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# **Article**

Board of directors turnover with new board chairs in family firms

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# ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

# Board of directors turnover with new board chairs in family firms

Jung Park<sup>1\*</sup> and Brian Bolton<sup>2</sup>

**Abstract:** We investigate the role of family ownership on turnover within a firm's board of directors when the firm appoints a new board chair. We conduct regression analysis using financial and governance data of public companies in the United States. We test new theoretical relationships linking the appointment of the new chairs and director turnover at different levels of family influence based on the Attraction-Selection-Attrition theory. We find that directors are more likely to exit when a new chairperson is appointed due to changes in board governance. In family firms, however, overall board governance is more consistent due to the family's significant controlling power and the family's direct or indirect support of the board leadership and governance function; as a result, family ownership of a company moderates the effect of having a new chair on the board in the likelihood that a director exits its board. This study enhances the understanding of how corporate boards renovate themselves as they strive to become more effective. Particularly, it helps explain whether a firm can deliver intended innovation when they announce an appointment of a new chairperson in response to the need for change in stagnant financial performance situations or by external pressure.

Subjects: Business, Management and Accounting; Strategic Management; Corporate Governance

## **ABOUT THE AUTHORS**

Jung Park is Associate Professor of Entrepreneurship and Innovation at ISG Paris. He has long experience of leading multidisciplinary research in corporate and academic settings interacting with engineers, economists, and business managers. His current research interests include venture governance, technology and innovation management, and entrepreneurial ecosystems.

Brian Bolton is Professor of Finance and the Endowed Chair in Finance at the University of Louisiana at Lafayette. He has spent the past 20 years studying different aspects of corporate governance, including board structures, executive compensation and ownership dynamics, focusing on how ESG issues create long-term economic value. His work has been published in the Journal of Quantitative & Financial Analysis, Journal of Corporate Finance, Columbia Law Review and other leading journals.

## **PUBLIC INTEREST STATEMENT**

We explore how board of director leadership might be different at family-owned firms compared to other firms without family ownership. Specifically, we study how much turnover occurs within the board when a new chair takes over. The average board has about 9 directors; directors serve for 8 years on average, while the chair serves for just over 5 years on average; these differences are telling. We hypothesize that these differences are most pronounced at non-familyowned firms because family ownership creates a more consistent leadership culture that all directors buy in to. And that is exactly what we find: when a firm appoints a new board chair, the other directors are less likely to leave at family firms than at nonfamily firms. The message is that all firms could work to model the leadership relationships and culture present in family firms to create more consistent and effective boards of directors.









#### Keywords: Corporate governance; director turnover; family business; board chair

#### 1. Introduction

Building up a board of directors with appropriate human and social capital gives a firm competitive advantage (Khana, Jones, & Boivie, 2014; Brown et al., 2017; Withers, Hillman et al., 2012). Shareholders elect the board of directors to represent them, ensure effective control over a company's full-time executives, and advise firm leadership. Well-functioning boards of directors can drive corporate entrepreneurship and innovation effectively by supporting the long-term strategies of the management team.

In family firms, the board of directors may take distinct roles because of the founder-owners' dominant power to fulfill their unique needs (Cannella et al., 2015). However, it is difficult to generalize aspects and identify best practices for family business boards (Dyer, 2018; Kabbach de Castro et al., 2017). Researchers have tried to interpret the behaviors of the different types of firms by both competing mindsets of agency and stewardship (Bammens et al., 2011; James et al., 2017; Madison et al., 2017). To make governance effective, separating the role of the chief executive officer (CEO) and chairperson, the two most important leadership figures, has been often advised (Braun & Sharma, 2007; Villalonga & Amit, 2006). Different proposals for best board compositions have been discussed that provide board independence and gender diversity (Chen & Hsu, 2009; Cruz et al., 2019). More recently, the conflicts between or different perspectives of family and nonfamily shareholders, or major and minor shareholders, have been discussed (Chang & James, 2020; Fattoum-Guedri et al., 2018; James et al., 2017). Altogether, governance exists because the role of boards of directors is undoubtedly important in realizing innovation in family businesses (Arzubiaga et al., 2018; Bolton & Park, 2020; Duran et al., 2016; Eddleston et al., 2012; Sievinen et al., 2020).

Despite the discussion on effective compositions of family business boards, there is a gap in understanding how we deliver the change, improve the board, and ensure innovation within the firm. Indeed, board governance is not fixed; it will naturally improve or deteriorate over time. Boards can overcome their ineffectiveness when the shareholders realize the need for change (Chrisman et al., 2015). Our research question is how corporate boards renovate themselves as they strive to become more effective. More specifically, we examine how board governance is changed when a new chairperson is appointed in a family firm (Sievinen et al., 2020).

Answering this question is important to understand whether a firm can deliver intended innovation when they announce an appointment of a new chairperson in response to the need for change in stagnant financial performance situations or by external pressure. For example, Tesla was ordered by The Securities and Exchange Commission (SEC) in 2018 to separate the roles of the CEO and chairperson. Elon Musk had to step down as chairperson and appoint an independent chairperson, in theory, to remove conflicts of interest and to limit undue influence within the boardroom by one single individual.

Does the appointment of a new chairperson make a difference in the decision-making process in the boardroom? How much difference can be expected? In 2020, Samsung Electronics appointed a new independent chairperson. While the late chairperson Lee Kun-hee died later in 2020 after extended hospitalization since 2014, his family successor and de-factor leader of Samsung Group, Lee Jaeyong, did not take the role of chairperson, partially because of public critics of the owner's bribery and embezzlement scandal with political connections. In both of these examples, concerns about the CEO having too much influence and control led to structural changes on the board of directors. How much influence can we expect to change with a new chairperson from outside of the owner's family? What if the owner's family appoints a new chairperson only to represent them? When some firms announce a new era in the business, can we expect these changes to correct the old board's ineffectiveness?



This research makes several contributions to the literature on family business boards. First, regarding the specific phenomena on boards, we address whether the intended changes are made in the boardroom when the firm appoints a new chairperson (Sievinen et al., 2020). Using a sophisticated statistical approach, we explain what a new chairperson's role is and how differently family business boards embrace it. Second, we test new theoretical relationships linking the appointment of the new chairs and director turnover at different levels of family influence based on the Attraction-Selection-Attrition theory (Schneider, 1987; Schneider et al., 1995). Third, we identify key elements of corporates' process to improve their governance in pursuing new changes.

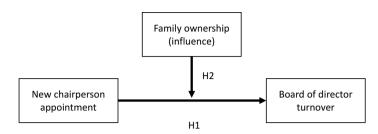
#### 2. Theoretical frameworks

# 2.1. Attraction-selection-attrition theory and board of directors' turnover

The Attraction-Selection-Attrition model, also known as the ASA model (Schneider, 1987; Schneider et al., 1995), proposes that people are attracted to organizations that are congruent with their values, personalities, and needs (Attraction); the organization, in turn, employs people with attributes that fit the organizational culture (Selection); and those employees who do not fit the organizational culture leave over time (Attrition). The theory has been applied in management research regarding human resource management based on person-organizational fits (Hoffman et al., 2011; O'Reilly et al., 1991; Ployhart et al., 2006). The ASA model explains how the characteristics of the people in a company become increasingly homogeneous. As the people establish organizational behaviors, the organization, in turn, develops a certain organizational culture that governs the organization afterward. However, when new changes are demanded (e.g., because of persistent poor financial performance), some board members may leave the organization if they do not fit with the new culture (Boone et al., 2004). The theory also suggests that CEOs or founderowners have a strong influence in determining the organizational culture (Herrmann & Nadkarni, 2014).

There has been a growing interest in which factors motivate outside directors to serve on boards (Boivie et al., 2012; Walther et al., 2017; Withers, Corley et al., 2012). The motivation was considered to be affected by the degree to which they aspired to the prestigious status that the position provides. If directors value the prestige, they are more likely to serve on the company board unless they are too occupied in their primary role besides the directorship. However, understanding how directors interact with each other to make decisions inside the boardroom and how board dynamics impact corporate governance and director turnover merits further investigation (Bammens et al., 2011; Chen et al., 2016; Garg et al., 2018; Walther et al., 2017). When a new chairperson is appointed, the new leadership generates new boardroom dynamics, relationships and governance. This situation may challenge those who were attracted to the former board governance and can lead to increased directors' turnover (Marcel et al., 2017). The new chairperson may be an external appointment, may be appointed from the existing board members or may be an internal executive newly appointed to the chair. Recognizing that corporate governance relates to "how companies are directed and controlled" (Tihanyi et al., 2014), this new appointment affects all members of the board. The tenure of outside directors usually ends by not pursuing reelection at the end of the current term, based on agreement (Boivie et al., 2012; Harrison et al., 2018), unless because of dismissal, retirement, or death. Since there are usually no formal time limits to serving on a board, some directors stay longer than others. According to the ASA theory, those board members who do not adapt to the new dynamics are more likely to leave at the end of their tenure, from which we have drawn the first hypothesis (Figure 1).

Figure 1. Diagram showing the theoretical relationships.



Hypothesis 1: Having a new board chair is positively associated with the likelihood that a director exits its board.

