looked at strategic change from three different perspectives (Müller and Kunisch 2018): (1) The deterministic view, whereby strategic change is the result of external factors, such as the environment and institutions (Hannan and Freeman 1977); (2) The voluntaristic view, whereby strategic change derives from the actions or decisions of firm leaders (Child 1972); and (3) The dialectical view, whereby strategic change is shaped by both external factors and the decisions of firm leaders (Hrebiniak and Joyce 1985).

The most popular of these perspectives is the voluntaristic view (Müller and Kunisch 2018). In this perspective, managers take a proactive role in the strategic direction of their organization, thus overcoming environmental and structural constraints. This view, which explains why firms operating in similar environments might perform differently, forms the foundation of multiple studies anchored in upper echelon theory investigating the effect of the top management team, board, and CEO on organizational actions and outcomes. In particular, studies have considered demographic characteristics such as age and education level (Wiersema and Bantel 1992), CEO origin (Kalasin 2020), top management team and CEO succession (Barron et al. 2011; Zhang et al. 2021), industry expertise (Oehmichen et al. 2017), experience within and outside the firm, size (Goodstein et al. 1994), compensation levels and structures (Cho and Hambrick 2006), and changes in leadership (Schepker et al. 2017).

On the macroeconomic level, scholars have examined how changes in the institution (Cuervo-Cazurra and Dau 2009), regulations (Smith and Grimm 1987), and technology (Tushman and Anderson 1986) affect strategic change. On the organizational level, research has identified past performance, firm age (Müller and Kunisch 2018), level of available resources (Kraatz and Zajac 2001), and potential absorptive capacity (Miroshnychenko et al. 2021) as influencing strategic change. In addition, the level of diversification (Hoskisson and Johnson 1992) and organizational inertia (Müller and Kunisch 2018) have been found to play a role in whether or not the firm engages in strategic change. Scholars have also investigated these relationships through the lens of governance structure, finding that ownership type has an effect on strategic change (Bethel and Liebeskind 1993; Bruton et al. 2002) and that high managerial ownership decreases the likelihood of strategic change (Bruton et al. 2002).

Familiness (Habbershon and Williams 1999) clearly differentiates family firms from non-family firms. In addition to financial goals, family firms also pursue non-financial goals and place great importance on the firm's longevity, as the firm's well-being has a direct impact on the family's well-being. These characteristics make family firms act differently than non-family firms.

As in other studies (e.g., Dawley et al. 2002; MacKay and Chia 2013; Quigley and Hambrick 2012), we aim to bridge the two main opposing views of strategic change by adopting the dialectical perspective, i.e., assuming that strategic change is influenced both externally by the environment and internally by firm performance.

We ground our work in performance feedback theory (PFT), developed out of the behavioral theory of the firm (BTOF) originally proposed by Cyert and March (1963). As such, we assume that the level of firm performance relative to its own past performance and relative to the performance of competitors is a signal for the firm to initiate change. Firms performing below their aspirations are more likely to engage in strategic change than firms performing above their aspirations. Past research adopting this theory has primarily investigated how performance aspiration relates to risk as measured by R&D investments (Kotlar et al. 2014). We seek to further enhance this knowledge by empirically testing how performance aspiration relates to strategic change and how this relationship is shaped by contextual contingencies such as family ownership. Past research has shown that family ownership influences a firm's strategic activities (Bruton et al. 2002; Chung and Luo 2008) and that a firm's level of risk decreases with higher levels of ownership concentration (Gadhoun and Ayadi 2003; Paligorova 2009; Rajverma et al. 2019). Strategic change is associated with more risk than continuing with the same strategy. We therefore theorize that family ownership has a negative effect on the relationship between the performance-aspiration gap and strategic change.

2.1 Performance aspiration and strategic change

PFT as part of the BTOF (Cyert and March 1963) suggests that firms assess their performance relative to their set goals and take strategic action, including strategic change. In this way, the discrepancy between set goals and actual performance becomes a principal reference point for a firm to evaluate its performance and take strategic action (Park 2007). Firms exceeding their aspiration levels are less likely to change compared to firms whose performance falls below their set performance goals (Greve 2003; Posen et al. 2018; Shinkle 2011).

