Action-Based Contracts between Firms and Shareholders*

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Abstract

This study is one of the first to examine bilateral action-based contracts between firms and large shareholders. Using a comprehensive sample of 18,927 block investments from 1996 to 2015, I find that these contracts are increasingly prevalent: from 2010 to 2015, 13.7% of block investments involve contracts, whereas from 1996 to 1999, only 6.5% of block investments involve contracts. These contracts can specify provisions that pertain to financing terms, trading, directorships, payout policy, joint ventures, financial reporting, and selective disclosure, among other phenomena. The contract provisions are commonly stated in terms of accounting numbers, and the prevalence of these contracts is significantly positively associated with several proxies for shareholder-manager agency conflicts. These findings extend research on debt contracts and suggest that contracts between firms and shareholders have important but understudied consequences.

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1 Introduction

Accounting can facilitate the writing of financial contracts that constrain the actions of firms and capital providers for their mutual benefit (e.g., Watts and Zimmerman, 1978, 1990). However, empirical research on these contracts is limited primarily to debt contracts. To extend this research, Hart (2001, 2017) suggests studying contracts that involve other capital providers such as shareholders. Viewing shareholder-firm contracts through the classical principal-agent model, Prendergast (2002) argues that outcome-based bonus contracts necessitate paying managers a risk premium, and therefore sophisticated investors will write action-based contracts with managers whenever they can. Theoretically, I should therefore find action-based contracts between firms and large shareholders. Beyond this, there is limited theoretical guidance as to when such contracts will be written or what provisions they might specify. This study is one of the first to examine these empirical issues.

Specifically, I examine (1) the extent to which accounting numbers are used in firms' binding bilateral contracts with shareholders, (2) the effects of these contracts on the action spaces of managers and shareholders, and (3) the circumstances in which these contracts are more prevalent. Since these notions are not well-defined empirical constructs, my research approach closely follows the structure of the seminal study by Smith and Warner (1979), whose descriptive analysis of debt covenants motivated a large body of research on debt covenant heterogeneity (e.g., Dichev and Skinner, 2002). This research approach also follows Gow, Larcker, and Reiss (2016, p. 480), who argue that in emerging research fields "it is important to conduct sophisticated descriptive research."

I start by hand collecting a sample of contracts between firms and shareholders using 13D filings from the SEC. These filings are mandatory for investments of 5% or more of a firm's common stock, and they must include any contracts between the corresponding firm and investor. Of the 18,927 13Ds in my sample from 1996 to 2015, 1,637 or about 9% contain

¹Zimmerman (2001, p. 412) similarly argues that many research fields "started descriptively, but as empirical findings accumulated, theories were developed to explain what was observed and to predict phenomena yet to be observed."

a contract. Going forward, I refer to these contracts as shareholder contracts (SCs).

SCs are increasingly prevalent, with the proportion of 13Ds containing an SC having more than doubled over the sample period. From 2010 to 2015, 13.7% of 13Ds contain SCs, whereas from 1996 to 1999, only 6.5% of 13Ds contain SCs. For an average year in my sample, newly executed SCs involve companies valued at about \$125 billion in sum.² SCs emerge in all industries and involve many types of investors, including corporations, partnerships, and investment companies. SCs also involve many well-known names, including Abbott Labs, Amazon.com, AT&T, The Carlyle Group, Ford, Goldman Sachs, Johnson & Johnson, KKR & Co., Monsanto, and Warburg Pincus.

To give some institutional context, my discussions with practitioners suggest that SCs are typically initiated by investors who approach a firm with a value proposition, are enforceable in court, and can be executed by any firm provided that its charter does not forbid it. Sections 2 and 3 provide additional institutional details.

I next assess the clauses commonly specified by SCs. Given that these contracts are idiosyncratic in their scope, one methodology in the literature for analyzing a large population of contracts is to assess a subpopulation of those contracts.³ Accordingly, I read and report on SC clauses for a random draw of 300 SCs. In Section 3, I discuss why selecting 300 SCs is appropriate for my analysis, and I confirm that these SCs conform well to the full sample.

I first classify SCs in a way that attempts to account for the underlying heterogeneity of the blockholders and firms who write them. Specifically, I follow the taxonomy in Barclay et al. (2009), who find that the two main classes of blockholders are corporations and investment funds. Barclay et al. (2009) find that corporations often buy large blocks of stock for strategic business purposes such as joint ventures, and investment funds typically pursue other goals such as directorships (e.g., Bray et al., 2008).⁴ I therefore classify SCs

²As explained in Section 2, this value is a lower-bound estimate due to data limitations.

³For example, this approach is taken by Joskow (1987), Kaplan and Strömberg (2003, 2004), Roberts (2015, p. 62), Roberts and Sufi (2009a, p. 1660; 2009b, p. 161), and Sufi (2009, p. 1063).

⁴More specifically, Barclay et al. (2009) decompose corporate blockholders into operating blockholders who pursue joint business ventures with a firm, and financial blockholders who invest passively. Passive financial blockholders are outside my sample because they file 13Gs (Edmans et al., 2013, p. 2).

as either (1) a corporate SC, which involves a corporate blockholder; or (2) a non-corporate SC, which involves a non-corporate blockholder such as a partnership, investment company, or holding company. Note that this taxonomy only summarily captures one key difference in these varied and complex contracts. Sections 3 and 4 discuss other differences.

