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ORGANIZATIONAL FORM AND AGENCY PROBLEMS

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ORGANIZATIONAL FORM AND AGENCY PROBLEMS

A Ph.D. Dissertation

by
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Department of
Management
İhsan Doğramacı Bilkent University
Ankara
December 2022

To my family

ORGANIZATIONAL FORM AND AGENCY PROBLEMS

Graduate School of Economics and Social Sciences
of
İhsan Doğramacı Bilkent University

by

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In Partial Fulfillment of the Requirements for the Degree of
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MANAGEMENT
İHSAN DOĞRAMACI BİLKENT UNIVERSITY
ANKARA

Aralık 2022

ORGANIZATIONAL FORM AND AGENCY PROBLEMS

By Ezgi Alp

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ABSTRACT

ORGANIZATIONAL FORM AND AGENCY PROBLEMS

Alp, Ezgi

Ph.D. in Department of Management

Supervisor: Assoc. Prof. Dr. A. Başak Tanyeri Günsur

December 2022

This dissertation comprises three essays about agency problems in family firms. The second chapter examines how the protection of shareholder rights affects the pricing of family firms. We measure investor reaction to 132 deaths in 109 publicly traded family firms operating in 24 countries. Investor reaction to a death in the family, measured using abnormal stock returns, averages 0.58 percent and is significant. Investors perceive the death to be a value-enhancing event with the potential to dilute family control. The positive investor reaction is amplified in countries and periods with weaker protection of shareholder rights. The third chapter investigates how the gender perceptions of investors may shape their valuation of family firms. Children from multiple marriages could increase potential conflicts. Investor reaction decrease with the interaction of the number of children and the number of marriages the

deceased had. Furthermore investors perceive male, but not female, progeny as potential instigators of unrest. The fourth chapter investigates whether family or non-family firms are more likely targets of shareholder activism. Shareholder activism aims to limit agency conflicts between insiders and outsider shareholders. We examine the shareholder activism targeting the 2,000 largest nonutility and nonfinancial firms traded in the United States. We measure shareholder activism with Schedule 13D forms filed to change or influence the control. Results indicate that family firms are more likely targets of shareholder activism than non-family firms. Activist shareholders seem to focus on principal-principal agency problems in family firms and principal-agent agency problems in non-family firms.

ÖZET

ÖRGÜTSEL BİÇİM VE TEMSİL MALİYETİNE BAĞLI PROBLEMLER

Alp, Ezgi

Doktora, İşletme

Tez Danışmanı: Doç. Dr. A. Başak Tanyeri Günsur

Aralık 2022

Bu tez, aile şirketlerindeki temsil sorunlarını irdeleyen üç makaleden oluşmaktadır. İkinci bölüm, 24 ülkede faaliyet gösteren halka açık 109 aile şirketindeki 132 ölüme yatırımcı tepkisini ölçerek hissedar haklarının korunmasının aile şirketlerinin değerini nasıl etkilediğini incelemektedir. Yönetici pozisyonuna sahip bir aile üyesinin ölümüne yatırımcı tepkisi, anormal hisse senedi getirileri kullanılarak ölçüldüğünde ortalama yüzde 0,58 ve istatistiksel olarak anlamlıdır. Yatırımcılar, ölümü, ailenin şirket üzerindeki kontrolünü azaltma potansiyeline sahip değer artırıcı bir olay olarak algılamaktadırlar. Olumlu yatırımcı tepkisi, hissedar haklarının daha az korunduğu ülkelerde ve dönemlerde artmaktadır. Üçüncü bölümde, yatırımcıların toplumsal cinsiyet algılarının aile şirketlerine ilişkin değerlendirmelerini nasıl şekillendirebileceği araştırılmaktadır. Aile karmaşıklığı olası çatışmaları artırabilmektedir. Ölen kişinin çocuk sayısı ve evlilik sayısının etkileşimi ile

yatırımcı tepkisinin azaldı görülmektedir. Ayrıca yatırımcılar, erkek varisleri huzursuzluk yaratmasını olası görürken kadın varisler ile ilgili negatif tepki vermemektedirler. Dördüncü bölüm, örgütsel formun, firmaların hissedar aktivizmi tarafından hedef alınma olasılığına olan etkisini araştırmaktadır. Hissedar aktivizmi, içeridekiler ve dışarıdan ortaklar arasındaki temsil çatışmalarını sınırlamayı amaçlar. Bu bölüm, Amerika Birleşik Devletleri'nde işlem gören en büyük 2.000 firmayı hedefleyen hissedar aktivizmini incelemektedir. Hissedar aktivizmini firmada alınan kararları etkilemek amacıyla kullanılan Schedule 13D formlarıyla ölçmektedir. Sonuçlar, aile şirketlerinin hissedar aktivizminin hedefi olma ihtimalinin aile şirketi olmayanlara göre daha yüksek olduğunu göstermektedir. Aktivist hissedarlar, aile şirketlerinde ana hissedarlar ve azınlık hissedarlar arasında ortaya çıkan temsil sorunlarına ve aile şirketi olmayanlarda hissedarlar ve yöneticiler arasındaki çıkar çatışmasından kaynaklı temsil maliyetlerine odaklanmış görünmektedirler.

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CHAPTER 1

INTRODUCTION

Residual claims on the cash flow and the corporate control of different parties such as shareholders, managers, and debtholders determine the organizational form.

Organizational form has an effect on the conflict of interest between managers and shareholders, minority and majority shareholders, or debtholders and managers.

Agency problems arise because of the divergence of interest between different parties. Hence, organizational form affects the agency problems arising from the conflict of interest between different parties such as managers and shareholders, minority shareholders and majority shareholders, or managers and debtholders. We concentrate on the most common organizational form, family firms, to explore the consequences of agency problems.

In the first essay, we examine the effect of the change in conflicts between the family and outsider shareholders on the value of family firms using an exogenous shock: a death in the family. Investors may perceive the death of a family member as a loss of valuable human capital or a value-enhancing event through its expected dilution in the control of the firm in the firm. Investor reaction to 132 deaths in 109 publicly traded family firms operating in 24 countries, measured using abnormal stock returns, averages 0.58 percent and is significant. Positive investor reaction points out

that investors perceive death as a value-enhancing event with the potential to dilute family control. We further investigate how legal protection of shareholder rights as an external corporate governance mechanism affects investors' pricing of family firms. The positive investor reaction is amplified in countries and periods with weaker protection of shareholder rights. Investor perception of how faithfully their interests is protected depends on the extent to which legal rules protect shareholder rights. This chapter aims to contribute to the agency cost and law and finance literature by focusing on an exogenous shock in the endogenous relationship between internal (organizational form and ownership concentration) and external governance mechanisms (shareholder rights protection) in family firms. We also contribute to the discussion on how the death of executives and block-holders affects firm value (Johnson *et al.*, 1985; Madden *et al.*, 2012; Nguyen and Nielsen, 2014; Salas, 2010; Slovin and Sushka, 1993; Worrell *et al.*, 1986). We show the importance of cross-country differences in the extent to which law protects the rights of outside shareholders and differences in investor perceptions about the effect of founders versus descendants in positions with executive power.

The second essay examines the investor perception of uncertainty about the family involvement in the firm and the potential inheritance disputes. Investors may anticipate the agency cost arising from potential family disputes and price the firm accordingly. We measure the complexity of family relations along two dimensions, the number of children and the number of marriages. We find that the complexity of family relations shapes investor perceptions about the likelihood and magnitude of disputes. Investors react negatively to the potential for inheritance disputes. We further investigate how the gender perception of investors affects the valuation of family firms in the case of a potential family dispute. Results suggest that investors

perceive male, but not female, progeny as the instigators of conflict and price the expected loss in firm value. This chapter aims to contribute to the literature on family firms by examining the effect of family complexity on the investors' family firm valuation. We also contribute to the literature on investors' gender perception (Balachandra, 2020; Brush, 2018; Lee & James, 2007; Pastore, P., Tommaso, S., & Ricciardi, A., 2017). This study addresses the gap in the literature on how investors' gender biases affect firm valuation.

The third essay investigates the impact of organizational form on the likelihood of the firms targeted by shareholder activism. Family firms mostly have high ownership concentration, intense family involvement in management, and non-pecuniary motives, which cause the divergence in the interest of inside and outside shareholders. Shareholder activism is one of the monitoring mechanisms exercised by outside shareholders. Outside shareholders use their voting power to affect corporate decisions when there is a conflict of interest between shareholders and agents. The fourth chapter uses shareholder activism to examine agency conflict differences between family and non-family firms. We measure shareholder activism with the Schedule 13D filings targeting the sample firms to change or influence corporate decisions. We examine the focus of Schedule 13D filings that targeted the 2,000 largest firms from 2001 through 2010. Univariate and multivariate test results support our hypothesis that family firms are more likely to be targeted by shareholder activism than non-family firms. We also investigate whether the activists target different characteristics in different organizational forms. Activist shareholders seem to focus on principal-principal agency costs resulting from conflict of interest between insiders and outside shareholders in family firms. In contrast, they target entrenched managers and resulting principal-agent agency costs arising from the

conflict of interest between managers and shareholders in non-family firms. This study is one of the first attempts to understand the agency conflict differences between family and non-family firms in the context of shareholder activism.

CHAPTER 2

THE VALUE OF SHAREHOLDER RIGHTS IN FAMILY FIRMS: GLOBAL EVIDENCE FROM A DEATH IN THE FAMILY¹

2.1. Introduction

The corporation is an organizational form in which a nexus of legally enforceable contracts defines the mutual rights and obligations of shareholders, creditors, managers, employees, suppliers, and customers to one another. Firms grow if their cost of coordinating economic activity using legally enforceable contracts is lower than that of the market (Coase, 1937). Firms that use outside equity financing face a substantial coordination cost: the agency costs arising from the separation of control on how the firm is run and of ownership by outside shareholders. Equity funding cost depends on investor perceptions about whether managerial decisions serve the interests of outside shareholders. The convergence of control and ownership may allow the inside shareholder who holds majority stake to overlook the interests of outside shareholders who hold minority stake (Berle & Means, 1932; Fama, 1980;

¹ This chapter is published in Tanyeri Günsur & Alp (2022)

Jensen & Meckling, 1976). Internal and external corporate governance mechanisms mutually supplement each other and make up the governance environment that binds managerial decisions. We investigate how one dimension of the external corporate governance environment, the legal protection of shareholder rights, affect the incentive conflicts between majority and minority shareholders and the pricing of family firms. Extensive literature investigates how the inability to use contracts to avoid incentive conflicts between atomistic shareholders and managers is an essential cost in coordinating economic activity. Atomistic shareholders would benefit from better monitoring and disciplining of managers but are unable to do so since other shareholders would free ride on the benefit without sharing the cost. Firms with concentrated ownership (such as family firms) may alleviate these agency costs (Jensen & Meckling, 1976; Martin-Reyna & Duran-Encalada, 2012; Singal & Singal, 2011; Villalonga *et al.*, 2015; Rashid, 2016). We sample family firms to minimize the variation in ownership concentration (an internal corporate governance mechanism) and isolate how legal protection of shareholder rights (an external corporate governance mechanism) affects investors' pricing of shares.

Measuring how conflicts of interest between stakeholders affect investors' perception of firm value is problematic. Firm value, organizational form, and internal and external corporate governance mechanisms are endogenous. We address the endogeneity by identifying an exogenous shock, a death in the family, to measure how investors perceive and price the change in the balance of power between the family and outside shareholders. Death is exogenous because it allows no conscious choice but changes the perimeters under which the family makes decisions.

Investors' perceptions of how a death in the family will change decision making

inform their trading in stock markets. On the one hand, investors may perceive death as a loss of valuable human capital. Stewardship theory suggests that family members develop distinct competencies and are emotionally invested in the firm (Bubolz, 2001; Davis, Schoorman, & Donaldson, 1997; Davis, Schoorman, Mayer & Tan, 2000). In this case, investors would react negatively to a death in the family. On the other hand, agency theory suggests that a decrease in entrenchment would constrain the self-serving actions of family members. Investors would welcome the expected dilution in family control. In this case, investors would react positively to a death in a family if they expect the balance of power to tilt from the family to outside shareholders.

The sample covers 132 deaths in 109 publicly traded family firms operating in 24 countries. Investor reaction to a death in the family, measured using abnormal stock returns, prove positive and statistically significant at 0.58 percent. The positive abnormal returns support agency theory that investors expect a dilution in family control resulting from the death.

Internal and external corporate governance mechanisms that determine the rights and obligations of stakeholders affect the agency costs arising from incentive conflicts between majority and minority shareholders. We focus on one specific dimension of the external corporate governance environment and investigate how the legal protection of shareholder rights affect the pricing of family firms. We hypothesize that legal system constrains the extent to which the controlling family can make self-serving decisions. We find that investors react more positively to news about the possible dilution of family control in countries and time periods where shareholder rights are less protected. The results support our theory that the legal protection of

shareholder rights as an external corporate governance mechanism is vital in shaping investor perceptions about firm value. Investors' pricing of family firms determines the cost of outside equity financing and hence their growth opportunities. A country's regulatory environment and the firm's corporate governance are critical to investors' perception when evaluating the agency costs that arise from incentive conflicts between inside and outside shareholders.

Our work contributes to the literature on: agency costs, law and finance nexus, and executive deaths. The literature on agency costs concentrates on how conflicts of interest between outside shareholders and the family affect the investment and financing decisions while holding the external legal environment constant (Gomez-Mejia, Nunez-Nickel & Gutierrez, 2001; Keil, Maula & Syrigos, 2017; Morck & Yeung, 2003; Nguyen & Nielsen, 2014; Villalonga & Amit, 2006; Villalonga, Amit, Trujillo & Guzman, 2015). Law and finance literature investigates how the law affects decision-making in firms with widely dispersed shareholders and the valuation of these firms (Allen, Qian & Qian, 2005; La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1997 and 1998; Peng & Jiang, 2010). These two strands of literature are related: one of the assumptions of law and finance literature is that protection of shareholder rights and internal corporate governance mechanisms mutually supplement each other and make up the governance environment to limit agency costs (Aguilera, Desender, Bednar & Lee, 2015; Bell, Filatotchev & Aguilera, 2014; Chrisman, Chua, Breton-Miller, Miller & Steier, 2018; Martins, Schiehl & Terra, 2017 and 2020; Peng, Sun, Vlas, Minichilli & Corbetta, 2018; Schiehl & Martins, 2016; Walsh & Seward, 1990). We contribute to the discussion by focusing on the endogenous relationship between internal (organizational form and ownership concentration) and external governance mechanisms (shareholder rights) in family

firms. We use agency theory as a building block to develop and test our theory on how legal rules shape investor perceptions and affects the pricing of family firms. Our research has policy implications for regulators because we show how strengthening the rule of law that protects the rights of all shareholders may affect the valuation and hence the growth of family firms.

We also contribute to the discussion on how the death of executives and block-holders affects firm value (Johnson, Robert, Nagarajan & Newman, 1985; Madden, Kallermanns, Eddleston & Patel, 2012; Nguyen & Nielsen, 2014; Salas, 2010; Slovin & Sushka, 1993; Worrell, Davidson, Chandy & Garrison, 1986). This literature focuses on how investors evaluate the entrenchment of the deceased versus the uniqueness of his/her human capital. We theorize that the external environment is an important factor that motivates family members with the executive power to develop firm-specific competencies and to serve all shareholders faithfully. Regulatory, cultural, and competitive differences in the external environment are important forces for aligning the family's interests with outside shareholders. We show the importance of cross-country differences in the extent to which law protects the rights of outside shareholders, and differences in investor perceptions about the effect of founders versus descendants in positions with executive power. Entrenchment and human capital development cannot be evaluated in isolation and are endogenous to the external environment, including the legal rules of the country in which the firm is incorporated.

2.2. Theory And Hypothesis Development

2.2.1. How Do Incentive Conflicts Between the Family and Outside Shareholders Affect Firm Value?

Firms with insufficient internal funds to finance profitable projects need to raise capital from outside investors. Listing on stock markets is an external financing choice that allows access to a broader base of investors. Firms that decide to issue shares to outside shareholders change the distribution of control in the firm. The inside and outside shareholders are equity investors who finance the firm and monitor the performance of their investment. However, the control that inside shareholders exert over the firm relative to outside shareholders is significantly higher.

Jensen and Meckling (1976) assert that the separation of control and ownership creates agency costs because of the divergence in interests of agents (managers) and principals (shareholders). Fama (1980) explains how the separation of control and ownership is efficient. Market-based control mechanisms such as the labor market (Fama, 1980), banks (Stiglitz, 1986), capital markets (Easterbrook, 1984), and the market for corporate control (Jensen & Ruback, 1983) motivate executives to prioritize shareholders' best interest rather than their own. However, the convergence of control and ownership may invite executives to ignore market-based monitoring mechanisms. This difference in the power of inside shareholders relative to outside shareholders coupled with differing objectives generates differences in opinion about how a firm should be run. Agency theory conjectures that inside shareholders make decisions in line with their risk appetites, interests, and beliefs (Fama, 1980). Thus, they may use the private benefits of control at the expense of outside shareholders

(Barclay & Holderness, 1989). Figure 2.1 uses agency theory to model how incentive conflicts between inside and outside shareholders affect investors' perceptions and firm value. We use family firms as the testing context because family firms, by nature, have concentrated ownership.

The family may continue to control the firm in two ways. Foremost, the family may retain enough voting shares to remain the majority shareholder. Alternatively, the family may keep control through family members who are high-level executives and/or board members. Habbershon, Williams, and MacMillan (2003) and Sirmon and Hitt (2003) stress that family firms develop competencies due to unique family relations that foster loyalty and harmony. However, executive power coupled with ownership entrenches the family. Even without significant ownership, family executive power may be amplified with the cooperation of other family members that are employees and/or with the loyalty of non-family employees bound by a shared history. Entrenchment is the necessary condition that enables the family to make financing and investment decisions that serve their interests, to the detriment of outside shareholders.

Self-serving decisions range from nepotism in the hiring process to the channeling of cash flows to projects that serve family interests (Kaye, 1991; Schulze, Lubatkin, Dino & Buchholtz, 2001; Westhead & Cowling, 1997). Furthermore, nepotism might demotivate non-family employees and hurt firm performance (Gomez-Mejia & Wiseman, 1997). Executives from the family may be more risk-averse than professional managers because their investments in the firm are undiversified (Agrawal & Nagarajan, 1990). Family members may depend on the firm's survival for employment (Liebowitz, 1986) and social status (Hollander & Elman, 1988;

Miller & Rice, 1967), which amplifies their aversion to taking on risk even when the returns are high. Family firms may fail to adopt new products, management styles, and technologies (Block, 2012; Morck, Wolfenzon & Yeung, 2005; Munari, Oriani & Sobrero, 2010) and may not identify market challenges and opportunities (Colli, 2002; Daily & Dollinger, 1992; Gallo, Tapies & Cappuyns, 2000; Pindado, Queiroz & Torre, 2010). The family may also tunnel corporate resources out of the firm (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 2000; Morck & Yeung, 2003).

Outside shareholders expect that the family may make decisions that serve family interests at the expense of outside shareholders (Gomez-Mejia & Wiseman, 1997; Gomez-Mejia *et al.*, 2001; Jensen & Meckling, 1976). Outside shareholders trade shares based on their perceptions of how faithfully the family protects the interests of all shareholders. Share prices reflect the perceptions of outside investors on how the family's self-serving financing and investment decisions will generate agency costs and decrease shareholder value. Shareholders who anticipate the self-serving actions of the family ask for higher returns from their investment. The family bears the cost of the self-serving actions that investors expect them to take in the form of higher funding costs. Family's best interest lies in implementing corporate governance rules to bond itself to serve the best interests of all shareholders equally.

Extensive literature develops and tests the influential model depicted in Figure 2.1 on how incentive conflicts between inside and outside shareholders affect firm value (Gomez-Mejia *et al.*, 2001; Keil *et al.*, 2017; Lin, 2009; Morck & Yeung, 2003; Nguyen & Nielsen, 2014; Sitthipongpanich & Polsiri, 2015; Villalonga & Amit, 2006; Villalonga *et al.*, 2015). Our theoretical contribution is two-fold: First, we recognize the interaction of internal and external corporate governance mechanisms

that make up the governance environment. Emerging literature discusses how external and internal governance mechanisms work together to limit incentive conflicts between different stakeholders (Aguilera *et al.*, 2015; Bell *et al.*, 2014; Chrisman *et al.*, 2018; Martins *et al.*, 2017; Martins, Schiehl & Terra, 2020; Peng *et al.*, 2018; Schiehl & Martins, 2016; Walsh & Seward, 1990). This is why we focus on family firms to analyze how one internal governance mechanism, concentrated ownership, interacts with an external governance mechanism, the law. Second, we explore how the protection of shareholder rights as a formal, external corporate governance mechanism affects investors' perception of the incentive conflicts between the family and outside shareholders. Legal rules that protect the rights of all shareholders equally and provide recourse to outside shareholders when their rights are violated would provide a check against family members taking self-serving actions. We investigate how legal rules may limit inside shareholders in firms with high ownership concentration (the family firms) to take self-serving actions.

La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998), and Schiehl and Martins (2016) point out that ownership concentration is negatively related to the level of investor protection in a country. Outside shareholders may require higher returns to invest in family firms where shareholder rights are poorly protected. Fernando, Schneible, and Suh (2014) show that institutional investors invest less in family firms than in non-family firms. The gap between institutional ownership of family firms and non-family firms shrinks after the introduction of the Sarbanes-Oxley Act of 2002, which shifts the power from insiders to outsider shareholders. Law as a formal, external governance mechanism that protects outside shareholders would restrain the family from exploiting shareholders. In countries where shareholder rights are strongly protected, stock prices will reflect investors' expectations of the limits on

family-serving decisions and the resulting decrease in agency costs.

2.2.2. The Valuation of Family Firms

The choice to go public and retain control is an endogenous decision that depends on the firm, industry, and economic and regulatory environment. This is why we identify a quasi-experimental setting in which the change in control is sudden and exogenous to the firm: the death of founders or family members. There is literature that uses death as an exogenous shock to examine: the political rents that firms enjoy (Fisman, 2001; Faccio & Parsley, 2009) and the employee relations in family and non-family firms (Kang & Kim, 2020). The corporate governance literature has used death as an exogenous shock since the firm cannot *consciously choose* it (Johnson *et al.*, 1985; Madden *et al.*, 2012; Nguyen & Nielsen, 2014; Pan, Wang & Weisbach, 2015; Salas, 2010; Slovin & Sushka, 1993; Worrell *et al.*, 1986). Using death as an exogenous shock, we overcome the selection bias. Executives are not actively trying to decrease entrenchment to stop a decline in firm value. Death disturbs the balance of power between the family and outside shareholders.

We test the theoretical model shown in Figure 2.1 in the context of family firms. The death of a family member changes the structure, function, and interactions within families. Relations between the inheritors and the deceased would affect how the stocks of the deceased is disposed of. Surviving relatives of the deceased may choose to sell their shares creating uncertainty in how block-holds of shares will fare in the future. The dilution in ownership may facilitate the transition to professional management and/or pave the way for acquisition bids (Slovin & Sushka, 1993). Even if family ownership does not change, entrenchment may decrease because of the loss of an executive that binds the company and the family. We investigate how investor

perceptions about the potential change in the balance of power between the family and outside shareholders affect firm value. Agency theory posits that outside investors may perceive the death as positive news if they anticipate a decrease in family entrenchment. A reduction in family entrenchment would limit their ability to influence decisions that are to the detriment of outside shareholders. Outside investors' trading activity would reflect their expectation that agency costs would decrease. Under these conditions, we predict that the abnormal returns (defined as realized stock returns benchmarked against the returns investors expect in the absence of the event in question) following a death in the family would be positive.

Hypothesis 1: Abnormal returns upon the death of a family member are on average positive.

The incentive conflicts between the inside and outside shareholders may be limited or amplified by the internal and external environment. We contribute to the literature by theorizing and testing how legal rules, as a part of the external environment, affect the pricing of family firms. Legal rules draw boundaries for executive decisions. In countries where legal rules protect the rights of shareholders less strongly, the bounds on decisions that serve the family at the expense of other shareholders will be weaker. Outside investors would price the increase in agency costs and the decrease in value that would result from the lax legal rules that fail to limit self-serving decisions. This is why in countries and periods where legal rules fail to protect the rights of shareholders, the death of a family member will be more welcome news. Under these conditions, our agency theoretic model predicts that market reactions differ depending on the legal protection of shareholder rights.

Hypothesis 2: Abnormal returns upon the death of a family member are negatively associated with the protection of shareholder rights.

The model assumes that the interests of the family and outside shareholders are not perfectly aligned. This incentive conflict drives the family to make decisions that serve their interests at the expense of outside shareholders. If the interests of the deceased are in line with shareholders, the predictions of agency theory may well be reversed, and investors would perceive the death as negative news. The extent to which family members identify with the firm versus the family will determine whether the member will be more likely to take actions that first serve the firm's best interests or the family's best interests. As such, the distinctive capabilities of family members in generating value for all shareholders may be a strong counterforce on how investors perceive the loss of a family member. If investors perceive the distinct competencies of family firms as an important competitive advantage, they may perceive his/her death to be a loss. This is why outside investors' perceptions of how aligned the deceased's interests are with shareholders rather than the family will shape their trading activity.

The ability of the deceased to take action depends on their power in the firm. Executive power allowed the deceased to act on their intentions. The deceased may well have been a servant to family needs first and the firm second or may have focused on the firm first and the family second. However, ability to decide and take action depended on his/her power. Le Breton-Miller and Miller (2009) and Le Breton-Miller, Miller, and Lester (2011) find that when executives identify more with the family, firm value (as measured in stock returns) decreases. The authors theorize that founders devoted their life to building the firm from scratch and are less

likely to take actions that compromise the firm to benefit family members.

Descendants of founders who were voted into their positions in the firm by other family members would be more likely to bow to their demands. Hence, Hypothesis 3 predicts that investor perceptions about how aligned the incentives the deceased were with outside shareholders and their ability to take action on their perceived goals will shape investor reaction.

Hypothesis 3: Abnormal returns upon the death of a founder who holds an executive position will be lower relative to the death of a descendant who holds the same position.

Death changes the structure and functioning of families and reshapes the internal environment (Jaskiewicz, Combs, Shanine & Kacmar, 2016; Jaskiewicz & Dyer, 2017). Sharma, Chrisman, and Chua (1997), Habbershon and Williams (1999), Habbershon *et al.* (2003), Sirmon and Hitt (2003), Zahra, Hayton, and Salvato (2004), Chrisman, Chua, and Litz (2004) and Chrisman, Chua, Pearson, and Barnett (2012) stress the competencies that arise from the unique family relations that foster loyalty and harmony. Death can shake family members' commitments to each other. De Massis, Chua, and Chrisman (2008) discuss the importance of rivalries among family members as a deterrent to succession planning. Sharma, Chrisman, Pablo, and Chua (2001) and Ventner, Boshoff, and Maas (2005) emphasize family harmony in promoting successful succession. Family complexity is a factor that catalyzes intra-family conflict during succession (İbrahim, Soufani & Lam, 2001; Lambrecht & Lievens, 2008). The potential for intra-family disputes would generate uncertainty about unity and adversely affect investor perceptions. Hypothesis 4 predicts that if investor perceptions about the likelihood of disputes increase, firm value would be

hurt.

Hypothesis 4: Abnormal returns upon the death of a family member are negatively associated with family complexity because of the potential to spark intra-family strife.

2.3. Research Framework And Sampling Strategy

2.3.1. Sampling Strategy

We sample the largest, publicly-listed family firms, where incentive conflicts between outside shareholders and the inside shareholder (the family) would be most pronounced. “The 2015 EY and University of St Gallen Global Family Business Index” defines a firm as a family firm if the family controls at least 30 percent of voting rights, an amount assumed sufficient to dominate the general assembly. “The World’s 250 Largest Family Business” index categorizes a firm as a family firm if a single-family controls the company’s ownership, members of the controlling family are active in top management, and the family has been involved in the company for at least two generations. Both lists rank firms according to revenue. After eliminating private firms from our family firm list, we search Lexis-Nexis for obituaries of founders and family members who currently work or used to work in family firms that are on these two lists. We fail to find stock price data in Bloomberg for 28 events. The resulting sample covers 132 announcements of founder and family member deaths from June 1981 to October 2016 in 109 firms across 24 countries. Figure 2.2 summarizes the filters we use to compile the sample. Sixty-four percent of the sample is from “The 2015 EY and University of St Gallen Global Family Business Index” and 36 percent from “The World’s 250 Largest Family Business” indices. Table 2.1 lists the number of family firms, the number of death

announcements, and the stock market index of each country in the sample. Table 2.2 summarizes the variable definitions and lists the sources from which we collect them.