# 2.2. Family business boards

Family firms represent cases in which board leadership is usually more robust and consistent due to the family's significant ownership of the company and direct or indirect support of that leadership (Mueller, 1988; Schneider et al., 1998). Ownership, family or otherwise, offers a mechanism for institutionalizing power in a firm and the ultimate decision-making power in the boardroom (Miller & Le Breton-Miller, 2006; Miller et al., 2008; Salancik & Pfeffer, 1980). The chairperson of a family firm's board, whether the person is a family member or not, must enjoy the support and empowerment of the family which has de facto control of the firm (Braun & Sharma, 2007; Lane et al., 2006). Thus, we hypothesize that family firms are less likely to experience director exits if other conditions are similar.

Family business boards may limit their roles in advising (Strike, 2012) instead of monitoring and challenging the owner-executives too strongly. Independent directors are positively stimulated to bring in objectives, ideas and governance that support the family founder-owners easily (Bettinelli, 2011). On the other hand, family power can govern the boardroom decision-making process and shape the organizational culture while setting the values (Corbetta & Salvato, 2004; Jaskiewicz & Klein, 2007; Li, 2018; Zellweger & Kammerlander, 2015). Therefore, a new chairperson appointment is not necessarily a sign of imminent changes. It could be an empty powerless figure representing the owner family's needs but being appointed by external pressure. In that case, there may not be any significant changes to the culture, values and boardroom dynamics. Thus, the board of directors is less likely to leave.

Hypothesis 2: Family ownership of a company moderates the effect of having a new chair on the board in the likelihood that a director exits its board.

Dual-class share structures allow issuing two or more common stock classes, where certain classes are restricted to select investors. Under such arrangements, while most shareholders receive their dividends and voting rights, a smaller number of shareholders with superior-class shares may receive greater voting rights, e.g., ten votes per share rather than single votes (Howell, 2017). While shareholders with greater voting rights may not always represent the benefits of minor shareholders (James et al., 2017; Shleifer & Vishny, 1986), dual-class share structures are unusually common in family firms. Because a small number of shareholders enjoy more voting power, we assume that they can influence key business decisions in the boardroom regardless of who the chairperson and board members are; utilizing dual-class share structures can help family owners control the firm's governance beyond what the board of directors is able to do. We utilize this additional governance choice to further analyze Hypothesis 2 in our empirical analyses.



# 3. Methodology

## 3.1. Sample and data sources

The baseline sample of companies used in this paper comes from the family firm research conducted by Anderson et al. (2009) and Anderson et al. (2012), which is available from Ronald Anderson's professional website. The data provide information on the family ownership and dual-class share structure of the 2,000 largest public companies in the US from 2001 to 2010. It excludes foreign companies, regulated public utilities, and financial firms, because government regulation potentially affects equity ownership structures.

We acknowledge that the data are relatively old while our study is new. Since the seminal work by Anderson and Reeb (2003), several research groups have employed similar definitions to classify family firms and updated the family firm index (Berrone et al., 2010; Miller et al., 2007; Villalonga & Amit, 2006). While the characteristics of each database are the same in general, there also exist discrepancies by definition about whether to include some companies, for example, Microsoft, as a family firm or not (Miller et al., 2007). Moreover, updating the database requires a nontrivial examination of corporate histories on the company webpages and media to identify the owner's family and descendants. Their last names may no longer be the same, which are potential sources of inaccuracy. As the data from Anderson et al. (2009) and Anderson et al. (2012) are shared publicly on their website, the dataset has been used widely in family firm research and is still used in recent studies (Abeysekera & Fernando, 2020; Cordeiro et al., 2021). Thus, using the Anderson et al. data allows our work to be consistently compared to prior studies. Further, using such as well-respected dataset assures external validity, such that we and others can comfortably rely on the data and its implications. We view that the benefits we gain in reliability, consistency and external validity outweigh the cost of using slightly dated data. We do, however, perform several robustness tests to apply the Anderson et al. data to more recent periods; these are discussed in a later section.

In addition, we collected information concerning the board of directors of the companies in the sample from BoardEx and financial performance data from Compustat. We use Fama-French 48 Industrial Classifications to match with SIC codes. For most of our variables, we consider only independent directors and excluded executive directors. However, we also calculate the ratios of female and independent directors using the total number of such directors on the board including executive directors. After matching the data from these multiple sources and removing data lines with missing variables, the final sample set used in the main analysis consisted of 64,717 director-year pairs with 9,913 unique directors in 1,180 unique public US companies from 2001 to 2010, while over 100,000 director-year pairs from 2001 to 2018 were considered for robustness checks. One contribution we make is we perform analyses at both the individual director level and the firm level to better understand the dynamics related to chair and director turnover.

#### 3.2. Dependent variable: director exit

In our data, director exit is a binary variable that equals 1 when a director left the board within three years of the year in which the independent variables were initially measured. First, we collected the list of outside directors of a given firm-year and compared it with the same list of the following years. A three-year window is the standard term for director service and generally ensures that a director can choose not to be re-elected at least once (Boivie et al., 2012; Garg et al., 2018). As shown in Table 1, the average tenure of a director is almost eight years, so this 3-year window should not create any bias related to director terms ending or truncation. To ensure robustness, we also tested a two-year to a four-year window, and the results were substantially similar.

We do not distinguish between voluntary and forced exit in our study. We assume that director exits were primarily voluntary or by mutual consent. Whereas CEO turnover is frequently forced (Bhagat & Bolton, 2013), firing a director has been noted to be extremely rare, and a director generally finishes his or her current term even when there is a board disagreement or conflict.



Table 1. Summary Statistics							
Variable	N	Mean	Std Dev	Min	P25	P75	Max
Panel A: Turnover Variables in Year t + 3 (2004–2018)							
Director exit binary	98,318	0.21	0.41	0.00	0.00	0.00	1.00
Panel B: Board related Variables in Year t (2001	-2015)						
Family firm binary	104,659	0.27	0.44	0.00	0.00	1.00	1.00
Dual class binary	104,659	0.07	0.26	0.00	0.00	0.00	1.00
Family & Dual	104,659	0.06	0.25	0.00	0.00	0.00	1.00
Ratio independent dir.	104,659	0.79	0.13	0.08	0.71	0.89	1.00
Ratio female director	104,659	0.12	0.10	0.00	0.00	0.18	0.80
Panel C: Director related Variables in Year t (200	)1–2015)			•			
Director network size	104,659	1,871	2,244	0	420	2,512	22,900
Director year on board	103,420	8.14	6.94	0.00	2.90	11.40	60.90
Director age	103,378	61.71	8.40	27.00	56.00	68.00	99.00
Director qualification	103,420	2.17	1.21	0.00	2.00	3.00	15.00
Director gender	103,420	0.14	0.35	0.00	0.00	0.00	1.00
Panel D: Chairperson related Variables in Year t	(2001–201	5)					
New chairperson	102,953	0.18	0.38	0.00	0.00	0.00	1.00
Chair network size	104,659	1,430	1,674	0	286	1,971	15,674
Chair year on board	102,953	14.42	10.91	0.00	6.40	19.40	67.90
Chair age	102,953	61.36	8.68	29.00	56.00	67.00	99.00
Chair qualification	102,953	1.93	1.08	0.00	1.00	2.00	9.00
Chair gender	102,953	0.02	0.15	0.00	0.00	0.00	1.00
Panel E: Firm related Variables in Year t (2001–2	2015)						
Year-end stock price	102,536	38.33	51.78	0.01	15.82	49.04	2,725
Revenue	102,523	8,686	26,557	0	757	5,979	483,521
Employee size	102,152	27.48	89.54	0.00	2.63	22.45	2,300
Industry classification	102,536	26.68	12.16	1.00	16.00	36.00	47.00

Therefore, the reason for a director's exit from a board can be disclosed to the public as a resignation, not a dismissal regardless of nuance of the real reason (Boivie et al., 2012; Cowen & Marcel, 2011). And, as mentioned previously, the standard way that directors exit a board is simply by not renewing their term when they are up for reelection. As such, it would be impossible to distinguish between voluntary and forced director exit.

# 3.3. Independent variables

We defined a new chairperson index that equals 1 when the chairperson's time in the role is less than one year, and 0 otherwise. In our analysis, when there were several directors with a chair title (e.g., retired chairman or co-chairman), we selected the most senior among them as the *de facto* chairperson, regardless of the official title.

We used two measures to examine the family influence hypotheses: whether the company is a family firm and whether it is a family firm with a dual-class share structure. In our study, we have defined a family firm as one in which the founder or a member of his or her family (by blood or through marriage) holds a minimum five percent equity stake in the firm (Anderson & Reeb, 2003; Shleifer & Vishny, 1986; Villalonga & Amit, 2006). We have assumed that the chairperson of the family firm's board is either a member of the family or a person who the owner family strongly



backs (any implicit endorsement of the new chair is sufficient). Some companies maintain a dual-class share structure, at least for certain periods, to provide enhanced voting rights to a small number of shareholders or owner family. In this case, we assumed that the owner family holds the levers of stronger power and influences the business's strategic decisions, directly or indirectly. In our data, we defined new binary variables counting both for family firms and dual-class share structures. The Family & Dual flag equals 1 when owner families hold a five percent or larger stake in the company and also the company has a dual-class share structure in place, and 0 otherwise (Anderson et al., 2009, 2012). As shown in Table 1, about 28% of our firms are family firms and about 7% have dual-class share structures.