Past research has operationalized aspirations based on internal performance measures (performance change from one year to another) (Greve 2003) and external or social performance measures (performance of competitors) (Audia and Brion 2007; Bromiley and Harris 2014; Gavetti et al. 2012). Following past research and building on the dialectical perspective, we use the measure of performance-aspiration gap by assuming that both external and historical performance aspirations play an important role when deciding on the necessity to change.

Past studies adopting the BTOF have primarily considered the relationship between performance feedback and firms' risk-taking by examining its effect on R&D investments, acquisitions, divestments, and new market entries (Bromiley 1991) as well as its effect on succession planning (Umans et al. 2023). Research generally agrees that firms performing well tend to maintain their current strategy. Firms experiencing stable growth tend to become inert (Salancik and Pfeffer 1978) and thus reluctant to change. Being trapped in established routines (Becker 2004), successful firms largely keep their resource allocation unchanged. However, firms with poor economic performance are more likely to change their strategy and allocate resources to match their strategic reorientation (Amburgey and Dacin 1994;

Billings et al. 1980). Performance below a firm's aspiration prompts managers to search for alternative courses of action to meet targets (Jiang et al. 2020).

Studies adopting the dialectical perspective offer mixed findings on the effect of performance on strategic change. Indeed, Gordon et al. (2000) did not find a relationship at all, but other studies have shown a negative relationship between prior firm performance and strategic change (Fombrun and Ginsberg 1990; Lant and Mezias 1992).

Therefore, we suggest that the gap between a firm's desired performance and its actual performance acts as a signal to change. Firms performing above their aspiration level are less likely to engage in change than firms performing below their aspiration level. Thus, we posit:

Hypothesis 1 The gap between desired performance and actual performance negatively affects strategic change.

2.2 Family ownership and strategic change

Family business theory contends that family control affects family firms' behaviors, clearly differentiating them from non-family firms (Miller and Le Breton-Miller 2011). Due to the influence of family control, family firms act under different constraints than non-family firms, thus affecting the potential drivers and barriers for change (König et al. 2013). In the context of strategic change, family firms' governance structure (Cruz et al. 2010), unique resources (Habbershon and Williams 1999), strong ties to past values and traditions (Sasaki et al. 2020), and pursuit of SEW (Gómez-Mejía et al. 2007) influence their ability and willingness to strategically change (Kotlar and Chrisman 2019).

The majority of past research on family firms has concentrated on a combination of family involvement in ownership and managerial control (Andres 2008). However, research shows that higher levels of concentrated ownership allow a firm to more closely control their strategic actions (Taras et al. 2018; Wang and Shailer 2015), resulting in more concentrated power within the firm (De Massis et al. 2021; König et al. 2013). Others have studied the influence of concentrated ownership on R&D investments (Chrisman et al. 2012), performance (Ghalke et al. 2023), growth (Block and Fathollahi 2022), and CSR (Sun et al. 2023). Past research has also investigated the moderating effect of concentrated ownership on the relationship between investment opportunities and level of R&D investments, finding that in family firms in particular, where ownership concentration is high, concentrated ownership has a favorable effect on investment opportunities (Miroshnychenko et al. 2020). Therefore, it is interesting to study the effect of family ownership on the strategic decisions of family firms. Family-owned firms provide a particularly interesting research context to detangle family influence according to the components of family ownership and managerial control: Because family wealth is bundled with the organization, family owners have an especially strong interest in keeping control over the firm's strategy and managing resources more parsimoniously (Carney 2005), as they are spending their own resources. This parsimony leads to more

foresighted decisions and lower levels of strategic change, as change is expensive and risky. Further, family owners value their established relationships with employees, the local community, and other managers, and they do not want to risk losing those ties or harming their social status and family identity (Belling et al. 2021) by initiating significant strategic changes based on short-term performance signals. Family owners are also more long-term oriented due to the importance of the firm's continuity, which allows for better planning in the long term and less volatility in resource deployment in the short term (Eddleston et al. 2007). Another important inhibitor of strategic change is the goal of family owners to retain control. Strategic change may involve the need to give up control. Family owners are considered particularly loss averse when it comes to their own personal control and belongings (Chirico et al. 2020; Gomez-Mejia et al. 2010; Rovelli et al. 2022). Consequently, family ownership decreases the firm's level of risk engagement, leading to the adoption of more conservative strategies in general (Zellweger et al. 2012).