Our sampling strategy presumes that the family is the controlling shareholder in the firm. We manually checked annual reports to collect the change in family ownership. We use firm websites, SEC website, and Google search engine to collect the annual reports of the previous year and event year. We find the last annual reports before the death and the annual reports of the event year for the 88 and 79 events, respectively. Then, we look for the family surname or words “family”, “voting right”, “ownership”, and “shareholder” in the annual reports. Most annual reports did not report the ownership structure due to the cross-country and time span of the sample. We can collect ownership information for only 26 events. Table 2.3 summarizes the ownership information we collect. According to the annual reports, the family ownership stake is around 56% for the sample firms.

We also used “The 2015 EY and University of St Gallen Global Family Business Index” and “The World's 250 Largest Family Business” indices to compile the family's ownership stake as measured at the publication time of the two indices. We find that the family is indeed the controlling shareholder in sample firms with an average ownership stake of 53 percent. Using a sample of 190 public companies from the USA, Madden et al. (2012) show that family member ownership is, on average, 54 percent.

Family ownership, on average, decreased by 0.41% after the death. Although we could measure the family ownership change upon the death of an executive family member for only 26 events, the result is in line with the results of Slovin and Sushka (1993). They report dilution in ownership concentration following the death of a

blockholder. We also observe a statistically significant difference in the average family ownership stake of countries with weak shareholder protection and countries with strong shareholder protection. The difference is 3.33 percent according to the ownership information gathered from annual reports (in the sample of 26 events), and 8.47 percent according to the ownership information taken from family firm indices (in the sample of 110 events). On average, the family is the majority shareholder in either case.

We collect the last annual report before the death and check whether the deceased held executive and monitoring positions. The family held executive positions in 64 percent and monitoring positions in 93 percent of sample firms. Forty-nine percent of the sample consists of founder deaths, of which 6 percent were CEOs or Chairman-CEOs, 12 percent were holding monitoring positions on the board, and the remaining 31 percent were retired at the time of their death. Fifty-one percent of the sample covers descendant deaths, of which 8 percent were CEOs and Chairman-CEOs, two percent were in other executive positions, 11 percent were in monitoring positions on the board, and 30 percent were retired.

We also examined the annual reports, obituaries, and articles released upon the death to check if the family firm's CEO and/or chairman is a family member at the time of the death. At the time of the death event, 92 percent of the family firms are controlled by the family (in the sample of 109 events), whereas 80 percent of the family firms are controlled by the family after the death (in the sample of 78 events). We find that professional CEO/chairman replaces family members in 10 events (in the sample of 76 events) following the death. The figures point to a change in the control upon the death of an executive family member.

The sample is not representative of family firms in general and is prone to survivorship bias. Less than one-third of family firms survive after the founder passes away, and only 10 percent of family firms make it to the third generation (Beckhard & Dyer, 1983). To investigate the incentive conflicts between the family and outside shareholders, the family firm needs to have grown to a size that necessitates financing through stock markets. As such, the survivorship bias in the sample is a natural product of our focus on publicly traded family firms.

2.3.2. Measuring Investor Reaction to Deaths in the Family

We conduct an event study to measure how investors react to the deaths of founders and family members. The event study assumes rationality in the market and measures the economic impact of an event (such as the death of a founder or descendant family member) using stock returns observed over a short period. Investors evaluate whether the new information will affect firm value and trade based on their perceptions.

Trading activity determines returns that reflect the consensus opinion of all investors.

The event date is the day on which the founder or family member passed away. We identify the event date using obituaries and news articles. We choose to identify the date of death as the event day instead of the obituary date because sample firms are large and the public learns pertinent information promptly. Bloomberg provides

stock prices and the values of major market indexes. Dual-class stock structure, an antitakeover protection, is commonly adopted by family firms (DeAngelo & DeAngelo, 1985; Gompers, Ishii & Metrick, 2010). The superior class of stocks are usually held by family members, and the inferior class of stocks are publicly traded.

We use the price change in inferior class stocks in the case of the dual-class structure. Returns ($R_{i,t}$) are the percentage change in stock prices (using the daily

closing price that is adjusted for dividends and stock splits). We use Bloomberg’s last trading price adjusted for stock splits and dividends to calculate daily returns. We also run the analysis using daily returns that Bloomberg provides, and our results are qualitatively similar. We use the event study method described in Brown and Warner (1985) to investigate investor perceptions about how the event affects firm value. Abnormal returns difference realized returns from a benchmark of ‘normal’ returns in the days around the deaths of family members. Abnormal returns reflect investors’ aggregated view on how the loss of the family member/founder will affect firm value. Expected returns are estimates of the returns the firm would have realized if the event in question had not taken place. We estimate expected returns using the market model in the one-year estimation window that starts 20 days before the death as in Equation (1):

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}, \quad (1)$$

where $R_{i,t}$ is the realized return of stock i at time t , and $R_{m,t}$ is the return of market index at time t . Equation (2) shows how abnormal returns in observation i ($A_{i,0}$) difference realized returns on event day (the day when the founder or the family member passed away) from expected returns. We check for other significant events (such as merger announcements) that may confound the analysis. We find no confounding events on the announcement days.

$$A_{i0} = R_{i0} - (\alpha_i + \beta_i R_{m0}). \quad (2)$$

Three-day cumulative abnormal returns (CAR) sum up the abnormal returns on the event date and the two days following the event to capture delays in investor reaction. Table 2.4 reports descriptive statistics and correlations for all the variables.

2.3.3. Proxies for Differences in the Internal and External Governance

Environment

Hypotheses 2 through 4 predict that the external governance environment, the deceased's identity, and the family structure may amplify or limit the incentive conflicts between outside shareholders and the family. Investors' perception of firm value will then depend on the moderating effect of the external and internal governance environment. We focus on shareholder rights as an integral part of the external corporate governance environment. We rely on existing indices that measure the strength of shareholder protection. First, we examine the Anti-Director Rights Index that La Porta *et al.* (1998) compiled and use the sixth item in the index (henceforth *shareholder challenge*). The *shareholder challenge* variable measures whether the law protects outside shareholders by allowing them to liquidate their ownership if and when they disagree with managerial decisions. Nenova (2003) posits that legally enabling shareholders to challenge managerial decisions may limit the self-serving decisions of inside block-holders.

The second measure uses changes in regulation that increase the protection of shareholder rights. Many countries around the world have instituted new regulations to better protect the rights of shareholders. One example of a law whose mandates increase the protection of shareholder rights is the Sarbanes-Oxley Act. Sarbanes-Oxley requires the board to recruit independent directors and improve the transparency of financial statements. An increase in monitoring and transparency restricts family members from acting in ways that maximize family utility rather than shareholder wealth (Fernando *et al.*, 2014). Canada, France, Germany, India, Indonesia, Italy, Japan, Netherlands, and Turkey instituted similar regulations. This

measure (henceforth *regulatory change*) takes on the value one after a country passes a new regulation that better protects the rights of shareholders and zero otherwise.

Table 2.1 lists the name of the regulations introduced to increase the protection of shareholder rights across sample countries.

We hand collect data on variables that proxy for differences in the internal environment using the obituaries, online searches for the biographies of the deceased, and financial reports. The first aspect of the internal environment we focus on is the deceased's identity. We analyze whether the deceased had any executive power in the firm and whether the deceased identified with the firm rather than the family. First, we construct a variable named *executive*, which identifies the top decision-makers. Second, we proxy for how faithfully the deceased served the firm's interest (hence all shareholders) by identifying whether the deceased was the founder, *founder*. Identifying the founder also differentiates the investor reaction to the first generation's passing away from the investor reaction to further generations. Founders are emotionally attached to the firm they built (Le Breton-Miller & Miller, 2009; Le Breton-Miller, Miller & Steir, 2011). Furthermore, the loss of the captain at the helm, so to speak, erodes the unity of purpose and might intensify incentive conflicts between outside shareholders and the family (Bertrand & Schoar, 2003; Chirico, 2008; Chua, Chrisman & Sharma, 2003; Jenter & Lewellen, 2015). Hence, we differentiate retired founders and founders who hold an executive position at the time of the death (with *executive-founder*). Last, we identify sole-founder firms, *sole-founder firms*. Miller, Le Breton-Miller, Lester, and Cannella (2007) define lone founder firms as those in which the company's founder is an insider (officer or director) or owns more than five percent of equity and in which no other family members are involved in the firm. In 14 sample firms, the deceased is the founder

and the only person in the family who worked in the firm at the time of his/her death.

The second aspect of the internal environment we focus on is the family structure of the deceased. The variable, *children*, counts the number of children of the deceased.

The more children, the more the deceased's estate will be divided, and the greater will be the dilution of family power. Bennedsen, Nielsen, and Wolfenzon (2005) and Karaevli and Yurtoglu (2018) show that family size and the number of children and partners are important determinants of firm performance and succession decisions.

Divorce and remarriage may potentially change family dynamics and increase dissent. This is why we construct an interaction variable (henceforth called *family complexity*) by multiplying the number of marriages with the number of children.

Table 2.4 reports that the deceased on average married 1.3 times with 3.7 children.

We include the choice of the dual-class stock structure as another dimension of the internal environment. Dual-class firms issue stocks with different voting power. As one of the most powerful antitakeover protections, executives may use the dual-class stock structure to discourage hostile takeovers (Gompers *et al.*, 2010) and a means to expropriate firm value (Ehrhardt & Nowak, 2003). We introduce a dummy variable, *dual-class share*, to control firms with the dual-class stock structure.

Lin (2009) emphasizes the interaction between cultural characteristics, economic development, socioeconomic condition, and the legal system. We control for socioeconomic and macroeconomic variables such as *income inequality*, *corruption perception*, and *economic fitness*. *Income inequality* (GINI index, World Bank, 2015) measures the income distribution of societies from a perfectly equal distribution. *Corruption perception* measures the perceived corruption level of the public sector in a country (Transparency International, 2016) and ranges from 0 (highly corrupt) to

100 (very clean). We use the *economic fitness* variable, which measures a country's diversification and its ability to produce complex goods (World Bank, 2006). Table 2.1 lists income inequality, corruption perception, and economic fitness indices across the sample countries.

We use Bloomberg to collect data on firm characteristics (in the year before the death). We control for firm characteristics such as *size*, *ROE*, *revenue growth*, *firm age*, and *leverage*. Sample firms are mature firms with assets of 1.3 billion dollars of which 57 percent is financed with debt. The firms seem to be doing well in the year before the death, with revenue growth averaging 6 percent and the return on equity averaging 12 percent. Industry classification is from "The 2015 EY and University of St Gallen Global Family Business Index" and "The World's 250 Largest Family Business". Table 2.5 summarizes the cross-country distribution of firm industries.

2.4. Results

2.4.1. Hypothesis Testing

Panels A, B, and C of Table 2.6 report the mean of *abnormal returns* and *cumulative abnormal returns* in the full sample and subsamples. We formally test Hypothesis 1 in Panel A of Table 2.6. Abnormal returns and cumulative abnormal returns average 0.58 and 0.74 percent, respectively. T-scores for the test that the means are different than 0 show that the means are statistically significant. Univariate results corroborate Hypothesis 1, which predicts positive abnormal returns. The results indicate that investors perceive deaths in the family as a value enhancing event.

Panel B of Table 2.6 splits the sample into subsamples according to the binary variables of *shareholder challenge*, *regulatory change*, *executive*, *founder*, *executive-*

founder, sole founder firm, financial firms, developed, post-2008, and United States.

In Table 2.6, we restrict the regulatory challenge variable to those countries that enacted a regulation in the univariate tests. In the regressions, in order to use as large a sample as we can, we set the regulatory challenge to 0 for countries that did not enact a regulation. Cumulative abnormal returns (abnormal returns) in countries where shareholders cannot challenge the decisions of executives average 2.3 (1.3) percent and prove significantly larger than the average cumulative abnormal returns of 0.1 (0.3) percent in countries where shareholders can challenge decisions.

Cumulative abnormal returns (abnormal returns) in countries that did not enact regulations that better protect the rights of shareholders average 1.8 (1.4) percent and prove higher (significantly larger) than the average cumulative abnormal returns of -0.1 (-0.1) percent in countries that enacted regulations. We find a statistically insignificant difference in abnormal returns between the deceased who held executive positions, those who were the founders, those who were founders with executive positions, those who were founders in sole founder firms, those who were worked in finance industry, those who were in developed countries, those who died after 2008, and those who were in United States. Panel C of Table 2.6 reports abnormal returns and cumulative abnormal returns in subsamples split in two according to whether the deceased had more children than the sample median of three children; whether the deceased had more partners than the sample median of one partner; and whether the family complexity (defined as the number of children multiplied by the number of partners) is greater than the sample median of four. We fail to find any statistical difference in abnormal returns in these subsamples.

Table 2.7 reports regressions of cumulative abnormal returns on measures for the protection of shareholder rights, the identity of the deceased, the family's role in the

firm, socioeconomic indicators, and family structure. The first specification of Table 2.7 reports the base model, which includes the measure for the strength of law in protecting shareholders (*shareholder challenge*). The second specification reports the model, which introduces four proxies for the deceased's identity: *executive*, *founder*, *executive-founder*, and *sole founder firm* variables. The third specification adds two proxies for family structure: *children* and *family complexity*. The fourth specification uses *regulatory change* to investigate whether enacting a regulation that better protects shareholders affects the investor reaction. The fifth specification introduces controls for firm characteristics, such as *firm size*, *ROE*, *revenue growth*, *log of firm age*, and *leverage*. Specification 6 introduces a dummy variable, *dual-class share*, to control firms with a dual-class stock structure. The seventh specification uses *regulatory change* as a measure of the change in the strength of shareholder rights. It also includes industry fixed effects as well as controls for socioeconomic and macroeconomic variables, such as *income inequality*, *corruption perception*, and *economic fitness*. We also include country, industry, year and legal origin fixed effects in the eighth specification to capture systematic differences across different countries, industries, and time. The coefficients of macroeconomic and socioeconomic variables, *income inequality*, and *corruption perception*, are statistically significant. Standard errors in all specifications in Table 2.7 are adjusted for the industry-year clusters. The variables that proxy for the strength of the legal code, the identity of the deceased, and the family structure prove statistically significant. The R^2 ranges from 3.71 to 75.74 percent.

2.4.2. Robustness Tests

We test the robustness of our results by using alternate measures for the legal

protection of outside shareholders. As alternative proxies, we investigate the La Porta *et al.* (1998) classification of the country's legal origin, La Porta *et al.* (1998)'s *antidirector rights index*, an index that combines the World Bank strength of minority investor protection index and the antidirector right index (henceforth *combined index*), and Kaufmann, Kraay, and Mastruzzi (2011) (the *rule of law index*). *Antidirector Rights* is a measure of shareholder rights protection (La Porta *et al.*, 1998). The index first considers whether shareholders can mail their proxy vote to the firm. Second, the index marks whether shareholders are required to deposit their shares before the general shareholders' meeting. Third, the index determines whether cumulative voting is allowed. Fourth, the index reports whether minority shareholders are proportionally represented on the board of directors. Fifth, the index analyzes whether shareholders with less than 10 percent ownership stake can call for an extraordinary shareholders' meeting. Sixth, the index records whether minority shareholders either have the right to challenge managerial decisions or the right to exit by requiring the company to purchase their share when they object to certain changes. The index aggregates to a maximum of six (highest level of shareholder protection) when the legal code satisfies all six measures of shareholder rights. We combine the *anti-director rights index* and *WB index* to develop a new measure (henceforth the *combined index*) of the extent to which the legal code protects shareholder rights. It ranges from one (highest shareholder protection) to three (lowest shareholder protection). The *rule of law* is a time-varying indicator of the agents' confidence in the rules of the society such as contract enforcement, property rights, the police, and the courts. It is one of the six indicators of country-level governance quality (Kaufmann *et al.*, 2011). Table 2.8 summarizes the results for the effect of legal shareholder protection with alternative measures. The results remain

qualitatively similar and prove robust.

We test the robustness of our results by controlling internal mechanisms. Aguilera et al. (2015) point to the importance of controlling for internal mechanisms such as board characteristics, ownership concentration, and managerial incentives. Our sample consists of family firms. Hence, we decided that family involvement on the board is an important variable that would shape the monitoring effectiveness of the board. We construct a variable family percentage that measures the percentage of family-member directors on the board. Another factor that might affect the monitoring effectiveness of the board is CEO-Chairman duality. CEO is the top decision-maker in firms, whereas the chairman undertakes monitoring duty. Literature shows that CEO-Chairman duality affects board independence and firm performance (Freire, 2019). We construct a variable, duality, that takes on the value one when the CEO and chairman roles are combined and zero otherwise. Finally, we also check whether the top executive positions in the firm are held by family members. The family *control* variable takes on the value one if the family firm's CEO and/or chairman is a family member at the time of the death and zero otherwise.

Ownership concentration is another important internal governance factor. Our sampling strategy of using family firms enables us to focus on firms with high ownership concentration. We minimize the variation in ownership concentration across firms and try to isolate how law affects investor perceptions in this sample of firms that have high ownership concentration. To examine, whether variation in ownership concentration (even in this sample of family firms with high ownership concentration), we use the data in "The 2015 EY and University of St Gallen Global

Family Business Index” and “The World’s 250 Largest Family Business” indices to compile the family’s ownership stake (named *family ownership*) measured at the publication time of the two indices.

Table 2.9 reports the results of the regressions which introduce the proxies for internal governance variables. Results are robust to introducing the proxies for the internal governance variables. The coefficient of the *shareholder challenge* variable is negative and statistically significant in all specifications. The coefficients of internal governance factor variables (*duality*, *family percentage*, *family ownership*, and *control*) are statistically insignificant. The corporate governance literature provides some evidence that CEO duality (Adams et al., 2005), family involvement in the board (Zhang & Cao, 2015), and family ownership (Zhang & Cao, 2015; Purkayastha, Veliyath & George, 2019) affect firm performance and firm strategy.

Table 2.10 summarizes results of the regressions of cumulative abnormal return calculated by market-adjusted model, cumulative abnormal return calculated by mean-adjusted model, abnormal return calculated by market model, abnormal return calculated by market-adjusted model, and abnormal return calculated by mean-adjusted model on governance mechanism and other control variables. Results are qualitatively similar when we use the one-day abnormal returns as the dependent variable. All results remain qualitatively the same when we use the mean-adjusted model and the market-adjusted model to calculate expected returns. Investor reaction to death may also depend on whether the death was anticipated (due perhaps to a prolonged illness) or sudden. We collect data on whether the death was sudden using the obituaries. When we restrict the sample to those deaths without a terminal illness, the sample reduces to 32 events. The coefficient of *shareholder challenge* is negative

at -1.91 but statistically insignificant for 22 sudden events. As an alternative measure of the unexpectedness of the death, we collect data on the age of the deceased. The younger the deceased, the more unexpected his/her death should be. When we identify the death as sudden if the deceased did not pass away after a terminal illness and/or is younger than 90, the sample is 55 events. The coefficient of *shareholder challenge* is -3.49 and statistically significant at a 5 percent significance level. Results remain robust when we control for the unexpectedness of the event.

2.5. Discussion

The availability of outside financing is crucial to the growth of family firms. Investors evaluate the economic consequences of incentive conflicts between the family and outside shareholders when they provide financing. We investigate the effect of these conflicts on the value of family firms using an exogenous shock: a death in the family. Agency theory predicts that when investors expect a death in the family to tilt the balance of power from the family to outside shareholders, the self-serving investment and financing decisions of the family will decrease. Our findings of positive and significant abnormal returns (at 0.6 percent) and cumulative abnormal returns (at 0.7 percent) corroborate the agency theoretic prediction that investors perceive the death as positive news because they expect family entrenchment to decrease. Investors price the agency costs arising from incentive conflicts between outside shareholders and family members when valuing the company.

The positive cumulative abnormal returns of 0.7 percent reflect the average investor response to deaths in the family. This average investor response may vary with differences in the protection of shareholder rights. The legal code that protects the rights of all shareholders may put checks on the extent to which the family takes self-

serving actions. When the law fails to protect the rights of outside shareholders adequately, agency costs will be more pronounced in family firms. The univariate findings support the prediction of Hypothesis 2 that the lower the level of shareholder protection, whether across countries or time, the higher the abnormal returns. Regression specifications one through six show that investor reaction (as measured in cumulative abnormal returns) is significantly lower (at around two percent) in countries with stronger protection of shareholder rights. Furthermore, investor reaction is significantly lower in countries when they pass regulations that better protect shareholder rights, such as the Sarbanes-Oxley Act of 2002. The regression evidence supports our theoretical model, which holds that when the law fails to protect the rights of outside shareholders (across countries and time), any news that may decrease the entrenchment of the firm is welcomed by investors.

Differences in the internal and external environment may inform investor expectations about how death in the family will affect firm value. Regression specification two of Table 2.7 introduces binary variables for the deceased who is a founder, executive, and founder-executive. The coefficient of the *executive* variable is positive but statistically insignificant, indicating that investors do not react to the death if the deceased is a descendant with executive power. However, the coefficient of the *executive-founder* variable is negative and significant at minus 5.7 percent, indicating that investors perceive the death to be negative news if the deceased is a founder with executive power (if the deceased is a founder with executive power, the *executive*, *founder*, and *executive-founder* variables would all be one with their coefficients adding up to $3.10 + 1.91 - 5.70 = -0.69$ percent). The significantly lower cumulative abnormal returns reflect the investors' perception that founder-executives will be less susceptible to serve the family's best interests. The results support

Hypothesis 3, which maintains that the value of family firms may decrease if the goals of the deceased are aligned with outside shareholders and have the executive power to act on his/her intentions to increase firm value. Investors seem to perceive that founders, at the helm of companies they've established, are invaluable assets and that their loss would hurt the firm. The coefficient of the deceased is the founder in a sole founder firm proves insignificant.

The finding of higher abnormal returns upon the death of a founder who holds no executive power indicates that investors perceive these deaths as positive news. The positive stock market reaction may be driven by their perception that these deaths will tilt the balance of power from the family to outside investors. Ownership and executive power cement the family's control over the firm. The death of a founder whose ownership stake will be divided among the inheritors may also decrease the entrenchment of the family. In line with the predictions of the agency theoretic model in Figure 2.1, we find that deaths of founder non-executives may act as signals of a decrease in the family entrenchment. Investors' positive stock-market reaction indicates their expectation that a reduction of entrenchment will curb future self-serving investment and financing decisions.

Founder-executives identify with the firm and invest in the firm more than any other stakeholders. On the one hand, Handler and Kram, (1988) and Gee and Baillie (1999) discuss how the negative connotation of retirement complicates founders' decision to entrust the firm to the next generation or to professional managers. On the other hand, Gagne, Wrosch, and Pontet (2011) find that founders who trust the executive talent of their successors have more positive retirement expectations and set an earlier retirement date. Therefore, investors may perceive the retirement of

founders as a signal of competent successors which is an important determinant of firm performance. If the founder who holds an executive position passes away before handing over the governance to the next generation, there might be no adequate professional and/or family member successors.

We compare our results on how investors react to deaths in the family to the results reported in the literature. Johnson *et al.* (1985), Worrell *et al.* (1986), Salas (2010), Madden *et al.* (2012), and Nguyen and Nielsen (2014) report abnormal returns around deaths of CEOs, chairman, and presidents that range from -0.7 percent to 0.4 percent in samples of US firms spanning periods from 1967 to 2008. The focus of these studies is not family firms but how investors react to the death of executives with differing abilities and goals. Johnson *et al.* (1985) and Salas (2010) distinguish founders from non-founders; Worrell *et al.* (1986) distinguish deceased persons whose surnames are linked to the firm (founder or descendant) from those who are not; Madden *et al.* (2012) distinguish deaths in family firms from deaths in non-family firms. The first three studies find more positive (albeit statistically insignificant in two of the studies) abnormal returns when the deceased is the founder or a family member. In contrast, Madden *et al.* (2012) find more negative abnormal returns when the death is in a family firm. Slovin and Sushka (1993) investigate investor reactions to deaths of block-holders (with more than 5 percent ownership) and find a two-day abnormal return of three percent. Abnormal returns around the death of block-holder founders are higher (albeit statistically insignificant). Furthermore, when the authors distinguish between block-holders who are CEOs and those that are not CEOs (including the deceased who may not work in the firm), abnormal returns prove lower for CEOs (statistically insignificant).

Our results are in line with the results of Villalonga and Amit (2006), Miller *et al.* (2007), and Andres (2008), who use Tobin's Q as the performance measure and find that family firms outperform (underperform) non-family firms only when the founder (descendant) serves as CEO. Saito (2008) shows that family firms with executive founders are traded at a premium, which signals investors' belief in the founders' executive talents as well as their intention to act in line with shareholders' best interest. Investors perceive that executive power will benefit outside shareholders when in the hand of founders and benefit the family when in the hand of descendants.

The structure of the deceased's family may also affect the entrenchment and the unity of descendants in serving the best interests of the company versus themselves. We expect that the more children the deceased has, the higher the dispersion in ownership stake across family members will be; this erodes the family's power over the firm and limits future self-serving actions. Abnormal returns are increasing in the number of children and decreasing in family complexity. Slovin and Sushka (1993) report that following the death of a block-holder, the block-holds fall for two-thirds of sample firms due to either the estate's dispersal or stock sales by inheritors. Furthermore, 60 percent of their sample become the target of acquisition bids. The greater the number of inheritors (that signals greater dilution in family ownership), and the higher are the cumulative abnormal returns.

The findings indicate that as the number of offspring increases, the division of the deceased's block-hold will decrease family entrenchment and may open the way to changes in ownership and control that would benefit outside shareholders. Multiple marriages and the number of children vying for employment in the family firm can also complicate succession and generate intra-family strife (İbrahim *et al.*, 2001;

Lambrecht & Lievens, 2008). The coefficient of *family complexity* (the number of marriages multiplied by the number of children) proves negative and significant. Investors perceive factors that would generate disaccord in the family to hurt firm value. Results are in line with Hypothesis 4, which predicts that investors would react negatively to the potential of a decrease in the unity of purpose in the family.

2.6. Conclusions, Limitations, And Directions For Future Research

An exogenous event, namely death in the family, that holds the potential to change the balance of power between the family and outside shareholders provides a quasi-experiment to investigate the factors that affect investors' valuation of family firms. The positive and significant investor reaction to deaths in the family supports agency theory and highlights the importance that outside investors attach to agency costs arising from incentive conflicts between outside shareholders and the family.

We interpret our results in light of the survivorship bias inherent in the sample. We need stock prices to conduct our analysis. The resulting sample covers the largest family firms that choose to list on the stock exchanges. The average firm has assets of 1.3 billion dollars, and the sample includes mega-firms such as Walmart (Walton family), Estee Lauder (Lauder family), Ford (Ford family), Fiat (Agnelli family), Hyundai (Chung family), and Peugeot (Peugeot family). The sample by construction suffers from survivorship bias. Firms that fail upon the death of family members before having had a chance to list on stock exchanges never enter the sample. Beckhard and Dyer (1983) report that 30 percent of family firms survive to the second generation and 10 percent to the third. Our sample misses two critical outcomes of deaths in the family: bankruptcy and acquisitions. The firm must have grown sufficiently enough to have gone public for incentive conflicts between inside

and outside shareholders to be relevant. It may be that for the average family firm, the loss of the founder or a family member may be the death knell. However, in our sample of the largest public family firms, the loss of a family member may pave the way for the family to lose control over the firm. The expected dilution in control restricts the family from making self-serving decisions. We show that in large, publicly-traded family firms, investors put a price on the costs that arise from incentive conflicts between the family and outside shareholders.

We theorize that if outside investors anticipate a decrease in family entrenchment, investor reaction will be positive. We are unable to measure the ownership stake of the deceased in the company before his/her death because, in our cross-country sample that spans four decades, neither the annual reports nor the obituaries cover ownership information. We are unable to directly measure the change in entrenchment that results from the death. We do indirectly show that the positive stock market reaction points to a possible decrease in the entrenchment. We believe future work focusing on a single country that requires the public dissemination of ownership data would facilitate a fine-grained measure of family entrenchment.