#### 3.4. Control variables

We include a number of control variables for firm-, board-, and individual-level characteristics that could influence the likelihood of a director exiting the board. At the firm level, we control for the companies' stock price, size, and industry. We used the companies' stock price recorded at the end of the year from Compustat. Firm size was measured using a firm's revenue (Boivie et al., 2012) and the number of employees. These measures captured the firm-level characteristics that could make a board appointment more prestigious (Boivie et al., 2016; Daily & Dalton, 1995). Each firm's industry was classified based on Fama-French 48 Industrial Classifications.

At the board level, we control for the ratios of female directors and of independent directors to the total number of directors on the board. At the director level, we include age, gender, and the individual's skills in terms of networking and qualifications. BoardEx provides data on the size of the network of a selected individual by counting the number of directors in the database who are connected to that individual through employment, peripheral activities, and education. Directors with high social and human capital are known to contribute to the board's effectiveness; the same should be true of board chairs with high social and human capital (Tian et al., 2011). We also control for the number of qualifications earned at the undergraduate level and higher by the directors under consideration. The last two variables were used as a reflection of the directors' ability to find a board position at another company (Acharya & Pollock, 2013) and affect the likelihood that directors exit the boards (Cowen & Marcel, 2011; Marcel & Cowen, 2014). We also include director's time on the sample firm's board. If the director served the board for a long term and had seniority, that director is likely to be knowledgeable of the industry and its corporate culture. We also include the same sets of variables related to the chairperson.

# 4. Results

Table 1 presents the descriptive statistics for all the variables used in the study. The definitions of the variables are listed in Appendix. In our sample set with director-year data, 21 percent of the directors exited the board within three years, 27 percent of them worked for family firms, and only 7 percent worked for a firm with dual-class share structures. The average length of time that a director served on the board was over 8 years. The average age of a director was 61 years while the youngest and oldest were 29 and 99 years old, respectively. The age data was distributed with a moderate skewness which reflects the general preference for seniority in directorships. Table 2 shows the correlation matrix confirming no multi-collinearity problems among those variables.

# 4.1. New chairperson appointment and director turnover

Table 3 presents the results of the logistic regression used to test our hypotheses. Logistic regression does not require the assumption of a linear relationship between the dependent and independent variables. Model 1 presents the results of the control variables and Model 2 adds the independent variables. Model 3 includes the interaction between the family firm status and dual-class share structures. Model 4 is a similar model that includes the newly defined variable considering both family firm and dual-class share structure, and its interaction with a new chair-person appointment. We have provided the regression coefficient, standard error, and p-value as the level of significance (Hoetker, 2007; Huang & Shields, 2000).

New chairperson         0.02         3         4           Family & Dual         -0.01         -0.05         -0.42           Family firm binary         -0.03         -0.09         0.42           Dual class binary         0.00         -0.04         0.94         0.38           Director network size         -0.03         0.00         -0.05         -0.07           Director year on board         0.14         -0.05         -0.07         -0.07           Director gender         0.01         -0.00         -0.05         -0.07         -0.07           Director gender         -0.03         0.01         0.00         -0.03         0.01         0.00           Chair network size         0.01         0.00         -0.07         -0.07         -0.07           Chair age         -0.03         -0.04         0.00         -0.05         -0.04         0.01           Chair age         -0.03         -0.05         -0.06         0.00         -0.01         -0.03           Chair age         -0.03         -0.04         0.00         -0.07         -0.05         -0.04           Chair gender         0.00         0.01         -0.02         -0.02         -0.03           <														
New chairperson       0.02         Family & Dual       -0.01       -0.05         Family firm binary       -0.03       -0.09       0.42         Dual class binary       0.00       -0.04       0.94       0.38         Director network size       -0.03       0.00       -0.05       -0.07         Director age       0.14       -0.02       0.01       0.02         Director gender       -0.04       0.00       -0.05       -0.07         Director gender       -0.03       0.01       0.00       -0.03         Chair network size       0.01       0.00       -0.07       -0.04         Chair age       -0.03       -0.16       0.19       0.36         Chair gender       -0.03       -0.06       0.08       0.01         Chair gender       0.00       0.01       -0.07       -0.15         Chair gender       0.00       0.01       -0.07       -0.08         Ratio independent dir.       0.00       0.02       0.02       -0.08         Year-end stock price       -0.02       -0.02       -0.08       -0.08         Revenue       0.01       -0.01       -0.03       -0.01       -0.05         Emp	5 6	7	∞	6	10	11 1	12 1	13 14	15	16	17	18	19	20
Family & Dual       -0.01       -0.05         Family firm binary       -0.03       -0.09       0.42         Dual class binary       0.00       -0.04       0.94       0.38         Director network size       -0.03       0.00       -0.05       -0.07         Director year on board       0.14       -0.02       0.01       0.02         Director qualification       -0.04       0.00       -0.05       -0.07         Director gender       -0.03       0.01       0.00       -0.03         Chair network size       0.01       0.00       -0.07       -0.14         Chair year on board       -0.03       -0.16       0.01       0.01         Chair qualification       0.00       0.01       -0.07       -0.15         Chair qualification       0.00       0.01       -0.07       -0.15         Chair gender       0.00       0.01       -0.07       -0.08         Ratio female director       0.00       0.02       0.02       -0.08         Year-end stock price       -0.02       -0.02       -0.02       -0.05         Employee size       0.01       -0.01       -0.03       -0.01         0.01       -0.03       -0.01 <th></th>														
Family firm binary         -0.03         -0.09         0.42           Dual class binary         0.00         -0.04         0.94         0.38           Director network size         -0.03         0.00         -0.05         -0.07         -           Director year on board         0.14         -0.02         0.01         0.07         -           Director gender         0.04         0.00         -0.05         -0.07         -         -           Director gender         -0.03         0.01         0.00         -0.07         -0.07         -         0.07         -														
Dual class binary         0.00         -0.04         0.94         0.38           Director network size         -0.03         0.00         -0.05         -0.07         -           Director year on board         0.13         -0.04         0.04         0.07         -           Director age         0.14         -0.02         0.01         0.02         -         -           Director gender         -0.04         0.00         -0.05         -0.07         -														
Director network size         -0.03         0.00         -0.05         -0.07           Director year on board         0.13         -0.04         0.04         0.07           Director age         0.14         -0.02         0.01         0.02           Director gender         -0.04         0.00         -0.05         -0.07           Director gender         -0.03         0.01         0.00         -0.03           Chair network size         0.01         0.00         -0.07         -0.14           Chair year on board         -0.03         -0.16         0.19         0.36           Chair gender         -0.02         -0.06         0.08         0.12           Chair gender         0.00         0.01         -0.07         -0.15           Chair gender         0.00         0.02         0.02         -0.08           Ratio independent dir.         0.06         0.02         -0.08         Vasar-end           Ratio female director         0.01         -0.02         -0.02         -0.08           Year-end stock price         -0.02         -0.02         -0.02         -0.05           Employee size         0.01         -0.01         -0.03         -0.01           0.01														
Director year on board         0.13 -0.04 board         0.04 board         0.07 board           Director age         0.14 -0.02 0.01 0.02 co.07	-0.04													
Director age         0.14         -0.02         0.01         0.02           Director qualification         -0.04         0.00         -0.05         -0.07         -0.07           Director gender         -0.03         0.01         0.00         -0.03         -0.14         -0.03           Chair network size         0.01         0.00         -0.07         -0.14         -0.14         -0.14           Chair age         -0.03         -0.06         0.08         0.02         0.05         -0.15         -0.15           Chair age         -0.02         -0.06         0.00         0.01         -0.07         -0.05         -0.15         -0.15           Chair gender         0.00         0.00         0.00         -0.02         -0.03         -0.14         -0.04           Ratio independent dir.         0.06         0.00         -0.02         -0.02         -0.03         -0.04         -0.08           Year-end stock price         -0.02         -0.02         0.00         -0.02         -0.05         -0.05           Employee size         0.01         -0.01         -0.03         -0.01         -0.01         -0.01         -0.01         -0.01         -0.01         -0.01         -0.01 <td< td=""><td>0.02</td><td>-0.10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	0.02	-0.10												
Director qualification         -0.04         0.00         -0.05         -0.07           Director gender         -0.03         0.01         0.00         -0.03           Chair network size         0.01         0.00         -0.07         -0.14           Chair age         -0.03         -0.16         0.19         0.36           Chair age         -0.02         -0.06         0.08         0.12           Chair gender         0.00         0.01         -0.07         -0.15           Chair gender         0.00         0.01         -0.07         -0.15           Ratio independent dir.         0.06         0.00         -0.02         -0.08           Ratio female director         0.01         0.03         0.02         -0.08           Year-end stock price         -0.02         -0.02         0.00         -0.05         -0.08           Revenue         0.02         0.00         -0.05         -0.05         -0.05         -0.05           Employee size         0.01         -0.01         -0.03         -0.01         -0.01         -0.01	00.00	-0.12 0.42												
Director gender         -0.03         0.01         0.00         -0.03           Chair network size         0.01         0.00         -0.07         -0.14         -0.14           Chair year on board         -0.03         -0.16         0.19         0.36           Chair qualification         0.00         -0.01         -0.07         -0.15           Chair gender         0.00         0.01         -0.07         -0.15           Ratio independent dir.         0.06         0.00         -0.02         -0.08           Ratio female director         0.01         0.03         0.02         -0.08           Year-end stock price         -0.02         -0.02         -0.03         -0.08           Revenue         0.02         0.00         -0.05         -0.05         -0.05           Employee size         0.01         -0.01         -0.03         -0.01         -0.01	-0.05	0.31 -0.11	-0.05											
Chair network size         0.01         0.00         -0.07         -0.14           Chair year on board         -0.03         -0.16         0.19         0.36           Chair age         -0.02         -0.06         0.08         0.12           Chair gender         0.00         0.01         -0.07         -0.15           Chair gender         0.00         0.02         0.02         0.01           Ratio independent dir.         0.06         0.00         -0.22         -0.34           Ratio female director         0.01         0.03         0.02         -0.08           Year-end stock price         -0.02         -0.02         0.00         -0.05         -0.05           Employee size         0.01         -0.01         -0.03         -0.01         -0.05	00.00	0.12   -0.09	) -0.21	20.0										
Chair year on board         -0.03         -0.16         0.19         0.36           Chair age         -0.02         -0.06         0.08         0.12           Chair qualification         0.00         0.01         -0.07         -0.15         -           Chair gender         0.00         0.02         0.02         0.01         -0.05         -0.34         -           Ratio independent dir.         0.06         0.00         -0.02         -0.34         -         -           Ratio female director         0.01         0.03         0.02         -0.08           Year-end stock price         -0.02         -0.02         0.00         -0.05         -0.05           Revenue         0.02         0.00         -0.02         -0.05         -0.05         -0.05           Employee size         0.01         -0.01         -0.03         -0.01         -0.01         -0.01	-0.04	0.26 -0.04	1-0.01	0.10	90.0									
Chair age         -0.02         -0.06         0.08         0.12           Chair qualification         0.00         0.01         -0.07         -0.15           Chair gender         0.00         0.02         0.02         0.01           Ratio independent dir.         0.06         0.00         -0.22         -0.34           Ratio female director         0.01         0.03         0.02         -0.08           Year-end stock price         -0.02         -0.02         0.00         0.01           Revenue         0.02         0.00         -0.05         -0.05           Employee size         0.01         -0.01         -0.03         -0.01	0.17	-0.08 0.21	0.10	-0.07	+0.0-	-0.22								
Chair qualification         0.00         0.01         -0.07         -0.15           Chair gender         0.00         0.02         0.02         0.01           Ratio independent dir.         0.06         0.00         -0.22         -0.34         -0.04           Ratio female director         0.01         0.03         0.02         -0.08           Year-end stock price         -0.02         -0.02         0.01           Revenue         0.02         0.00         -0.05         -0.05           Employee size         0.01         -0.01         -0.03         -0.01         -0.01	0.07	-0.05 0.12	0.16	-0.04	-0.02	-0.17	0.50							
Chair gender         0.00         0.02         0.02         0.01           Ratio independent dir.         0.06         0.00         -0.22         -0.34           Ratio female director         0.01         0.03         0.02         -0.08           Year-end stock price         -0.02         -0.02         0.01         0.01           Revenue         0.02         0.00         -0.05         -0.05           Employee size         0.01         -0.01         -0.03         -0.01	-0.06	0.11 -0.01	0.00	0.10	0.02	0.30	-0.15	-0.07						
Ratio independent dir.       0.06       0.00       -0.22       -0.34         Ratio female director       0.01       0.03       0.02       -0.08         Year-end stock price       -0.02       -0.02       0.02       0.01         Revenue       0.02       0.00       -0.05       -0.05         Employee size       0.01       -0.01       -0.03       -0.01	0.01	0.01   -0.02	-0.02	0.01	0.03	- 60.0	-0.05	-0.05	0.05					
Ratio female director     0.01     0.03     0.02     -0.08       Year-end stock price     -0.02     -0.02     0.02     0.01       Revenue     0.02     0.00     -0.02     -0.05       Employee size     0.01     -0.01     -0.03     -0.01	-0.23	0.07 0.01	0.02	20.0	90.0	0.16	-0.26	-0.12	0.15 0	0.03				
Year-end stock price         -0.02         -0.02         0.02         0.01           Revenue         0.02         0.00         -0.02         -0.05           Employee size         0.01         -0.01         -0.03         -0.01	0.03	0.15 -0.03	90.0-	80.0	0.31	0.20	-0.12	-0.07	0.06	0.23 0.18	8			
Revenue         0.02         0.00         -0.02         -0.05           Employee size         0.01         -0.01         -0.03         -0.01	0.01	0.06 0.04	4 0.05	0.02	0.03	0.08	0.02	0.00	0.02 -0	-0.01 0.10	0.07			
Employee size 0.01 -0.01 -0.03 -0.01	-0.02	0.18   -0.02	0.02	0.04	90.0	0.24	-0.06	-0.04	0.08	0.01 0.07	0.16	0.11		
	-0.03	0.14   -0.01	0.01	0.02	0.05	0.15	0.00	-0.02	0.06	0.01 0.01	0.16	0.09	0.68	
20 Industry classification 0.00 0.01 -0.07 -0.01 -0.08	-0.08	0.00 -0.01	0.03	-0.02	-0.02	90.0-	- 50.0	-0.01	-0.05 -C	-0.02 -0.04	+ -0.05	-0.05	0.07	0.12