To summarize, the particularities of family firms have a strong impact on their ability and willingness to change (Veider and Matzler 2016). In particular, family ownership plays an important role, as family owners are especially committed to their firm due to the intertwined relationship between the family and the business and the resulting financial as well as emotional interdependence. We argue that in family-owned firms, the relative financial performance has a weaker impact on strategic change than in non-family firms. Studies have found that as family ownership increases, a firm's willingness to take risks decreases (Gadhoun and Ayadi 2003; Paligorova 2009; Rajverma et al. 2019). Whereas non-family firms might change their strategy in response to inferior performance relative to performance goals, family firms consistently follow their long-term objectives and goals, without being diverted by purely financial measures (Belda-Ruiz et al. 2022). We therefore suggest that a lower level of relative return on assets may not induce family owners to change their strategy immediately due to their long-term orientation, their loss aversion, and their focus on non-financial goals. Their greater independence allows them to engage in more long-term and intuitive strategies (Carney 2005), even if it means that they may not meet their financial goals in the short run. Family-owned firms tend to value stability, hence lower uncertainty; therefore, they generally prefer less risk and strategic change regardless of financial success or pitfalls. We hence posit:

Hypothesis 2 Family ownership negatively moderates the relationship between strategic change and the performance-aspiration gap, indicating that family firms are less sensitive to financial performance signals than non-family firms.

3 Data and method

3.1 Sample

We tested our hypotheses using a panel dataset of publicly traded firms from continental Europe, including Austria, Germany, Switzerland, the Netherlands, France, Finland, Spain, and Italy. Our empirical setting and country selection are based on

previous literature on family-controlled firms in Europe (Barontini and Bozzi 2018; Faccio and Lang 2002). Following Barontini and Bozzi (2018), we excluded the UK and Ireland, as family control is less important in these countries than in continental Europe. Public firms in particular may be more sensitive to performance feedback compared to private firms (Carney 2005; Lv et al. 2019).

We observed our sample firms annually between 2007 and 2016, years which included a significant financial and economic crisis. The crisis required organizations to engage in strategic change to withstand the uncertain times and adapt to shifting market requirements. We included all family and non-family firms in the NRG Metrics database (NRG Metrics 2022). NRG Metrics provides one of the most comprehensive sets of governance information about firms from around the world, including information on corporate governance, ownership structure, directors and officers, family firms, compensation, audits, and, more recently, environmental, social, and governance (ESG) aspects of the firm. They collect company governance information from publicly available documents such as annual reports, financial statements, corporate governance reports, and SEC filings. NRG Metrics employs market professionals and academic researchers to collect and cross-check the data to ensure data quality. Several studies in the management and finance field have used and validated this database (e.g.: Cho et al. 2019; Delis et al. 2017; Miroshnychenko et al. 2020).

Following prior research, we excluded firms from the financial sector, as they are subject to different regulations that make them incomparable to non-financial firms (Barontini and Bozzi 2018; La Porta et al. 2002). Subsequently, we collected firm-level financial, strategic change, and firm control data from Thomson Reuters Datastream and Bloomberg Terminal. We obtained macroeconomic country-level data from the World Bank website (*World Bank Open Data* 2023) and industry data from the STAN OECD database (OECD Statistics 2023). After dropping observations with missing data, our final unbalanced panel dataset included 211 traded firms between 2007 and 2016, totaling 757 firm-year observations.

Over half the firms in our final sample were German (55.58%), followed by Swiss (18.76%) and Austrian (7.87%) companies. The rest were situated in Italy (9.27%), France (5.12%), Spain (2.43%), The Netherlands (0.7%), and Finland (0.27%). The largest portion of firms operated in the industrial sector (37.47%), consumer goods (14.02%), technology (12.56%), and healthcare (11.64%), while the remaining fell into basic materials (9.54%), oil and gas (4.85%), consumer services (4.74%), utilities sectors (3.77%), and telecommunications (1.4%).