To preview the common clauses in SCs, I start with corporate SCs. Corporate SCs can grant a blockholder access to private information about a firm, including access to non-public financial statements, direct access to a firm's internal accountants and external auditors, and access to proprietary trade secrets.⁵ These SCs can also grant a blockholder directorships and managerial roles at a firm, and they can specify that a firm's board publicly support a blockholder's director nominee. Corporate SCs can also outline detailed cost- and profit-sharing arrangements between a blockholder and a firm, and they can prohibit product development that would compete against joint business ventures. Private placements of common stock can also occur under these SCs.

Turning to non-corporate SCs, these contracts often specify directorships for a block-holder and can grant a blockholder access to private information about a firm. Non-corporate SCs can also prohibit blockholders from selling their stake in a firm until a specific date. Private placements and the option to put the block back to a firm at a future date can also occur in non-corporate SCs, and stock price in these placements is occasionally stated at a premium or discount to its market price. Non-corporate SCs can also specify clauses that prohibit a blockholder from further influencing a firm. For example, they can prohibit a blockholder from pursuing directorships by a proxy contest.

Both corporate and non-corporate SCs can also specify clauses that involve financing terms, payout policy, investment, compensation, M&A activities, the venue for disputes such as arbitration, and accounting procedures. Accounting numbers are used in many of these clauses and in the other clauses discussed above. Section 3 provides my full analysis of what SCs commonly specify, includes direct excerpts from SCs, links my findings to prior

⁵As explained in Section 3.9, such private information sharing is permitted by securities regulations.

research, and explains how SCs terminate.

To summarize the findings from the first part of this study, contracts between firms and shareholders appear to be action-based contracts akin to those in the classical principal-agent model, where the principal (i.e., the shareholder) knows exactly what actions the agent (i.e., the manager) should take (or not take) and will contract on those actions to the extent it is possible. However, these contracts are often more complex than the standard principal-agent model, in that they can specify rights and duties for both shareholders and managers.

Since Prendergast (2002) does not specify other factors that may increase the prevalence of contracts, I next empirically model the probability that a 13D includes an SC, conditional on several blockholder and firm characteristics. This approach follows that of Smith and Warner (1979, p. 124), who perform cross-sectional tests of debt contracts and firm attributes. In selecting the covariates for my regressions, I follow Edmans and Holderness (2017, p. 588) and draw on theory, empirical models in related studies, and other institutionally motivated factors (see Section 4 for more detail).

For brevity, I sample the findings from my regressions that pool all SCs, and in Section 4, I examine separate regressions for corporate and non-corporate SCs. Pooling the SCs follows Roberts (2007, p. 121), who argues that many ex ante incentives for writing SCs should apply to all SCs. That is, although the contracts may look heterogeneous, in theory they may solve a homogeneous problem such as agency conflicts. In particular, Roberts (2007, p. 121) argues that contracts should be written only when simple self-interest will not lead the contracting parties to act in one another's common best interests.

Consistent with Roberts (2007), Gillan and Starks (2007, p. 58) conjecture that 13D investment is primarily a response to agency conflicts. To test this conjecture in the setting of SCs, I include in the regressions several proxies for blockholder-manager information asymmetries and divergence of interests. For example, among other variables, I include the geographic separation between a blockholder and a firm, and a firm's return volatility,

⁶Gow, Larcker, and Reiss (2016, Section 4) suggest building such empirical models.

institutional investor ownership, ROA, age, and cash holdings.⁷ In the cross-section of 13D investments, I find that for virtually all of my proxies of agency conflicts, increased agency conflicts are associated with an increased likelihood of an SC. One interpretation of these findings is that blockholders and shareholders write SCs in part to address agency conflicts between themselves.⁸

A few other key cross-sectional findings emerge. I find that increased blockholder ownership corresponds to an increased likelihood of SCs, which suggests that control through ownership facilitates SCs. I also find that SCs are more prevalent in firms whose managers are more entrenched, and in firms whose CEO's personal wealth is less sensitive to stock price. These findings are consistent with the conjecture of Denes et al. (2017, p. 415) that blockholders seek to control managers more when a firm has weak internal governance. The full cross-sectional analysis is discussed in Section 4.

This study contributes to the literature in a few ways. First, Aghion and Holden (2011) and Hart (2017) call for additional research on contracts, arguing that contract theory can be informed by studies of real-world contracts. For example, in his Nobel Prize article, Hart (2017, p. 1749-1750) argues that "there is as yet no tractable, widely agreed upon, theory of incomplete contracts," and calls for researchers to "continue to work on this challenging topic." The current study speaks to this call.

Second, this study complements those that examine private debt contracts. A seminal paper in this area is by Smith and Warner (1979, p. 117), who classify debt covenants for 80 debt contracts. In later work, Dichev and Skinner (2002) and many others examine the salient elements of debt covenant heterogeneity (e.g., Christensen et al., 2016). One conclusion from these studies is that accounting numbers serve a crucial contracting function

⁷Section 4 links these variables to various types of agency conflicts. Additionally, Harris and Raviv (1991, Section I.A) and Stein (2003, Section 2.2) outline the myriad ways in which managers' interests can diverge from those of shareholders (career concerns, empire building, etc.).