Aguilera *et al.* (2015), Bell *et al.* (2014), Chrisman *et al.* (2018), Martins *et al.* (2016), Martins *et al.* (2020), Peng *et al.* (2018), and Schiehl and Martins (2016) discuss the importance of internal and external governance mechanisms working together to limit agency costs. The value that family firms generate depends on the internal and external corporate governance controls that foster the development of firm-specific human capital of family members while constraining their self-serving actions. We contribute to the literature by analyzing how differences in the protection of outside shareholders affect investors' valuation of family firms. Our results

highlight the importance of the internal and external environment in alleviating incentive conflicts between the family and outside shareholders in large, publicly-traded family firms. Large and publicly listed family firms command significant assets and generate employment in the US and worldwide (Anderson & Reeb, 2003; Gersick, Davis & Hampton, 1997; La Porta *et al.*, 2000). Incentive conflicts between the family and outside shareholders that increase funding costs are important for employment and economic growth.

Second, we investigate how cross-country differences in the protection of shareholder rights affect the investors' perception of incentive conflicts between the family and outside shareholders. Investors whose rights are not adequately protected may use alternative ways to protect their investments. As such, financing choices of firms, formal and informal governance institutions, and culture would work together to limit or amplify the incentive conflicts between stakeholders. Investigating how the external and internal governance environment interacts to shape the incentive conflicts is an important direction for future research.

There are two important avenues for future work that would build on the results of our analysis. First, we investigate investor expectations at the time of death, when investors can only anticipate the changes in ownership, management, and operations. Future work exploring how a death in the family changes the ownership, control, and operations ex-post would be critical in understanding whether investor expectations are met. Second, we focus on two internal and external corporate governance dimensions: ownership concentration and shareholder rights. Future work that considers how other dimensions of internal and external corporate governance interact would provide a deeper understanding of how corporate governance affects

firm value.

Figure 2.1: How Do Incentive Conflicts Between the Family and Outside Shareholders Affect Firm Value

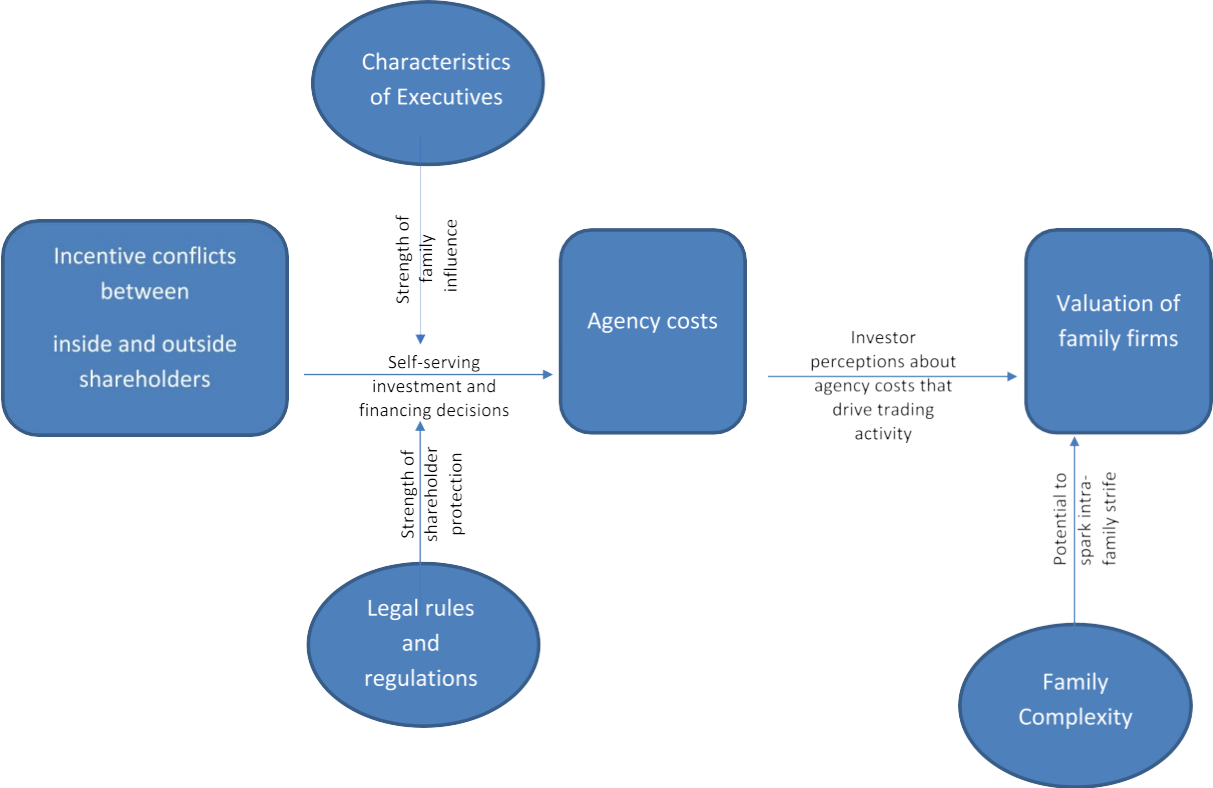


Figure 2.2: Sampling Procedure

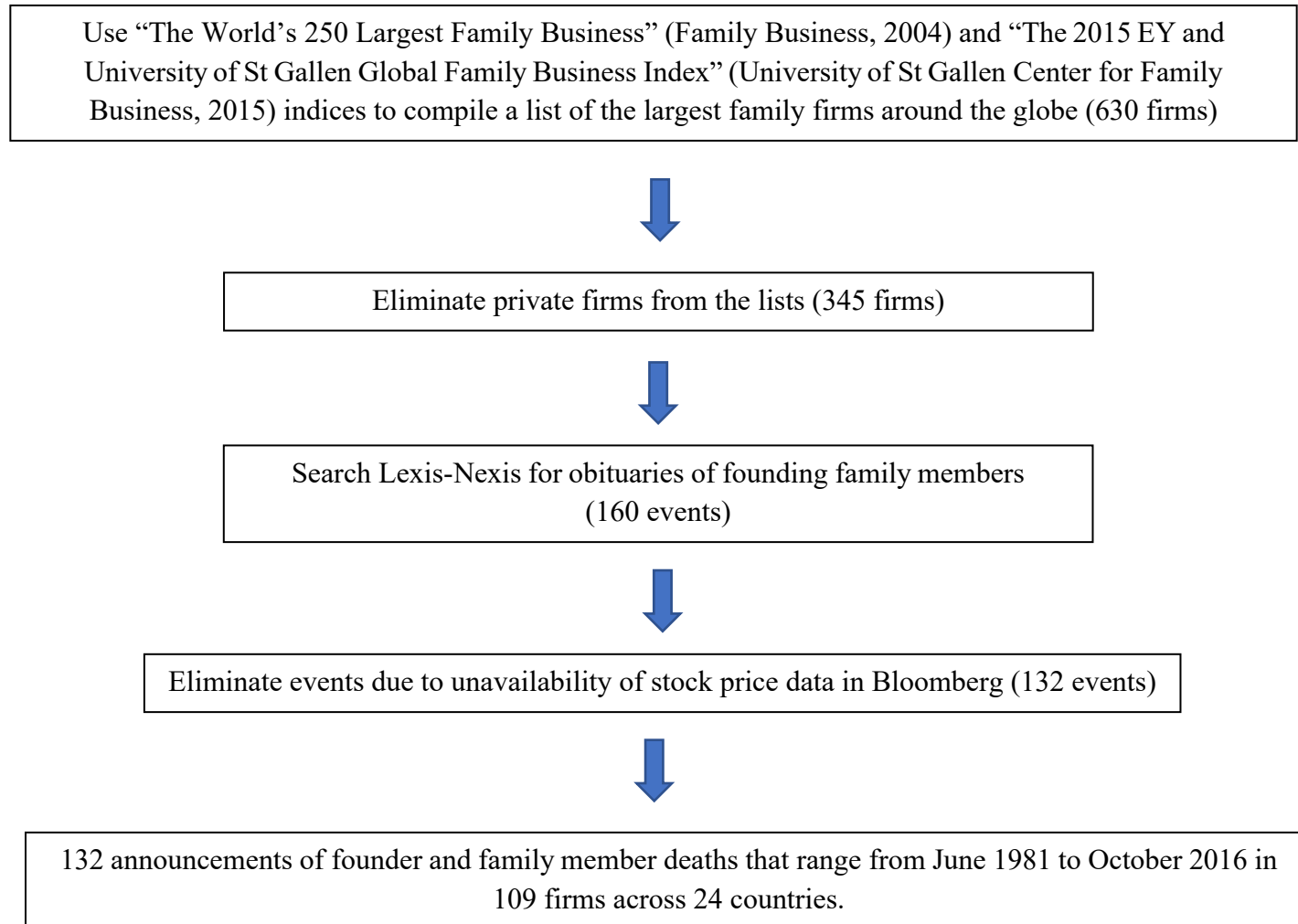


Table 2.1: Cross-country Distribution of Sample and Summary of Country-Level Variables

Country	Firms	Events	Stock Market Index	Shareholder Challenge	Legal Origin	Income Inequality	Perceived Corruption	Economic Fitness	Name & Year of Regulatory Changes
Canada	6	7 (5%)	S&P/TSX60	1	English	32.7	82	1.50	Bill 198, 2004
Chile	2	2 (1%)	IPSA	1	French	44.4	66	0.43	
Denmark	1	1 (1%)	OMXCGI	0	Scandinavian	28.2	90	2.44	
Finland	1	1 (1%)	OMXHPI	1	Scandinavian	27.1	89	1.55	
France	8	9 (7%)	CAC 40	0	French	31.9	69	5.10	Financial Security Law, 2003
Germany	4	5 (4%)	DAX 30	0	German	31.9	81	6.72	Corporate Governance Code, 2002
Greece	1	1 (1%)	D	0	French	35	46	1.26	
Hong Kong	3	3 (2%)	HIS	1	English	-	75	-	
India	4	4 (3%)	BSE SENSEX	1	English	-	38	3.80	Clause 49, 2005
Indonesia	1	1 (1%)	JCI	0	French	38.6	36	1.66	AEC Bachar Law, 2010
Israel	1	2 (1%)	MSCI	1	English	39	61	2.13	
Italy	3	4 (3%)	FTSEMIB	0	French	35.2	44	5.59	Law 262, 2005
Japan	1	1 (1%)	TOPIX	1	German	32.9	75	5.47	Financial Instruments and Exchange Law, 2006
Korea	2	3 (2%)	KOSPI	1	German	31.4	54	2.62	
Malaysia	1	1 (1%)	KLCI	1	English	44.1	50	1.50	
Mexico	5	6 (5%)	IPC	0	French	46.3	31	1.75	
Netherlands	1	1 (1%)	AEX	0	French	28.2	84	3.95	Code Tabaksblat, 2004
Spain	3	3 (2%)	IBEX 35	1	French	35.8	58	3.77	
Sweden	4	4 (3%)	OMXS 30	0	Scandinavian	29.6	89	2.72	
Switzerland	3	3 (2%)	SMI	0	German	33	86	3.90	
Taiwan	1	2 (1%)	TAIEX	1	German	-	62	-	
Turkey	3	4 (3%)	BIST100	0	French	41.9	42	2.32	New Commercial Code, 2013
England	3	5 (4%)	FTSE	1	English	34.8	81	4.19	
USA	47	59 (45%)	S&P 500	1	English	41.1	76	5.86	Sarbanes-Oxley Act, 2002
Total	109	132	Mean	0.54		38.05	69.65	4.56	

Notes: Table 2.1 lists the number of family firms, the number of death announcements, and the stock market index of each country, the name of the regulations introduced to increase the protection of shareholder, income inequality, corruption perception, and economic fitness indices across the sample.

Table 2.2: Definitions and Sources of Variables

Variable	Description	Sources
Shareholder challenge	takes on the value one if shareholders have either the right to challenge managerial decisions or the right to exit the company by requiring the company to purchase their shares and zero otherwise. The identification is named the ‘oppressed minority mechanism’ in La Porta <i>et al.</i> (1998) and is used as one of the six factors that constitute the Antidirector rights index.	La Porta <i>et al.</i> (1998)
Regulatory Change	takes on the value one after a country passes new regulation that better protects the rights of shareholders and zero before the introduction of the regulation.	Hand-collected: newspaper articles
Deceased executive	takes on the value one if the deceased was a top decision-maker (such as the CEO, president, CFO, COO, vice-president, or members of executive committees) and zero otherwise.	Hand-collected: newspaper articles and obituaries
Deceased founder	takes on the value one if the deceased is the founder and zero otherwise.	Hand-collected: firm websites, newspaper articles, and obituaries
Deceased founder-executive	identifies the deceased who are founders and are also at the helm of the company at the time of their death.	Hand-collected: annual reports, newspaper articles, and obituaries
Deceased in sole-founder firm	takes on the value one in firms where the deceased is the founder and the only person in the family that works in the firm at the time of his/her death, and zero otherwise.	Hand-collected: annual reports, newspaper articles, and obituaries
Dual-class structure	takes on the value one if the firm issues shares with different voting rights and zero otherwise.	Hand-collected: annual reports
Income inequality	measures income inequality of countries (World Bank, 2016). The measure calculates the extent to which income distribution deviates among individuals or households within an economy deviates from a perfectly equal distribution. The identification is named ‘Gini index’ by World Bank. The index ranges from 0 (perfect equality) to 100 (perfect inequality).	World Bank (2015)
Corruption perception	measures the perceived corruption level of the public sector in a country (Transparency International, 2015). The identification is named “corruption perception index (CPI)” by Transparency International. It ranges from 0 (highly corrupt) to 100 (very clean).	Transparency International (2016)
Economic fitness	measures a country’s diversification and the ability to produce complex goods (World Bank, 2016). It is a proxy for economic development and is zero if the country is not economically fit.	World Bank (2016)
Developed	takes on the value one if the firm operates in developed countries, and zero otherwise.	United Nations (2014)
United States	takes the value one if the firm operates in the United States, and zero otherwise.	Family Business (2004) and University of St Gallen Center for Family Business (2015)
Legal origin	identifies the legal origin of the commercial code of each country.	La Porta <i>et al.</i> (1998)
Post-2008	takes the value one if the deceased passed away after 2008, and zero otherwise.	Obituaries
Children	counts the number of children of the deceased.	Newspaper articles and obituaries
Family complexity	an interaction variable calculated by multiplying the number of marriages with the number of children.	Newspaper articles and obituary notices
Financial firm	takes on the value one if the firm operates in the finance industry, and zero otherwise.	Bloomberg
Firm size	the log of book value of assets.	Bloomberg
ROE	net income divided by book value of equity (in the year before the death).	Bloomberg
Revenue growth	the percentage change in sales.	Bloomberg
Log firm age	the number of years that passed from the establishment of the firm.	Bloomberg
Leverage	the book value of liabilities divided by assets (in the year before the death).	Bloomberg

Table 2.3: Family Ownership

Panel A. Before and After the event

	Before the event (end of the previous year)	After the event (end of the event year)
Average family ownership (according to annual reports)	55.87%	55.46%

Panel B. Weak and strong shareholder protection

	Weak Shareholder Protection		Strong Shareholder Protection	
	Before	After	Before	After
Average family ownership (according to indices)	58.65%		50.18%	
Average family ownership (according to annual reports)	60.19%	60.71%	56.86%	55.93%

Notes: Table 2.3 summarizes the ownership of the family. Panel A presents the average family ownership gathered from annual reports before and after the death announcements. Panel B summarizes the average family ownership in environments with weak and strong shareholder protection.

Table 2.4: Means, Standard Deviations, and Correlations

	Correlations																			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
(1) AR (%)	1.0000																			
(2) CAR (%)	0.8524	1.0000																		
(3) Shareholder challenge	-0.0384	-0.1671	1.0000																	
(4) Regulation change	-0.1857	-0.0679	0.0382	1.0000																
(5) Founder	0.0150	0.1417	0.1490	0.0814	1.0000															
(6) Executive	-0.0572	-0.1213	0.0845	-0.0382	-0.0686	1.0000														
(7) Executive-Founder	-0.1507	-0.1134	0.1098	0.0822	0.2814	0.5691	1.0000													
(8) Sole-founder firm	-0.0106	0.0366	0.0537	-0.1460	0.1375	-0.0537	-0.0305	1.0000												
(9) Income inequality	-0.0324	-0.1868	0.6118	-0.1151	0.0329	0.0295	-0.0184	-0.2258	1.0000											
(10) Corruption perception	-0.0152	-0.0636	0.6443	0.1678	0.1087	0.0902	0.1012	0.1266	-0.0238	1.0000										
(11) Economic fitness	0.0754	-0.0731	0.1150	-0.1418	-0.1461	0.0201	-0.1039	-0.3457	0.5215	0.0630	1.0000									
(12) Dual-class share	0.1115	0.0871	0.0300	0.1904	-0.1157	0.1332	-0.0751	0.1505	-0.0200	0.0855	-0.0675	1.0000								
(13) Children	-0.2224	-0.2444	0.0536	-0.1161	0.1143	-0.0346	0.0262	0.2015	-0.0426	0.1758	0.0449	-0.0471	1.0000							
(14) Partner	-0.3195	-0.3913	0.0468	-0.1377	0.0022	-0.0468	-0.0850	0.2722	-0.0384	0.0525	-0.0418	0.1873	0.6236	1.0000						
(15) Family complexity	-0.4240	-0.4889	0.0751	-0.1804	0.0970	-0.0613	-0.0500	0.2183	0.0118	0.0947	0.0157	-0.0246	0.8264	0.8423	1.0000					
(16) Firm size	-0.0396	0.0175	-0.0367	0.1890	-0.0836	-0.0836	0.0120	-0.0366	0.0707	-0.1731	0.0220	0.1239	0.1513	0.1172	0.0413	1.0000				
(17) ROE	0.1237	0.1875	0.0454	-0.0046	-0.1439	-0.1581	-0.3807	0.0167	0.0387	0.1479	-0.0058	-0.0393	-0.0023	0.1006	0.0348	0.0301	1.0000			
(18) Growth revenue	-0.0044	0.0762	-0.1487	-0.1558	0.1064	-0.0829	-0.0689	0.0528	-0.1084	0.1402	0.1882	-0.0973	0.1892	0.0383	0.0803	0.0512	0.2892	1.0000		
(19) Firm age	0.1371	0.0773	-0.4322	0.0251	-0.5441	-0.0471	-0.1988	-0.1428	-0.2449	-0.1949	0.1748	0.1789	-0.0367	0.0891	-0.0196	-0.0401	0.0775	-0.1194	1.0000	
(20) Leverage	-0.1507	-0.1154	-0.2230	0.1258	0.1641	-0.0582	0.2206	0.0104	-0.1789	-0.2263	-0.1349	-0.0508	0.2282	0.2814	0.2250	0.2577	-0.3112	-0.0522	-0.0377	1.0000

Notes: Table 2.4 reports descriptive statistics and correlations for all the variables.

Table 2.5: Cross-Country Distribution of Firm Industry

Country	Arts, Entertainment, and Recreation	Financial Activities	Information	Manufacturing	Natural Resources and Mining	Other	Professional and Business Services	Trade, Transportation, and Utilities	Total
Canada	3	0	1	2	0	0	0	1	7
Chile	0	0	0	2	0	0	0	0	2
Denmark	0	0	0	0	0	1	0	0	1
Finland	0	0	0	1	0	0	0	0	1
France	2	0	0	5	0	1	0	1	9
Germany	0	0	0	5	0	0	0	0	5
Greece	0	0	0	0	1	0	0	0	1
Hong Kong	0	2	0	1	0	0	0	0	3
India	0	0	0	3	1	0	0	0	4
Indonesia	0	0	0	1	0	0	0	0	1
Israel	0	0	0	0	2	0	0	0	2
Italy	0	0	0	3	1	0	0	0	4
Japan	0	0	0	0	0	0	1	0	1
Korea	0	0	0	3	0	0	0	0	3
Malaysia	0	1	0	0	0	0	0	0	1
Mexico	1	0	0	2	0	0	0	3	6
Netherlands	0	0	0	1	0	0	0	0	1
Spain	1	2	0	0	0	0	0	0	3
Sweden	0	3	0	0	0	0	0	1	4
Switzerland	0	0	0	2	0	0	0	1	3
Taiwan	0	0	0	0	2	0	0	0	2
Turkey	0	4	0	0	0	0	0	0	4
England	1	0	0	0	1	0	0	3	5
USA	4	13	2	20	2	10	2	6	59
Total	12	25	3	51	10	12	3	16	132
Percentage	9.09%	18.94%	2.27%	38.64%	7.58%	9.09%	2.27%	12.12%	100%

Table 2.6: Abnormal Returns and Cumulative Abnormal Returns in Subsamples

Panel A. Full sample						
	AR			CAR		
	Mean		t-score	Mean		t-score
Full sample	0.58**		2.06	0.74*		1.67
Panel B. Subsamples classified using binary variables						
	No	Yes	t-score	No	Yes	t-score
Shareholder challenge?	1.31	0.27*	1.72	2.25	0.11**	2.24
Regulatory change?	1.43	-0.07**	2.08	1.79	-0.11**	1.68
Executive?	0.48	1.07	-0.79	0.59	1.48	-0.75
Founder?	0.58	0.57	0.03	0.33	1.16	-0.93
Executive-founder?	0.63	-0.35	0.84	0.85	-1.02	1.01
Sole-founder firm?	0.59	0.34	0.23	0.75	0.63	0.07
Financial Firms?	0.65	0.27	0.53	0.70	0.93	-0.20
Developed?	0.77	0.52	0.36	1.74	0.47	1.17
Post-2008?	0.83	0.22	1.09	1.04	0.31	0.82
United States?	0.69	0.43	0.47	1.36	-0.02	1.57
Panel C. Subsamples classified using the median of continuous variables						
	≤median	>median	t-score	≤median	>median	t-score
Children	0.57	0.61	-0.07	0.33	1.18	-0.93
Partners	0.72	0.07	0.91	1.04	-0.55	1.40
Family complexity	0.37	1.12	-1.18	0.25	1.82	-1.56

Notes: Table 2.6 report the mean of *abnormal returns* and *cumulative abnormal returns* in the full sample and subsamples. Panel A shows full sample mean of abnormal and cumulative abnormal returns. Panel B of Table 2.6 splits the sample into subsamples according to the binary variables of *shareholder challenge*, *regulatory change*, *executive*, *founder*, *executive-founder*, and *sole founder firm*. Panel C of Table 2.6 reports abnormal returns and cumulative abnormal returns in subsamples split in two according to the number of children, the number of partner and the family complexity. *, **, and *** indicate statistical significant at 10%, 5% and 1% level, respectively.

Table 2.7: Regressions of Cumulative Abnormal Returns on Governance Mechanisms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Shareholder Challenge	-2.14**	-	-2.04**	-1.99	-1.92*	-2.44*		
		2.15**						-12.46**
	(2.18)	(2.39)	(2.19)	(1.59)	(1.97)	(1.79)		(2.32)
Regulatory Change				-1.78**			-2.42**	
				(2.02)			(2.38)	
Executive		3.10	3.16	3.34	1.90	0.14	0.23	-0.87
		(1.42)	(1.46)	(1.29)	(0.94)	(0.15)	(0.15)	(0.47)
Founder		1.91**	1.62**	2.09**	1.92*	3.19**	3.55**	1.38
		(2.34)	(2.19)	(2.34)	(1.77)	(2.50)	(2.43)	(0.90)
Executive-Founder		-	-6.08**	-7.39*	-4.57*	-3.37**	-1.95	
		5.70**						0.35
		(2.03)	(2.08)	(1.87)	(1.96)	(2.22)	(0.75)	(0.11)
Sole Founder Firm		-0.70	-0.29	-1.19	1.07	5.42***	0.12	-1.11
		(0.67)	(0.15)	(0.46)	(0.51)	(3.34)	(0.04)	(0.32)
Children			1.12**	1.31**	1.16**	1.20***	1.76***	1.19**
			(2.51)	(2.40)	(2.51)	(2.93)	(3.08)	(2.12)
Family Complexity			-	-	-	-	-	
			0.45***	0.56***	0.47***	0.56***	0.71***	-0.63***
			(3.10)	(4.31)	(3.59)	(5.38)	(4.76)	(4.04)
Size					0.27	-0.09	1.49***	0.31
					(0.75)	(0.37)	(3.34)	(0.74)
ROE					0.03	0.04	0.04**	0.04
					(1.01)	(1.58)	(2.11)	(0.98)
Revenue Growth					0.01	0.01	-0.03	0.02
					(0.45)	(0.31)	(0.96)	(0.70)
Firm Age					0.23	1.65	1.66	0.65
					(0.25)	(1.58)	(1.20)	(0.54)
Leverage					-0.02	0.01	-0.06*	-0.02
					(1.04)	(0.56)	(1.68)	(0.39)
Income Inequality						0.04	0.07	-0.80**
						(0.23)	(0.38)	(2.06)
Economic Fitness						-0.10	-0.30	1.6
						(0.32)	(0.76)	(1.51)
Corruption Perception						0.05	-0.03	-0.12
						(0.93)	(0.74)	(1.17)
Dual-Class Share						0.28		
						(0.26)		
Industry: Arts, Entertainment, and Recreation							-0.16	-0.44
							(0.05)	(0.18)
Industry: Financial Activities							-3.7	-2.87
							(1.17)	(0.87)
Industry: Information							-2.37	-4.02
							(0.86)	(1.29)
Industry: Manufacturing							0.82	-2.16
							(0.34)	(0.66)
Industry: Natural Resources and Mining							-1.84	-2.09
							(0.63)	(0.43)
Industry: Other							-2.58	-2.34
							(0.89)	(0.85)
Industry: Professional and Business Services							3.17	4.36
							(0.80)	(0.86)
Year: 1989								3.72*
								(1.94)
Year: 1990								-9.40***
								(4.21)
Year: 1992								-1.97
								(0.79)
Year: 1993								-2.28
								(0.92)
Year: 1995								-0.91
								(0.36)
Year: 1996								1.27
								(0.51)
Year: 1997								9.47***
								(4.38)
Year: 1998								-3.01
								(1.02)
Year: 1999								-1.35
								(0.75)
Year: 2000								2.15
								(0.69)
Year: 2001								5.83

Table 2.7 (cont'd)

Year: 2002								(1.56)
								1.89
Year: 2003								(0.33)
								1.08
Year: 2004								(0.45)
								3.96
Year: 2005								(1.36)
								-1.09
Year:2006								(0.45)
								-2.32
Year: 2007								(1.20)
								1.52
Year: 2008								(0.34)
								0.84
Year: 2009								(0.39)
								-2.45
Year: 2010								(0.52)
								-0.78
Year: 2011								(0.28)
								0.58
Year: 2012								(0.31)
								-0.47
Year: 2013								(0.20)
								-2.95
Year: 2014								(0.97)
								2.15
Year: 2015								(0.56)
								-0.35
Country: Canada								(0.12)
								1.24
Country: Denmark								(0.41)
								-16.6***
Country: France								(3.00)
								-31.1***
Country: Germany								(4.42)
								-5.17
Country: Greece								(1.07)
								-22.7***
Country: Israel								(3.47)
								0.57
Country: Italy								(0.09)
								-30.0***
Country: Mexico								(3.98)
								-20.3***
Country: Spain								(4.18)
								-18.49*
Country: Sweden								(1.92)
								-16.8***
Country: Turkey								(3.34)
								-24.7***
Country: England								(4.30)
								-1.06
Legal origin: French								(0.33)
								11.74
Legal origin: Scandinavian								(1.43)
								-13.9***
Constant	2.25***	1.19*	-0.41	0.35	-3.23	-12.67	-17.20	(3.57)
	(2.65)	(1.76)	(0.39)	(0.30)	(0.79)	(1.14)	(1.47)	18.72
R ²	3.71	9.15	25.55	36.71	31.57	42.70	63.97	(0.88)
Observations	132	132	126	92	111	90	78	107

Notes: Table 2.7 reports the results of regressions of 3-day cumulative abnormal returns on variables related to shareholder protection, deceased identity, the family, and controls. *, **, and *** indicate statistical significant at 10%, 5% and 1% level, respectively.