3.2 Dependent variable: strategic change

Strategic change is commonly measured by noting the changes that firms have made in their resource allocation in key strategic areas (Chatterjee and Hambrick 2007; Crossland et al. 2014; Zhu et al. 2020) from one year to another, according to Mintzberg's (1979) definition of strategy as an "observed pattern in an array of actions and decisions" (Bednar et al. 2013, p. 911). We collected information on (1) R&D intensity (R&D/sales), (2) Plant and equipment newness (net P&E/gross P&E), (3)

Non-production overhead in selling, general, and administrative (SGA) expenses (SGA/sales), (4) Inventory level (inventory/sales), (5) Financial leverage (debt/equity), and (6) Advertising intensity (advertising expenses/sales). In a second step, we took the absolute value of the differences, then standardized and took the average across these values. As advertising included a great number of missing values, we excluded this and calculated the composite measure of strategic change based on the five other measures (1–5). We obtained the financial ratios to compute strategic change from Thomson Reuters Datastream.

3.3 Independent variable: performance relative to aspirations

The variable *performance relative to aspirations* is defined as the gap between a firm's performance and aspiration level. In line with past research, the aspiration level of a firm is a composite measure based on the firm's historical and social performance (Baum et al. 2005; Baum and Dahlin 2007; Schimmer and Brauer 2012). We defined a firm's social performance based on the current performance of the firm's competitors in the same industry. Thus, a firm's social aspiration level is based on the current performance of other firms operating in the same industry at time t^1 . In family firms, the firm's network and the firm's leader experience is often within the same industry (Belling et al. 2021). Thus, it is likely that their performance reference points outside their own firm remain within the principal industry the firm operates in. Firms' historical performance was measured by calculating the difference between each firm's performance in year t and the firm's prior performance in year $t-1$. Similar to other studies, we assume that social performance acts as the firm's central reference point for its aspiration level (Schimmer and Brauer 2012), unless the firm's performance is already above its reference group (Fiegenbaum et al. 1996; Lehner 2000). In this case, firm performance is multiplied by a factor of 0.05^2 to account for the firm's ambition to constantly improve (Bromiley 1991; Deephouse and Wiseman 2000; Schimmer and Brauer 2012).

We operationalized firm performance measured by the return on assets (ROA), an accounting-based measure used widely in strategic management and family business research, especially in non-US settings (Anderson and Reeb 2003; Barker and Mueller 2002; Palich et al. 2000). For competitors, we relied on the principal industry of the focal company and calculated the mean ROA per group. We derived the annual data from Thomson Reuters Datastream.

¹ The average industry performance was measured the following way: $\sum P_i / N_t$, where P is the performance of all firms within the same industry at time t and N the number of firms in the industry at time t .

² The operationalization of performance relative to aspirations (PRA) is as follows: $PRA_{i,t} = P_{i,t} - A_{i,t}$ with $A_{i,t} = I_{i,t-1}$, if $P_{i,t-1} < I_{i,t-1}$ and $A_{i,t} = 1.05 * P_{i,t}$ if $P_{i,t} > I_{i,t}$. $P_{i,t}$ is the performance level measured as the ROA of firm i at time t . I is the average level of performance of firms in the same industry based on the 4-digit SIC code at time t . $A_{i,t}$ represents the aspiration level of firm i at time t .

3.4 Moderator variable: family ownership

We captured family ownership by the number of shares held by the family relative to total shares outstanding (NRG Metrics 2022). This is in line with previous studies that have operationalized family firms by ownership stake (Anderson and Reeb 2003; Soluk et al. 2021). In our sample, the average family ownership stake is 13%.