⁸An alternative hypothesis is that agency conflicts may be so severe as to deter investment and the writing of contracts altogether. Section 2 elaborates further on this theoretical argument. Nonetheless, Chava and Roberts (2008, p. 2087) similarly find that debtholders use contracts that specify managerial actions only in firms where agency conflicts are severe.

for debt financing. I find that accounting numbers also serve a contracting function for equity financing, an important consideration for future research on financial contracts.

Third, my study provides new evidence on how contracts can shape managers' and investors' action spaces, which is a key question in the corporate governance literature (e.g., Armstrong et al., 2010; Bushman and Smith, 2001). For example, the starting point of Shleifer and Vishny's (1997, p. 741) survey of the governance literature is that "the financiers and the manager sign a contract that specifies what the manager does with the funds." Yet, recent surveys of this literature do not recognize the presence of SCs in public companies. At the same time, not all of the investments in my sample involve SCs. This is consistent with the main argument of Grossman and Hart (1986), which is that managers' residual rights to make decisions when contracts are incomplete likely play an important role in running a firm.

The remainder of this study is organized as follows. Section 2 describes the setting and data in light of prior research. Section 3 examines SC clauses. Section 4 tests for which firms and shareholders SCs are more prevalent. Section 5 concludes.

2 Theory and Data

In typical models of investing, investors use their private information only to generate trading profits (e.g., Verrecchia, 1983). However, Admati et al. (1994) argue that some sophisticated investors may have expertise in monitoring management, and therefore may invest for control purposes.¹⁰ In such situations, the relationship between an investor and a manager is that of a principal-agent where an investor creates value not by trading but by ensuring that managers take the correct actions. To the extent such actions are directly contractible, Prendergast (2002) further argues that these investors may use explicit action-

⁹See Brav et al. (2010, 2015), Denes et al. (2017), Edmans (2014), Edmans and Holderness (2017), Gillan and Starks (2007), Khorana et al. (2017), and Mehrotra and Morck (2017).

¹⁰Importantly, Admati et al. (1994) argue that any gains from monitoring outweigh its costs, i.e., free-riding by other shareholders is not a concern.

based contracts as opposed to outcome-based bonus contracts, because outcome-based bonus contracts impose risk on managers for which they must be compensated by an investor.¹¹ I examine such action-based contracts (*SCs*) directly.

To isolate a sample of SCs, I textually analyze 13D filings from 1996 to 2015 as provided by the SEC's EDGAR. The SEC mandates that shareholders file a 13D within 10 days of acquiring "ownership of more than 5% of a voting class of a company's equity securities registered under Section 12 of the Securities Exchange Act of 1934." Each 13D filing includes a section entitled "Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer." Referred to as "Item 6" of the 13D, this section contains SCs and is described on the 13D form as follows¹²:

Describe any contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the issuer, including but not limited to transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies, naming the persons with whom such contracts, arrangements, understandings or relationships have been entered into.

To identify which 13Ds contain SCs, I use Perl to search 13D filings for the following terms: cooperation agreement, exchange agreement, investment agreement, investment contract, investor agreement, investor contract, investor rights, shareholder agreement, shareholder contract, stockholder agreement, stockholder contract, and support agreement. For consistency, I refer to these contracts as shareholder contracts (SCs). My reading of 300 SCs uncovered no false positives.

Each 13D filing includes a central index key that links the 13D to Compustat and CRSP. The final sample consists of 18,927 13D filings from 1996 to 2015, 1,637 or about 9% of which contain an SC. Because I do not restrict my sample to hedge funds, my sample is larger than

¹¹Put differently, when a principal knows the optimal action a risk-averse agent should take, a contract that uses a more direct measure of that action is always more efficient. When a principal does not know the optimal action an agent should take, an outcome-based bonus contract that leaves the action choice to the agent can be optimal.

¹²See https://www.sec.gov/answers/sched13.htm for more detail.

those of other studies that examine hedge funds over similar time periods (e.g., Bebchuk et al., 2015; Brav et al., 2008; Clifford, 2008; Klein and Zur, 2009, 2011).

Since SCs range in length from two to several hundred pages, I follow prior studies and analyze the clauses in 300 randomly drawn SCs. By comparison, Roberts (2015, p. 62) uses 114 randomly drawn firms to analyze the life cycle of debt contracts, and Smith and Warner (1979) analyze 80 debt contracts. Other examples of this approach include Roberts and Sufi (2009a, p. 1660), Roberts and Sufi (2009b, p. 161), and Sufi (2009, p. 1063). In Section 3, I confirm empirically and with practitioners that my subpopulation of SCs is representative of the full SC sample.

I also perform cross-sectional analyses on all the 13Ds, for which I include covariates that represent a variety of constructs. To avoid repetition, I motivate and describe these covariates in Section 4.