Table 2.8: Robustness Test with Alternative Shareholder Protection Proxies

	1	2	3	4	5	6
Antidirector Rights	-0.49* (1.67)	-0.42 (1.26)				
Combined Index			1.15* (1.72)	1.65** (2.27)		
Rule of Law					-1.63** (2.40)	-1.49* (1.76)
Deceased Executive	3.28** (2.20)	2.26 (1.37)	2.99** (2.00)	1.88 (1.15)	2.97* (1.91)	2.92* (1.77)
Deceased Founder	1.87* (1.97)	2.52** (2.15)	2.00** (2.10)	2.68** (2.32)	1.78* (1.84)	1.86 (1.48)
Deceased Executive- Founder	-6.01** (2.50)	-4.68* (1.81)	-5.89** (2.46)	-4.59* (1.80)	-6.74*** (2.84)	-6.28** (2.47)
Size		0.33 (1.51)		0.48 ** (2.28)		0.05 (0.20)
ROE		0.01 (0.53)		0.02 (0.71)		0.01 (0.52)
Revenue Growth		0.01 (0.49)		0.02 (0.48)		0.01 (0.58)
Log firm age		0.91 (0.94)		0.84 (0.89)		0.17 (0.17)
Leverage		-0.04 (1.40)		-0.04 (1.56)		-0.02 (0.83)
Constant	1.56 (1.17)	-4.19 (0.79)	-2.73 (1.77)	-10.16** (2.00)	2.16* (1.79)	1.71 (0.29)
Observations	132	117	132	117	102	96
Adjusted R2	4.54%	3.61%	4.67%	6.66%	10.33%	5.21%

Notes: *Antidirector Rights* is a measure of shareholder rights protection (La Porta *et al.*, 1998). The index aggregates to a maximum of six (highest level of shareholder protection) when the legal code satisfies all six measures of shareholder rights. We combine the *anti-director rights* index and *WB index* to develop a new measure (henceforth the *combined index*) of the extent to which the legal code protects shareholder rights. It ranges from one (highest shareholder protection) to three (lowest shareholder protection). The *rule of law* is a time-varying indicator of the agents' confidence in the rules of the society such as contract enforcement, property rights, the police, and the courts. It is one of the six indicators of country-level governance quality (Kaufmann *et al.*, 2011). *, **, and *** indicate statistical significant at 10%, 5% and 1% level, respectively.

Table 2.9: Robustness Tests with Internal Governance Factors

	1	2	3	4	5	6	7	8
Shareholder Challenge	-2.39* (1.80)	-2.59* (1.86)	-2.84* (1.68)	-2.97* (1.72)	-3.58* (1.87)	-3.33* (1.97)	-2.02* (1.73)	-2.51* (1.71)
Duality	1.38 (1.51)	1.64* (1.69)				1.33 (1.20)		1.50 (1.49)
Family Percentage			6.89 (1.48)	6.54 (1.37)	1.37 (0.22)			
Family Ownership					0.05 (1.75)	0.05* (1.97)		
Control							-0.81 (0.44)	0.75 (0.48)
Deceased Executive	-0.57 (0.42)	-0.86 (0.61)	-0.97 (0.64)	-1.06 (0.68)	-1.66 (0.95)	-1.22 (0.79)		-1.09 (0.75)
Deceased Founder	1.32 (1.42)	1.26 (1.04)	0.99 (0.68)	0.96 (0.66)	-0.65 (0.37)	0.31 (0.22)		1.16 (0.94)
Deceased Executive-Founder	*2.77 (1.26)	-1.59 (0.70)	-2.28 (0.89)	-2.34 (0.91)	-1.81 (0.65)	-1.60 (0.66)		-1.45 (0.63)
Deceased in Sole Founder Firm	5.96 (1.36)	3.08 (0.61)				2.91 (0.54)		3.13 (0.61)
Children	0.86** (2.55)	0.83** (2.31)	0.77* (1.84)	0.79* (1.86)	0.98* (1.90)	0.88** (2.10)		0.84** (2.26)
Family Complexity	-0.53*** (5.97)	-0.55*** (6.08)	-0.55*** (5.46)	-0.55*** (5.44)	-0.58*** (5.13)	-0.57*** (5.74)		-0.56*** (6.00)
Size		-0.23 (0.92)	-0.37 (1.27)	-0.42 (1.32)	-0.47 (1.34)	-0.31 (1.03)	0.27 (1.15)	-0.26 (1.01)
ROE		0.04** (2.04)	0.04* (1.84)	0.04* (1.74)	0.05* (1.99)	0.05** (2.23)	0.02 (0.78)	0.04** (2.01)
Revenue Growth		0.01 (0.34)	0.02 (0.57)	0.02 (0.60)	0.03 (1.00)	0.02 (0.75)	0.01 (0.45)	0.01 (0.34)
Log firm age		0.50 (0.54)	0.31 (0.31)	0.043 (0.41)	-0.12 (0.11)	0.16 (0.16)	-0.24 (0.26)	0.60 (0.63)
Leverage		0.04 (1.38)	0.05 (1.37)	0.05 (1.41)	0.07* (1.86)	0.06* (1.91)	-0.03 (1.19)	0.04 (1.38)
Income Inequality	0.12 (0.83)	0.12 (0.79)	0.10 (0.67)	0.14 (0.78)	0.20 (1.01)	0.19 (1.04)		0.11 (0.74)
Corruption Perception	0.08* (1.82)	0.09* (1.74)	0.07 (1.32)	0.08 (1.36)	0.10 (1.49)	0.10* (1.68)		0.09* (1.73)
Economic Fitness	-0.05 (0.15)	-0.11 (0.33)		-0.17 (0.41)	-0.12 (0.26)	-0.03 (0.07)		-0.14 (0.41)
Constant	-9.46 (1.42)	-11.94 (1.24)	-9.20 (0.86)	-10.46 (0.94)	-13.44 (1.12)	-16.19 (1.51)	2.70 (0.53)	-12.55 (1.27)
Observations	88	86	74	74	63	73	101	84
Adjusted R2 (%)	32.14%	34.01%	34.19%	33.24%	36.87%	37.62%	0.63%	33.12%

Notes: *Duality* indicates whether CEO and/or chairman roles are combined in the firm. It takes on the value one when the roles are combined and zero otherwise. *Family Percentage* measures the percentage of family-member directors on the board. *Family Ownership* measures the ownership stake of the family. *Control* takes on the value one if the family firm's CEO and/or chairman is a family member at the time of the death and zero otherwise. *, **, and *** indicate statistical significance at 10%, 5%, and 1% levels, respectively.

Table 2.10: Robustness Tests with Alternative Methods

	Cumulative abnormal return calculated by market- adjusted model	Cumulative abnormal return calculated by mean-adjusted model	Abnormal return calculated by market model	Abnormal return calculated by market- adjusted model	Abnormal return calculated by mean-adjusted model
Shareholder Challenge	-0.1911*** (4.32)	-0.2442*** (5.31)	-11.4314*** (5.11)	-0.1059*** (4.78)	-0.1249*** (5.53)
Executive	-0.0179 (0.87)	-0.013 (0.58)	0.6322 (0.43)	0.0028 (0.18)	0.0074 (0.43)
Founder	0.004 (0.24)	0.0185 (1.19)	1.5122 (1.53)	0.0117 (1.15)	0.0173 (1.58)
Executive-Founder	0.0172 (0.51)	-0.0071 (0.20)	-1.7234 (0.79)	-0.0093 (0.42)	-0.0247 (1.00)
Sole Founder Firm	-0.018 (0.51)	-0.0139 (0.40)	-3.2769 (1.59)	-0.0291 (1.42)	-0.024 (1.09)
Children	0.013** (2.20)	0.0089 (1.47)	0.6215 (1.61)	0.0069* (1.78)	0.0043 (1.01)
Family Complexity	-0.0071*** (4.45)	-0.0054*** (3.25)	-0.3277*** (2.80)	-0.0037*** (3.37)	-0.0028** (2.33)
Size	0.0033 (0.68)	0.0036 (0.78)	-0.0066 (0.02)	0.0004 (0.10)	0.0006 (0.16)
ROE	0.0004 (0.90)	0.0003 (0.79)	0.0196 (0.93)	0.0003 (1.12)	0.0003 (1.17)
Revenue Growth	0.0002 (0.56)	0.0003 (1.25)	0.0041 (0.27)	0 (0.16)	0.0002 (0.97)
Firm Age	0.0053 (0.37)	0.0116 (0.87)	0.8796 (0.88)	0.0075 (0.74)	0.0121 (1.19)
Leverage	-0.0001 (0.18)	-0.0003 (0.67)	-0.0009 (0.03)	0.0000 (0.01)	-0.0002 (0.53)
Income Inequality	0.0119*** (4.22)	0.0132*** (4.02)	0.4658*** (3.02)	0.0046*** (2.96)	0.0051*** (3.29)
Economic Fitness	0.0054 (0.97)	0.0083 (1.48)	0.3431 (0.74)	0.0027 (0.66)	0.0025 (0.47)
Corruption Perception	-0.0021** (2.09)	-0.0024** (2.22)	-0.3065*** (3.77)	-0.0027*** (3.31)	-0.0029*** (3.47)
Industry: Arts, Entertainment, and Recreation	0.0091 (0.31)	0.0064 (0.24)	1.6229 (0.70)	0.0228 (0.93)	0.0214 (0.92)
Industry: Financial Activities	-0.0299 (0.89)	-0.0167 (0.57)	-1.5267 (0.80)	-0.0165 (0.85)	-0.0093 (0.49)
Industry: Information	-0.0354 (1.03)	-0.0325 (0.96)	-1.2178 (0.55)	-0.0122 (0.56)	-0.0113 (0.46)
Industry: Manufacturing	-0.0218 (0.64)	-0.0261 (0.74)	-1.4868 (0.63)	-0.0123 (0.51)	-0.0206 (0.81)
Industry: Natural Resources and Mining	-0.014 (0.28)	-0.026 (0.50)	-3.6955 (1.07)	-0.0319 (0.93)	-0.0477 (1.31)
Industry: Other	-0.0124 (0.43)	-0.0258 (0.90)	-0.4009 (0.20)	0.0038 (0.20)	-0.0064 (0.31)
Industry: Professional and Business Services	0.0536 (1.00)	0.0237 (0.41)	0.5096 (0.11)	0.0107 (0.26)	-0.0003 (0.01)
Year: 1989	0.0462** (2.22)	0.02 (0.89)	5.3915*** (3.67)	0.0556*** (4.26)	0.0468*** (3.05)
Year: 1990	-0.1085*** (4.74)	-0.0932*** (3.54)	-1.9666 (1.31)	-0.0288** (2.16)	-0.0161 (0.96)
Year: 1992	-0.0302 (1.19)	-0.0471 (1.61)	1.3405 (0.73)	0.0098 (0.66)	0.021 (1.22)
Year: 1993	-0.0268 (1.02)	-0.0405 (1.52)	0.8054 (0.54)	0.0049 (0.35)	0.0041 (0.25)
Year: 1995	-0.0041 (0.15)	-0.0357 (1.41)	0.4187 (0.28)	0.006 (0.40)	-0.0086 (0.53)
Year: 1996	0.0062 (0.22)	-0.0125 (0.50)	1.5202 (0.89)	0.0116 (0.70)	0.0089 (0.45)
Year: 1997	0.086*** (3.48)	0.061*** (2.80)	4.9868*** (3.61)	0.0466*** (3.36)	0.0252* (1.71)
Year: 1998	-0.0258 (0.74)	-0.0474 (1.37)	-0.9251 (0.40)	-0.0097 (0.41)	-0.0136 (0.56)
Year: 1999	-0.0082 (0.38)	-0.0283 (1.41)	0.4371 (0.30)	0.0047 (0.39)	-0.0022 (0.16)
Year: 2000	0.0102 (0.31)	-0.0075 (0.25)	1.6274 (0.93)	0.0075 (0.42)	0.0084 (0.51)
Year: 2001	0.0656* (1.67)	0.078* (1.85)	-2.1816* (1.67)	-0.0183 (1.31)	-0.0162 (1.12)
Year: 2002	0.0249 (0.44)	0.0169 (0.29)	4.6042 (1.19)	0.0477 (1.25)	0.0587 (1.41)
Year: 2003	0.0009 (0.04)	-0.0289 (1.11)	1.1908 (0.71)	0.0072 (0.42)	-0.0033 (0.19)
Year: 2004	0.0546* (1.67)	0.0042 (0.11)	2.9802 (0.71)	0.0294 (0.42)	0.0216 (0.19)

Table 2.10 (cont'd)

	(1.78)	(0.14)	(1.36)	(1.35)	(1.00)
Year: 2005	-0.0068 (0.27)	-0.0283 (1.07)	0.6129 (0.38)	0.0043 (0.29)	-0.0061 (0.33)
Year:2006	-0.0316 (1.45)	-0.0429** (2.01)	-0.925 (0.77)	-0.015 (1.15)	-0.0111 (0.92)
Year: 2007	0.0112 (0.24)	0.0026 (0.05)	2.8045 (1.29)	0.0224 (1.09)	0.0242 (1.06)
Year: 2008	0.0065 (0.25)	-0.0186 (0.77)	-2.1565 (1.19)	-0.02 (1.21)	-0.0268* (1.68)
Year: 2009	-0.0095 (0.17)	-0.0304 (0.59)	0.1817 (0.07)	0.0088 (0.28)	0.0138 (0.47)
Year: 2010	-0.0107 (0.36)	-0.0394 (1.39)	2.0915 (1.13)	0.014 (0.79)	0.021 (1.11)
Year: 2011	0.0022 (0.11)	-0.0167 (0.71)	1.2151 (1.12)	0.0087 (0.83)	0.0043 (0.27)
Year: 2012	-0.0136 (0.54)	-0.024 (0.90)	0.4533 (0.25)	-0.0022 (0.13)	-0.0019 (0.10)
Year: 2013	-0.0341 (1.23)	-0.0537 (1.66)	-0.5616 (0.25)	-0.0069 (0.37)	-0.0139 (0.59)
Year: 2014	0.0179 (0.43)	0.0025 (0.06)	1.2661 (0.41)	0.0111 (0.37)	0.0101 (0.33)
Year: 2015	-0.0048 (0.15)	-0.0251 (0.78)	1.5043 (0.62)	0.0112 (0.45)	0.0109 (0.45)
Country: Canada	0.1421*** (3.60)	0.1627*** (3.85)	7.3525*** (2.55)	0.0678** (2.42)	0.0746** (2.51)
Country: Denmark	0.2542*** (5.19)	0.313*** (5.29)	8.7072** (2.25)	0.0878** (2.21)	0.1038 (2.43)**
Country: France	-0.0782** (2.11)	-0.1414*** (3.92)	-9.6777*** (4.34)	-0.0854*** (3.95)	-0.1036*** (4.01)
Country: Germany	-0.0948 (1.33)	-0.0849 (1.43)	-4.7525 (1.39)	-0.0531 (1.60)	-0.0406 (1.08)
Country: Greece	-0.1257* (1.72)	-0.1144 (1.39)	-10.5705* (1.80)	-0.0903 (1.51)	-0.0992 (1.51)
Country: Israel	0.0072 (0.15)	0.0132 (0.26)	-1.312 (0.42)	0.0147 (0.45)	0.0019 (0.05)
Country: Italy	-0.1774*** (2.65)	-0.2089*** (3.03)	-15.7727*** (3.43)	-0.1441*** (3.30)	-0.1473*** (3.13)
Country: Mexico	-0.1119 (1.49)	-0.1266 (1.63)	-12.0123** (2.58)	-0.1055** (2.29)	-0.1267** (2.52)
Country: Spain	-0.329*** (6.21)	-0.3961*** (7.49)	-25.7312*** (7.00)	-0.2378*** (6.55)	-0.2604** (6.74)
Country: Sweden	-0.0034 (0.07)	-0.0127 (0.25)	-1.9266 (0.59)	-0.0182 (0.56)	-0.0278 (0.88)
Country: Turkey	-0.0186 (0.32)	-0.0618 (1.06)	-2.8222 (0.62)	-0.0223 (0.47)	-0.054 (1.22)
Country: England	-0.0448 (1.20)	-0.0952*** (2.96)	-2.283 (1.16)	-0.0162 (0.93)	-0.0289 (1.30)
Legal origin: French	-0.2899*** (4.44)	-0.3716*** (5.80)	-20.4173*** (4.94)	-0.1885*** (4.52)	-0.2431*** (5.92)
Legal origin: Scandinavian	0.1056** (2.45)	0.1075** (2.63)	5.8661** (2.11)	0.0617** (2.05)	0.053 (1.89)*
Constant	-0.2085 (0.98)	-0.2012 (0.87)	8.9305 (0.56)	0.0631 (0.37)	0.0728 (0.42)
R ²	36	39	23	25	25
Observations	107	107	107	107	107

CHAPTER 3

GENDER PERCEPTIONS AND THE VALUATION OF FAMILY FIRMS

3.1. Introduction

Investors' collective gender stereotypes may color their trading activity when evaluating managerial decisions and a firm's prospects. Gender biases may affect the costs and availability of financing, in turn affecting investment decisions and growth. Extensive literature investigates how gender biases affect the hiring process (Arrow, 1973; Bilimoria, 2000; Ryan & Haslam, 2005), payoffs (Steinberg, 1990), compensation (Adams, S., Gupta, A., Haughton D., & Leeth, J., 2007; Kanter, 1977), and firm valuation (Abdullah, İsmail, & Nachum, 2016). We contribute to this literature and examine how gender biases may affect investor perceptions in pricing family firms in the context of an exogenous shock, a death in the family. We examine family firms to minimize the candidate pool because family firms are most likely to select an intra-family succession to transfer firm leadership.

The death of a family member generates uncertainty about how involved the family will be in the firm, and inheritance disputes would increase this uncertainty. Children from different marriages may further strain family relations. The complexity of family relations shapes investor perceptions about the likelihood and magnitude of disputes. We measure the complexity of family relations along two dimensions, the number of children and the number of marriages. Investors react negatively to the potential for inheritance disputes since abnormal returns around the death are significant and decrease with the interaction of the number of children interacted and the number of marriages the deceased had. Furthermore when we control for the gender of the progeny, investors perceive male, but not female, progeny as potential instigators of unrest.

Investors' gender biases about leadership and conflict resolution styles might drive the results. First, investors might believe that a leadership transition from father to daughter is smoother than a transition from father to son (Haberman & Danes, 2007; Smythe & Sardeshmukh, 2013). Second, investors might perceive daughters as unlikely successors (Barnes, 1988; Berenbeim, 1984; Wang, 2010). Regression analysis confirms that gender plays a role in how investors view the likelihood and severity of the family conflict. We present evidence suggesting that investors perceive male progeny as the instigators of conflict and price the expected loss in firm value.

This paper contributes to the literature in several ways. First, we explore how investors perceive and react to the complex web of relations in a family. Lansberg (1999) defines family complexity as the number of family members and the kind of relationships established between them. He points out the negative effect of family complexity on family firms' performance. Ibrahim, Soufani, & Lam (2001) measure the complexity by

the number of offspring from multiple marriages and present an anecdotal examination of the family complexity's detrimental effect during succession. In comparison, our study first examines investors' perception of family complexity. We find evidence for the negative perception of investors regarding family complexity. Second, we examine the investor perspective using an exogenous shock, a death in the family. Various factors might catalyze the transition of the leadership position to the next generation. However, using death as an exogenous shock, we eliminate the succession-triggering factors also affecting investors' firm valuation.

Last, our study documents investors' exclusion of female progeny. The literature on investors' gender biases mainly focuses on investors' reactions to female appointments (Lee & James, 2007; Pastore, Tommaso & Ricciardi, 2017) and financing opportunities available to female entrepreneurs (Brush, 2018; Balachandra, 2020). However, the literature overlooks the importance of investors' valuation of prospective firm leaders. The candidate pool of upper-echelon positions is an essential part of human capital. Thus, investors' valuation of candidates may affect their expectations and perceptions regarding the firm's future performance. This study addresses the literature gap on the effect of investors' gender biases on firm valuation.

3.2. Theory And Hypothesis Development

3.2.1. Death in the family, relationship conflict, and investor perceptions

The death of a family member can potentially change the relationships in the family and how the family members affect decision making in the firm. The death may cause structural change in the family and the firm, regardless of whether the deceased was the

founder or a family member who was not actively involved in the firm. On the one hand, losing a family member might also mean losing valuable human capital for the firm if the deceased was an executive. Family members who work in the firm as executives enhance firm performance by supplying exceptional employee commitment (Donnelly, 1988; Horton, 1982), well-established connections (Bunkanwanicha & Wiwattanakantang 2009; Faccio 2009; Karaevli & Yurtoglu, 2018), and specific tacit knowledge (Sirmon & Hitt, 2003). Madden et al. (2012) examine investor reactions to sudden executive deaths in family and non-family firms and observe the detrimental effect of executive deaths on stock returns. On the other hand, family members in the upper echelon might be the source of agency problems arising from the conflict between family and outsider shareholders (Berle & Means, 1932; Fama, 1980; Jensen & Meckling, 1976; Tanyeri Günsur & Alp, 2022). Hence, investors might perceive an executive's death as positive news because of the dilution in ownership concentration (Slovin & Sushka, 1993) and the increase in takeover bids (Slovin & Sushka, 1993). Tanyeri Günsur and Alp (2022) show that investors perceive the death of a family member who held an executive/monitoring position or was retired as a value-enhancing event.

Family firms are more prone to choose an intra-family succession to transfer leadership (Ballinger & Marcel, 2010; Giambatista, Rowe, & Riaz, 2005). Chua, Chrisman, & Sharma (2003) use surveys and identify families' primary concern as managing family involvement in the firm. Intra-family succession is one way of maintaining family involvement in management. Succession potentially changes the delicate balance between the firm and the family. The literature attributes the family firm succession process to utmost importance (Avloniti, Iatridou, Kaloupsis & Vozikis, 2014; Chua et

al., 2003; Glover, 2014; Ibrahim, Soufani & Lam, 2001). Chua, Chrisman, and Sharma (2003) refer to choosing a successor as one of family firms' most critical issues. The conflicts arising from the succession process might hurt firm performance (Levinson, 1971).

Intra-family succession is a complex process that might harm familial relationships but is essential to the sustainability and growth of family firms (Friedman, 1991). Chua et al. (2003) point out a secondary concern as maintaining healthy relationships between family members. However, choosing a successor from within the family can create family relationship conflicts. The nature of the relationship between siblings significantly impacts the success of successions since the process may trigger and amplify existing rivalries (Avloniti et al., 2014; Griffeth, 2006). The invisibility of daughters in succession may exacerbate perceived gender issues (Glover, 2014).

Blindness to female successors can cause conflict and tension in the firm and the family. As a result, succession because of an executive family member's death might lead to severe intra-family strife, triggering an increase in intra-family agency costs and resulting in destructive consequences for family firms (Eddleston & Kellermanns, 2007).

The family's complexity is a factor that catalyzes intra-family conflict during succession (Ibrahim et al., 2001; Lambrecht & Lievens, 2008). Gimeno Sandig, Labadie, Saris, and Mayordomo (2006) define family complexity as “the number of family members and the kind of relationships established among them, the number of generations alive at a given point in time.” Ibrahim, Soufani, and Lam (2001) examine the succession process upon the death of Quebecor's founder, Pierre Peladeau, who married three times and had seven children. The complexity of the Peladeau family created severe intra-family

conflicts after the founder's death. Children from his different marriages engaged in family feuds and filed lawsuits. Relationship conflicts demotivate employees and decrease the performance of all parties involved in the conflict, especially in family firms (Eddleston & Kellermanns, 2007; Kellermanns & Eddleston, 2004). Another example of a family dispute arising from family complexity is the El Periodico de hoy, a family newspaper firm. When the transition to the second generation has completed, one of the brothers took control of the firm (became CEO) by taking advantage of the complicated ownership structure (Holan & Sanz, 2006). The CEO brother expropriated minority shareholders by tunneling firm resources using cash CEO compensation while decreasing dividends. The family feud may end up with expropriation of outside shareholders wealth.

To summarize, the death of a family firm executive changes relationships within the family and the firm. As a result of losing a family member who is also an executive, succession may be the number one agenda for the family and the firm. The number of family members and the kind of relationships established among them may create a complicated family relationship. Then, intra-family succession may generate disputes among family members. Conflict within the family would negatively affect the functioning and performance of the family firm. Outsiders may anticipate the potential agency cost arising from relationship conflict upon a family member's death and price the firm accordingly.

3.2.2. Gender, investor perceptions, and the valuation of family firms

To understand the impact of the gender concept on the investors' investment behavior, we review the literature on firms with females in the upper echelon. This section

examines empirical findings related to accounting-based and market-based performance of female-managed firms and gender perception of intra-family conflict.

3.2.2.1. The role of gender in decision-making and firm performance

Some studies indicate that male and female executives have different managerial behaviors (Ford & Richardson, 1994; Jianakoplos & Bernasek, 2007). Ford and Richardson (1994) assert that females tend to have more ethical concerns than male workmates. The risk aversion characteristics of female managers differentiate them from male workmates in financial and investment decisions (Eckel & Grossman, 2008; Jianakoplos & Bernasek, 2007). Female executives tend to undertake fewer acquisitions and issue debt less frequently than male executives (Huang & Kisgen, 2013). However, the characteristics of female executives do not necessarily cause them to make sub-optimal choices or hurt firm values (Jianakoplos & Bernasek, 2007).

Assessment of firm performance refers to measuring the effectiveness and efficiency of firm actions (Neely, Gregory, & Platts, 1995). The corporate finance literature uses accounting-based and market-based performance measures to assess and improve management. Accounting-based measures reveal backward-looking outcomes such as profitability and growth (Vij & Bedi, 2016). Accounting-based performance measurements are 'objective' indicators since they use data that conform to legally enforceable accounting standards. (Haslam, Ryan, Kulich, Trojanowski & Atkins, 2010; Santos & Brito, 2012; Vij & Bedi, 2016). Performance measures such as Return on Equity (ROE), Return on Asset (ROA), Return on Investment (ROI), Return on Sales (ROS), and Earnings per Share (EPS) inform about profitability at a given time.

Many studies explore how female executives affect firm performance using accounting measures (Adams et al., 2009; Ararat et al., 2010; Catalyst, 2004; Dezsö & Ross, 2012; Erhardt, Werbel & Shrader, 2003; Haslam et al., 2010; Khan & Vieito, 2013; Shrader, Blackburn & Iles, 1997). On the one hand, Dezsö and Ross (2012) and Haslam et al. (2010) find no relationship between the (presence or) percentage of women on board and profitability measures such as return on equity (ROE) and return on asset (ROA). Adams et al. (2009) also examine the relationship between the female CEO and Earnings per Share (EPS), failing to find any association. On the other hand, Khan and Vieito (2013) find a positive correlation between female CEOs and ROA. Catalyst (2004) and Ararat et al. (2010) observe that firms with the highest representation of female management teams outperform firms (using ROE) with the lowest female representation. Erhardt, Werbel, and Shrader (2003) examine the relationship between female representation on board and two performance measures, ROA and ROI. They find a positive correlation between female representation and both performance measures. Shrader, Blackburn, and Iles (1997) show that firms with large percentages of women in management realize a higher return on sales (ROS), ROA, ROI, and ROE. In summary, the literature finds mixed evidence, suggesting that gender diversity in the upper echelon of management at best increases and at worst does not decrease performance.

3.2.2.2. The role of gender perceptions in the investors' valuation of the firms

Accounting-based firm performance measures consider backward-looking outcomes, while stock-based performance measures reveal forward-looking investor expectations and perceptions regarding future performance (Ganguli & Agrawal, 2009). Traditional financial models assume investors are rational. Investors evaluate publicly available

information and price the firm based on how they perceive the information to affect value. The no-arbitrage principle ensures that the market will correct short-run divergences from fundamental value (Black & Scholes, 1973; Merton, 1973). Behavioral financial models relax the rationality assumption and allow investors to behave irrationally (De Long, Shleifer, Summers, & Waldmann, 1990; Odean, 1998; Tversky & Kahneman, 1974). Emotional and cognitive biases cause people to make irrational investment decisions (Tversky & Kahneman, 1974). Chen et al. (2004) and Rietz (2005) show that collective individual investors' biased decisions create mispricing in the market using an experimental design. They conclude that markets are prone to violating the no-arbitrage rule. Moreover, Stango, and Zinman's (2019) survey shows that biases are not an anomaly affecting only a few investors. Instead, 98 percent of Americans have biases affecting their investment decisions.