3.5 Control variables

We included firm, industry, and macro-level variables in our model. We included the governance variables *board independence* as the ratio of independent board members to board size (Anderson and Reeb 2003) as well as *family CEO* to control for the involvement of family management. We also accounted for *managerial ownership*, measured as the number of shares held by the top management team to differentiate the effect of ownership control from management control (Alessandri and Seth 2014). We derived the data for these variables from the NRG Metrics database (NRG Metrics 2022). We included *firm size*, measured as the number of total employees (Audia and Greve 2006) on the firm level. Due to its skewness, we log-transformed this variable. Firm size can affect strategic change through the level of resources available (Chen and Hambrick 1995; Cho and Hambrick 2006) and the degree of formalization. Further, we included *beta* as a proxy for risk, defined as a relative risk measure compared to the average stock (Chen and Hsu 2009). We collected these variables from Thomson Reuters Datastream. Since the extent of strategic change might change with CEO age and/or tenure, we controlled for *CEO age* and *CEO tenure* (Chatterjee and Hambrick 2007; Zhang and Rajagopalan 2010), the latter measured as the number of years the CEO had been in office (Zhang 2006). On the macroeconomic level, we accounted for *GDP growth* as the percentage of annual GDP growth (Stadler et al. 2018) obtained from the World Bank website (*World Bank Open Data*, 2023). We measured *industry growth* as the annual growth of a firm's core industry at the 4-digit ISIC level based on the value added at current prices that reflects the overall attractiveness and performance of a firm's core industry (Bowen and Wiersema 2005). We obtained these data from the STAN OECD database (OECD Statistics 2023). The models include industry and year dummies.

3.6 Analysis

The management literature points out that the relationship between past performance and strategic decisions (in our case, strategic change) is endogenous (Hamilton and Nickerson 2003). Lags only correct for this problem in a limited way, as the decision to change might be taken in anticipation of better performance, inducing a reverse causality bias (Bascle 2008; Greene 2003). Further, because our panel data include a relatively short period of time, there is a potential risk of Nickell bias when applying fixed-effects estimators in a dynamic panel model (Nickell 1981). Therefore, we estimated our empirical models using the generalized methods of moments (GMM)

system with the “xtabond2” command in STATA (Arellano and Bond 1991; Roodman 2009), which enables the inclusion of the lagged dependent variable of strategic change. It also allows us to efficiently estimate a model with a not-strictly exogenous predictor variable, such as past performance (Girod and Whittington 2017), and is more efficient in estimating panel models with fewer time periods and a relatively large number of individuals (Roodman 2009). We used the “collapse” command to avoid the risk of instrument proliferation (Roodman 2009), treating the strategic change lag as well as performance, sales growth, and family influence moderator as endogenous variables (Roodman 2009).

4 Results

Table 1 reports the descriptive statistics and correlations of our variables, while Table 2 shows the regression results of the GMM estimation.

All models include industry and year dummies. The models fit well ($\text{Prob} > F = 0.000$), proving the validity of the GMM estimation method. In all models, the p value of the Arellano-Bond test was significant for AR1 and non-significant for AR2. This means that there was no second-order autocorrelation in the model with the dependent variable. The GMM estimation is therefore consistent. As for the Hansen test for overidentifying restrictions and the difference-in-Hansen test (Girod and Whittington 2017), both were non-significant across all models. We are thus confident that the instruments and lags used in our models are valid. Model 1 in Table 2 shows our base model, including the control variables. We subsequently added the independent variables and interaction terms. Concerning our control variables, GDP growth had a significant negative effect on strategic change. This is consistent with past research that found that a stable economic environment reduces the likelihood of strategic change (Fombrun and Ginsberg 1990). We also found that CEO age, managerial ownership, and beta had a negative but non-significant effect on strategic change. Board independence and CEO tenure were found to have a positive but non-significant effect on strategic change.

Model 2 in Table 2 presents the results of the main effect of prior performance on strategic change with all controls. In line with our first hypothesis (H1), we found that the coefficient was negative and significant ($b = -0.025$, $p = 0.013$). This supports previous findings that when firm performance is above aspirational levels, firms tend to continue with the path they set rather than initiate strategic change. Our second hypothesis (H2) suggested that the influence of family ownership has a negative effect. In model 3, presented in Table 2, we further examined the direct effect of family ownership on strategic change. The direct effect, however, was not significant. In model 4, shown in Table 2, we tested our moderation hypothesis (H2), including the interaction term *performance aspiration x family ownership*. We found a consistent and significant negative interaction between *performance aspiration* and *strategic change* ($b = -0.059$, $p = 0.045$). This finding, also plotted in Fig. 1, confirms H2 and suggests that family-owned firms are less influenced by purely financial results when deciding how to allocate their resources.