		Director exit binary	ı	
	1	2	3	4
New chairperson	1	0.10**	0.11**	0.11**
ivew chairperson		-0.02	-0.03	-0.02
Family firm binary		-0.11**	-0.07**	0.02
rarriity iiirir biriary				
Dual class binary		-0.02 0.13**	-0.03 0.83**	
Dual class billary		-0.04		
Family C Dual		-0.04	-0.09	-0.03
Family & Dual				
Director network	-0.00**	-0.00**	-0.00**	-0.05 -0.00**
	0.00	0.00	0.00	0.00
Director year on board	0.02**	0.02**	0.03**	0.02**
	0.00	0.00	0.00	0.00
Director age	0.03**	0.03**	0.03**	0.03**
	0.00	0.00	0.00	0.00
Director qualification	-0.06**	-0.06**	-0.06**	-0.06**
	-0.01	-0.01	-0.01	-0.01
Director gender	0.01	0.01	0.01	0.01
	-0.03	-0.03	-0.03	-0.03
Chair network size	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00
Chair year on board	-0.01**	-0.01**	-0.01**	-0.01**
	0.00	0.00	0.00	0.00
Chair age	-0.01**	-0.01**	-0.01**	-0.01**
	0.00	0.00	0.00	0.00
Chair qualification	-0.02*	-0.02*	-0.02*	-0.02*
	-0.01	-0.01	-0.01	-0.01
Chair gender	0.02	0.02	0.04	0.01
	-0.07	-0.07	-0.07	-0.07
Ratio independent dir.	0.76**	0.72**	0.74**	0.76**
	-0.09	-0.09	-0.09	-0.09
Ratio female director	0.20	0.18	0.18	0.19
	-0.12	-0.12	-0.12	-0.12
Year-end stock price	-0.00**	-0.00**	-0.00**	-0.00**
	0.00	0.00	0.00	0.00
Revenue	0.00**	0.00**	0.00**	0.00**
	0.00	0.00	0.00	0.00
Employee size	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00
NewChair: FamilyFirm			-0.02	



Table 3. (Continue	ed)			
		Director exit binary	,	
			-0.06	
NewChair:DualClass			-0.25*	
			-0.11	
FamilyFirm: DualClass			-0.82**	
			-0.10	
NewChair: Family&Dual				-0.36**
				-0.13
Observations	64,717	64,717	64,717	64,717
R <sup>2</sup>	0.03	0.03	0.03	0.03
Max. Possible R <sup>2</sup>	0.88	0.88	0.88	0.88
Log Likelihood	-67,016	-66,994	-66,961	-67,001
Wald Test	1,925** (df = 15)	1,960** (df = 18)	2,039** (df = 21)	1,953** (df = 18)
LR Test	2,174** (df = 15)	2,218** (df = 18)	2,284** (df = 21)	2,203** (df = 18)
Score (Logrank) Test	2,211** (df = 15)	2,255** (df = 18)	2,339** (df = 21)	2,242** (df = 18)

Note: \*p < 0.05; \*\*p < 0.01

Hypothesis 1 predicted that having a new board chair is positively associated with the likelihood that a director exits its board, thus a new chairperson appointment increases the likelihood of a director exit. This hypothesis was supported. In Model 2, the coefficient of positive 0.10 was significant at the 0.01 level.