Investors may downplay female executives' managerial skills, and gender stereotyping may affect their investment decisions (Balachandra, 2020; Lee & James, 2007; Haslam et al., 2010). In the Upper Echelon Theory, Hamrick and Mason (1984) suggest that the senior management team determines all the strategic decisions related to daily organizations, investment choices, and capital structure. Then, executive characteristics shape the firm's performance. Gender is an integral part of human identity. The social perspective of Feminist Theory argues that females tend to analyze circumstances and make strategic decisions differently from males (Carter & Williams, 2003). Investors associate executive roles with masculine traits and perceive them as 'manly' jobs (Eagly, Karau, & Makhijani, 1995; Oakley, 2000). Firms with gender diversity in the upper echelon may make a 'feminine' impression. Investors' gender biases may engender uncertainty regarding the firm.

The appointment of a female CEO or board member creates skepticism regarding the firm's future performance, even when the female appointee is equipped with higher-level human capital than male candidates (Stroh, Brett, & Reilly, 1992). Lee and James (2007) analyze the stock market reaction to CEOs' appointments from 1990 to 2000. Abnormal returns around appointments of female CEO are more negative than the announcements of male CEOs. Pastore et al. (2017) investigate market reaction to the board appointment of a female director in 67 Italian publicly traded firms and report a statistically significant negative abnormal return on the announcement days. They interpret the result as a collective gender bias of investors rather than the managerial quality of female CEOs and board members because they control for factors such as experience and education.

Investors price female-managed firms with valuation discount, even though the accounting-based performance of these firms is no different from the firms managed by male colleagues (Adams et al., 2009; Dezsö & Ross, 2012; Haslam et al., 2010), if not better on behalf of females (Catalyst, 2004; Erhardt et al., 2003; Khan & Vieito, 2013). Haslam et al. (2010) show that females' existence on a board decreases the firm value by 37 percent. However, they find no significant relationship between female representation on boards and the accounting-based performance measures such as ROE and ROA of their sample firms. Abdullah, İsmail, and Nachum (2016) examine Malaysian firms and find that firms with at least one female director on their boards have lower Tobin's Q, even though they have higher ROA. In summary, female representation on boards creates economic value: however, investors discount the positive impact of female presence.

3.2.2.3. How do gender perceptions affect investor reaction to relationship conflict?

Intra-family succession rather than professional appointment is more likely to occur after the death of an executive family member (Ballinger & Marcel, 2010; Giambatista et al., 2005) since family involvement is the number one priority in family firms (Chua et al., 2003). Furthermore, intra-family succession is more likely to occur when the predecessor has a son, even if there are qualified daughters with higher levels of education and better work experience (Ahrens, Landmann, & Woywode, 2015; Keating & Little, 1997). Family firms' predecessors consider sons the natural successors for leadership roles (Barnes, 1988; Berenbeim, 1984) and prefer to sell a firm over placing daughters in leadership positions (Stavrou, 1999). For example, LG Electronics Inc.'s rule is to refer succession to the eldest in the male line (Gyung-Hwa, 2019). Koo Bon-moo, the founder's grandson, adopted his younger brother's son to uphold the succession rule even though he has two daughters. Literature shows that fathers prefer sons over daughters for succession (Dahl & Moretti, 2008) and, in most cases, exclude daughter candidates for leadership positions (Wang, 2010).

Figure 3.1 models how potential intra-family relationship conflict affects firm value. Potential intra-family conflicts shape investor perception about the conflict with the moderating effect of family complexity and descendent gender. Investors might assume that sons, but not daughters, from different marriages, create intra-family conflict during the succession since they do not consider daughters as prospective firm leaders. They price the family firm by considering the possible family conflict arising from the male progeny (Avloniti et al., 2014; Eddleston & Kellermanns, 2007; Griffeth, 2006). Thus, we hypothesize that investors perceive the male progeny as the instigators of conflict

and price the expected loss in firm value.

Hypothesis: The deceased's male offspring from multiple marriages negatively affects investor reactions to the death of a family member.

3.3. Research framework and sampling strategy

3.3.1. Sampling strategy for identifying family firms and compiling deaths in the family

We compile our sample of family firms using the lists: “The World’s 250 Largest Family Business” (Family Business, 2004), “The 2015 EY and University of St Gallen Global Family Business Index” (University of St Gallen Center for Family Business, 2015) and “The 2019 EY and University of St Gallen Global Family Business Index” (University of St Gallen Center for Family Business, 2019). “The World’s 250 Largest Family Business” categorizes a firm as a family firm if the family holds at least 32 percent of voting rights. “The 2015 EY and University of St Gallen Global Family Business Index” and “The 2019 EY and University of St Gallen Global Family Business Index” define a publicly listed firm as a family firm if the family controls at least 50 percent of the shares (and voting rights) and is involved in management.

We exclude privately held family firms because we need stock market data. We searched Lexis-Nexis for obituaries of founders and family members in firms listed on the abovementioned indices. We gathered the last annual report before the obituary to understand if the deceased held an executive position in the firm or was retired. The filters result in 140 death announcements of founders and family members.

We read obituaries, newspaper articles, and press releases to collect information about the children and marriages of the deceased. We failed to find information on the progeny in four and marriages in three events. The resulting sample includes 140 death announcements of founders and family members who were executives in 116 family firms across 25 countries. Table 3.1 lists the number of family firms, the number of death announcements, and the stock market index of each country in the sample.

3.3.2. Measuring changes in firm value and investor reaction to deaths in the family

We conduct an event study to measure investor reaction to the death of executive family members. The event study assumes that investors rationally evaluate new information releases and trade based on their perception of how the information will affect the firm. Trading activity determines prices (and returns) that reflect the consensus opinion of all investors. Thus, abnormal stock returns measure an event's economic impact over a short period.

We obtain daily adjusted stock returns of the firms and daily adjusted returns of the market indices from Bloomberg. We use Bloomberg to compile major stock index returns for sample countries and stock returns for sample firms. We follow Brown and Warner (1985) and calculate abnormal returns by differencing realized returns from a benchmark of expected returns in the days around the event. Expected returns are estimates of returns that shareholders would have realized if the event had not taken place. We estimate expected returns using the market model in the one-year estimation and 20-day event window as in Equation (1).

$$\textit{The market model of abnormal returns: } R_{i,t} = \alpha_i + \beta_i R_{m,t} + \varepsilon_{i,t} \quad (1)$$

where $R_{i,t}$ is the realized return of stock i at time t , and $R_{m,t}$ is the return of market index at time t . Abnormal returns ($A_{i,0}$) are calculated by differencing realized returns on event day from expected returns as shown in Equation (2):

$$A_{i,0} = R_{i,0} - (\hat{\alpha}_i + \beta_i R_{m,0}) . \quad (2)$$

Three-day cumulative abnormal returns (CAR) sum up the abnormal returns on the event date and the two days following the event day. Table 3.2 presents descriptive statistics of three-day cumulative abnormal returns following the death. On average, the abnormal return on the day of the death announcement is 0.55, and the three-day cumulative abnormal return is 0.60. The positive market reaction shows that investors perceive the announcement of a family member's death as an incident that increases the firm value.

3.3.3. Proxies for measuring family complexity and gender perception

Our hypothesis predicts how descendent gender affects investor perception of family complexity. Two variables measure gender-controlled family complexity. First, *family complexity (son)* is the interaction term of the number of sons and marriages of the deceased family member. Similarly, the second measure, *family complexity (daughter)*, is the interaction term of the number of daughters and the number of marriages of the deceased. The variables, *sons*, and *daughters*, count the number of sons and daughters of the late family member, respectively. We use biological sex to identify the gender of potential successors. The average number of children of the deceased is 3.7, half of which are males. The deceased in our sample had 1.3 marriages, on average.

Table 3.2 reports descriptive statistics on variables related to investor reaction, family

complexity, deceased characteristics, firm characteristics, succession plan, shareholder right protection, and macroeconomic indicators. Seventy-seven percent of the sample deceased married only once, and 20 percent were married more than once. Four percent of the deceased had no children, and six percent had only one child. In 13 percent of the cases, the deceased had no sons. Thirty-one percent of the deceased in the sample had one son, and 51 percent had more than one son. Twenty-one percent of the sample covers family member deaths who had no daughters, and 28 percent had one daughter.

We also control for the existence of a succession plan at the time of the death. Intra-family succession is a potential consequence of the death of a family member from the upper echelon. A succession plan is the most critical factor in ensuring a successful succession process (Kesner & Sebor, 1994). Since it is a factor that potentially affects the investors' valuation, we also control for conscious organizational planning and preparation for an expected or unexpected change in the leadership role, namely the *succession plan*.

Tanyeri Günsür and Alp (2022) find that law as an external corporate governance mechanism, as well as the characteristics of the deceased, affect investor reaction upon the death of an executive family member. We use the *shareholder challenge*, *deceased executive*, *deceased founder*, and *deceased founder executive* variables as control variables for the characteristics of the deceased. The *shareholder challenge* is a dummy variable that shows whether shareholders have the right to challenge managerial decisions or the right to exit the company by requiring the company to purchase its shares. We use the ‘oppressed minority mechanism’ created by La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) to measure *shareholder challenge*. Seventy-one

percent of the sample firms operate in countries that enable shareholders to challenge corporate decisions. The *deceased executive* variable identifies the deceased who are top decision-makers (such as CEO, president, CFO, COO, vice-president, or members of executive committees). The *deceased founder* indicator shows whether the deceased is the founder. The *deceased founder-executive* variable identifies the deceased who are founders and also top decision makers at the time of their death. Table 3.3 reports that 47 percent of the deceased were founders, whereas only five percent were actively involved in management when they passed away. We use the information we collect from company websites, obituary notices, newspaper articles, and annual reports to construct the *variables for the deceased executive, deceased founder, and deceased founder executive*.

We include variables to control for the characteristics of sample firms. We compile financial statement data using Bloomberg. We lag firm-level variables by one year. *Revenue growth* is the percentage change in sales. *Leverage* is the ratio of debt to assets. *Firm Size* is the log of assets. *ROE* is net income divided by equity. Sample firms are large firms with 1.4 billion dollars, of which 56 percent is financed with debt. They realized average revenue growth of 6.7 percent and obtained a return on equity of 12 percent in the year before the death.

3.4. Results

Table 3.3 reports the correlation between the variables. The table shows that the correlations between CAR and variables are small. Not surprisingly, the most significant correlations are between the *number of children (sons and daughters)* and *family*

complexity (family complexity (son) and family complexity (daughter)). The *family complexity* variables are the *number of children (sons and daughters)* and the *number of marriages*. Since Pearson correlations of variables are high, multicollinearity may create a bias. However, we check vector inflation factors (VIF) for all regressions to ensure multicollinearity does not adversely affect estimates.

Table 3.4 reports the regression results of the three-day cumulative abnormal returns on measures of family complexity and control variables. The adjusted R-squares of the regressions range from seven to 42 percent. The first specification reports the base model for testing the effect of family complexity. Specification two includes the *succession plan* variable. The third model introduces controls for the country (*shareholder challenge*) and deceased characteristics (*deceased executive, deceased founder, and deceased founder executive*). Model four adds socioeconomic (*income inequality and corruption perception*), macroeconomic (*economic fitness*), and firm-related (*Revenue growth, leverage, firm size, and ROE*) control variables. The fifth specification includes country-fixed effect. The sixth model consists of all control variables, as well as the country and industry fixed effects. The coefficients for family complexity are negative and significant in all regressions. Negative coefficients show that family complexity negatively affects the stock market reaction upon the death of a family member. The positive and significant coefficients of *children* suggest that investors perceive the case of having many potential successors as good news.

Our hypothesis predicts that the deceased's male offspring from different marriages cause more adverse stock market reactions upon the death of a family member than the deceased's female offsprings. Table 3.5 exhibits the regression results of the three-day

cumulative abnormal returns on measures of gender-based family complexity and control variables. The adjusted R-squares range from 16 to 21 percent. The first and second specifications report the base model for our hypothesis. Specification three includes the *succession plan* variable. The fourth specification introduces controls for the country (*shareholder challenge*) and deceased characteristics (*deceased executive*, *deceased founder*, and *deceased founder executive*). Specification five adds socioeconomic (*income inequality* and *corruption perception*), macroeconomic (*economic fitness*), and firm-related (*Revenue growth*, *leverage*, *firm size*, and *ROE*) control variables. The sixth specification includes country fixed effect. The coefficients for the interaction term (*family complexity (sons)*) of the number of sons and marriages are significantly negative at all specifications.

The coefficients for the interaction term (*family complexity (daughters)*) of the number of daughters and number of marriages prove statistically insignificant when the specifications include *family complexity (sons)* and *family complexity (daughters)*. The negative coefficients for *family complexity (sons)* and the insignificant coefficients for *family complexity (daughters)* support our hypothesis. The positive and significant coefficients for *sons* suggest that investors appreciate an abundance of male successor candidates. However, coefficients for *daughter* variables prove insignificant.

Tables 3 and 4 report the negative effect of shareholder protection on investor reaction upon the death of a family member. Regression results also present a positive (negative) effect of the deceased's identity as a founder (founder holding executive positions) on investor reaction, which is in line with the literature (Tanyeri Günsur & Alp, 2022).

Table 3.4 and Table 3.5 report income inequality's positive and significant effect on the

investor reaction to the death of a family member. The coefficients of other control variables such as *succession plan*, *deceased executive*, *firm size*, ROE, *revenue growth*, *leverage*, *economic fitness*, and *corruption perception* prove insignificant.

We also use market-adjusted and mean-adjusted to calculate expected returns. Table 3.6 reports regression results of cumulative abnormal returns calculated by market-adjusted and mean-adjusted methods on measures of gender-based family complexity and control variables. All results remain qualitatively the same when we use the mean-adjusted model and the market-adjusted model to calculate expected returns.

3.5. Discussion, Limitations and Directions for Future Research

We explore how investors' conflict perception affects the value of family firms with the moderating effect of descendent gender and family complexity. Investors may anticipate the agency cost arising from potential family disputes and price the firm accordingly.

We propose that family complexity (measured by an interaction term of the number of children and marriages the deceased had) has an adverse effect on the market reaction upon a family member's death. We also hypothesize that the detrimental impact of family complexity is amplified if the deceased had sons. We test our hypothesis using a sample of 140 death announcements of founders and family members holding executive positions in 116 firms across 25 countries. The findings support our hypothesis that family complexity adversely affects the market reaction following a family member's death, especially if the deceased had a son.

The insignificance of the coefficients for the number of daughters interacted with the number of spouses implies that investors do not perceive daughters as troublemakers.

Two reasons might drive these results. First, investors might believe that the transition of leadership from father to daughter is easier when compared to the transition from father to son. The literature finds a smoother leadership transition when the successor is female (Haberman & Danes, 2007; Smythe & Sardeshmukh, 2013). Successors' desire to differentiate themselves from their predecessors, which results in a power conflict, is one source of intra-family conflict in family firms (Erikson, 1964; Rosenblatt, Mik, Anderson, & Johnson, 1985). Female successors may focus on intimacy and bonding rather than differentiation and separation (Erikson, 1964; Smythe & Sardeshmukh, 2013). As a result, father-daughter succession generally results in less conflict, better communication, and a higher level of collaboration than father-son succession (Haberman & Danes, 2007; Smythe & Sardeshmukh, 2013). If investors perceive both sons and daughters as unlikely successors but the male progeny as the instigators of conflict, we expect to observe the positive effect of daughters on investor reaction. However, the statistically insignificant effect of the number of the deceased's daughters on investor reaction shows that investors do not perceive the possibility of leadership transition from father to daughter as a factor that will affect firm value.

The second explanation builds upon the investors' biases about gender stereotypes (Haslam et al., 2010; Lee & James, 2007). Executive roles are associated with masculine traits and are seen as 'manly' jobs (Eagly, Karau, & Makhijani, 1995; Oakley, 2000). The rarity of females in the upper echelon sets female executives as having token status, which nurtures the gender stereotyping perception (Kanter, 1977; Powell & Butterfield, 2002). In particular, investors might assume that it is unlikely for the daughters to become successors and may not consider the managerial skills of female progeny when

pricing family firms.

Investors underprice female-managed firms even though they are not associated with lower ‘objective’ measures of performance (Abdullah et al., 2016; Haslam et al., 2010). Markets’ reactions to female executive appointments may reflect the collective gender biases of investors rather than the managerial quality of the appointee (Pastore et al., 2017). When the investors’ joint gender stereotypes shape investment decisions and trading activities, stock market reactions may reflect gender biases rather than investment quality.

Traditional gender biases affect decisions from hiring to investment (Abdullah et al., 2016; Adams et al., 2007; Arrow, 1973; Balachandra, 2020; Bilimoria, 2000; Brush, 2018; Kanter, 1977; Lee & James, 2007; Pastore et al., 2017; Ryan & Haslam, 2005; Steinberg, 1990). The first and most critical part of the action plan to overcome gender bias is to raise awareness of the presence of traditional gender role perspectives. This study contributes to a better understanding of the impact of gender bias on investment decisions. We hope to draw attention to how gender stereotyping bias affects firm valuation and the availability of financing options.

Our study shows the importance of gender diversity for valuation. We suggest that managers become more conscious of gender stereotyping to overcome the gender bias issue. In countries with no legal arrangements related to gender diversity, we recommend that firms take action to break ‘glass ceilings’ and eliminate gender role stereotyping. As the underrepresentation of females is an ethical issue that needs to be overcome, evidence suggests that gender diversity in firm management will often bring more remarkable firm performance (Catalyst, 2004; Erhardt et al., 2003; Khan & Vieito,

2013).

Our results present an image of the gender perspective of 25 countries, which includes developed and developing countries. Policymakers are introducing reforms to increase the representation of females in top management teams in some countries. Cambell and Miguez-Vera (2008) examine the investor perception of gender diversity in Spain after introducing the 'gender quota' imposed by legal arrangements. They find that the positive impact of gender diversity in the upper echelon of a firm is appreciated by investors as a result of the reform. Our findings support the necessity of reforms and rules to increase gender diversity in the upper echelon.

The sampling framework imposes limitations on the generalizability of the results. Our sample is representative of the most prominent family firms. It is also prone to survivorship bias since more than two-thirds of family firms do not survive after the founder passes away (Beckhard & Dyer, 1983). To investigate the effect of investor reaction upon the death of a family member, we need to inspect publicly traded family firms that survive throughout generations. We explain investors' indifference to female progeny with Kanter's token status. However, documenting the effect of a growing number of women in firms' top-level management would provide further support for our explanation. A longitudinal study on the impact of the increasing number of females in the upper echelon of firms' management on stock market reaction would be valuable for future research. We also do not know the education and experience level of daughters and/or sons. Future work that controls for education and experience would provide a deeper understanding of investors' gender bias.

Figure 3.1: Effect of Potential Relationship Conflicts on Firm Value

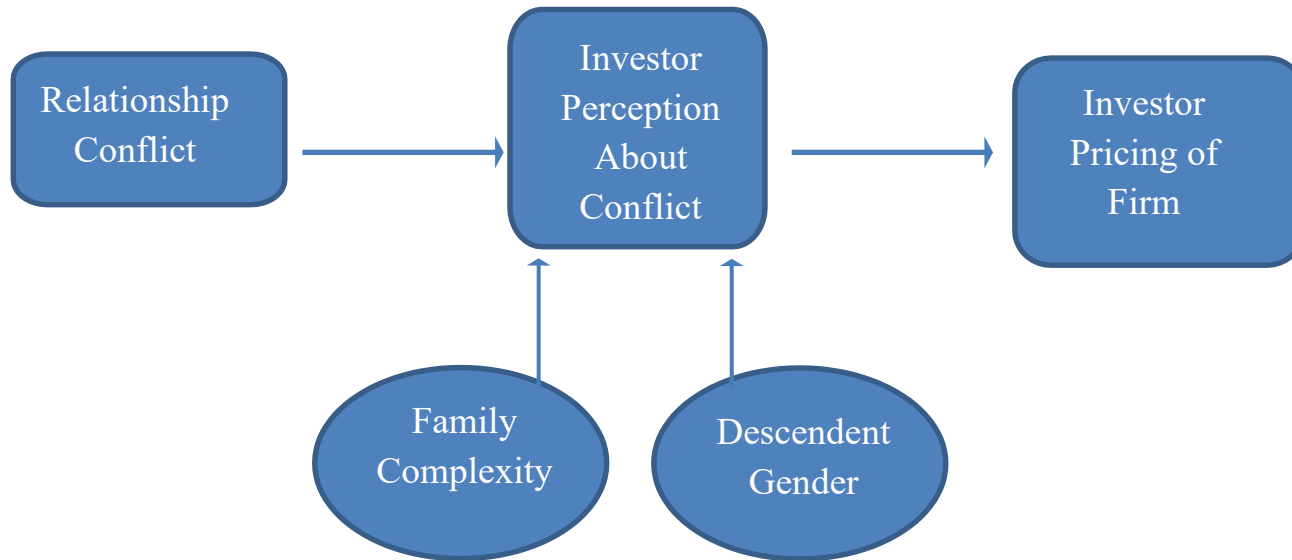


Table 3.1: Cross-country Distribution of Sample and Summary of Country-Level Variables

Country	Firms	Events	Stock Market Index	Shareholder Challenge	Legal Origin	Income Inequality	Perceived Corruption	Economic Fitness
Belgium	1	1 (1%)	BE20	0	French	27.6	77	4.33
Canada	6	7 (5%)	S&P/TSX60	1	English	32.7	82	1.50
Chile	2	2 (1%)	IPSA	1	French	44.4	66	0.43
Denmark	1	1 (1%)	OMXCGI	0	Scandinavian	28.2	90	2.44
Finland	1	1 (1%)	OMXHPI	1	Scandinavian	27.1	89	1.55
France	8	9 (6%)	CAC 40	0	French	31.9	69	5.10
Germany	3	4 (3%)	DAX 30	0	German	31.9	81	6.72
Greece	1	1 (1%)	D	0	French	35	46	1.26
Hong Kong	5	5 (4%)	HIS	1	English	-	75	-
India	4	4 (3%)	BSE SENSEX	1	English	-	38	3.80
Indonesia	1	1 (1%)	JCI	0	French	38.6	36	1.66
Israel	1	2 (1%)	MSCI	1	English	39	61	2.13
Italy	4	5 (4%)	FTSEMIB	0	French	35.2	44	5.59
Korea	4	6 (4%)	KOSPI	1	German	31.4	54	2.62
Malaysia	1	1 (1%)	KLCI	1	English	44.1	50	1.50
Mexico	5	5 (4%)	IPC	0	French	46.3	31	1.75
Netherlands	1	1 (1%)	AEX	0	French	28.2	84	3.95
Spain	3	3 (2%)	IBEX 35	1	French	35.8	58	3.77
Sweden	4	4 (3%)	OMXS 30	0	Scandinavian	29.6	89	2.72
Switzerland	4	4 (3%)	SMI	0	German	33	86	3.90
Taiwan	1	2 (1%)	TAIEX	1	German	-	62	-
Turkey	3	5 (4%)	BIST100	0	French	41.9	42	2.32
England	3	5 (4%)	FTSE	1	English	34.8	81	4.19
USA	47	59 (42%)	S&P 500	1	English	41.1	76	5.86
Total	109	132	Mean	0.54		38.05	69.65	4.56

Notes: Table 3.1 lists the number of family firms, the number of death announcements, and the stock market index of each country, the name of the regulations introduced to increase the protection of shareholder, income inequality, corruption perception, and economic fitness indices across the sample.

Table 3.2: Descriptive Statistics

	Observation	Mean	Std. Dev.	Min	Max
AR (%)	140	0.5488	3.1342	-14.4072	19.0166
CAR (%)	140	0.5996	4.9669	-23.9072	29.3495
Number of Children	140	3.7000	2.2141	0.0000	13.0000
Number of Sons	136	1.8897	1.3807	0.0000	7.0000
Number of Daughters	136	1.7721	1.5490	0.0000	9.0000
Number of Marriages	137	1.2920	0.7589	0.0000	5.0000
Family Complexity	137	5.4526	7.1804	0.0000	65.0000
Family Complexity (Sons)	133	2.7218	3.7343	0.0000	35.0000
Family Complexity (Daughters)	133	2.7143	4.1571	0.0000	30.0000
Succession Plan	116	0.5603	0.4985	0.0000	1.0000
Shareholder Challenge	139	0.7122	0.4544	0.0000	1.0000
Deceased Executive	136	0.1544	0.3627	0.0000	1.0000
Deceased Founder	140	0.4786	0.5013	0.0000	1.0000
Deceased Founder Executive	136	0.0515	0.2218	0.0000	1.0000
Income Inequality	129	37.9651	4.9835	27.1000	47.7000
Economic Fitness	133	4.4414	1.7662	0.4200	6.7200
Corruption Perception	138	68.9420	15.6866	31.0000	91.0000
ROE	125	12.2317	20.4598	-162.8107	56.8392
Revenue Growth	125	6.6614	20.8774	-81.7552	98.5870
Leverage	126	56.2152	19.7626	9.4085	92.8621
Firm Size	127	1.87	7255.044	0.385	46100.000

Table 3.3: Pearson Correlations of Variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
(1) AR (%)	1.00																					
(2) CAR (%)	0.78*	1.00																				
(3) Number of Children	-0.07	-0.02	1.00																			
(4) Number of Sons	-0.14	-0.06	0.72*	1.00																		
(5) Number of Daughters	-0.09	-0.08	0.79*	0.14	1.00																	
(6) Number of Marriages	-	-	0.38*	0.26*	0.34*	1.00																
(7) Family Complexity	0.18*	0.22*	0.75*	0.53*	0.61*	0.76*	1.00															
(8) Family Complexity (Sons)	-	-	0.68*	0.72*	0.33*	0.68*	0.91*	1.00														
(9) Family Complexity (Daughters)	0.34*	0.35*	0.72*	0.29*	0.77*	0.73*	0.93*	0.70*	1.00													
(10) Succession Plan	-	-	0.26*	0.28*	-	-	-	-	-	1.00												
(11) Shareholder Challenge	-0.02	-0.03	-0.07	-0.04	-0.04	0.00	-0.06	-0.08	0.05	0.15	1.00											
(12) Deceased Executive	-0.15	-0.16	0.09	0.15	0.03	-0.03	0.07	0.08	0.05	0.15	0.05	1.00										
(13) Deceased Founder	0.07	0.08	-0.12	-0.16	-0.11	-0.06	-0.08	-0.09	-	-	-0.06	1.00										
(14) Deceased Founder Executive	0.02	0.09	0.23*	0.22*	0.16	0.00	0.13	0.14	0.11	0.04	0.07	-0.12	1.00									
(15) Income Inequality	-0.08	-0.09	0.02	-0.03	0.05	0.00	-0.01	-0.03	0.00	0.07	-0.01	0.55*	0.25*	1.00								
(16) Economic Fitness	0.01	-0.03	0.13	0.07	0.14	-0.01	0.09	0.03	0.16	0.05	0.36*	0.04	0.10	0.04	1.00							
(17) Corruption Perception	-0.02	-0.09	-0.09	0.00	-0.10	-0.06	-0.02	0.01	-	0.13	0.19*	0.00	-0.16	-0.05	0.16	1.00						
(18) ROE	-0.13	-0.11	0.21*	-0.08	0.22*	0.01	-0.06	0.02	-	0.12	0.27*	0.03	-0.09	0.00	0.34*	0.41*	1.00					
(19) Revenue Growth	0.05	0.12	0.06	0.17	-0.07	0.09	0.07	0.09	0.03	0.10	0.01	-0.09	-0.04	-	0.18*	-0.02	-0.02	0.06	1.00			
(20) Leverage	-0.03	0.08	0.25*	0.33*	0.09	0.14	0.16	0.21*	0.10	0.14	0.03	0.04	0.06	0.10	-0.01	0.03	-0.03	0.29*	0.06	1.00		
(21) Firm Size	-0.07	-0.12	0.11	0.03	0.14	0.13	0.14	0.11	0.16	0.06	-	-0.05	-0.04	0.04	0.12	0.03	0.06	-	0.19*	0.06	1.00	
	0.13	0.06	0.13	0.11	0.05	0.03	0.03	0.04	0.02	0.06	0.11	-0.04	-0.09	-0.06	-	-	-	-	0.22*	0.06	0.0	1.0
															0.21*	0.31*	0.26*	-0.05	0.05	0.05	0.0	2

Notes: * indicates a significance of less than 5%

Table 3.4: Regressions of 3-day Cumulative Abnormal Returns on Family Complexity Measures

	1	2	3	4	5	6
Family Complexity	-0.42*** (3.19)	-0.44*** (3.03)	-0.44*** (2.96)	-0.50*** (3.63)	-0.45*** (3.14)	-0.50** (2.29)
Children	0.96** (2.55)	1.06** (2.31)	1.10** (2.28)	1.22** (2.28)	0.91** (2.06)	1.10* (1.93)
Succession Plan		-0.45 (0.6)	-0.16 (0.25)	-0.18 (0.22)	0.68 (0.89)	0.16 (0.19)
Shareholder Challenge			-2.25** (2.10)	-3.30* (1.99)	-4.31 (1.68)	-3.69 (1.14)
Deceased Executive			3.03 (1.14)	1.86 (0.83)	-0.03 (0.03)	0.68 (0.54)
Deceased Founder			1.69* (1.92)	1.76 (1.66)	2.80** (2.13)	3.01* (1.98)
Deceased Founder Executive			-5.98 (1.62)	-4.64* (1.78)	-2.96* (1.80)	-3.75 (1.58)
Firm Size				0.26 (0.79)	0.36 (1.06)	0.45 (1.13)
ROE				0.03 (1.01)	0.03 (1.32)	0.03 (0.93)
Revenue Growth				0.01 (0.56)	-0.00 (0.01)	0.00 (0.11)
Leverage				0.00 (0.02)	-0.02 (0.79)	-0.02 (0.7)
Income Inequality				0.16 (1.04)	0.36*** (3.08)	0.38*** (2.53)
Economic Fitness				-0.11 (0.36)	0.21 (0.38)	0.36 (0.54)
Corruption Perception				0.05 (1.11)	0.07 (1.22)	0.07 (1.03)
Country: Canada					5.10* (1.74)	4.34 (1.19)
Country: France					0.59 (0.22)	1.01 (0.30)
Country: Germany					0.46 (0.13)	0.94 (0.21)
Country: Indonesia					25.63*** (7.53)	24.36*** (6.00)
Country: Israel					-0.40 (0.15)	1.20 (0.30)
Country: Italy					3.52 (0.93)	4.33 (1.09)
Country: Malaysia					-4.62 (1.31)	-3.56 (0.84)
Country: Netherland					1.77 (0.65)	2.73 (0.68)
Country: Philippines					-1.59 (0.46)	-2.50 (0.63)
Country: Spain					2.27 (0.79)	2.29 (1.00)
Country: Switzerland					-2.02 (0.89)	-1.94 (0.52)
Country: Turkey					-2.09 (0.70)	-0.29 (0.09)
Country: England					5.18* (1.89)	4.33 (1.52)
Industry: Arts, Entertainment, and Recreation						0.02 (0.01)
Industry: Financial Activities						-3.07* (1.80)

Table 3.4 (cont'd)

Industry: Information						-2.99*
						(1.70)
Industry: Manufacturing						-1.86
						(1.67)
Industry: Natural Resources and Mining						-2.75
						(1.37)
Industry: Other						-4.06***
						(3.10)
Industry: Professional and Business Services						-1.86
						(0.40)
Constant	-0.68	-0.64	-0.22	-11.65	-21.57**	-22.79**
	(0.8)	(0.81)	(0.24)	(1.32)	(2.37)	(2.02)
Observations	137	115	111	95	95	95
Adjusted R2	15	15	20	19	42	41

Notes: The absolute value of t statistics is given in parentheses. ***, **, and * indicate a significance of less than 1%, 5%, and 10%, respectively.