Table 1, Panel A shows that SCs occur in about 9% (1,637 of 18,927) of 13D filings from 1996 to 2015. This likely represents the lower bound of SCs in the market for two reasons. First, I cannot reliably observe SCs outside of the 13D universe. For example, in 2013, Microsoft and ValueAct executed an SC, but because ValueAct owned about 1% of Microsoft's common stock, ValueAct had no obligation to file a 13D (Bass and Weiss, 2013). Second, I do not use amended 13D (13D/A) filings. The problem with including 13D/A filings in this initial study of SCs is that 13D/A filings can include renegotiated and restated SCs. For example, consider 13Ds that contain an SC. If blockholders ceteris paribus buy more shares in a firm, they would file a 13D/A that not only updates their ownership stake, but also could restate the SC from their 13D. This leaves to future research how SCs evolve over blockholder-manager relationships.¹³

SC target firms are relatively large, with a mean (median) market value of about \$946 million (\$111 million). Relative to 13D targets not associated with an SC, SC targets on

¹³This follows Klein and Zur (2009, p. 19), who also use 13Ds, and Kaplan and Strömberg (2004), who only study a venture investor's initial investment in a company—subsequent studies examine the multi-stage nature of venture investment (e.g., Bengtsson, 2011; Bengtsson and Sensoy, 2011).

average are larger, have higher analyst following, are more volatile, have lower book to market, have lower ROA, generate and hold more cash, conduct more R&D, own more intangible assets, are younger, and are more financially constrained. When the 13D provides the location of both the shareholder and the firm, the mean (median) geographic separation between a blockholder and a target is 919 miles (705 miles). The mean blockholder ownership level as a percentage of a target's outstanding shares is 14.68% for all 13Ds and 21.55% for 13Ds with SCs (at the time of the 13D filing).¹⁴

Table 1, Panel B shows that the percentage of 13Ds that contain an SC has more than doubled since 1996: from 2010 to 2015, 13.7% of block investments involve contracts, whereas from 1996 to 1999, only 6.5% of block investments involve contracts. Table 1, Panel C shows that SCs arise in a variety of industries, and occur most frequently in business equipment, financial, and healthcare firms.

Table 1, Panel D provides the investor types based on a list of categories included on the 13D form. According to the SEC, investors can categorize themselves as more than one type, not categorize themselves at all, or categorize themselves as "other," which explains why the percentages in each column of this panel sum to more than 100%. Across the full sample of 13Ds and the 13Ds with SCs, corporations appear the most frequently at 38.8% and 56.1% of filings, respectively. Partnerships are the second most frequent category, and holding companies, investment advisers, and investment companies account for the bulk of the remaining observations.¹⁵

¹⁴I could not locate geographic distance and blockholder ownership for every filing due to missing data. I therefore follow Khanna et al. (2015, p. 1230) and create indicator variables that represent filings that are missing these data. My reading of SCs suggests that missing ownership data is due to blockholders leaving this field empty, and that missing geographic distance is due primarily to non-U.S. blockholders not providing a zip code. I also discovered some 13Ds in which blockholders' ownership levels are below 5%, which suggests that some blockholders file 13Ds at lower ownership levels.

¹⁵The statistics in Table 1 align well with prior studies; the differences (e.g., positive prior-year stock returns) are likely due to my sample's inclusion of corporate blockholders, who are excluded from many studies that use 13Ds (e.g., Denes et al., 2017, Section 5).

3 An Analysis of SC Clauses

As explained above, SCs are relatively new to the literature. Since each SC is idiosyncratic in its format, and some SCs run hundreds of pages, I follow prior research on contracts and examine a randomly drawn subsample of 300 SCs (e.g., Roberts and Sufi, 2009a, p. 1660; Sufi, 2009, p. 1063).

To ensure that the 300 SCs conform reasonably well to the full population, I first follow Cochran (1977, Ch. 2) and confirm that my random subsample of SCs covers blockholders and targets that are statistically similar to the full sample of SCs on the dimensions in Table 1. I select 300 SCs due in part to (1) the procedure in Cochran (1977, p. 72-76), which yields a subsample size of about 300 for my study (95% confidence level); and (2) Roberts (2015, p. 63), who analyzes debt contracts for a random draw of 114 firms "based on two considerations: power and cost." Roberts (2015) argues that cost is "more important" for sample size due to the time required to read the contracts. To further validate my subsample, I then inquire of practitioners who work on SCs whether my analysis has any significant gaps. The consensus was that my analysis covers the common types of SCs, and that the frequency of SC clauses in my analysis appears appropriate.

In assessing SC clauses, I closely follow the framework of Smith and Warner's (1979) analysis of debt covenants. First, I describe and exemplify each category of SC clauses, and then I follow up with analysis. Since corporate and non-corporate SCs overlap in the types of clauses that they can specify, I unpack SCs by clause type rather than first dividing SCs into corporate and non-corporate, which eliminates repetition. However, I still denote whether a particular type of clause pertains to corporate or non-corporate SCs (or both).

I next group SC clauses into the following categories: private placements, transfer/purchase restrictions on the stock, anti-dilution, directorships, management representation, general operating and financing decisions, dividend payout policy, profit/cost sharing arrangements, private information sharing, accounting procedures, and arbitration. Note that a single SC can specify one or more of these clauses.