Hypothesis 2 predicted that family ownership of a company moderates the effect of having a new chair on the board in the likelihood that a director exits its board, thus a family firm status moderates the positive relationship between new chairperson appointment and the likelihood of a director exit. Model 3 shows the significant interaction between these variables. This hypothesis was not supported by this measure. In Model 3, the interaction coefficient was not significant. It is possible that the criteria (of ownership > 5%) is too low to capture the family ownership's effect on the board. However, the dual-class share structure interacts with a new chairperson appointment and family firm status significantly.

The effects of a new chairperson on the likelihood of a director exit were moderated in different ways when the newly defined variable considering both family firm and dual-class share structure (Family&Dual) was used. While the likelihood of a director exit increases with a new chairperson appointment, the change is much smaller when the firm is a family firm with a dual-class share structure. In Model 4, the interaction coefficient of -0.36 was significant at the 0.01 level. This suggests that having a dual-class structure indicates a stronger influence of family (or blockholder). Hypothesis 2 was thus supported with this dual-class structure measure implying stronger family influence; thus, family ownership of a company moderated the effect of having a new chair on the board in the likelihood that a director exits its board.

#### 4.2. Robustness checks

We checked the robustness of our analysis by making marginal changes in a few critical variables. Our turnover is defined as 1 if the director left in three years. We tested different criteria of two years and four years instead of three years. The analysis yielded similar results. We also changed and ran our tests assuming the new chairperson variable was defined as the chairperson's time in the role less than two years and three years instead of one year. These changes also yielded similar results.



Most of the variables are significantly related to turnover except for just a few p-values over 0.05. These results can be because we have over 60,000 observations that give more statistics power and result in a disproportionately high number of very low p-values (as our analysis is at the director level). One way to address this is to look at director turnover at the firm level. We aggregated the data into 9,864 firm-years to test whether the sample size would be driving all of the results. Analyzing firm-level data makes the dependent variable a pseudo-continuous variable of turnover, defined as the number of directors that left within three years, divided by the board size in a given year. Accordingly, we used linear regression instead of logit regression. The control and independent variables were also measured as a mean value at the firm level. The family firm and dual-class share structure variables are already firm-level, as are many control variables. A few variables at director levels represent the average values among directors within the board.

Table 4 presents the results of the fixed effects linear regressions with firm-level data with this pooling method. Model 4 shows similar results to our primary director-level analyses. A new chairperson appointment increases the likelihood of a director exit while the newly defined variable considering both family firm and dual-class share structure (Family&Dual) moderates the relationship. The coefficient for the new chairperson was 0.022, while the interaction coefficient was -0.076. They were both significant at the 0.01 level.

As discussed previously, we utilize the data from Anderson et al. (2009) and Anderson et al. (2012) for our family firm identification. These data are from 2001–2010; using such well-respected data gives our study reliability, consistency and validity. However, using slightly older data may cause some concern about the relevance of this study and our results to more recent years. To explore this, we extend our study beyond 2010 by assuming that the status of being a family firm does not change frequently; thus, if a firm was a family firm in 2010, we assumed it continued to be a family firm for each of the following five years, 2011–2015. (If this assumption is inappropriate, it would bias against us finding consistent results with the 2001–2010 period.) We calculate turnover in 2015 based on data from 2015 to 2018. We compare the board member in the 2015 list with the list in 2016, 2017, and 2018 to determine whether the member left the board before 2018. Table 5 confirms the consistent results for NewChair with turnover while the coefficient of the interaction term between FamilyDual and Turnover lost its significance.

Losing statistical significance in the interaction term could be a result of a number of factors: it could be a result of us assuming that family firm status was constant for 2010–2015, or it could be that the actual relationship did change, or it could be due to some dynamic within the sample. Of course, the dominant financial markets and corporate governance event during 2001–2015 was the Global Financial Crisis. Within the United States, where our data are from, the crisis was followed by significant regulation and changes in corporate governance practices (Bhagat & Bolton, 2013).

To investigate whether the Global Financial Crisis had a disproportionate effect on our study and the relationships between family firms, board chairs and director turnover, we conducted our original analysis excluding 2008–2009, the primary years of the Global Financial Crisis. The result is presented in Table 6.

The results in Table 6 are generally consistent with our primary results, suggesting that the Global Financial Crisis did not dominate our primary results. In untabulated results, we broke down the full 15-year sample into three 5-year subsamples to ascertain how consistent our results were over time. The results for 2001–2005 and 2006–2010 were highly consistent with our primary results; the results for 2011–2015 were slightly weaker and, again, could be due to a number of factors. We defer to future research if this portends a permanent structural change in these relationships or if it is a temporary dislocation.



T	y		vel for year 2001–2	.010
		Director e	exit binary	
	1	2	3	4
New chairperson		0.018**	0.021**	0.022**
		-0.006	-0.007	-0.006
Family firm binary		-0.017**	-0.011	
		-0.006	-0.006	
Dual class binary		0.019*	0.165**	
		-0.009	-0.026	
Family & Dual				0.000
				-0.010
Director network size	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000
Director year on board	-0.001	-0.001	-0.001	-0.001
	-0.001	-0.001	-0.001	-0.001
Director age	0.001	0.001	0.001	0.001
	-0.001	-0.001	-0.001	-0.001
Director qualification	-0.020**	-0.020**	-0.019**	-0.019**
	-0.005	-0.005	-0.005	-0.005
Director gender	-0.072	-0.073	-0.083*	-0.081*
	-0.041	-0.041	-0.041	-0.041
Chair network size	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000
Chair year on board	-0.001**	-0.001**	-0.001**	-0.001**
	0.000	0.000	0.000	0.000
Chair age	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000
Chair qualification	-0.003	-0.003	-0.003	-0.003
	-0.002	-0.002	-0.002	-0.002
Chair gender	-0.012	-0.009	-0.009	-0.014
-	-0.017	-0.017	-0.017	-0.017
Ratio independent dir.	0.122**	0.116**	0.120**	0.120**
	-0.018	-0.018	-0.018	-0.018
Ratio female director	0.131*	0.125*	0.137*	0.140**
	-0.054	-0.054	-0.054	-0.054
Year-end stock price	-0.001**	-0.001**	-0.000**	-0.001**
	0.000	0.000	0.000	0.000
Revenue	0.000*	0.000*	0.000*	0.000*
	0.000	0.000	0.000	0.000
Employee size	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000
Industry classification	0.002	0.002	0.001	0.001



		Director e	exit binary	
	-0.001	-0.001	-0.001	-0.001
factor(IndustryNo)1	0.042	0.044	0.036	0.038
	-0.049	-0.049	-0.049	-0.049
factor(IndustryNo)2	0.046	0.047	0.031	0.041
	-0.037	-0.038	-0.038	-0.038
factor(year)2009	0.096**	0.097**	0.097**	0.097**
	-0.011	-0.011	-0.011	-0.011
factor(year)2010	0.111**	0.111**	0.111**	0.112**
	-0.011	-0.011	-0.011	-0.011
NewChair: FamilyFirm			-0.002	
			-0.014	
NewChair:DualClass			-0.059*	
			-0.025	
FamilyFirm: DualClass			-0.159**	
			-0.027	
NewChair: Family&Dual				-0.076**
				-0.026
Observations	9,864	9,864	9,864	9,864
R <sup>2</sup>	0.068	0.070	0.073	0.070
Adjusted R <sup>2</sup>	0.061	0.063	0.066	0.063
F Statistic	135.6** (df = 69; 9795)	130.5** (df = 72; 9792)	126.3** (df = 75; 9789)	130.5** (df = 72; 9792)

Note: \*p < 0.05; \*\*p < 0.01

#### 5. Discussion

Our research question is how corporate boards can renovate themselves. More specifically, we examine how board governance is changed when a new chairperson is appointed in a family firm (Sievinen et al., 2020). We examined whether appointing a new chairperson can renovate the board governance and innovation to stimulate or redirect the firm again. Answering these questions enables us to make several contributions to the literature on family business boards.

First, we provide statistically valid answers to the specific phenomenon with new insights. When a new chair is appointed, the new board leadership usually leads to changes in board governance and even organizational values (Braun & Sharma, 2007; Lane et al., 2006). Therefore, some directors who could not adapt themselves to the new system are more likely to leave the board or be pressured to leave; this is consistent with the Attraction-Selection-Attrition theory applied to boards of directors. On the other hand, when strong and engaged ownership is present, indicated by family ownership and a dual-class share structure, directors' turnover is less related to the new chair's appointment. The new chairperson is not responsible for driving the board dynamics, but it is the owner's family that controls and influences the firm's governance consistently. Therefore, it is less easy to change the board governance in family firms as the decision-making process is unchanged. These results are consistent with what is explained in the literature on family business boards (Corbetta & Salvato, 2004; Schneider et al., 1998).