Table 3.5: Regressions of 3-Day Cumulative Abnormal Returns on Measures for Family Complexity and Gender of Progeny

	1	2	3	4	5	6	7
Family Complexity (sons)	-0.73*** (3.69)	-0.88*** (2.92)	-0.91*** (2.79)	-0.94*** (2.87)	-0.93** (2.24)	-1.01** (2.53)	-1.10** (2.22)
Sons	1.20*** (3.66)	1.38*** (3.27)	1.42** (2.69)	1.44** (2.67)	1.49** (2.10)	1.87** (2.62)	1.95** (2.44)
Family Complexity (daughters)		0.12 (0.57)	0.15 (0.61)	0.17 (0.77)	0.07 (0.18)	0.06 (0.17)	0.06 (0.15)
Daughters		0.01 (0.03)	-0.01 (0.01)	-0.03 (0.07)	0.24 (0.43)	0.42 (0.64)	0.58 (0.65)
Succession Plan			-0.12 (0.19)	-0.14 (0.22)	0.06 (0.08)	0.37 (0.48)	-0.15 (0.17)
Shareholder Challenge				-1.55** (2.46)	-2.07** (2.09)	-4.81* (2.03)	-3.92 (1.32)
Deceased Executive				1.31 (0.85)	0.07 (0.08)	0.59 (0.59)	0.91 (0.77)
Deceased Founder				1.98** (2.38)	2.03* (1.88)	3.32** (2.51)	3.30** (2.29)
Deceased Founder Executive				-4.77 (1.59)	-3.38** (2.27)	-4.66*** (2.93)	-4.85** (2.06)
Firm Size					-0.08 (0.41)	0.55 (1.44)	0.59 (1.33)
ROE					0.03 (0.89)	0.03 (1.19)	0.02 (0.79)
Revenue Growth					0.01 (0.42)	-0.02 (1.65)	-0.01 (0.31)
Leverage					0.02 (0.94)	-0.04 (1.34)	-0.04 (1.09)
Income Inequality					0.04 (0.4)	0.41*** (3.34)	0.41** (2.66)
Economic Fitness					-0.11 (0.41)	0.38 (0.64)	0.51 (0.75)
Corruption Perception					0.05 (1.09)	0.10** (2.24)	0.09 (1.53)
Country: Canada						6.63** (2.08)	6.33 (1.53)
Country: France						1.45 (0.59)	1.69 (0.54)
Country: Germany						1.98 (0.56)	2.27 (0.55)
Country: Israel						0.53 (0.19)	2.31 (0.52)
Country: italy						4.99 (1.54)	5.40 (1.49)
Country: Malaysia						-4.39 (1.45)	-3.67 (1.07)
Country: Netherland						3.20 (1.28)	3.62 (0.95)
Country: Philippines						-1.37 (0.46)	-2.39 (0.66)
Country: Spain						0.83 (0.44)	1.10 (0.50)
Country: Turkey						-0.62 (0.32)	0.71 (0.33)
Country: England						6.71** (2.57)	5.57** (2.06)
Industry: Arts, Entertainment, and Recreation							-0.64 (0.30)
Industry: Financial Activities							-2.60 (1.50)
Industry: Information							-3.14 (1.48)
Industry: Manufacturing							-1.64 (1.13)
Industry: Natural Resources and Mining							-2.67 (1.11)
Industry: Other							-4.04***

Table 3.5 (cont'd)

Industry: Professional and Business Services							(2.85)
							-0.58
Constant	0.09	-0.20	-0.24	0.08	-4.84	-28.12***	(0.13)
	(0.24)	(0.35)	(0.35)	(0.11)	(0.65)	(2.75)	(2.26)
Observations	133	133	111	107	91	91	91
Adjusted R2	18	17	17	20	21	20	16

Notes: The absolute value of t statistics is given in parentheses. ***, **, and * indicate a significance of less than 1%, 5%, and 10%, respectively.

Table 3.6: Robustness Tests with Alternative Methods

	Cumulative-abnormal Return calculated by Market-Adjusted Model		Cumulative-abnormal Return calculated by Mean-Adjusted Model	
Family Complexity (sons)	-1.35*** (3.53)	-1.47*** (3.19)	-0.95** (2.19)	-0.99* (1.91)
Sons	0.28 (0.86)	0.25 (0.70)	-0.02 (0.05)	-0.02 (0.05)
Family Complexity (daughters)	2.18*** (2.91)	2.33*** (2.84)	1.80* (1.96)	1.74 (1.68)
Daughters	0.33 (0.54)	0.59 (0.67)	0.64 (0.94)	0.82 (0.90)
Succession Plan	-0.34 (0.44)	-0.81 (0.89)	0.40 (0.46)	-0.26 (0.27)
Shareholder Challenge	-4.75* (1.87)	-4.02 (1.24)	-6.68*** (3.05)	-4.67 (1.61)
Deceased Executive	0.4 (0.44)	0.97 (0.85)	-0.14 (0.12)	0.33 (0.26)
Deceased Founder	3.16** (2.38)	3.18** (2.17)	3.89** (2.41)	3.64* (1.94)
Deceased Founder Executive	-4.46*** (2.97)	-4.57* (2.00)	-6.06*** (3.13)	-6.68** (2.38)
Size	0.42 (1.06)	0.51 (1.07)	0.68* (1.70)	0.65 (1.38)
ROE	0.03 (1.15)	0.03 (0.80)	0.02 (0.81)	0.02 (0.56)
Revenue Growth	-0.02* (1.83)	-0.01 (0.48)	-0.03* (1.77)	0.00 (0.12)
Leverage	-0.02 (0.84)	-0.03 (0.74)	-0.05* (1.82)	-0.05 (1.54)
Income Inequality	0.36*** (2.86)	0.36** (2.17)	0.52*** (3.94)	0.52*** (3.35)
Economic Fitness	0.14 (0.23)	0.29 (0.39)	0.64 (1.14)	0.69 (0.99)
Corruption Perception	0.11** (2.39)	0.11* (1.75)	0.12*** (2.86)	0.09 (1.68)
Country: Canada	0.05 (1.59)	0.05 (1.06)	0.08** (2.57)	0.08* (1.82)
Country: France	0.03 (0.89)	0.03 (0.76)	-0.01 (0.27)	0.01 (0.33)
Country: Germany	-0.01 (0.29)	-0.01 (0.13)	0.02 (0.75)	0.04 (1.17)
Country: Israel	0.01 (0.40)	0.03 (0.59)	0.01 (0.44)	0.04 (0.84)
Country: Italy	0.05 (1.50)	0.05 (1.45)	0.03 (1.18)	0.05 (1.41)
Country: Malaysia	-0.04 (1.10)	-0.03 (0.67)	-0.02 (0.78)	-0.04 (1.10)
Country: Netherlands	0.01 (0.40)	0.02 (0.39)	0.03 (1.28)	0.05 (1.55)
Country: Philippines	-0.01 (0.15)	-0.01 (0.35)	-0.01 (0.41)	-0.03 (0.80)
Country: Spain	0.01 (0.30)	0.00 (0.00)	-0.01 (0.32)	-0.02 (0.68)
Country: Switzerland	-0.03	-0.03	-0.05***	-0.04

Table 3.6 (cont'd)

	(1.13)	(0.73)	(2.90)	(1.06)
Country: Turkey	-0.02	0.00	-0.02	-0.02
	(0.87)	(0.10)	(1.18)	(0.69)
Country: England	0.07***	0.05*	0.08***	0.06*
	(2.77)	(1.95)	(2.75)	(1.97)
Industry: Arts, Entertainment, and Recreation		0.01		-0.01
		(0.19)		(0.54)
Industry: Financial Activities		-0.03		-0.02
		(1.45)		(1.33)
Industry: Information		-0.03		-0.03*
		(1.50)		(2.02)
Industry: Manufacturing		-0.02		-0.03**
		(1.10)		(2.06)
Industry: Natural Resources and Mining		-0.02		-0.04*
		(0.88)		(1.75)
Industry: Other		-0.04**		-0.05***
		(2.36)		(4.75)
Industry: Professional and Business Services		0.01		-0.02
		(0.22)		(0.47)
Constant	-0.2464	-0.25*	-0.3384	-0.31**
	(2.39)**	(1.94)	(3.03)***	(2.34)
Adjusted R-squared	27	25	21	18
N	91	91	91	91

CHAPTER 4

ORGANIZATIONAL FORM AND SHAREHOLDER ACTIVISM

4.1. Introduction

This paper investigates the impact of organizational form on the likelihood of being targeted by shareholder activism. The family firm is one of the most common organizational forms in the market. Family firms have high ownership concentration and intense family involvement in management. Another difference between family and non-family firms is their non-pecuniary motives which cause the divergence in the interest of inside and outside shareholders. Non-pecuniary objectives of the family include creating an identity, maintaining control over the firm, supplying employment to family members, and survival of the family dynasty (Miller et al., 2013; Zellweger et al., 2012). Family members' prioritization of nonpecuniary objectives amplifies agency problems arising from the conflict of interest between insiders and outsider shareholders (Gomez-Mejia et al., 2007). Concentrated ownership and managerial involvement of families provide a fertile environment for agency problems resulting from prioritizing socioemotional wealth over shareholders wealth (Gomez-Mejia et al., 2007). Another consequence of the concentrated

ownership and family involvement in the management is disregarding some market-based monitoring mechanisms to exploit outsider shareholders (Berrone, Cruz, Gomez-Mejia, & Larraza-Quintana, 2010). Shareholder activism is one of the monitoring mechanisms exercised by outside shareholders. Outside shareholders use their voting power to affect corporate decisions when there is a conflict of interest between shareholders and managers. This study uses shareholder activism to examine agency conflicts between family and non-family firms.

The study relies on the combined list of Anderson, Duru and Reeb (2009) and Anderson, Reeb, and Zhao (2012). They categorize the 2,000 largest publicly traded, nonutility, and nonfinancial U.S. firms as a family firm if a family holds at least 5 percent ownership stake and non-family firm otherwise. We examine the effect of organizational form on the likelihood of being targeted by shareholder activism in the sample of 16,200 year-firm observations from 2001 through 2010. We measure shareholder activism with the 13D filings targeting the sample firms to change or influence corporate decisions. We also investigate whether performance and agency cost indicators change following shareholder activism.

Shareholder activism is a reaction to the agency conflicts between insiders and outsider shareholders. Concentrated ownership and family involvement in management may amplify agency costs resulting from prioritizing socioemotional wealth and disregarding market-based monitoring mechanisms to exploit outsider shareholders. In this case, family firms would be more subject to shareholder activism than non-family firms. Univariate and multivariate analysis results indicate that family firms are more likely to be targeted by shareholder activism.

This study aims to contribute to empirical research in organizational form and

agency theory by examining the likelihood of shareholder activism as a monitoring mechanism that targets family and non-family. One strand of the literature discusses the effect of the organizational form on the agency problems arising from the conflict of interest between different parties such as managers and shareholders, minority shareholders and majority shareholders, or managers and debtholders (Faccio & Lang, 2002; Villalonga & Amit, 2010; Young et al., 2008; Purkayastha, Veliyath & George, 2019). Another strand of the literature that focuses on shareholder activism refers to agency problems as a motive for shareholder activism but does not explore whether the likelihood of being targeted for activism differs in family and non-family firms (Brav et al., 2008; Byun & Kim, 2013; Klein & Zur, 2013). This study uses agency theory as a building block to develop and test our hypothesis on how organizational form impacts a firm's likelihood of being targeted by shareholder activism.

The plan of the paper is as follows. Section 2 summarizes the theory and develops the hypothesis. Section 3 presents the sample and methodology. Section 4 summarizes and discusses the results, while Section 5 concludes.

4.2. Theory And Hypothesis Development

4.2.1. Agency Problems

Coase (1937) defines the firm as a system of legal relationships built to ensure the agents' prioritization of shareholders' interests. On the one hand, traditional finance literature assumes that firms' objective is to maximize shareholders' wealth. On the other hand, management (the agent) does not always act in the best interest of shareholders (the principal) since he/she derives utility not only from increasing firm value but also from using the firm resources for his/her own comfort (Jensen &

Meckling, 1976). The main reasons underlying the conflict between stakeholders are disagreement in the firms' resource allocation (Jensen, 1986) and the optimal managerial effort devoted to the firm (Jensen & Meckling, 1976). Divergence of the interest of principal and agent creates agency costs, including agency bonding expenditures, monitoring expenditures, and residual loss (Jensen & Meckling, 1976).

The separation of control and ownership creates agency costs because of the divergence in the interests of managers and shareholders (Jensen & Meckling, 1976). However, there are market-based control mechanisms to monitor managers and prevent them from wasting firm resources (Shleifer & Vishny, 1989). Monitoring mechanisms such as managerial labor markets (Fama, 1980), banks (Stiglitz, 1986), capital markets (Easterbrook, 1984), and the market for corporate control (Jensen & Ruback, 1983) motivates non-owner managers to prioritize shareholders' best interest rather than their own. However, inside shareholders may make corporate decisions by ignoring some market-based monitoring mechanisms.

The literature highlights other monitoring mechanisms such as independent board of directors and the debt financing to limit agency costs (Ang et al., 2000; Byrd & Hickman, 1992; Cadbury, 1992; Rosenstein & Wyatt, 1990). The board of directors is one of the most critical monitoring mechanisms to alleviate agency problems (Bryd & Hickman, 1992; Cadbury, 1992; Rosenstein & Wyatt, 1990). Bryd and Hickman (1992) and Rosenstein and Wyatt (1990) show that the percentage of non-executive directors on the board positively relates to the firm performance. The separation of CEO and chairman roles increases board independence and constrains powerful insiders who may exploit the firm for their private benefits (Cadbury, 1992). Jensen and Meckling (1976) point to debt as another monitoring mechanism.

Lenders devote some resources to limit agency costs and motivate organizational efficiency. By examining 1,708 small US firms, Ang et al. (2000) show that debt is an effective way of monitoring. However, the inadequacy of the board of directors and debt engenders other mechanisms to correct agency problems.

4.2.2. Shareholder Activism

Shareholder activism is a monitoring mechanism employed by shareholders (Brav et al., 2008; Byun & Kim, 2013; Klein & Zur, 2013). It refers to shareholders using their voting power to affect corporate decisions when there is a conflict of interest between shareholders and agents (Grossman & Hart, 1980). Gillian and Stark (1998) describe shareholder activism as a “continuum of responses to corporate performance.” An activist investor is an investor who wants to change the status quo by using voting power. Buying and selling the firm shares is the least aggressive way of shareholder activism. With the help of these transactions, active shareholders reflect their opinion regarding corporate decisions as a price change. At the middle of the continuum, activist shareholders gather block-holding to influence the corporate decisions. At the other extreme part of the continuum, activist shareholders seize the control of the firm by hostile takeovers and force the firm to make fundamental changes. In summary, shareholder activism aims to decrease agency conflict between insiders and outside shareholders (Gillian & Stark, 1998).

Shareholder activism literature examines the characteristics of target firms (Barber, 2006; Becht, Franks, Mayer & Rossi, 2008; Brav, Jiang, Partnoy & Thomas, 2008; Byun & Kim, 2013; Karpoff, 2001; Klein & Zur, 2009). Table 4.1. summarizes the literature on shareholder activism. Karpoff (2001) in his literature survey concluded that shareholder activism targets large firms with high institutional ownership and

poor stock returns. Barber (2006) examines the firms targeted by The California Public Employees' Retirement System's (CalPERS) activism through shareholder proposals. Barber (2006) finds that institutional activists use activism to increase shareholder wealth and gain social benefits such as decreasing pollution.

Brav et al. (2008), Becht et al. (2008), Klein and Zur (2009), and Greenwood and Schoor (2009) investigate the characteristics of the firms targeted by activist funds. Brav et al. (2008), Klein and Zur (2009), and Greenwood and Schoor (2009) measure shareholder activism by the type of Schedule 13D filings. Brav et al. (2008) find activist hedge funds target highly profitable (high ROA) firms with low market value. They also tend to target firms takeover defenses in place. Klein and Zur (2009) show that activist hedge funds target profitable firms with cash flow-related agency costs, although they state their strategies as investing in distressed firms. Other private investors tend to target firms in financial distress. Greenwood and Schor (2009) find that activist funds target small firms with low market-to-book value. Becht et al. (2008) investigate shareholder activism exercised by the Hermes U.K. Focus fund, a trustee of one U.K. Pension fund. They observe that the fund intervenes in firms' investment and dividend strategies by using shareholder activism. The fund also demands to make changes in executive management. Byun and Kim (2013) differentiate their analysis by using the sample of shareholder activism targeting Korean business group-affiliated firms. They find that business group owners transfer resources of publicly traded firms to business group affiliated other firms for their personal interest. Shareholder activism targets these firms to prevent the exploitation of outside shareholders.

4.2.3. Organizational Form

Organizations are legal entities formed to achieve missions based on a vision. Coase (1937) claims that firms emerge to minimize the transaction costs of production and exchange. The characteristics of organizations' residual claim on the cash flow and the corporate control determine the organizational form. The family firm is one of the most common organizational forms (Gersick et al., 1997; Villalonga & Amit, 2006). Anderson and Reeb (2003a) define a family firm as a firm where the founder or descendants hold shares and/or are present on the board of directors. Anderson, Reeb, and Zhao's (2012) definition of family firms requires the family has at least five percent of the ownership stake.

The literature does not clearly define family firms, yet, family firm definitions mostly require family ownership (Anderson & Reeb, 2003a; Anderson et al., 2012; Chrisman, Chua, & Sharma, 2005). Families mostly hold a majority ownership stake in family firms (La Porta et al., 1999; Madden et al., 2012). La Porta et al. (1999) examine public family firms across 27 countries and find that, on average, family members own 53 percent of the firm shares. Using a sample of 190 public companies from the US, Madden et al. (2012) show that family member ownership is, on average, 54 percent.

The literature also points to intense family involvement in management (Sirmon & Hitt, 2003; Ward & Handy, 1988; Zahra, 2005). Ward and Handy (1988) examine 147 privately controlled US family firms. CEOs are founders in 29 percent and family members in 32 percent of the case. Feranita, Ruiz-Palomo, and Dieguez-Soto (2015) examine 1,721 Spanish manufacturing family firms. They find that at least one family member participates in the firm management in 43 percent of their sample

firms as of 2010. Ray, Mondal, and Ramachandran (2017) investigate the managerial involvement of 303 Indian family firms listed on the S&P Bombay Stock Exchange (BSE) 500 Index. They show that family members hold executive positions in 66 percent of the sample firms. In summary, family members are insider block-holders in family firms.

Many studies discuss the differences between family and non-family firms (Berle & Means, 1932; Chrisman *et al.*, 2004 and 2012; Fama & Jensen, 1985; Jensen & Meckling, 1976; La Porta *et al.*, 2000; Morck *et al.*, 1988; Sharma *et al.*, 2001; Sirmon & Hitt, 2003). However, scholars have not reached a consensus on the optimum organizational form. The nonpecuniary motives of family member managers are another point differentiating family firms from non-family firms.

Altruism is one of the reasons for nonpecuniary concerns (Schulze, Lubatkin, & Dino, 2003). Families engage in altruistic behaviors (Schulze *et al.*, 2003) and keep control of the firm even at the expense of organizational efficiency (Gomez-Mejia *et al.*, 2007, Jones *et al.*, 2008). Gomez-Mejia *et al.* (2007) introduce Socioemotional Wealth (SEW) model to explain the nonfinancial choices of family firms. The model names the family's nonpecuniary needs such as identity, maintaining control over the firm, and survival of the family dynasty (Miller *et al.*, 2013; Zellweger *et al.*, 2012) as socioemotional wealth. Family members prioritize socioemotional wealth over shareholders' financial wealth (Berrone *et al.*, 2010). The prioritization of socioemotional wealth increases the divergence of interests between family and outsider shareholders.

4.2.4. Organizational Form and Agency Theory

Divergence of the interest of insider and outsider shareholders creates a set of agency

costs, including outsider shareholder bonding expenditures, monitoring expenditures, residual loss resulting from tunneling, and related-party transactions (Faccio & Lang, 2002; Young et al., 2008). The atomization of ownership amplifies the exploitation of outsider shareholders (La Porta et al., 1999; Madden et al., 2012; Young et al., 2008; Villalonga & Amit, 2010). Corporate decisions influenced by the family may misallocate firm resources and hurt shareholders' financial wealth (Young et al., 2008). The controlling family may use their power to affect corporate decisions at the expense of outsider shareholders (Barclay & Holderness, 1989). Zhang and Cao (2015) show that agency costs in family firms increase with the family ownership stake. High family ownership increases the probability of rising principal-principal agency conflict arising from the divergence of the interest between insider and outsider shareholders (Purkayastha, Veliyath & George, 2019).

As the Socio Emotional Wealth approach suggests, family firms aim to preserve families' socioemotional wealth and prioritize families' socioemotional wealth over the financial objectives of the shareholders (Gomez-Mejia, Makri, & Kintana, 2010). Nonpecuniary goals of the family cause the divergence in the interest of the family and outsider shareholders, which amplifies agency issues. As a part of socioemotional wealth, altruism might generate further agency costs. Parents may not take necessary actions in case of bad family-employee performance because of altruistic impulse, even though it harms the firm and the shareholder value. Schulze et al. (2001, 2003) examine the relationship between firm performance and pay incentives for family and non-family employees. They find no relationship between the firm performance and the pay incentive for family member employees. They conclude that parents do not evaluate their heirs based on their performance, and altruism alleviates agency problems in family firms. Altruism causes parents to favor

their heirs, wastes resources, and increases agency costs in the firm (Schulze et al., 2001). Chen et al. (2006) find that the probability of CEO replacement is negligible for family-member CEOs, even in times of poor performance. In contrast, the performance-CEO turnover sensitivity substantially increases if a non-family CEO manages the family firm.

In summary, the divergence of the interest of family and outside shareholders creates a set of agency costs arising from altruism, tunneling, and related-party transactions (Faccio & Lang, 2002; Schulze et al., 2001; Young et al., 2008). Gomez-Mejia and Herrero (2022) examine the nonpecuniary goals of manufacturing firms through a survey. They find that the nonpecuniary objectives are not specific to family firms, yet, socioemotional wealth is more salient in family firms. Concentrated ownership and family involvement in management may amplify agency costs resulting from prioritizing socioemotional wealth and disregarding market-based monitoring mechanisms to exploit outsider shareholders. Shareholder activism is a reaction to the agency conflicts inherent in the firm. Since the prioritization of socioemotional wealth over shareholders' financial wealth, concentrated ownership, and family involvement in management point to the agency cost amplifying characteristics of family firms, we hypothesize that family firms are more subject to shareholder activism than non-family firms.

Hypothesis: Family firms are more subject to shareholder activism than non-family firms.

Figure 4.1 summarizes our model. Organizational form impacts agency issues with the moderator effect of ownership concentration, and governance quality (Faccio & Lang, 2002; Purkayastha, Veliyath & George, 2019; Villalonga & Amit, 2010;

Young et al., 2008). Poor governance quality and high ownership concentration may provoke the family to ignore market-based monitoring mechanisms. In addition, the family's prioritization of socioemotional wealth over shareholders' financial wealth amplifies agency problems arising from the conflict between family and outsider shareholders (Chen et al., 2006; Schulze et al., 2001, 2003). Lastly, agency issues motivate activist shareholders to respond to corporate decisions (Brav et al., 2008; Byun & Kim, 2013; Klein & Zur, 2013). Hence, the organizational form of a firm changes the likelihood of being targeted by shareholder activism by the mediating effect of agency problems arising in the firm.

4.3. Research Framework and Sampling Strategy

4.3.1. Sample

We aim to investigate whether organizational form impacts a firm's exposure to shareholder activism. We obtain the sample of the family and non-family firms from the combined list of Anderson et al. (2009) and Anderson et al. (2012). They define family firms as firms with at least five percent of family ownership. They sample the largest 2,000 U.S. nonutility and nonfinancial firms (based on total assets as of 2001). The list contains a family firm indicator which takes a value of one when families hold at least five percent ownership stake and zero otherwise. It spans the period from 2001 through 2010. The sample covers providing 16,200 firm-year observations. The organizational form of the firms may change during the sample period. Forty percent of the 2,000 firms are family firms as of 2001. Table 4.3 presents descriptive statistics and correlations for all the variables.

4.3.2. Proxy for Shareholder Activism

We measure shareholder activism with 13D filings filed to change or influence the

control. Section 13(d) of the 1934 Exchange Act requires investors who acquire more than five percent of shares of a publicly traded firm to file Schedule 13D filings if they intend to change or influence the control. The form includes information about the filer's identity, the security purchased/sold, the source of funds, and the purpose of the transaction. The person or group that made the transaction needs to file a 13D form within ten days of the transaction. Schedule 13G form, on the other hand, is more straightforward than the Schedule 13D form. Investors acquiring more than five percent of shares of a publicly traded firm must file 13G form if they have no intent to change or influence the control of the firm. Schedule 13D and 13G files are also known as "beneficial ownership reports." Blockholder making a transaction to affect corporate decisions must file a 13D form. However, the person or group making the transaction just for investment purposes must file Schedule 13G.