3.1 Private Placements

Description. 28% of the SCs I examined involve a private placement whereby a blockholder buys shares directly from a target at a pre-determined price level (in a non-IPO setting), as opposed to in the secondary markets. I observed this clause in both corporate and non-corporate SCs. In a non-corporate SC between Charter Medical Corp. and the blockholder Rainwater Magellan Holdings, LP, filed in a 13D on January 31, 1996, the following private placement occurs:

The aggregate purchase price for the Securities is \$69,732,000 (the "Purchase Price"). The parties acknowledge that the Purchase Price, as calculated on a per share basis, is equal to 95% of the average closing price of the Common Stock as reported in the Wall Street Journal over the ten trading days beginning on Monday, November 13, 1995 and continuing through the close of business on Monday, November 27, 1995, which average was \$18.350 per share (i.e. \$18.350 x .95 = \$17.433 per share). The portion of the Purchase Price . . . shall be paid by Buyer on or before the Closing Date (as hereinafter defined) in immediately available funds by confirmed wire transfer to a bank account to be designated by the Company.

Analysis. Most companies can carry out private placements without shareholder approval unless the placement dilutes existing shareholders by 20% or more (Bartlett and Talley, 2017, p. 219). One benefit of private placements is that a firm can raise cash without paying investment banks for a seasoned equity offering, which could explain why targets sometimes sell blocks at a discount to market prices (see above). Another reason for discount pricing is that "blockholders expect to bear net private costs" as they invest in improving firm value (Holderness, 2003, p. 55). Blocks in my sample also sell at premiums, which suggests that blockholders earn private benefits from control (perhaps through a particular right conferred to them by the SC) or have private information that firm value will increase (Barclay and Holderness, 1989).

An altogether different explanation for private placements is that management is selfdealing, for example, raising cash for empire building (Holderness, 2018). In any case, private placements suggest that a blockholder's transaction costs for targeting a firm may differ from what one can infer from liquidity measures and prices derived from the secondary markets. Interestingly, some SCs also specify that a blockholder can sell the stock to a target in the future at a pre-specified price.

3.2 Buy/Sell Clauses

Description. Buy restrictions, which prohibit blockholders from acquiring additional stock in a target, occur in 17.3% of the SCs I examined. Sell restrictions, which prohibit blockholders from selling their stock in a target, occur in 14% of the SCs I examined. The minimum and maximum buy restrictions in my sample are 6 months and 10 years, respectively, with an average of 3.5 years. The minimum and maximum sell restrictions in my sample are 3 months and 6 years, respectively, with an average of 1.31 years. I observed these clauses in both corporate and non-corporate SCs. An example of a buy restriction arises in the corporate SC between the private student loan provider The First Marblehead Corporation and the blockholder The Goldman Sachs Group, Inc., in a 13D filing dated December 21, 2007:

The Purchasers, GS Capital, GS Offshore, GS Germany and GS Parallel have agreed that for a two-year period following the Initial Closing Date, they will not, directly or indirectly, (i) acquire beneficial ownership of additional shares of Common Stock if such acquisition would result in them owning more than 24.9% of the Issuer's outstanding voting securities or (ii) take certain other actions to influence or related to a change in control of the Issuer.

The same SC also specifies a sell restriction:

The Purchasers have agreed that they will not, for the period from the Initial Closing Date to June 20, 2009, sell or transfer, or enter into any hedging transaction which is designed to result in substantially the same economic effect.

Analysis. Buy/sell restrictions show that firms can specify a blockholder's action space through SCs, which can mitigate managerial uncertainty about what future actions a blockholder might take. However, whether buy/sell restrictions (or standstill provisions) decrease or increase agency conflicts depends on whether these restrictions facilitate or deter value-increasing investments by managers (e.g., Dann and DeAngelo, 1983; Jensen and Ruback,

1983; Malatesta and Walkling, 1988). For example, a blockholder sell restriction could reassure directors that they will continue to receive that blockholder's votes if they undertake a project that a blockholder prefers. By contrast, sell restrictions also subject blockholders to private-equity-style lock-ups, thereby closing the exit threat governance channel for the time being (e.g., Bharath et al., 2013; Edmans, 2009; Lerner and Schoar, 2004). Buy restrictions likewise mean that blockholders cannot threaten to increase their control rights through ownership as a means to further govern a target. Aside from agency conflicts, one could also think of the sell restriction period as an explicitly defined investment horizon, which complements studies that infer investment horizon through observed holding periods (e.g., Chen et al., 2007; Gaspar et al., 2005).

3.3 Anti-Dilution

Description. 20.3% of the SCs I examined specify anti-dilution provisions, which entitle a blockholder to first rights on any future share issuance by the firm. I observed this clause in both corporate and non-corporate SCs. In a non-corporate SC between TheStreet.com, Inc. and the blockholder Technology Crossover Ventures, filed in a 13D on November 15, 2007, the following anti-dilution clause appears:

The Purchasers have the right to purchase their proportionate percentage of new equity securities issued and sold by the Issuer. This right is subject to exceptions, as further set forth in the Investment Agreement, including issuances (i) pursuant to equity plans approved by the Board and (ii) in consideration for mergers, acquisitions, joint ventures, strategic alliances and other license agreements.