		Director exit binary	1	
	1	2	3	4
New chairperson		0.10**	0.10**	0.11**
		-0.02	-0.02	-0.02
Family firm binary		-0.10**	-0.07**	
		-0.02	-0.02	
Dual class binary		0.10**	0.74**	
		-0.03	-0.08	
Family & Dual				-0.07
				-0.04
Director network	-0.00**	-0.00**	-0.00**	-0.00**
	0.00	0.00	0.00	0.00
Director year on board	0.03**	0.03**	0.03**	0.03**
	0.00	0.00	0.00	0.00
Director age	0.04**	0.04**	0.04**	0.04**
	0.00	0.00	0.00	0.00
Director qualification	-0.04**	-0.04**	-0.04**	-0.04**
	-0.01	-0.01	-0.01	-0.01
Director gender	-0.02	-0.02	-0.02	-0.02
	-0.02	-0.02	-0.02	-0.02
Chair network size	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00
Chair year on board	-0.01**	-0.01**	-0.01**	-0.01**
	0.00	0.00	0.00	0.00
Chair age	-0.01**	-0.01**	-0.01**	-0.01**
	0.00	0.00	0.00	0.00
Chair qualification	-0.02*	-0.02**	-0.02**	-0.02*
	-0.01	-0.01	-0.01	-0.01
Chair gender	0.03	0.04	0.05	0.03
	-0.05	-0.05	-0.05	-0.05
Ratio independent dir.	0.79**	0.75**	0.77**	0.78**
	-0.07	-0.08	-0.08	-0.08
Ratio female director	0.15	0.14	0.15	0.15
	-0.09	-0.09	-0.09	-0.09
Year-end stock price	-0.00**	-0.00**	-0.00**	-0.00**
	0.00	0.00	0.00	0.00
Revenue	0.00**	0.00**	0.00**	0.00**
	0.00	0.00	0.00	0.00
Employee size	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00
NewChair: FamilyFirm			-0.01	
			-0.05	



-				
		Director exit binary	1	
NewChair:DualClass			-0.05	
			-0.09	
FamilyFirm: DualClass			-0.76**	
			-0.08	
NewChair: Family&Dual				-0.06
				-0.10
Observations	96,302	96,302	96,302	96,302
R <sup>2</sup>	0.04	0.04	0.04	0.04
Max. Possible R <sup>2</sup>	0.89	0.89	0.89	0.89
Log Likelihood	-103,974	-103,944	-103,906	-103,957
Wald Test	3,650** (df = 15)	3,702** (df = 18)	3,782** (df = 21)	3,681** (df = 18)
LR Test	4,154** (df = 15)	4,213** (df = 18)	4,290** (df = 21)	4,189** (df = 18)
Score (Logrank) Test	4,223** (df = 15)	4,284** (df = 18)	4,374** (df = 21)	4,260** (df = 18)

Note: \*p < 0.05; \*\*p < 0.01

Second, we have made a theoretical contribution to the ASA theory. We tested new propositions linking the new chair's appointment and the director's turnover at different levels of family ownership. Our basic assumption is that family firms appointed the new chairperson not to make dramatic changes in governance as it can threaten their controlling power (Chrisman et al., 2015), but to continue and strengthen the owner family's influence and goals. The findings are aligned with the existing knowledge that family firms are more open to hiring family-friendly directors and employees who already have worked in other family businesses (Block et al., 2016; Cannella et al., 2015).

Third, our research contributes to the literature on family business boards. Strong family influence can help stabilize the board dynamics at the new chair's appointment. Moreover, the longer a director has worked with the chairperson, the more likely they have formed the same group identity, which will be beneficial to aligning their goals and eventually improve the board's efficiency (Boivie et al., 2011; Withers, Corley et al., 2012). We also provide insights on the situations that corporates, both family and nonfamily firms, have to consider when they envision innovating the governance and changing the company. Family firms are famous for keeping their consistency and long-term strategy (Arzubiaga et al., 2018). But family shareholders with majority voting powers can dominate the decisions despite conflicting with other minor shareholders, causing a kind of agency problem (James et al., 2017; Shleifer & Vishny, 1986). In some sense, family firms have disadvantages in renovating themselves as they strive to become more effective, and our study shows this to be in play in board dynamics and director turnover decisions.

# 5.1. Limitations and future research directions

One of the limitations of our study is the use of data in the US, which cannot represent the family business as a whole. Our sample only includes publicly listed firms in the US; private firms may experience an even stronger influence by the owner family. Also, the corporate culture in the US may be different from that in other countries. For example, the US public's negative perception is not the same in Germany as the public perception of the Mittelstand, medium-sized companies, are generally positive. For example, we know that different countries



		Director exit binary	·	
	1	2	3	4
New chairperson	-	0.08**	0.10**	0.09**
Tew enamperson		-0.03	-0.03	-0.03
Family firm binary		-0.13**	-0.09**	0.03
diffity fifth billary		-0.03	-0.03	
Dual class binary		0.07	0.78**	
oddi cidss biridi y		-0.05	-0.10	
Family & Dual		0.03	0.10	-0.11*
diffity & Dudi				-0.05
Director network	-0.00*	-0.00*	-0.00*	-0.00*
	0.00	0.00	0.00	0.00
Director year on	0.02**	0.02**	0.02**	0.02**
	0.00	0.00	0.00	0.00
Director age	0.03**	0.03**	0.03**	0.03**
	0.00	0.00	0.00	0.00
Director qualification	-0.06**	-0.06**	-0.06**	-0.06**
	-0.01	-0.01	-0.01	-0.01
Director gender	0.02	0.02	0.02	0.02
	-0.03	-0.03	-0.03	-0.03
Chair network size	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00
Chair year on board	-0.01**	-0.01**	-0.01**	-0.01**
	0.00	0.00	0.00	0.00
Chair age	-0.01**	-0.01**	-0.01**	-0.01**
	0.00	0.00	0.00	0.00
Chair qualification	-0.02	-0.02	-0.02	-0.02
	-0.01	-0.01	-0.01	-0.01
Chair gender	0.05	0.06	0.07	0.04
	-0.08	-0.08	-0.08	-0.08
Ratio independent dir.	0.64**	0.56**	0.58**	0.60**
	-0.10	-0.10	-0.10	-0.10
Ratio female director	0.18	0.15	0.15	0.17
	-0.13	-0.13	-0.13	-0.13
rear-end stock price	-0.00**	-0.00**	-0.00**	-0.00**
	0.00	0.00	0.00	0.00
Revenue	0.00**	0.00**	0.00**	0.00**
	0.00	0.00	0.00	0.00
Employee size	0.00	0.00	0.00	0.00
NewChair: FamilyFirm	0.00	0.00	0.00 -0.02	0.00



-		Director exit binary	/	
			-0.07	
NewChair:DualClass			-0.31*	
			-0.13	
FamilyFirm: DualClass			-0.83**	
			-0.11	
NewChair: Family&Dual				-0.33*
				-0.15
Observations	51,102	51,102	51,102	51,102
$R^2$	0.03	0.03	0.03	0.03
Max. Possible R <sup>2</sup>	0.88	0.88	0.88	0.88
Log Likelihood	-52,438	-52,421	-52,392	-52,425
Wald Test	1,379** (df = 15)	1,401** (df = 18)	1,464** (df = 21)	1,396** (df = 18)
LR Test	1,548** (df = 15)	1,582** (df = 18)	1,639** (df = 21)	1,573** (df = 18)
Score (Logrank) Test	1,579** (df = 15)	1,610** (df = 18)	1,679** (df = 21)	1,602** (df = 18)

Note: \*p < 0.05; \*\*p < 0.01

have different corporate governance practices, that are driven by both formal and informal influences; while over 60% of listed firms in the US have dual CEO-chairs, approximately 15% of listed firms in the UK have dual CEO-chairs and no firms in Germany have dual CEO-chairs as the practice is not allowed (Goergen et al., 2020).

Also, we used the criteria of 5% of ownership to segregate the family business. This criterion has been criticized as family firms are heterogeneous (Dyer, 2018; Jaskiewicz & Dyer, 2017). Some researchers have built up their own database following the methods of Anderson to use detailed information other than the binary index (ex. Miller et al., 2007; Villalonga & Amit, 2006). However, except Ronald Anderson, none of the researchers shared their dataset which involves plenty of possibilities of making errors with inevitable manual data handling, and would raise concerns about reliability, consistency and validity. We use the Anderson et al. dataset that has been repeatedly used and yielded meaningful insights consistently (Anderson et al., 2009, 2012; Mullins, 2018). We do not discount the concern that using a binary variable is not precise enough and can be better assessed by considering the heterogeneity of family firms (Dyer, 2018). However, our empirical results are generally consistent with our theorizing, and our analysis and control variables rule out a variety of alternative explanations. Moreover, our research design allowed us to consider a far larger sample than would have been possible with other research designs. Furthermore, it allowed us to conduct a longitudinal analysis that would not have been possible with other research designs.

We also address that whether a low likelihood of director exit is beneficial to firm performance is unknown from our study. As director's turnover affects the consistency as well as the flexibility, they are likely to make mixed-effects on the effectiveness of board governance (Hambrick et al., 2015). Future research could use these findings to study the consequences of low director exit likelihoods, including based on firm performance and during times of crisis or exogenous shock.