We use data on the Form SC 13D filings from Audit Analytics. The initial sample includes 4,375 filings. We eliminate the filings where the main purpose of the filer is to engage in merger and acquisition-related transactions. The filter produces 4,194 Form Schedule 13D filings from January 2001 to December 2010. We merge the shareholder activism data with the family firm list of Anderson et al. (2009) and Anderson et al. (2012). We exclude filings of target firms not included in the firm list. The final sample consists of 1,433 filings of Schedule 13D targetting for 387 firms in the sample. The average number of filings for our sample firms averages 0.09 filings with a minimum of zero and maksimum of 10.

4.3.3. Proxy for Governance Quality

The main motivations of shareholder activism include poor governance quality (Gillian & Stark, 1998), the concentration of ownership (Roe, 1990), and poor firm performance (Clifford, 2008; Gillian & Stark, 1998; Klein & Zur, 2009). We use

dual-class shares to control corporate governance differences. *Dual-class share* variable indicates the choice of issuing shares with different voting power. Firms adopting dual-class share structures issue more than one class of shares with different voting power. Insiders hold most of the superior shares with higher voting power (Gompers et al., 2010). Executives may use the dual-class share structure to maintain control over the firm and expropriate its resources (Gompers et al., 2010). Hence, a dual-class share structure is an indicator of entrenched insiders. We use data on dual-class firms from Anderson et al. (2009) and Anderson et al. (2012), who identify firms with dual-class share structures. *Dual-class share* takes the value of one when the firm adopts a dual-class share structure and zero otherwise. On average, ten percent of our sample firms adopt the dual-class share structure.

4.3.4. Proxy for Ownership Structure

Concentrated ownership may undermine the effect of market monitoring on agency costs (Holmstrom & Tirole, 1993). We control for ownership structure using insider and affiliated parties' block ownership data from Dlugosz, Fahlenbrach, Gompers, and Metrick (2006). Dlugosz et al. (2006) examine proxy statements and changes in block ownership for each year from 1996 to 2001. We merge block ownership data with the family firm list of Anderson et al. (2012). *Insider Blockholder Percentage* includes the block ownership percentage held by all officer blockholders and non-officer directors. The average insider block-ownership is 4 percent. *Affiliated Blockholder Percentage* contains the block ownership percentage held by "any individual, trust or company whose voting outcome is partially influenced, but not completely controlled by an officer or director of the company." The affiliated parties block-ownership is 2.5 percent. *Outsider Blockholder Percentage* includes the

block ownership percentage held by shareholders other than officers, directors, affiliated entities, and employee stock ownership plan (ESOP) (Dlugosz et al., 2006). The average outsider block-ownership is 17 percent for our sample firms. Being targeted to shareholder activism and ownership structure are endogenous (Bizjak & Marquette, 1998; Carleton, Nelson, & Weisbach, 1998; Karpoff, Malatesta, & Walkling (1996). To overcome this endogeneity problem, we use the affiliated entities and insiders' block ownership as of 2001 as a proxy of affiliated entities and insiders' block ownership for all the years included in our sample. We have only 459 sample firms' block ownership data.

4.3.5. Other Firm Characteristics

We use several controls for firm characteristics such as asset, the market value of equity, the book value of equity, net income, sales, sales growth, capital expenditure, return on asset (*ROA*), leverage, yearly stock return, cash balance, and dividend per share, total debt divided by the total asset (*Leverage*), the logarithm of asset size (*Log Asset*), capital Expenditure divided by asset size (*CAPEX/Asset*), *Dividends per share*, the book value divided by market value (*Book/Market Value*), change in revenue (*Sales growth*), and research and development expense divided by asset size (*R&D Expense/Asset*). Table 4.2 summarizes the data source and how we construct the variables. We collect year-end data on firm characteristics from Compustat.

Log Asset is the log of the book value of the asset. *Market value* is the market value of equity. *Equity* is the book value of equity. *Net income* is the year-end net income of the company. *Sales* is the year-end sales of the firm. *Capital expenditure* is the expenses used for additions to firms' property, plant, and equipment. *Book Value/Market Value* is the book value of equity divided by the market value of the

equity. *Yearly stock return* is the annual return of a share issued by a sample firm. *ROA* is the net income divided by the book value of the asset. *EBITDA/Asset* is calculated by earnings before income, tax, depreciation, and amortization divided by the asset's book value. *Cash/Asset* is the cash balance divided by the book value of the asset. *Cash+ST Investment/Asset* is calculated by dividing cash and short-term investment balance by the asset. *Dividends per share* is the annual cash dividend paid per share. *CAPEX/Asset* is the capital expenditures divided by the book value of the asset. *R&D Expense/Asset* is the annual research and development expense divided by the book value of the asset.

4.4. Results

Table 4.4 compares the characteristics of family firms and non-family firms. We categorize the firm characteristics based on the classification of Klein and Zur (2009). Panel A of Table 4.4 shows shareholder activism exposure of family and non-family firms. The main hypothesis investigates whether family firms are more subject to shareholder activism than non-family firms. *Yearly total shareholder activism* is the mean annual number of SC 13D filings each firm is subject to. Results in the first row of Table 4.4 support the hypothesis that shareholder activism targets family firms more than non-family firms. Family firms, on average, are the target of 0.37, whereas non-family firms are the target of 0.19 Schedule 13D filings per year. Panel B of Table 4.4 summarizes the family and non-family firm size and book-to-market ratio. In our sample, family firms are significantly smaller with an average \$3.9 billion asset size than non-family firms with an average \$6.3 billion asset size. They also generate significantly fewer sales with \$3.3 billion in sales per year and less net income of \$119 million than non-family firms. Family and non-family firms have similar book-to-market ratios of 2.33 and 3.64, respectively.

Panel C of Table 4.4 summarizes *affiliated entities, insider and outsider blockholder percentages*, and adopting a *dual-class share structure*. Affiliated entities and insiders in family firms, on average, hold 7 and 12 percent block ownership, whereas they are less than 1 percent in non-family firms. Outside block ownership is lower in family firms (13 percent) than in non-family firms (19 percent). Family firms adopt dual-class share structures 13 times more than non-family firms.

Panel D of Table 4.4 presents family and non-family firms' profitability indicators such as *yearly stock return, ROA, and EBITDA/Asset*. There is no significant difference between family and non-family firms' means of *ROA* and *yearly stock return*. The average ROA of family and non-family firms are 0.17 and 0.01 percent, respectively. The average annual return of a stock issued by a family firm is 18.5 percent, and the average yearly return of a stock issued by family firms is 17.7 percent. However, family firms have higher *EBITDA/Asset* (0.11) than non-family firms have (0.10), which points to the superior financial performance of family firms.

Table 4.4 Panel E presents the cash balance and debt ratio differences between family and non-family firms. The figure shows that family firms retain less cash (and cash plus short-term investment) than non-family firms. Family firms operate with 24 percent debt, whereas non-family firms operate with 26 percent, on average.

Jensen (1986) suggests that excess cash increases the incentive of managers to expropriate firm resources. Boubaker, Derouiche, and Hassen (2015) find that family firms tend to hold less cash. They explain that it might reflect the outsider shareholders' concern about "the potential misuse of cash by controlling families" (Boubaker et al., 2015).

Panel F of Table 4.4 summarizes the discretionary spending of family and non-

family firms. There is no statistically significant difference between the family and non-family firms' dividends per share. The table presents that family firms have a *CAPEX/Asset* ratio of 0.051 and non-family firms have a *CAPEX/Asset* ratio of 0.048, on average. The average *R&D Expense/Asset* is 0.43 for family and 0.59 for non-family firms. Panel E of Table 4.4 presents significantly higher *CAPEX/Asset* and smaller *R&D/Expense* ratios for family firms. The literature points to the risk-averse characteristics of family firm executives (Chandler, 1990; Daily & Dollinger, 1992; Munari et al., 2010). Family firms choose to invest in low-risk, fixed-asset capital expenditures investment projects and avoid high-risk research and development projects (Crocì, Doukas & Gönenç, 2011). Univariate test results align with the literature highlighting that family firms tend to invest in physical assets rather than research and development projects to avoid risk (Crocì et al., 2011; Feranita, Ruiz-Palomo, & Diéguez-Soto, 2021; Munari et al., 2010).

4.4.1. Hypothesis Testing

Table 4.5 presents the OLS regression results of *shareholder activism* on organizational form, governance quality, and block ownership measures. We measure shareholder activism with the Schedule 13D filings filed to change or influence the control. To avoid intense proxy fights to drive the results, we use the *shareholder activism* dummy variable as a dependent variable in Table 4.5.

Shareholder activism_{i,t} equals one at year *t* if at least one Schedule 13D filed to change or influence the control in firm *i*. The first specification reports the base model for the main hypothesis that family firms are targeted shareholder activism more than non-family firms. Specification two includes the firm's choice of adopting the dual-class share structure. The third model contains affiliated entities and insider

parties block ownership. Specification four introduces controls for one-year-lagged firm characteristics such as *ROA*, *leverage*, *logasset*, *CAPEX/Asset*, *dividends per share*, *cash and short-term investments/Asset*, *book value/market value*, *sales growth*, and *R&D expense/Asset*. Models five and six introduce industry and year fixed-effect, respectively. Standard errors in all specifications are adjusted for industry-year clusters.

The coefficients of the *family firm* indicator are positive and statistically significant at 1 percent in all specifications. The family firm indicator coefficient of the last specification shows that family firms are targeted 0.09 percent more than non-family firms. Regression results support the prediction of our hypothesis that family firms are more subject to shareholder activism than non-family firms.

Table 4.5 shows that firms adopting dual-class share structures are subject to shareholder activism more than firms with single-class shares. Poor governance quality increases the likelihood of being targeted by shareholder activism. Brav et al. (2008) use the governance index (Gompers, Ishii, Metrics, 2003) to measure governance quality. They also find that firms with poor governance quality are more subject to shareholder activism than firms with better governance quality.

In line with the literature, regression results show that activist shareholders target small-sized (Greenwood & Schor, 2009) and highly leveraged firms (Brav et al., 2008; Klein & Zur, 2008). The probability of being the target of shareholder activism decreases with the cash ratio (cash and short-term investment/book value of asset). Brav et al. (2008) also find a lower cash ratio for the target firms. However, Klein and Zur (2008) show that activist hedge funds target cash-rich firms. The coefficients of book-to-market value are mostly positive, suggesting that the likelihood of

shareholder exposure increase with the book-to-market ratio. Brav et al. (2008) also find that activist funds target high book-to-market value firms. Insider block ownership seems not to affect shareholder activism exposure. Positive coefficients of affiliated parties' block ownership percentage point that the likelihood of being targeted by activist shareholders increases by the affiliated parties' ownership.

To summarize, univariate and multivariate analysis results show that family firms are subject to shareholder activism more than non-family firms. In addition to the organizational form, the likelihood of being targeted by activist shareholders is affected by the governance quality, ownership structure, size, leverage level, book-to-market value, and cash ratio.

4.4.2. Robustness Tests

Table 4.6 summarizes the logit regression results of *shareholder activism* on organizational form, governance quality, and block ownership measures. The *shareholder activism* variable is binary. Hence, we also use logit regression to test the robustness of the results of our main regression. Results are qualitatively similar and robust.

Table 4.7 presents the result of the OLS regression of *yearly shareholder activism* on organizational form, governance structure, and block ownership measures. *Yearly shareholder activism* is a discrete variable and equals the yearly total number of Schedule 13D forms filed targeting the firm. The results are robust when we use yearly total shareholder activism instead of the existence of shareholder activism in a year in our regression analysis.

To test the robustness of our results, we also restrict our shareholder activism

measure further. We examine the stated purpose of Schedule 13 D files. We categorize files only if the filer explicitly states the activist purpose. Table 4.9 summarizes the purposes of shareholder activism stated in the Schedule 13 D filings. Audit Analytics provides the categorization of purposes. The final sample includes 382 Schedule 13D filed to state the activist purpose explicitly. Table 4.8 summarizes the regression results of *conservative shareholder activism* on organizational form, governance structure, and ownership concentration. Results are qualitatively similar and robust.

We also exclude financial firms and regress *conservative shareholder activism* on the *family firm* indicator. The coefficient of the *family firm* variable is 0.012 and statistically significant at a 1 percent significance level. Second, we exclude manufacturing firms and regress *conservative shareholder activism* on the *family firm* indicator. The coefficient of the *family firm* variable is 0.008 and statistically significant at a 5 percent significance level. Regression results with the subsample support the hypothesis that family firms are more subject to shareholder activism than non-family firms. Lastly, we divided our sample into two based on the year. We analyze the 2001-2007 and 2008-2010 periods in separate regressions by regressing *conservative shareholder activism* on the *family firm* indicator. The coefficient of the *family firm* variable is 0.013 and statistically significant at the significance level of 1 (5) percent for the regression of the 2001-2007 (2008-2010) period.

4.4.3. Characteristics of Target Family and Non-Family Firms

We also investigate whether the activists target different characteristics in different organizational forms. We measure shareholder activism by the Schedule 13D filed to

state the activist purpose explicitly. We subdivide our sample based on the organizational form. Then we compare target family firms (target non-family firms) with non-target family firms (non-target non-family firms) in our sample. Table 4.10 compares the characteristics of target firms with non-target firms. The second through fifth columns present differences between target and non-target family firms, the t-score, p-value, and statistical significance. The sixth through ninth columns present differences between target and non-target non-family firms, t-score, p-value, and statistical significance.

On the one hand, Jensen and Meckling (1976) point to debt as a monitoring mechanism. Lenders devote some resources to limit agency costs and motivate organizational efficiency. On the other hand, Canarella and Miller (2022) find that debt minimizes agency costs to some level of debt, but agency costs are higher in highly leveraged firms. Bankruptcy cost and financial distress increase agency cost substantially (Jensen & Meckling, 1976). Table 4.10 shows that, in both family and non-family samples, activist shareholders target firms with higher leverage (total debt/book value of the asset). Activists may perceive debt as a source of agency cost if the leverage is too high in target firms.

Target family firms also adopt dual-class shares more than non-target family firms. Issuing dual-class shares with different voting power is one of the most effective mechanisms to increase managerial entrenchment and decrease governance quality (Gompers et al., 2010). Insiders hold most of the superior shares with higher voting power (Gompers et al., 2010). Poor governance quality causes a divergence of interest between insiders and outside shareholders, which increases agency costs (Gompers, Ishii & Metrick, 2003). In family firms, activist shareholders may focus

on the principal-principal agency cost arising from the conflict of interest between inside and outside shareholders. Table 4.10 shows that target family firms have a lower cash ratio than non-target family firms. Family firms with poor governance quality may intend to signal that they have no incentive to expropriate firm resources by retaining lower excess cash.

Target non-family firms distribute more dividends per share and have higher ownership concentration than non-target non-family firms. Non-family firms mostly have low ownership concentration. Pantzalis, Kim, and Kim (1998) find that high insider ownership results in managerial entrenchment in the case of low shareholder concentration. Activist shareholders may perceive high insider and affiliated parties' ownership as a sign of managerial entrenchment in non-family firms. Activist shareholders may focus on exacerbated conflict of interest between insiders and outside shareholders due to entrenched managers. Faccio, Lang, and Young (2001) show that dividends decrease the expropriation of outside shareholders by insiders. In countries with strong legal protection of shareholders, as in the case of the U.S., large shareholder plays a monitoring role and cause an increase in the dividend. Higher dividend payments may result from high ownership concentration of target non-family firms.

Entrenched managers may need further motivation to exert effort to maximize shareholders' wealth since managerial entrenchment increases the divergence of interest between insider and outside shareholders. In our sample, target non-family firms are less profitable, have less market value of equity, and lower sales than non-target non-family firms. Shareholders may perceive these as a signal of managerial effort problem and use their voting power to motivate managers to prioritize

shareholders' wealth over his/her own self-interest. Jensen and Meckling (1976) suggest that self-interest motivated managers would hurt shareholders' wealth by increasing consumption and shirking behavior. Shirking behavior may also cause a decrease in profitability (Hart, 1995; Hirshleifer & Suh, 1992). In non-family firms, activist shareholders may focus on the principal-agent agency cost arising from the conflict of interest between managers and shareholders.

We also use Kernel propensity score matching combined with the diff-in-diff method to analyze the activist investors' interest in family and non-family firms. The difference-in-difference (diff-in-diff) method is an experimental research design helpful for determining treatment effects. We use the diff-in-diff method to understand the characteristics of firms targeted to shareholder activism. The aim of matching is to minimize sample selection bias in non-experimental designs (Stuart et al., 2014). We use Kernel propensity score matching combined with the diff-in-diff method since the combination of these two methods makes even more robust inferences, especially when the randomization is not feasible (Stuart et al., 2014). Further, even though the diff-in-diff method requires longitudinal data on firms, data from repeated cross-sections can be used to implement the integrated method (Stuart et al., 2014). We match family and non-family firms based on a weighted average of three control variables: asset, industry, and year.

We compare the characteristics of target and non-target for family and non-family firms. Table 4.11 summarizes the comparison of the characteristics such as the market value of equity, the book value of equity, net income, sales, sales growth, capital expenditure, return on asset (*ROA*), leverage, yearly stock return, cash balance, and dividend per share, total debt divided by the total asset (*Leverage*), the

logarithm of asset size (*Log Asset*), capital Expenditure divided by asset size (*CAPEX/Asset*), *Dividends per share*, the book value divided by market value (*Book/Market Value*), change in revenue (*Sales growth*), and research and development expense divided by asset size (*R&D Expense/Asset*). The second column of Table 4.11 summarizes the mean differences between matched target and non-target non-family firms. The third column lists the mean differences between matched target and non-target family firms. The fourth column gives the differences between column two and column three. The last two columns summarize the significance of the difference-in-difference figures. The results remain qualitatively similar and prove robust. Table 4.11 also shows that target and non-target family and non-family firms statistically differ. Results support that activist shareholders' focus varies depending on the organizational form.

4.5. Discussion, Limitations, and Directions for Future Research

In this study, we aim to contribute to empirical research in organizational form and agency theory by examining the exposure to shareholder activism as a monitoring mechanism in family and non-family firms. On the one hand, literature discusses that organizational form affects the agency problems arising from the conflict of interest between insiders and outside shareholders (Faccio & Lang, 2002; Purkayastha, Veliyath & George, 2019; Villalonga & Amit, 2010; Young et al., 2008). On the other hand, research on shareholder activism refers to agency problems as a motive for shareholder activism but does not focus on whether firms that are organized differently (such as family versus non-family) are more or less targeted to shareholder activism (Brav et al., 2008; Byun & Kim, 2013; Klein & Zur, 2013). This study uses agency theory as a building block to develop and test our hypothesis

on how organizational form affects a firm's exposure to shareholder activism.

We measure shareholder activism with the Schedule 13D filings filed to change or influence the control. After excluding the Schedule 13D filings related to merger and acquisition agreements, the final sample includes 1,423 Schedule 13D filings concerning corporate decisions. We further restrict our shareholder activism measure to include only 382 filings of Schedule 13D filed to state the activist purpose explicitly.

Section 13(d) of the 1934 Exchange Act requires investors who acquire more than five percent of shares of a publicly traded firm to file Schedule 13D filings if they intend to change or influence the control. We examine the focus of Schedule 13D filings that targeted the 2,000 largest firms from 2001 through 2010. Univariate and multivariate test results support our hypothesis that family firms are more likely to be targeted by shareholder activism than non-family firms.

We also investigate whether the activists target different characteristics in different organizational forms. We conclude that activist shareholders may focus on conflict of interest between insiders and outside shareholders resulting from poor governance quality in family firms. In non-family firms, activist shareholders may target entrenched managers and try to reduce principal-agent agency costs arising from the conflict of interest between managers and shareholders.

This study is one of the first attempts to understand the agency conflict differences between family and non-family firms by using shareholder activism. However, we do not consider either the identity or the purpose of the activist in this study. As a follow-up study, we plan to examine how the activist shareholders' stated purpose and identity impact activism in different organizational forms. The question of why

family firms have greater exposure to shareholder activism remains unsolved. This study fails to measure socioemotional wealth. Examination of the non-financial objectives of families might provide satisfactory answers. We also plan to investigate whether shareholder activism has an impact on firms and whether the effect of shareholder activism is different in family and nonfamily firms.

Figure 4.1: How Does Organizational Form Affect shareholder Activism Exposure?

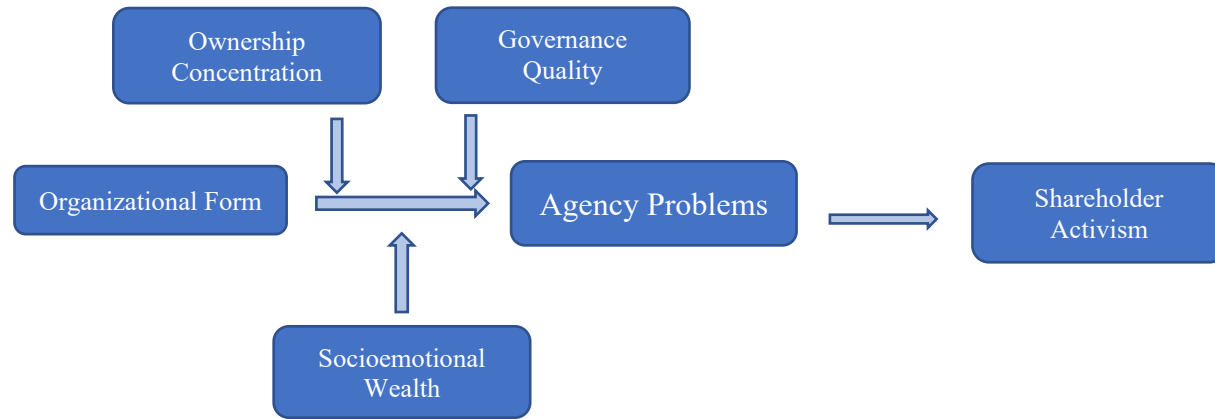


Table 4.1: Literature Review on Shareholder Activism Targets

Paper	Measures	Sample	Conclusion
Grossman & Hart (1980)	Theory paper	-	Shareholder monitoring is a costly action. Only a few shareholders may choose to be activists since there are significant costs in ensuring agents act in the best interest of shareholders. The activist shareholders take the heavy burden of monitoring, yet all shareholders benefit from the improvement of the management
Gillian & Stark (1998)	Literature Review	-	Shareholder activism aims to decrease agency conflicts between insiders and outsider shareholders.
Karpoff (2001)	Literature Review	-	Shareholder activism targets large firms with high investor ownership and low stock return performance.
Barber (2006)	CalPERS focus list firms	US 1992-2005	Shareholder activism exercised by institutional shareholders may have two main motives: to increase shareholder value or to gain a social benefit such as decreasing pollution.
Brav, Jiang, Partnoy & Thomas (2008)	Schedule 13D filings	US 2001-2006	Activist hedge funds target highly profitable (high ROA) firms with low market value. They also tend to target firms with more hostile takeover defense.
Becht, Franks, Mayer, & Rossi (2008)	the Hermes U.K. Focus Fund activism	UK 1998-2004	The fund intervenes in firms' investment and dividend strategies by executing shareholder activism. The fund also claims to make changes in executive management.
Klein & Zur (2009)	Schedule 13D filings	US 2003-2005	Activist hedge funds target profitable firms with cash flow-related agency costs, whereas other private investors tend to target firms in financial distress.
Greenwood & Schor (2009)	Schedule 13D filings	US 1993-2006	Activist funds tend to target small with low market-to-book value.
Byun & Kim (2013)	PSPD's minority shareholder activism	Korea 2001-2008	Business group owners transfer resources of publicly traded firms to business group affiliated other firms for their personal interest. Shareholder activism targets these firms to prevent the exploitation of outside shareholders.

Table 4.2: Variable Definitions and Sources

Variable Name	Definition	Data Source
<i>Yearly shareholder activism</i>	number of total annual 13D form filed targeting the firm	Audit Analytics
<i>Shareholder activism</i>	equals one if at least one Schedule 13D filed to change or influence the control of the firm in year t.	Audit Analytics
<i>Family Firm</i>	takes one if the family holds at least five percent of firm shares in a given year and one otherwise	Anderson, Duru & Reeb (2009) and Anderson, Reeb, & Zhao (2012)
<i>Dual-class share structure</i>	takes one if the firm has shares with different voting power in a given year and zero otherwise.	Anderson, Duru & Reeb (2009) and Anderson, Reeb, & Zhao (2012)
<i>Affiliated blockholder percentage</i>	the block ownership percentage held by “any individual, trust or company whose voting outcome is partially influenced, but not completely controlled by an officer or director of the company.”	Dlugosz, Fahlenbrach, Gompers, and Metrick (2006)
<i>Insider blockholder percentage</i>	the block ownership percentage held by all officer blockholders and non-officer directors	Dlugosz, Fahlenbrach, Gompers, and Metrick (2006)
<i>Outsider blockownership percentage</i>	the block ownership percentage held by shareholders other than officers, directors, affiliated entities, and employee stock ownership plan (ESOP)	Dlugosz, Fahlenbrach, Gompers, and Metrick (2006)
<i>Market value</i>	the market value of the equity	Compustat (MKVALT)
<i>Equity</i>	book value of the equity	Compustat (SEQ)
<i>Return on Asset (ROA)</i>	net income divided by the book value of the asset	Compustat (NI/AT)
<i>Leverage</i>	total debt divided by the book value of the asset	Compustat ((DLC+DLTT)/AT)
<i>Log Asset</i>	the log of the book value of the asset	Compustat (log(AT))
<i>Capex/Asset</i>	capital expenditures divided by the book value of the asset	Compustat (CAPX/AT)
<i>EBITDA/Asset</i>	earnings before income, tax, depreciation, and amortization divided by the book value of the asset	Compustat (EBITDA/AT)
<i>Cash/Asset</i>	cash balance divided by the book value of the asset	Compustat (CH/AT)
<i>Cash+ST Investment/Asset</i>	Cash and short-term investment balance divided by the asset	Compustat (CHE/AT)
<i>Dividends per share</i>	cash dividend paid per share	Compustat (DVPSX_F)
<i>Book Value/Market Value</i>	the book value of equity divided by the market value of the equity	Compustat (SEQ/MKVALT)
<i>Growth</i>	the percentage change in sales	Compustat (change in SALE)
<i>R&D Expense/Asset</i>	research and development expenses divided by the book value of the asset	Compustat (XRD)

Notes: We use year-end data on firm characteristics from Compustat. The Compustat mnemonic is given in parentheses.

Table 4.3: Descriptive Statistics

	Mean	(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) Yearly total shareholder activism	0.2502	1.0000													
(2) Family firm	0.3452	0.0711*	1.0000												
(3) Dual class share structure	0.1031	0.0820*	0.3782*	1.0000											
(5) Affiliated blockholder percentage	2.4854	0.2156*	0.3112*	.	1.0000										
(6) Insider blockholder percentage	3.7366	0.1076*	0.5563*	.	-0.0293	1.0000									
(7) Outsider blockholder percentage	17.3483	0.0529	-0.1580*	.	-0.1530*	-0.1429*	1.0000								
(8) Dividends per share	0.2825	0.0094	0.0096	0.0056	0.0344	-0.1035*	-0.1095*	1.0000							
(9) Asset	5435.74	-0.0191*	-0.0463*	0.0195*	-0.0207	-0.0747	-0.1570*	0.0621*	1.0000						
(10) Leverage	0.2504	0.0474*	-0.0244*	0.0895*	0.0066	-0.0986*	0.0556	-0.0108	0.0356*	1.0000					
(11) Book value/Market value	-3.1954	0.003	0.0025	-0.0086	0.0141	0.0688	0.1316*	0.0029	0.0015	-0.0168*	1.0000				
(12) CAPEX	248.98	-0.0226*	-0.0544*	-0.0197*	0	-0.1012*	-0.2054*	0.0735*	0.7460*	0.0243*	0.0027	1.0000			
(13) ROA	0.0006	-0.0014	0.0015	-0.0052	0.0483	0.0097	0.0381	0.0276*	0.0176*	-0.0693*	0.0211*	0.0222*	1.0000		
(14) Net income	219.12	-0.0137	-0.0372*	-0.0339*	0.0114	-0.0468	-0.2050*	0.0630*	0.4054*	-0.0446*	0.0258*	0.4327*	0.1154*	1.0000	
(15) Yearly return	18.2363	0.0036	-0.0019	-0.0065	0.0272	0.1061*	0.1389*	-0.0021	-0.008	-0.0059	-0.0013	-0.0104	0.0178*	0.006	1.0000

Notes: Table 4.3 reports descriptive statistics and correlations for the variables. * indicate a significance of less than 5%.