Table 1 Descriptive statistics and correlation of variables

Variables	Mean	Std. dev.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Strategic change	-0.07	0.42	1											
(2) Performance-aspiration gap	3.91	9.91	-0.113***	1										
(3) CEO age	54.51	6.11	-0.005	-0.007	1									
(4) CEO tenure	9.60	6.75	0.108***	0.412***	0.412***	1								
(5) Family CEO	0.11	0.32	0.014	-0.105***	-0.073**	0.193***	1							
(6) Managerial ownership	3.09	11.96	0.058	-0.020	0.014	0.204***	0.153***	1						
(7) Family ownership stake	0.12	0.23	-0.032	0.066*	-0.043	0.133***	0.276***	0.217***	1					
(8) Board independence	0.67	0.22	0.003	-0.048	-0.082**	-0.226***	0.016	-0.117***	-0.195***	1				
(9) Number of employees	9.02	1.77	-0.007	0.096***	0.144***	-0.017	-0.211***	-0.171***	-0.150***	-0.320***	1			
(10) Beta	0.98	0.41	0.020	-0.068*	-0.009	-0.070*	-0.044	-0.144***	-0.105***	0.068*	0.091**	1		
(11) GDP growth	1.46	1.39	-0.062*	0.086**	-0.126***	-0.105***	0.012	-0.098***	-0.090**	0.186***	-0.031	0.058	1	

Table 1 (continued)

Variables	Mean	Std. dev.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Industry growth	0.05	0.13	-0.055	0.022	0.059*	0.043	-0.023	-0.026	-0.053	0.049	0.014	-0.013	0.074**	1

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 2 Estimation of the performance-aspiration gap's effect on strategic change

	Model 1	Model 2	Model 3	Model 4
Constant	-0.7189 (1.1143)	0.9292 (0.8773)	0.9453 (0.8404)	0.8535 (0.8958)
Strategic change _(t-1)	0.0578 (0.0596)	0.0095 (0.0630)	0.0110 (0.0730)	-0.0317 (0.0657)
CEO age	0.0019 (0.0153)	-0.0052 (0.0142)	-0.0049 (0.0148)	-0.0082 (0.0133)
CEO tenure	-0.0086 (0.0142)	0.0081 (0.0142)	0.0081 (0.0145)	0.0145 (0.0144)
Family CEO	1.0458 (0.8819)	0.1003 (0.8844)	0.1135 (0.8735)	-0.4524 (1.0099)
Managerial ownership	0.0004 (0.0033)	-0.0003 (0.0028)	-0.0005 (0.0040)	0.0004 (0.0026)
Board independence	0.2584 (0.2710)	0.0425 (0.3221)	0.0161 (0.3035)	0.0602 (0.3592)
Number of employees ^b	0.0579 (0.0924)	-0.0639 (0.1115)	-0.0664 (0.1217)	-0.0441 (0.0958)
Beta	-0.0706 (0.1049)	-0.0467 (0.1059)	-0.0445 (0.1571)	-0.0675 (0.0920)
GDP growth	-0.1057*** (0.0349)	-0.0889*** (0.0333)	-0.0888** (0.0366)	-0.0818** (0.0361)
Industry growth	-0.1403 (0.1222)	-0.0556 (0.1191)	-0.0541 (0.1246)	-0.1062 (0.1093)
<i>Predictors</i>				
Performance aspiration _(t-1) ^a		-0.0252** (0.0101)	-0.0251** (0.0098)	-0.0173** (0.0080)
Family ownership stake			0.0291 (0.9415)	0.0671 (0.6035)
<i>Interaction</i>				
Performance aspiration x Family ownership _(t-1)				-0.0594** (0.0295)
Year dummies	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
Observations	750	750	750	750
Number of ranks	208	208	208	208
Arellano-Bond test: AR1	-6.78	-7.17	-6.40	-6.25
Arellano-Bond test: AR2	0.25	0.03	-0.02	-0.52
Hansen test of overidentifying restrictions	25.79	11.99	12.31	16.26
Number of instruments	59	53	53	59

Standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

^a variable centered on the mean; ^b variable transformed using the natural logarithm; ^c the p values of the Hansen test of overidentifying restrictions are not significant in Models 1, 2, and 3, confirming that the instruments and lag values are valid; ^d the p values of the difference-in-Hansen test are not significant in Models 1, 2, and 3, indicating that the instruments are exogenous; significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.10$

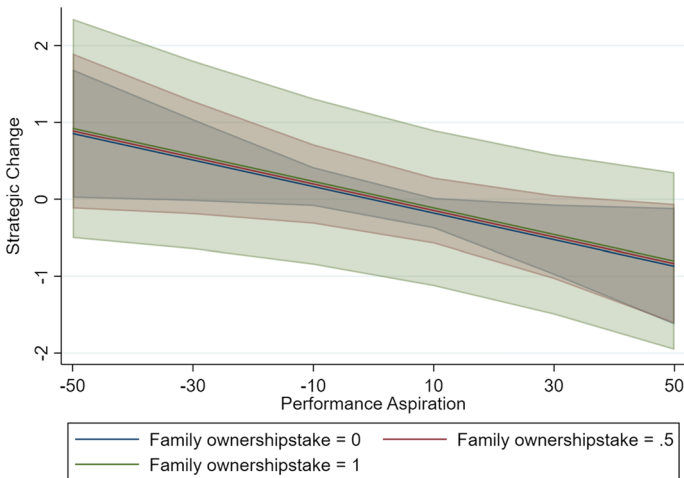


Fig. 1 Visualization of the interaction effect of family ownership and performance aspiration on strategic change

4.1 Robustness tests

To test for the robustness of our results, we conducted several additional tests applying alternative measures for our independent and moderating variables. The results of the robustness tests are included in the Online Appendix of the manuscript. First, we measured performance aspiration without the included factor of 0.05 suggested by Bromiley (1991) (Table 3 in the Online Appendix). Our results remained robust, confirming that the choice of performance measure did not influence our results. In addition, we applied alternative family firm definitions, including (1) The firm has at least one family officer and one family director, and the members of the founding family hold at least 25% of the voting rights (Table 4 in the Online Appendix), and (2) The family owners are the largest vote holder (Table 5 in the Online Appendix). Again, our results remained stable across the different definitions, confirming the robustness of the results even when using alternative family firm definitions. Further, we split the sample into over- and underperformance and found that the negative effect was negative and significant in the case when firms outperform their aspiration level. The moderating effect of family ownership remained negative but was no longer significant in the split samples (Table 7 in the Online Appendix).

We also ran our analyses on a subsample representing the period of the global financial crisis in 2008 and 2009; however, this did not yield any conclusive results due to the limited observations available.

4.2 Discussion and conclusion

In this paper, we have examined the effect of family ownership on the relationship between the performance-aspiration gap and strategic change. Drawing on PFT and family business theory, we posited that family ownership leads to less strategic change even when financial performance falls below a firm's aspirational level. In line with our assumptions, our findings indicate that family firms are more consistent in their strategies and change their strategic direction to a lower extent than non-family firms, regardless of financial performance signaling a need for change. We ran several analyses to ensure the robustness of our findings, including alternative measures of the performance-aspiration gap and changing definitions of family firms, neither of which changed our results. Our findings confirm the prevailing theoretical perspective that family firms are more long-term oriented and pursue financial as well as non-financial goals (Chrisman et al. 2009; Gómez-Mejía et al. 2007).