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#### References

- Abeysekera, A. P., & Fernando, C. S. (2020). Corporate social responsibility versus corporate shareholder responsibility: A family firm perspective. *Journal of Corporate Finance*, 61, 101370. https://doi.org/10.1016/j.jcorpfin.2018.05.003
- Acharya, A. G., & Pollock, T. G. (2013). Shoot for the stars? predicting the recruitment of prestigious directors at newly public firms. Academy of Management Journal, 56(5), 1396–1419. https://doi.org/10.5465/amj.2011.0639
- Anderson, R. C., Duru, A., & Reeb, D. M. (2009). Founders, heirs, and corporate opacity in the United States. Journal of Financial Economics, 92(2), 205–222. https://doi.org/10.1016/j.jfineco.2008.04.006
- Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. The Journal of Finance, 58(3), 1301–1328. https://doi.org/10.1111/1540-6261.00567
- Anderson, R. C., Reeb, D. M., & Zhao, W. (2012). Family-controlled firms and informed trading: Evidence from short sales. *The Journal of Finance*, 67(1), 351–385. https://doi.org/10.1111/j.1540-6261.2011.01714.x
- Arzubiaga, U., Kotlar, J., De Massis, A., Maseda, A., & Iturralde, T. (2018). Entrepreneurial orientation and innovation in family SMEs: Unveiling the (actual) impact of the Board of Directors. *Journal of Business Venturing*, 33(4), 455–469. https://doi.org/10.1016/j.jbusvent.2018.03.002
- Bammens, Y., Voordeckers, W., & Van Gils, A. (2011).

  Boards of directors in family businesses: A literature review and research agenda. *International Journal of Management Reviews*, 13(2), 134–152. https://doi.org/10.1111/j.1468-2370.2010.00289.x
- 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(1), 82–113. https://doi.org/10. 2189/asqu.2010.55.1.82
- Bettinelli, C. (2011). Boards of directors in family firms: An exploratory study of structure and group process. Family Business Review, 24(2), 151–169. https://doi.org/10.1177/0894486511402196
- Bhagat, S., & Bolton, B. (2013). Director ownership, governance and performance. *Journal of Financial and Quantitative Analysis*, 48(1), 105–135. https://doi.org/10.1017/S0022109013000045
- Block, J. H., Fisch, C. O., Lau, J., Obschonka, M., & Presse, A. (2016). Who prefers working in family firms? An

- exploratory study of individuals' organizational preferences across 40 countries. *Journal of Family Business Strategy*, 7(2), 65–74. https://doi.org/10. 1016/j.jfbs.2016.04.001
- Boivie, S., Graffin, S. D., Oliver, A. G., & Withers, M. C. (2016). Come aboard! exploring the effects of directorships in the executive labor market. *Academy of Management Journal*, 59(5), 1681–1706. https://doi.org/10.5465/amj.2014.0840
- Boivie, S., Graffin, S. D., & Pollock, T. G. (2012). Time for me to fly: Predicting director exit at large firms. *Academy of Management Journal*, *55*(6), 1334–1359. https://doi.org/10.5465/amj.2010.1083
- Boivie, S., Lange, D., McDonald, M. L., & Westphal, J. D. (2011). Me or we: The effects of CEO organizational identification on agency costs. Academy of Management Journal, 54(3), 551–576. https://doi.org/ 10.5465/amj.2011.61968081
- Bolton, B., & Park, J. E. (2020). Corporate governance, family firms, and innovation. *Corporate Ownership & Control*, 18(1), 138–151. https://doi.org/10.22495/cocv18i1art11
- Boone, C., Van Olffen, W., Van Witteloostuijn, A., & De Brabander, B. (2004). The genesis of top management team diversity: Selective turnover among top management teams in Dutch newspaper publishing, 1970– 94. Academy of Management Journal, 47(5), 633–656. https://doi.org/10.2307/20159609
- Braun, M., & Sharma, A. (2007). Should the CEO also be chair of the board? an empirical examination of family-controlled public firms. Family Business Review, 20(2), 111–126. https://doi.org/10.1111/j. 1741-6248.2007.00090.x
- Brown, J. A., Anderson, A., Salas, J. M., & Ward, A. J. (2017). Do investors care about director tenure? insights from executive cognition and social capital theories. *Organization Science*, 28(3), 471–494. https://doi.org/10.1287/orsc.2017.1123
- Cannella, A. A., Jr, Jones, C. D., & Withers, M. C. (2015). Family-versus lone-founder-controlled public corporations: Social identity theory and boards of directors. Academy of Management Journal, 58(2), 436–459. https://doi.org/10.5465/amj.2012.0045
- Chang, E. P., & James, S. D. (2020). Family versus institutional involvement in restructuring: evidence from the communications equipment industry. Family Business Review, 33(3), 310–330. https://doi.org/10.1177/0894486520934553
- Chen, G., Crossland, C., & Huang, S. (2016). Female board representation and corporate acquisition intensity. Strategic Management Journal, 37(2), 303–313. https://doi.org/10.1002/smj.2323
- Chen, H. L., & Hsu, W. T. (2009). Family ownership, board independence, and R&D investment. Family Business Review, 22(4), 347–362. https://doi.org/10.1177/0894486509341062
- Chrisman, J. J., Chua, J. H., De Massis, A., Frattini, F., & Wright, M. (2015). The ability and willingness paradox in family firm innovation. *Journal of Product Innovation Management*, 32(3), 310–318. https://doi.org/10.1111/jpim.12207
- Corbetta, G., & Salvato, C. A. (2004). The board of directors in family firms: One size fits all? Family Business Review, 17(2), 119–134. https://doi.org/10.1111/j. 1741-6248.2004.00008.x
- Cordeiro, J. J., Profumo, G., & Tutore, I. (2021). Family ownership and stockholder reactions to environmental performance disclosure: A test of secondary agency relationships. *Business Strategy and the Environment*, 30(4), 2091–2107. https://doi.org/10.1002/bse.2734

- Cowen, A. P., & Marcel, J. J. (2011). Damaged goods: Board decisions to dismiss reputationally compromised directors. Academy of Management Journal, 54 (3), 509-527. https://doi.org/10.5465/amj.2011. 61967992
- Cruz, C., Justo, R., Larraza-Kintana, M., & Garcés-Galdeano, L. (2019). When do women make a better table? examining the influence of women directors on family firm's corporate social performance. Entrepreneurship Theory and Practice, 43(2), 282–301. https://doi.org/10.1177/1042258718796080
- Daily, C. M., & Dalton, D. R. (1995). CEO and director turnover in failing firms: An illusion of change? Strategic Management Journal, 16(5), 393–400. https://doi.org/10.1002/smj.4250160505
- Duran, P., Kammerlander, N., Van Essen, M., & Zellweger, T. (2016). Doing more with less: Innovation input and output in family firms. Academy of Management Journal, 59(4), 1224–1264. https://doi.org/10.5465/amj.2014.0424
- Dyer, W. G. (2018). Are family firms really better? Reexamining "examining the 'family effect' on firm performance". Family Business Review, 31(2), 240–248. https://doi.org/10.1177/ 0894486518776516
- Eddleston, K. A., Kellermanns, F. W., & Zellweger, T. M. (2012). Exploring the entrepreneurial behavior of family firms: Does the stewardship perspective explain differences? Entrepreneurship Theory and Practice, 36(2), 347–367. https://doi.org/10.1111/j. 1540-6520.2010.00402.x
- Fattoum-Guedri, A., Guedri, Z., & Delmar, F. (2018). Multiple blockholder structures and family firm performance. *Entrepreneurship Theory and Practice*, 42(2), 231–251. https://doi.org/10.1177/ 1042258717748652
- Garg, S., Li, Q., & Shaw, J. D. (2018). Undervaluation of directors in the board hierarchy: Impact on turnover of directors (and CEOs) in newly public firms. Strategic Management Journal, 39(2), 429–457. https://doi.org/10.1002/smj.2716
- Goergen, M., Limbach, P., & Scholz-Daneshgari, M. (2020). Firms' rationales for CEO duality: Evidence from a mandatory disclosure regulation. *Journal of Corporate Finance*, 65, 101770. https://doi.org/10. 1016/j.jcorpfin.2020.101770
- Hambrick, D. C., Misangyi, V. F., & Park, C. A. (2015). The quad model for identifying a corporate director's potential for effective monitoring: Toward a new theory of board sufficiency. Academy of Management Review, 40(3), 323–344. https://doi.org/10.5465/amr. 2014.0066
- Harrison, J. S., Boivie, S., Sharp, N. Y., & Gentry, R. J. (2018). Saving face: How exit in response to negative press and star analyst downgrades reflects reputation maintenance by directors. Academy of Management Journal, 61(3), 1131–1157. https://doi.org/10.5465/ amj.2016.0471
- Herrmann, P., & Nadkarni, S. (2014). Managing strategic change: The duality of CEO personality. Strategic Management Journal, 35(9), 1318–1342. https://doi. org/10.1002/smj.2156
- Hoetker, G. (2007). The use of logit and probit models in strategic management research: Critical issues. Strategic Management Journal, 28(4), 331–343. https://doi.org/10.1002/smj.582
- Hoffman, B. J., Bynum, B. H., Piccolo, R. F., & Sutton, A. W. (2011). Person-organization value congruence: How transformational leaders influence work group effectiveness. Academy of Management Journal, 54