Table 4.4: Characteristics of Family and Non-Family Firms

	Non-Family Firms		Family Firms		Difference	t-score	p-value	Significance
	Mean	N	Mean	N				
Panel A. Shareholder Activism								
Yearly total shareholder activism	0.1878	10,607	0.3685	5,593	0.1807	-9.0781	0.0000	***
Panel B. Firm Size and Book-to-Market Ratio								
Asset (in millions)	6263.62	10,582	3868.55	5,590	-2395.07	5.8884	0.0000	***
Market Value (in millions)	6686.71	10,510	4001.39	5,548	-2685.32	7.6476	0.0000	***
Equity (in millions)	2180.64	10,578	1490.45	5,580	-690.19	5.8729	0.0000	***
Net income (in millions)	271.79	10,562	119.10	5,562	-152.70	4.7207	0.0000	***
Sales (in millions)	5506.80	10,562	3317.04	5,562	-2189.76	7.8504	0.0000	***
Capital expenditure (in millions)	290.96	10,528	169.26	5,544	-121.70	6.9070	0.0000	***
Book value/market Value	-3.6472	10,500	-2.3386	5,538	1.3086	-0.3107	0.7561	
Panel C. Ownership and Governance Structure								
Affiliated blockholder percentage	0.8476	335	6.9101	124	6.0625	-7.0004	0.0000	***
Insider blockholder percentage	0.7114	335	11.9096	124	11.1982	-14.3111	0.0000	***
Outsider blockholder percentage	18.6921	335	13.7177	124	-4.9744	3.4206	0.0007	***
Dual class share structure	0.0196	10,607	0.2616	5,593	0.2420	-52.0028	0.0000	***
Panel D. Profitability								
Yearly Stock Return	18.5257	8,344	17.6917	4,434	-0.8340	0.2112	0.8327	
Return on asset (ROA)	0.0001	10,556	0.0017	5,562	0.0016	-0.1954	0.8451	
EBITDA/Asset	0.1057	10,546	0.1131	5,563	0.0074	-2.5170	0.0118	**
Panel E. Cash Balances								
Cash/Asset	0.1168	10,485	0.1006	5,528	-0.0162	7.9878	0.0000	***
Cash+ST investment/Asset	0.1701	10,575	0.1513	5,579	-0.0188	6.0619	0.0000	***
Leverage	0.2545	10,548	0.2424	5,551	-0.1211	3.0904	0.0010	***
Panel F. Discretionary Spending								
Dividends per share	0.2728	10,573	0.3008	5,591	0.0281	-1.2161	0.2240	
CAPEX/Asset	0.0479	10,528	0.0510	5,544	0.0031	-3.1417	0.0017	***
R&D expense/Asset	0.0594	7,164	0.0427	2,793	-0.0167	9.4355	0.0000	***

Notes: Table 4.4 presents firm characteristics for family and non-family firms. *** and ** indicate a significance of less than 1% and 5%, respectively.

Table 4.5: Regressions of Shareholder Activism on Organizational Form Measure

	1	2	3	4	5	6	7
Family Firm	0.07*** (10.42)	0.06*** (8.01)	0.07*** (4.63)	0.06*** (6.75)	0.06*** (6.57)	0.06*** (6.94)	0.09*** (4.79)
Dual class share structure		0.08*** (8.51)	0.43** (2.39)	0.08*** (6.91)	0.08*** (7.21)	0.08*** (7.14)	0.40** (2.17)
Affiliated Blockholder Percentage			0.00*** (5.00)				0.00*** (3.34)
Insider Blockholder Percentage			0.00 (0.97)				0.00 (0.29)
ROA (t-1)				-0.03 (1.28)	-0.03 (1.28)	-0.03 (1.40)	-0.15*** (2.75)
Leverage (t-1)				0.08*** (4.70)	0.07*** (4.55)	0.07*** (4.74)	0.09*** (3.10)
Logasset (t-1)				-0.01*** (4.17)	-0.01*** (3.52)	-0.01*** (4.25)	-0.02*** (6.74)
CAPEX/Asset (t-1)				-0.14*** (2.75)	-0.08 (1.34)	-0.09 (1.55)	-0.64*** (8.47)
Dividends per share (t-1)				0.00 (1.07)	0.00 (0.79)	0.00 (0.72)	-0.01** (2.25)
Cash and ST Investment (t-1)				-0.09*** (5.26)	-0.07*** (4.81)	-0.08*** (4.76)	-0.20*** (5.92)
Book Value/Market Value (t-1)				0.00*** (2.81)	0.00*** (2.66)	0.00*** (3.04)	-0.00*** (4.69)
Sales Growth (t-1)				0.00 (0.70)	0.00 (0.69)	0.00 (0.37)	0.00 (1.48)
Industry: Energy & Transportation					-0.02 (1.22)	-0.02* (1.80)	0.02 (1.16)
Industry: Finance					0.05 (0.92)	0.05 (0.97)	0.06 (0.66)
Industry: Life Science					0.00 (0.30)	0.00 (0.62)	0.04*** (3.45)
Industry: Manufacturing					0.01 (0.93)	0.01* (1.97)	0.03*** (3.18)
Industry: Nonclasifiable					0.01 (0.10)	0.01 (0.14)	-0.04 (0.85)
Industry: Real Estate & Construction					0.09*** (6.32)	0.09*** (8.10)	0.07** (2.40)
Industry: Technology					-0.02* (1.72)	-0.02*** (4.14)	-0.03*** (3.74)
Industry: Energy & Transportation					-0.02 (1.22)	-0.02* (1.80)	0.02 (-1.16)
Year: 2003						-0.06*** (8.15)	
Year: 2004						-0.05*** (10.64)	0.00 (0.06)
Year: 2005						-0.05*** (8.21)	0.00 (0.05)
Year: 2006						-0.03*** (4.36)	0.03* (1.81)
Year: 2007						-0.02* (1.80)	0.03* (1.84)
Year: 2008						-0.00 (0.37)	0.04*** (3.49)
Year: 2009							0.03** (2.47)
Year: 2010						-0.01 (1.63)	-0.02* (1.88)
Constant	0.06*** (20.83)	0.06*** (20.22)	0.07*** (17.51)	0.13*** (7.41)	0.12*** (6.81)	0.16*** (8.64)	0.28*** (8.91)
Adjusted R-squared	2	2	3	3	4	4	7
N	16,184	16,184	4,586	12,064	12,064	12,064	3,639

Notes: Table 4.5 reports the results of regressions of shareholder activism on variables related to organizational form, governance quality, ownership, and controls. ***, **, and * indicate a significance of less than 1%, 5%, and 10%, respectively.

Table 4.6: Robustness Test with Logit Regression

	1	2	3	4	5	6	7
Family Firm	0.86*** (14.58)	0.68*** (10.39)	0.72*** (6.17)	0.70*** (8.16)	0.67*** (7.87)	0.71*** (8.40)	0.75*** (5.64)
Dual class share structure		0.64*** (9.25)	2.51*** (3.49)	0.55*** (6.86)	0.62*** (7.40)	0.60*** (7.18)	2.50*** (2.97)
Affiliated Blockholder Percentage			0.03*** (6.20)				0.02*** (4.11)
Insider Blockholder Percentage			0.01 (1.21)				0.01 (1.07)
ROA (t-1)				-0.28 (1.51)	-0.22 (1.48)	-0.24 (1.41)	-1.36*** (2.73)
Leverage (t-1)				0.75*** (5.14)	0.74*** (5.27)	0.75*** (5.49)	0.94*** (3.53)
Logasset (t-1)				-0.09*** (3.93)	-0.09*** (3.49)	-0.10*** (4.16)	-0.30*** (6.46)
CAPEX/Asset (t-1)				-1.55** (2.40)	-0.83 (1.17)	-0.95 (1.24)	-9.94*** (6.79)
Dividends per share (t-1)				0.02 (1.54)	0.01 (1.12)	0.01 (1.13)	-0.12 (1.44)
Cash and ST Investment (t-1)				-1.18*** (4.44)	-1.08*** (4.28)	-1.11*** (4.32)	-2.65*** (4.98)
Book Value/Market Value (t-1)				0.00 (0.48)	0.00 (0.5)	0.00 (0.51)	-0.02* (1.82)
Sales Growth (t-1)				0.00 (0.96)	0.00 (1.00)	0.00 (0.67)	0.00 (1.29)
Industry: Energy & Transportation					-0.29 (1.37)	-0.27 (1.85)*	0.16 (0.69)
Industry: Finance					0.46 (0.98)	0.40 (1.06)	0.65 (0.96)
Industry: Life Science					0.07 (0.44)	0.08 (0.97)	0.46*** (3.67)
Industry: Manufacturing					0.14 (1.00)	0.14** (2.24)	0.27*** (3.10)
Industry: Real Estate & Construction					0.10 (0.14)	0.12 (0.17)	-0.57 (0.71)
Industry: Technology					0.76*** (5.51)	0.76*** (7.81)	0.45* (1.85)
Year: 2003.0000					-0.36** (2.07)	-0.35*** (4.90)	-0.56*** (4.05)
Year: 2004.0000						-0.55*** (5.19)	0.34** (2.24)
Year: 2005.0000						-0.48*** (5.53)	0.35*** (2.64)
Year: 2006.0000						-0.38*** (4.87)	0.34*** (2.63)
Year: 2007.0000						-0.22** (2.24)	0.70*** (4.34)
Year: 2008.0000						-0.06 (0.48)	0.64*** (4.73)
Year: 2009.0000						0.11 (1.18)	0.81*** (7.55)
Year: 2010.0000						0.13 (1.68)*	0.69*** (6.28)
Constant	-2.71*** (52.88)	-2.73*** (52.45)	-2.51*** (42.41)	-1.90*** (8.99)	-2.01*** (9.82)	-1.70*** (7.31)	-0.17 (-0.41)
N	16,184	16,184	4,586	12,064	12,064	12,064	3,639

Notes: Table 4.6 reports the results of logit regressions of shareholder activism on variables related to organizational form, governance quality, ownership, and controls. ***, **, and * indicate a significance of less than 1%, 5%, and 10%, respectively.

Table 4.7: Robustness Test with Yearly Total Shareholder Activism

	1	2	3	4	5	6	7
Family Firm	0.18*** (7.63)	0.12*** (5.06)	0.18*** (2.66)	0.12*** (4.15)	0.11*** (3.80)	0.12*** (4.22)	0.23*** (3.05)
Dual class share structure		0.26*** (6.13)	1.08* (1.84)	0.27*** (4.96)	0.28*** (5.06)	0.27*** (4.97)	1.02* (1.74)
Affiliated Blockholder Percentage			0.01*** (3.01)				0.01* (1.87)
Insider Blockholder Percentage			0.00 (0.95)				0.00 (0.24)
ROA (t-1)				-0.14* (1.78)	-0.14* (1.85)	-0.15* (1.97)	-0.29 (-1.44)
Leverage (t-1)				0.27*** (3.25)	0.26*** (3.10)	0.26*** (3.17)	0.22* (1.99)
Logasset (t-1)				-0.04*** (4.61)	-0.04*** (4.12)	-0.04*** (4.82)	-0.07*** (4.78)
CAPEX/Asset (t-1)				-0.38 (1.67)	-0.35 (1.22)	-0.37 (1.28)	-1.52*** (5.67)
Dividends per share (t-1)				0.00 (0.77)	0.00 (0.54)	0.00 (0.33)	-0.03 (1.07)
Cash and ST Investment (t-1)				-0.29*** (4.64)	-0.25*** (3.98)	-0.26*** (4.02)	-0.37** (2.60)
Book Value/Market Value (t-1)				0.00*** (2.77)	0.00*** (2.75)	0.00*** (2.73)	-0.02*** (6.28)
Sales Growth (t-1)				0.00 (1.18)	0.00 (1.2)	0.00 (0.34)	0.00 (1.43)
Industry: Energy & Transportation					-0.04 (0.63)	-0.04 (0.90)	0.11** (2.12)
Industry: Finance					0.02 (0.18)	0.01 (0.08)	0.08 (0.47)
Industry: Life Science					-0.05 (0.92)	-0.04 (1.49)	0.11*** (3.02)
Industry: Manufacturing					-0.01 (0.17)	-0.01 (0.34)	0.08*** (3.04)
Industry: Nonclasifiable					-0.12 (1.55)	-0.11* (1.69)	-0.24** (2.05)
Industry: Real Estate & Construction					0.16** (2.31)	0.16*** (3.15)	-0.07 (0.97)
Industry: Technology					-0.09 (1.66)	-0.09*** (3.41)	-0.10*** (4.02)
Year: 2003.0000						-0.19*** (6.88)	
Year: 2004.0000						-0.15*** (4.03)	0.06 (1.08)
Year: 2005.0000						-0.13*** (4.05)	-0.05 (1.47)
Year: 2006.0000						-0.12*** (4.48)	0.02 (0.41)
Year: 2007.0000						-0.06** (2.36)	0.10*** (2.75)
Year: 2008.0000						0.00 (0.07)	0.18*** (4.82)
Year: 2009.0000							0.11*** (3.20)
Year: 2010.0000						0.03 (0.57)	-0.04 (0.89)
Constant	0.19*** (14.12)	0.18*** (13.62)	0.17*** (12.07)	0.49*** (6.59)	0.49*** (6.30)	0.62*** (7.35)	0.73*** (6.88)
Adjusted R-squared	0	1	2	1	2	2	4
N	16,184	16,184	4,586	12,064	12,064	12,064	3,639

Notes: Table 4.7 reports the results of regressions of total yearly shareholder activism on variables related to organizational form, governance quality, ownership, and controls. ***, **, and * indicate a significance of less than 1%, 5%, and 10%, respectively.

Table 4.8: Robustness Test with Conservative Shareholder Activism Measure

	1	2	3	4	5	6	7
Family Firm	0.01*** (3.65)	0.01*** (2.99)	0.02 (1.60)	0.01* (1.78)	0.01 (1.40)	0.01* (1.72)	0.01 (1.35)
Dual class share structure		0.01** (2.17)	-0.02*** (8.05)	0.01 (1.39)	0.01 (1.64)	0.01 (1.58)	-0.02*** (2.90)
Affiliated Blockholder Percentage			0.00* (1.98)				0.00 (0.78)
Insider Blockholder Percentage			0.00 (1.30)				0.00 (0.59)
ROA (t-1)				-0.03** (2.26)	-0.03** (2.30)	-0.03** (2.35)	-0.07*** (2.76)
Leverage (t-1)				0.02* (1.89)	0.01* (1.72)	0.01* (1.79)	0.01 (0.55)
Logasset (t-1)				-0.00 (1.37)	-0.00 (1.18)	-0.00* (1.74)	-0.00** (2.34)
CAPEX/Asset (t-1)				0.00 (0.02)	0.01 (0.28)	0.01 (0.18)	-0.18*** (3.47)
Dividends per share (t-1)				0.00 (0.29)	-0.00 (0.22)	-0.00 (0.54)	-0.00 (0.60)
Cash and ST Investment (t-1)				-0.02** (2.40)	-0.01* (1.87)	-0.02* (1.89)	-0.06*** (4.49)
Book Value/Market Value (t-1)				0.00*** (3.95)	0.00*** (3.80)	0.00*** (3.92)	0.00 (-0.04)
Sales Growth (t-1)				0.00 (0.88)	0.00 (0.90)	0.00 (0.11)	0.00 (1.27)
Industry: Energy & Transportation					-0.01 (0.50)	-0.01 (0.60)	0.00 (0.08)
Industry: Finance					0.03 (0.62)	0.03 (0.60)	-0.03*** (4.70)
Industry: Life Science					-0.00 (0.60)	-0.00 (0.92)	-0.01** (2.25)
Industry: Manufacturing					-0.00 (0.07)	-0.00 (0.14)	-0.01* (1.80)
Industry: Nonclasifiable					0.02 (0.55)	0.02 (0.56)	0.01 (0.14)
Industry: Real Estate & Construction					0.03** (2.18)	0.03** (2.50)	-0.02 (1.08)
Industry: Technology					-0.01 (1.23)	-0.01** (2.24)	-0.02*** (3.52)
Year: 2003.0000						-0.01 (1.57)	
Year: 2004.0000						-0.02*** (2.83)	-0.00 (0.60)
Year: 2005.0000						-0.02*** (3.32)	0.00 (0.15)
Year: 2006.0000						-0.01 (1.59)	0.02*** (2.67)
Year: 2007.0000						0.00 (0.58)	0.01* (1.87)
Year: 2008.0000						0.01 (1.28)	0.02*** (2.75)
Year: 2009.0000							0.01* (1.72)
Year: 2010.0000						0.01 (0.97)	0.01 (0.77)
Constant	0.02*** (11.54)	0.02*** (11.37)	0.02*** (8.05)	0.03*** (2.97)	0.03*** (2.72)	0.04*** (3.51)	0.08*** (4.39)
Adjusted R-squared	0	0	1	1	1	1	2
N	16,184	16,184	4,586	12,064	12,064	12,064	3,639

Notes: Table 4.8 reports the results of regressions of conservative shareholder activism on variables related to organizational form, governance quality, ownership, and controls. ***, **, and * indicate a significance of less than 1%, 5%, and 10%, respectively.

Table 4.9: Stated Purpose of Activist Shareholders

Concerns - Concern about stock price: Indicates that the Reporting Person has stated some concern about the current price of his shares-usually that he believes them to be undervalued.

Concerns - Demand information from management: Indicates that the Reporting Person has requested, claims to have requested, or intends to request, specific information about the Issuer's strategy, operations, financial information or records.

Concerns - Oppose a future acquisition: Indicates that the Reporting Person has stated he intends to work against an acquisition or merger contemplated by the Issuer.

Concerns - Suggested to management strategy: Indicates that reporting person has stated that he has offered written or verbal advice to the Issuers management on how they ought to act in the interest of the Issuer.

Control - Caused change in management: Indicates that the Reporting person has caused a change in the management verbal advice to the Issuers management on how they ought to act in the interest of the Issuer.

Control - Intent to acquire control of the company: Indicates that the Reporting Person has stated an intention to acquire effective control over the Issuer.

Control - Intent to change or nominate the board of directors: Indicates that the Reporting Person has stated his intention to work to nominate new members to the Issuer's board of directors and/or to replace existing members.

Control - Intent to control the board of directors: Indicates that the Reporting Person has stated an intention to control to work to nominate new members to the Issuer's board of directors and/or to replace existing members.

Control - Intent to maintain control: The Reporting Person has acquired the shares to keep a controlling influence over the Issuer.

Control - Intent to replace management: Indicates that the reporting person intends to substitute officers of his choice in place of the current management.

Discussions - Held discussions with management: Indicates that the Reporting person has stated that he has held discussions about the Issuer with its management.

Discussions - Intent or requested discussions with management: Indicates that the Reporting person has plans or desires to hold discussions with the Issuer's management.

Discussions - May (or reserves the right) have discussions with management: Indicates that the reporting person, while he has not stated any specific intention of holding discussions with the management of the Issuer, has specifically reserved the right to do so.

Discussions - Potential merger or acquisition discussed: Indicates that the Reporting Person has engaged in discussion with managers or directors concerning a possible merger or acquisition.

Dispute - Allege management is misleading: Indicates that the Reporting Person has stated that he believes the management to be giving incorrect, purposefully ambiguous or deliberately dishonest information in its public or private statements.

Dispute - Disagree with management actions or strategy: Indicates that the Reporting Person has stated that he disagrees with some policy or the overall direction of the Issuer.

Dispute - Dispute with management: Indicate that the Reporting Person has stated that he has some dispute with the Issuer's management.

Dispute - Litigation: Indicates that the Reported person has stated that he has a dispute concerning the Issuer that has resulted in legal action.

Notes: Audit Analytics provides categorization of the stated purpose of Schedule 13 D filings.

Source: Audit Analytics

Table 4.10: Characteristics of Target and Non-Target Firms

	Family Firms				NonFamily Firms			
	Target-Control	t-score	p-value	Significance	Target-Controls	t-score	p-value	Significance
Panel A: Firm Size and Book-to-Market Ratio								
Asset	-1586.60	1.1531	0.2489		-2432.75	1.2581	0.2084	
Market Value	-2143.27	1.5776	0.1147		-3645.59	2.2695	0.0233	**
Equity	-650.97	1.3224	0.1861		-1022.33	1.9524	0.0509	*
Net Income	-112.79	1.4126	0.1578		-196.65	1.2197	0.2226	
Sales	-744.50	0.5827	0.5601		-2054.78	1.7237	0.0848	*
Capital Expenditure	-67.84	1.1158	0.2645		-123.62	1.4895	0.1364	
Book Value/Market Value	3.18	-0.2861	0.7748		3.18	-0.1524	0.8788	
Panel B: Ownership and Governance Structure								
Affiliated Blockholder Percentage	1.82	-0.9833	0.3257		3.88	-5.1805	0.0000	***
Insider Blockholder Percentage	-0.67	0.3400	0.7339		1.05	-2.3048	0.0212	**
Outsider Blockholder Percentage	1.63	-0.9794	0.3276		3.33	-1.9107	0.0561	*
Dual class share structure	0.10	-2.9579	0.0031	***	-0.01	0.5275	0.5979	
Panel C: Profitability								
Yearly Stock Return	0.55	-0.1073	0.9145		4.77	-0.2372	0.8125	
Return on Asset (ROA)	0.01	-0.3987	0.6902		-0.12	2.8194	0.0048	***
EBITDA/Asset	0.00	-0.0419	0.9666		-0.09	6.5845	0.0000	***
Panel D: Cash Balances								
Cash/Asset	-0.01	1.3727	0.1699		-0.01	0.8559	0.3921	
Cash+ST Investment/Asset	-0.04	2.7800	0.0055	***	-0.02	1.6141	0.1065	
Leverage	0.05	-2.9592	0.0031	***	0.06	-3.3768	0.0007	***
Panel E: Discretionary Spending								
Dividends per share	-0.06	0.4272	0.6693		0.32	-4.7911	0.0000	***
CAPEX/Asset	-0.01	1.1957	0.2319		0.00	-0.5017	0.6159	
R&D Expense/Asset	-0.01	1.5266	0.1270		-0.01	0.8142	0.4155	

Notes: Table 4.10 presents firm characteristics for targeted and not targeted firms. *** and ** indicate a significance of less than 1% and 5%, respectively.

Table 4.11: Difference-in-Difference Analysis of Target and Non-Target Firms

	Difference between Target and Non-Target Non-Family Firms	Difference between Target and Non- Target Family Firms	Difference- in- Difference	p-value	Significance
Panel A: Firm Size and Book to Market Ratio					
Market Value	-2381.57***	362.89	2744.46	0.000	***
Equity	-478.64***	402.75***	881.39	0.000	***
Net Income	-100.08***	-110.89**	-10.81	0.840	
Sales	-823.97***	-155.90	2166.87	0.177	
Capital Expenditure	-43.24***	36.59***	79.84	0.006	***
Book Value/Market Value	2.787	0.772	-2.015	0.865	
Panel B: Governance Structure					
Dual class share structure	0.001	0.029**	0.028	0.007	***
Panel C: Profitability					
Yearly Stock Return	0.630	-6.978	-7.608	0.522	
Return on Asset (ROA)	-0.014	0.053**	0.066	0.010	**
EBITDA/Asset	-0.007**	0.050***	0.057	0.000	***
Panel D: Cash Balances and Debt					
Cash/Asset	-0.006***	-0.016***	-0.010	0.193	
Cash+ST Investment/Asset	-0.023***	-0.072***	-0.048	0.000	***
Leverage	0.051***	0.073***	0.023	0.143	
Panel E: Discretionary Spending					
Dividends per share	0.457***	-0.107	-0.563	0.009	***
CAPEX/Asset	-0.013***	0.017***	0.030	0.000	***
R&D Expense/Asset	-0.016***	-0.020***	-0.003	0.598	

Notes: Table 4.11 presents a difference-in-difference analysis of firm characteristics for targeted and not targeted firms. *** and ** indicate a significance of less than 1% and 5%, respectively.

CHAPTER 5

CONCLUSION

5.1. Overview

This dissertation investigates the investor perception of agency conflicts between the family and the outside shareholders. Internal and external corporate governance mechanisms mutually supplement each other and make up the governance environment that binds managerial decisions. Firm value, organizational form, and internal and external corporate governance mechanisms are endogenous. We examine investor perceptions towards the valuation of family firms by controlling internal and external governance mechanisms.

In the second chapter, we investigate how the legal protection of shareholder rights affects the incentive conflicts between insiders and outside shareholders and the pricing of family firms. Death in the family provides a quasi-experiment to investigate the factors affecting investors' valuation of family firms since it is an exogenous shock. We sample family firms to minimize the variation in ownership concentration (an internal corporate governance mechanism) and isolate how legal

protection of shareholder rights (an external corporate governance mechanism) affects investors' pricing of shares. We show that in large, publicly-traded family firms, investors put a price on the costs that arise from incentive conflicts between the family and outside shareholders. The positive investor reaction is amplified in countries and periods with weaker protection of shareholder rights.

In the third chapter, we explore how investors' conflict perception affects the value of family firms with the moderating effect of descendent gender and family complexity. We use a sample of 140 death announcements of founders and family members holding executive positions in 116 firms across 25 countries. The findings support our hypothesis that family complexity adversely affects the market reaction following a family member's death, especially if the deceased had a son. The insignificance of the coefficients for the number of daughters who interacted with the number of spouses implies that investors do not perceive daughters as troublemakers. Two reasons might drive these results. First, investors might believe that the transition of leadership from father to daughter is easier than the transition from father to son. The second explanation builds upon the investors' biases about gender stereotypes (Haslam et al., 2010; Lee & James, 2007). The statistically insignificant effect of the number of deceased's daughters on investor reaction shows that investors do not perceive the possibility of leadership transition from father to daughter as a factor that will affect firm value. In particular, regarding the token status of female executives, investors might assume that it is unlikely for the daughters to become successors and may not consider the managerial skills of female progeny when pricing family firms (Kanter, 1977; Powell & Butterfield, 2002).

The fourth chapter investigates the effect of organizational form on agency problems by examining the exposure to shareholder activism in different organizational forms. Shareholder activism is a reaction to agency conflicts of interest between insiders and outside shareholders. We measure shareholder activism with the Schedule 13D filings filed with the intention of changing or influencing the control. We examine the focus of Schedule 13D filings that target the 2,000 largest publicly traded U.S. firms from 2001 through 2010. Univariate and multivariate test results support our hypothesis that family firms are more likely to be targeted by shareholder activism than non-family firms. Activist shareholders focus on conflict of interest between insiders and outside shareholders resulting from poor governance quality in family firms. In non-family firms, activist shareholders target entrenched managers and resulting principal-agent agency costs arising from the conflict of interest between managers and shareholders.

There are a few limitations in this thesis. First, our samples cover the most prominent family firms in all three studies. We need to interpret our results in light of the survivorship bias inherent in the sample. Second, we need stock prices to conduct our analysis. Hence, our results samples include only firms that choose to list on the stock exchanges.

5.2 Policy Implication

This dissertation examines the agency relations between different parties, such as managers and shareholders, and insiders and outside shareholders in family and non-family firm contexts. Results show that investors' perceptions of how faithfully their interests are protected change depending on the extent to which legal rules protect

shareholder rights. It has important policy implications because we show how better protection of shareholder rights affects the pricing and hence, the funding costs of family firms.

This dissertation also contributes to a better understanding of the impact of gender bias on investment decisions. It draws attention to how gender stereotyping bias affects firm valuation and the availability of financing options. We also show the effect of female representation in top management on the investors' gender perception. Our findings support the necessity of reforms and rules to increase gender diversity in the upper echelon of firm management.

Lastly, we show that investors' concerns differ depending on the organizational form. Activist investors seem to consider different agency problems in family and non-family firms. Policymakers need to consider the variations in organizational form while introducing new rules and reforms. Investors focus on shareholder rights protection, especially in family firms. Results present the importance of legal protection of shareholder rights which has an important policy implication.

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