Analysis. Anti-dilution rights ensure that a target's board cannot dilute a blockholder's ownership rights in a target. Although some firms have corporate charters that grant all their shareholders anti-dilution rights, others have poison pill provisions that can deter large investors (e.g., Malatesta and Walkling, 1988; Ryngaert, 1988). In any event, blockholders can use SCs to acquire a type of personal insurance against ownership dilution.

3.4 Directorships

Description. 37% of the SCs I examined specify directorships, which makes directorships one of the most common clauses in both corporate and non-corporate SCs. In a corporate SC between engine and turbine manufacturer Cummins Engine Co. Inc. and the blockholder Ford Motor Co., filed in a $13D/A^{16}$ on January 1, 1997, the following provision appears:

Ford will be entitled to designate a number of directors proportional to its ownership interest (rounded down to the nearest whole number), provided, however, that if Ford holds at least 20% of the voting power of the then outstanding Voting Securities (as defined in the Investment Agreement) Ford will be entitled to designate at least two directors. Ford's designations will be made after consultation with the Issuer and must be reasonably satisfactory to the Issuer. The Issuer is obligated to use its reasonable best efforts to cause Ford's designees to be elected, including recommending to its Board of Directors the inclusion of Ford's designees in the slate of nominees recommended by the Board to the Issuer's stockholders. The Issuer has represented to Ford that it has taken all steps necessary to increase the size of its Board of Directors and to fill a vacancy thereon created by such increase in size with Ford's designee ... Ford's right to designate directors for election to the Issuer's Board of Directors will terminate if Ford sells Voting Securities such that it ceases to own at least 10% of the total voting power of then outstanding Voting Securities.

Analysis. Adams et al. (2010, p. 96-97) and Hermalin and Weisbach (2003, p. 7) argue that the determinants of board makeup are fundamental governance issues for several reasons, not least of which is the considerable soft influence that one director can have over the entire board. Directorship clauses in SCs help to explain the conflicting finding in the board literature that large investors attain directorships at a much higher rate than they conduct proxy contests and win director elections (Khorana et al., 2017, p. 11-12; Klein and Zur, 2009, p. 216; Shleifer and Vishny, 1986, p. 472-473). This literature commonly assumes that directors are appointed through elections, which raises the question of how SCs specify directorships if directors are voted on. The most direct way is that a firm can increase the

¹⁶When I drew the random subsample of 300 SCs, I drew from both 13Ds and amended 13Ds (13D/As), as I was unaware ex ante that 13D/As could contain renegotiated SCs (see Section 2). Though 13D/A filings present the aforementioned duplicate-observation problem in a regression framework, this problem is not as much of a concern for my analysis of SC clauses.

size of its board and appoint individuals to the new vacancies immediately.¹⁷ An SC can also specify that a target "use its reasonable best efforts to cause" a blockholder's designee to be elected, for example, by publicly supporting that designee (see above). This implies that a board's director recommendations to shareholders can be influenced by shareholders themselves.¹⁸

3.5 Management Representation

Description. 15% of the SCs I examined specify at least one management appointment at a target. I observed this clause primarily in corporate SCs. In a corporate SC between AT&T Corp. and the blockholder Nippon Telegraph & Telephone DoCoMo, Inc., filed in a 13D on January 22, 2001, the SC specifies both a director seat and management roles:

DoCoMo is entitled to designate one director to the AT&T Board of Directors and one member of the AT&T Capital Stock Committee. DoCoMo also has the right to appoint at least two and no more than five DoCoMo employees as employees of AT&T Wireless. These employees will have the titles of "Manager-Finance" and/or "Director of Technology," or such other titles as DoCoMo and AT&T Wireless shall agree. DoCoMo will lose these management positions in the event DoCoMo's share of the Wireless Group falls below 10% for a period of 60 days or more. However, so long as DoCoMo retains at least 10/16 of its original investment, DoCoMo will not lose these positions unless its share of the Wireless Group falls below 8% for a period of 60 days or more. In addition, DoCoMo will be entitled to select one senior executive of DoCoMo to serve on the Senior Leadership Team of AT&T Wireless to participate in meetings in which principal decisions relating to AT&T Wireless are discussed.

Analysis. Barclay et al. (2009, p. 2448) find that the majority of operating corporate block-holders are involved in a target's management, and that "in some instances representatives of the block purchaser assume top management positions at the target." SCs are one mechanism by which blockholders can gain management roles at a target. Thus, blockholders—through

¹⁷This applies beyond SCs. For example, in 2017, the investor Nelson Peltz lost his bid for a directorship at P&G, but P&G increased the size of its board and appointed him director anyway (Cavale, 2017).

¹⁸Bebchuk et al. (2017) find that directors can also be appointed through settlement agreements, but settlement agreements are limited in scope relative to SCs: they came into practice only around 2000, pertain mainly to directorships, and involve primarily hedge funds.

SCs—can shape a target's senior management team. In addition, these clauses speak to the incompleteness of SCs. For example, in this case, AT&T prefers to take a management role directly rather than write a contract ex ante that specifies that manager's actions. This could occur because AT&T is uncertain about what future actions that manager should take, or because AT&T cannot translate those actions into contractible language (e.g., Aghion and Bolton, 1992, p. 473; Roberts, 2007, p. 87).