Our findings contribute to family business literature by introducing family ownership as a contextual variable. Family business theory argues that family firms have certain characteristics that cause them to act differently (in terms of strategy) than non-family firms (Habbershon and Williams 1999; Martin and Gomez-Mejia 2016). Past research has operationalized family firms using dichotomous measures to indicate whether the firm is owned and/or managed by a family. By investigating the effect of family ownership on strategic change, we want to add to past findings by providing a more nuanced picture of the influence that family ownership has in the prevailing tension between continuity and change in family firms. Our study provides evidence that family-owned firms are less likely to induce strategic change following prior relative poor performance, highlighting the existence of goals other than financial ones (Belda-Ruiz et al. 2022). With this study, we further fill a void in family firm literature. Previous work that has investigated change in family firms has either done so only conceptually (Kotlar and Chrisman 2019), studied only a narrow perspective of change (e.g., R&D investments (Block 2012)), or examined only its theoretical opposite (i.e., strategic persistence Fang et al. 2021). Understanding strategic change in family-owned firms is important, as strategic persistence can lead to positive outcomes like uncertainty avoidance, economies of scale and scope, learning, and lower coordination costs (Fang et al. 2021; Sydow et al. 2009), but also negative consequences like escalated commitment, a lack of creativity, and inertia or rigidity (Fang et al. 2021; Sydow et al. 2009).

Our study also adds to the strategic change management literature. Previous studies have examined how various contextual factors, such as past performance (Gordon et al. 2000) and industrial and environmental changes (Fombrun and Ginsberg 1990), influence strategic change, yet they overlook that performance may be perceived in relation to internal as well as external performance developments. We therefore add empirical evidence to PFT with our study.

Understanding the strategic behavior of family-owned firms is important because they are the backbone of the economy, representing the most prevalent business form worldwide (Rovelli et al. 2022). Our research shows that the strategic direction of family-owned firms is less influenced by purely economic values, suggesting greater strategic stability than in non-family firms. Fully analyzing, evaluating, and

understanding family firms requires a complete picture. In other words, family firms are complex, and their reasons for engaging in strategic change may not be as obvious and straightforward as for non-family firms.

Managers of family firms should be aware that while family-owned firms react slower to poor financial performance than non-family firms, a major advantage is their strategic continuity, allowing greater certainty for planning. However, reacting slowly or ignoring financial performance indicators may also pose a risk, as family firms might fail to change when change is needed (König et al. 2013; Szevczyk et al. 2022). Managers should be aware that a family firm's lower propensity to engage in strategic change, or higher strategic persistence, can be a two-edged sword. While strategic change increases a firm's chances of continued survival and effectiveness and is necessary to align with changing competitive, technological, and societal environments (Kraatz and Zajac 2001), persistence is associated with positive outcomes related to long-term orientation (Fang et al. 2021). Managers in family firms need to be cognizant of the trade-off between the preservation of heritage and tradition (Lumpkin and Brigham 2011) and the need for adaptation.

We acknowledge some limitations of our study that also provide future research avenues. First, due to data availability, we focused on publicly listed European firms. However, private companies may act differently, as they are subject to less pressure from external shareholders (Carney 2005). Future studies could consider institutionally different countries, such as the US or emerging economies. Further, we collected company data over a 10-year period between 2007 and 2016. Although we have attempted to reduce potential biases due to the relatively short observation period, longer time periods may provide more accurate results.

Following other researchers, we have proxied strategic change as a composite measure in key strategic fields (Bednar et al. 2013; Zhao et al. 2020). This allowed us to analyze multiple strategic changes over time across a large number of firms, but did not enable us to examine the individual dimensions of strategic change. Future studies might consider each of the measures individually to gain a better understanding of their relationship with performance and how family influence affects this relationship.

We examined how the performance aspiration-strategic change relationship is moderated by family ownership. Future studies could go into more detail by analyzing the top management and board structure in family firms in relation to strategic change. Although we have considered various family governance definitions, it would be interesting to look at how the relationship changes when the CEO is the founder, a relative, or recruited externally.

Our study period also included the years of the global financial crisis. Splitting the sample to analyze the crisis period separately did not yield any conclusive results. Considering the most recent global pandemic, future research could assume a longer time period to include multiple crisis periods.

Overall, our study provides additional evidence of the differences between non-family and family firms, and we hope researchers will further investigate this field.

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Data Availability The data that support the findings of this study are available from NRG Metrics (NRG, 2018) as well as Thomson Reuters Datastream. Restrictions apply to the availability of these data, which were used under license for this study. Data are available from the authors only if permitted by NRG Metrics (NRG, 2018) and Thomson Reuters.

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