- (4), 779–796. https://doi.org/10.5465/amj.2011. 64870139
- Howell, J. W. (2017). The survival of the US dual class share structure. Journal of Corporate Finance, 44, 440–450. https://doi.org/10.1016/j.jcorpfin.2014.07.006
- Huang, C., & Shields, T. G. (2000). Interpretation of interaction effects in logit and probit analyses: Reconsidering the relationship between registration laws, education, and voter turnout. American Politics Quarterly, 28(1), 80–95. https://doi.org/10.1177/ 1532673X00028001005
- James, A. E., Jennings, J. E., & Jennings, P. D. (2017). Is it better to govern managers via agency or stewardship? examining asymmetries by family versus nonfamily affiliation. Family Business Review, 30(3), 262–283. https://doi.org/10.1177/ 0894486517717532
- Jaskiewicz, P., & Dyer, W. G. (2017). Addressing the elephant in the room: Disentangling family heterogeneity to advance family business research. *Family Business Review*, 30(2), 111–118. https://doi.org/10. 1177/0894486517700469
- Jaskiewicz, P., & Klein, S. (2007). The impact of goal alignment on board composition and board size in family businesses. *Journal of Business Research*, 60 (10), 1080–1089. https://doi.org/10.1016/j.jbusres. 2006.12.015
- Kabbach de Castro, L. R., Aguilera, R. V., & Crespí-Cladera, R. (2017). Family firms and compliance: Reconciling the conflicting predictions within the socioemotional wealth perspective. Family Business Review, 30(2), 137–159. https://doi.org/10.1177/ 0894486516685239
- Lane, S., Astrachan, J., Keyt, A., & McMillan, K. (2006). Guidelines for family business boards of directors. Family Business Review, 19(2), 147–167. https://doi. org/10.1111/j.1741-6248.2006.00052.x
- Li, S. (2018). Increased nonfamily ownership in familyowned firms: How does it affect CEO turnover-performance sensitivity? Strategic Management Journal, 39(13), 3434–3457. https://doi.org/10.1002/smj.2955
- Madison, K., Kellermanns, F. W., & Munyon, T. P. (2017). Coexisting agency and stewardship governance in family firms: An empirical investigation of individual-level and firm-level effects. *Family Business Review*, 30(4), 347–368. https://doi.org/10. 1177/0894486517727422
- Marcel, J. J., & Cowen, A. P. (2014). Cleaning house or jumping ship? understanding board upheaval following financial fraud. Strategic Management Journal, 35 (6), 926–937. https://doi.org/10.1002/smj.2126
- Marcel, J. J., Cowen, A. P., & Ballinger, G. A. (2017). Are disruptive CEO successions viewed as a governance lapse? evidence from board turnover. *Journal of Management*, 43(5), 1313–1334. https://doi.org/10. 1177/0149206313503011
- Miller, D., & Le Breton-Miller, I. (2006). Family governance and firm performance: Agency, stewardship, and capabilities. *Family Business Review*, 19(1), 73–87. https://doi.org/10.1111/j.1741-6248.2006.00063.x
- Miller, D., Le Breton-Miller, I., Lester, R. H., & Cannella, A. A., Jr. (2007). Are family firms really superior performers? Journal of Corporate Finance, 13(5), 829–858. https://doi.org/10.1016/j.jcorpfin.2007.03.004
- Miller, D., Le Breton-Miller, I., & Scholnick, B. (2008). Stewardship vs. stagnation: An empirical comparison of small family and nonfamily businesses. *Journal of Management Studies*, 45(1), 51–78. https://doi.org/10. 1111/j.1467-6486.2007.00718.x
- Mueller, R. K. (1988). Differential directorship: special sensitivities and roles for serving the family business



- board. Family Business Review, 1(3), 239–247. https://doi.org/10.1111/i.1741-6248.1988.00239.x
- Mullins, F. (2018). A piece of the pie? The effects of familial control enhancements on the use of broadbased employee ownership programs in family firms. Human Resource Management, 57(5), 979–992. https://doi.org/10.1002/hrm.21828
- O'Reilly, C. A., III, Chatman, J., & Caldwell, D. F. (1991).

  People and organizational culture: A profile comparison approach to assessing person-organization fit.

  Academy of Management Journal, 34(3), 487–516.

  https://doi.org/10.2307/256404
- Ployhart, R. E., Weekley, J. A., & Baughman, K. (2006). The structure and function of human capital emergence: A multilevel examination of the attraction-selectionattrition model. Academy of Management Journal, 49(4), 661–677. https://doi.org/10.5465/ami.2006.22083023
- Salancik, G. R., & Pfeffer, J. (1980). Effects of ownership and performance on executive tenure in US corporations. Academy of Management Journal, 23 (4), 653–664. https://doi.org/10.5465/255554
- Schneider, B. (1987). The people make the place.

  Personnel Psychology, 40(3), 437-453. https://doi.org/
  10.1111/j.1744-6570.1987.tb00609.x
- Schneider, B., Goldstein, H. W., & Smith, D. B. (1995). The ASA framework: An update. *Personnel Psychology*, 48 (4), 747–773. https://doi.org/10.1111/j.1744-6570. 1995.tb01780.x
- Schneider, B., Smith, D. B., Taylor, S., & Fleenor, J. (1998). Personality and organizations: A test of the homogeneity of personality hypothesis. *Journal of Applied Psychology*, 83(3), 462. https://doi.org/10.1037/0021-9010.83.3.462
- Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94(3, Part 1), 461–488. https://doi.org/10.1086/261385
- Sievinen, H. M., Ikäheimonen, T., & Pihkala, T. (2020). Strategic renewal in a mature family-owned company-

- A resource role of the owners. *Long Range Planning*, 53 (2), 101864. https://doi.org/10.1016/j.lrp.2019.01.001
- Strike, V. M. (2012). Advising the family firm: Reviewing the past to build the future. Family Business Review, 25(2), 156–177. https://doi.org/10.1177/0894486511431257
- Tian, J., Haleblian, J., & Rajagopalan, N. (2011). The effects of board human and social capital on investor reactions to new CEO selection. *Strategic Management Journal*, 32(7), 731–747. https://doi.org/10.1002/smj.909
- Tihanyi, L., Graffin, S., & George, G. (2014). Rethinking governance in management research. *Academy of Management Journal*, 57(6), 1535–1543. https://doi. org/10.5465/amj.2014.4006
- Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal* of Financial Economics, 80(2), 385–417. https://doi. org/10.1016/j.jfineco.2004.12.005
- Walther, A., Möltner, H., & Morner, M. (2017). Nonexecutive director's motivation to continue serving on boards: A self-determination theory perspective. Corporate Governance: The International Journal of Business in Society, 17(1), 64–76. https://doi.org/10. 1108/CG-05-2016-0120
- Withers, M. C., Corley, K. G., & Hillman, A. J. (2012). Stay or leave: Director identities and voluntary exit from the board during organizational crisis. *Organization Science*, 23(3), 835–850. https://doi.org/10.1287/orsc.1110.0660
- Withers, M. C., Hillman, A. J., & Cannella, A. A., Jr. (2012). A multidisciplinary review of the director selection literature. *Journal of Management*, 38(1), 243–277. https://doi.org/10.1177/0149206311428671
- Zellweger, T., & Kammerlander, N. (2015). Family, wealth, and governance: An agency account.

  Entrepreneurship Theory and Practice, 39(6), 1281–1303. https://doi.org/10.1111/etap.12182



# **Appendix Variable Definitions**

Variable	Description	Source
Panel A: Turnover Variables base	ed on Year t to t + 3 (2004-2018)	
Director exit binary	=1 if the director left the board before year t + 3, and zero otherwise	Calculated from BoardEx data
Panel B: Board related Variables	in Year t (2001–2015)	
Family firm binary	=1 if a founding family or descendants own 5% of more of the common stock (cash flow rights, not voting rights)	Anderson's website
Dual class binary	=1 if the firm has more than 1 class of common stock, and 0 otherwise	Anderson's website
Family & Dual	=1 if a founding family or descendants own 5% of more of the common stock & the firm has more than 1 class of common stock, and 0 otherwise	Calculated
Ratio independent dir.	The ratio of independent directors	Calculated from BoardEx data
Ratio female director	The ratio of female directors	Calculated from BoardEx data
Panel C: Director related Variable		
Director network size	Network size (number of overlaps through employment, other activities, and education)	BoardEx
Director year on board	The time served on the board by the director	BoardEx
Director age	The age of the director	BoardEx
Director qualification	Number of qualifications at undergraduate level and above	BoardEx
Gender	=1 if the director is male, and zero for female	BoardEx
Panel D: Chairperson related Var	iables in Year t (2001–2015)	
New chairperson	=1 if the time on the role by the chairperson is less than 1 year, and 0 otherwise	Calculated from BoardEx data
Chair network size	Network size (number of overlaps through employment, other activities, and education)	BoardEx
Chair year on board	The time served on the board by the chair	BoardEx
Chair age	The age of the chair	BoardEx
Chair qualification	Number of qualifications at undergraduate level and above	BoardEx
Chair gender	=1 if the chairperson is male, and zero for female	BoardEx
Panel E: Firm related Variables in	n Year t (2001–2015)	



(Continued)		
Year-end stock price	The firm's stock price at the end of the year in US dollar	Compustat
Revenue	Net Revenues in million US dollars	Compustat
Employee size	The number of employees in thousand	Compustat
Industry classification	Fama-French 48 Industrial Classifications	Calculated



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