3.6 General Operating and Financing Decisions

Description. 5% of the 300 SCs I examined specify managerial actions for precise business functions of a target, including financing constraints. I observed these clauses in both corporate and non-corporate SCs. In a corporate SC between the software company Xata Corp. and the blockholder John Deere & Co., filed in a 13D on September 11, 2000, the SC restricts Xata's mergers and acquisitions, borrowings, payout policy, compensation plans, capital expenditures, and other business decisions:

The Company shall not, without the Investor's prior written consent, do any of the following: (a) merge, consolidate or exchange shares with another corporation or entity or otherwise dispose of any of its assets other than in the ordinary course of business; (b) incur any debts, outside the ordinary course of business, which would have a material adverse effect on the Company; (c) pay or declare any dividends on its Common Stock (except for stock dividends) or redeem, retire or otherwise acquire any of its capital stock; (d) make any change in the Company's capital structure which would have a material adverse effect on the Company; (e) during any calendar year (i) pay to any officer or senior manager compensation (including salary, bonus and benefits) which materially exceeds the compensation customarily paid to management in companies of similar size, of similar maturity and in similar businesses or (ii) change the compensation for any officer or senior manager other than such changes as are approved by a majority of the disinterested members of the Board of Directors or any compensation committee thereof; (f) enter into any transaction, including, without limitation, any loans or extensions of credit, with any employee, consultant, officer, director or holder of five percent (5%) of any class of capital stock of the Company, or any member of their respective immediate families or any corporation or other entity directly or indirectly controlled by one or more of such employees, consultants, officers, directors or 5% stockholders or members of their immediate families (i) on terms less favorable to the Company than it would obtain in an armslength transaction between unrelated parties, or (ii) except in the case of any transaction or series of transactions entered into in the ordinary course of business and involving less than \$5,000 in the aggregate; (g) except as provided for or approved in an annual budget approved by the Board of Directors, (i) enter into any agreement, commitment or plan involving an acquisition, investment or expenditure in excess of \$50,000, or (ii) incur, assume, guarantee, endorse or otherwise become directly or contingently liable for any obligation in excess of \$50,000, in a transaction or series of transactions; (h) enter into any material transaction outside the ordinary course of business.

Analysis. The above example shows that corporate investment and financing are in part contractible, which are current subjects of debate in the contracting literature (Hart, 2017, p. 1735). In this case, blockholders directly specify several elements of managers' action space. Thus, if blockholders invest in acquiring information about their targets, or if they already possess sufficient management expertise, it appears that they can write contracts that alter managers' action space for detailed corporate operating decisions.

3.7 Dividend Payout Policy

Description. 19% of the SCs I examined limit or require a target to make dividend payouts to shareholders. I observed this clause in both corporate and non-corporate SCs. The corporate SC between Xata Corp. and John Deere & Co. in the prior section provides one example of this. Another example is in the non-corporate SC between the technology firm First Advantage Corporation and the blockholder First American Real Estate Solutions, LLC, filed in a 13D/A on September 14, 2005:

(1) until the fifth anniversary of the closing of the First Advantage Transaction (the "Covered Period"), to the extent that such distribution and any concurrent distribution made pursuant to clause (3) below would not leave the Company and FARES II and their respective subsidiaries (other than First Advantage) with an aggregate cash balance of less than \$30,000,000, the Management Committee shall distribute for each year of such period an amount equal to not less than 67% of the difference of (A) Net Profits, minus the Company's equity in the earnings of First Advantage.

Analysis. Prior studies suggest that dividends serve different purposes for corporate and

non-corporate blockholders. Barclay et al. (2009) examine whether corporate blockholders, who have a tax preference for dividends, invest in firms that pay dividends, but they find no evidence of this (also see Lewellen et al., 1978). Shleifer and Vishny (1997, p. 746) note that the worst agency problems occur in firms that hold excess cash, and Klein and Zur (2009, p. 189) argue that "by obligating managers to make continuous payouts in the form of increased dividends," blockholders can decrease such agency conflicts. Indeed, Klein and Zur (2009) find that investment funds' 13Ds are followed by decreased cash holdings and increased dividend payouts at a target, but they do not establish an underlying mechanism. SCs that specify firms' actions around dividends represent one mechanism by which blockholders may influence dividends. In addition, the example above provides a rich account of the exact inputs that a target uses in provisioning its dividend, which is a subject that has received considerable research attention (e.g., Brav et al., 2005).

3.8 Profit/Cost Sharing Arrangements

Description. 6% of the SCs I examined specify a profit- or cost-sharing arrangement. I observed this clause only in corporate SCs. These arrangements, which are commonly embedded within an SC, typically involve joint business ventures between a blockholder and target. In a corporate SC between the healthcare company Millennium Pharmaceuticals, Inc. and the blockholder Abbott Laboratories, filed in a 13D on March 7, 2003, the two parties share costs and profits and limit actions that might cannibalize the project:

Under the terms of a Collaboration and License Agreement, between Abbott and the Issuer, dated March 9, 2001, (the "Collaboration Agreement"), Abbott and the Issuer agreed to collaborate in the joint discovery, development, and commercialization of drugs and molecular diagnostics for the treatment of obesity and diabetes. This collaboration is for a five year term. Abbott and the Issuer agreed to share the cost of developing, manufacturing and marketing products on a worldwide basis. Abbott and the Issuer agreed to share profits worldwide and commercialization activities in the United States. Abbott agreed to be responsible for commercialization in the rest of the world but Millennium has the right to co-promote in major European markets. Subject to certain limited exceptions, neither Abbott nor the Issuer may conduct research, development or

commercialization of pharmaceutical products in areas of obesity and diabetes outside the collaboration.

Analysis. Bolton and Scharfstein (1998, p. 98) and Grossman and Hart (1986) posit that cross-company business projects can be plagued by future hold-up problems so severe that they deter such projects altogether. SCs appear to be one mechanism by which firms can partly resolve such problems. In addition, SCs with these arrangements suggest that many corporations have relationships that are partly cooperative rather than wholly competitive, thereby further suggesting that some corporations buy blocks for strategic business purposes.

3.9 Private Information Sharing

Description. 29% of the SCs I examined specify that managers will provide to a blockholder some form of non-public information. I observed these clauses in both corporate and non-corporate SCs. The corporate SC between the commercial real estate developer Perini Corp. and the blockholder Union Labor Life Insurance Co., filed in a 13D on April 13, 2000, specifies the following clause:

Access and Information. For so long as Union Labor Life holds at least 5% of the outstanding voting stock of the Company,

- (i) Access. Permit Union Labor Life (and its designated representatives) to visit and inspect any of the properties of the Company and the Subsidiaries, including the books and records of the Company and the Subsidiaries (and to make extracts and copies therefrom), and to consult with respect to and discuss the affairs, businesses, finances, operations and accounts of the Company and the Subsidiaries with the officers, directors, employees, affiliates and agents of such entities, all at such reasonable times and as often as Union Labor Life may reasonably request.
- (ii) Information. Deliver to such Union Labor Life the following: (A) As soon as practicable and in any event within 45 days after the end of each quarterly period (other than the last quarterly period) in each fiscal year, (1) a consolidated statement of income and consolidated statements of changes in financial position and cash flows of the Company and the Subsidiaries for such quarterly period and for the period from the beginning of the current fiscal year to the end of such quarterly period, and (2) a consolidated balance sheet of the Company and the Subsidiaries as at the end of such quarterly period, setting forth in each case, in comparative form, figures for the corresponding periods in the preceding fiscal

year and corresponding figures for the budget for such quarterly period, all in reasonable detail and certified by an authorized financial officer of the Company, subject to changes resulting from year-end adjustments.

Analysis. SCs can entitle blockholders to a variety of non-public information sources, including early access to financial statements, subsidiary- and product-specific financial statements, and observer directorships, which let the shareholder attend board meetings. Many SCs also specify provisions that prohibit shareholders from trading on any information obtained from these sources, which suggests that these covenants serve to facilitate accounting's steward-ship role rather than its trading role (Lambert, 2001, Section 3.3.5). At first glance, this may appear to violate Regulation Fair Disclosure (Reg FD). However, Reg FD applies "only to communications to securities market professionals and to any holder of the issuer's securities under circumstances in which it is reasonably foreseeable that the security holder will trade on the basis of the information." In addition, Reg FD exempts "any person who expressly agrees to maintain the information in confidence." Reg FD also exempts "strategic partners." Thus, Reg FD confers to managers considerable latitude over the sharing of private information in this setting.¹⁹

Nonetheless, I test whether the enactment of Reg FD in 2000 is associated with private information sharing in SCs. I create an indicator variable that equals 1 if an SC contains one or more of the following terms: information rights, access to information, access and information, access to documents, visit and inspect, communication with accountant, and full access. 45% of SCs contain one or more of the above terms before 2000, whereas 28% of SCs contain one or more of the above terms after 2000 (1% level). Although shareholder-manager private information sharing remains a key feature of SCs in the post-Reg-FD era, this finding suggests that Reg FD decreased these types of disclosures.²⁰

¹⁹See https://www.sec.gov/rules/final/33-7881.htm. Rule 10b-5 makes similar exemptions.

²⁰Section 3.10 provides an example of private information sharing post Reg FD.

3.10 Accounting Procedures

Description. 18% of the SCs I examined specify that managers report financial accounts under U.S. GAAP. I observed this clause in both corporate and non-corporate SCs. The corporate SC between the credit-card-processing company Vantiv, Inc. and the blockholder Fifth Third Bancorp, filed in a 13D on March 21, 2012, specifies both GAAP-compliant accounting and private information sharing:

SECTION 7.1 Books of Account. Appropriate books of account shall be kept by the Company and the Subsidiaries, in accordance with the generally accepted accounting principles of the United States ("GAAP"), at the principal place of business of the Company, and each Member shall have access to all books, records and accounts of the Company and the Subsidiaries and the right to make copies thereof for any purpose reasonably related to the Member's interest as a member of the Company, in each case, under such conditions and restrictions as the Managing Member may reasonably prescribe. [In this contract, "Member" refers to the blockholder.]

Analysis. Accounting information provides both a snapshot of a target's financial accounts and a summary of a target's recent performance, which makes it a useful contracting tool as demonstrated in the prior sections. Public companies based in the U.S., which are the focus of this study, must adhere to the reporting standards of U.S. GAAP and undergo an annual independent financial audit. However, if a target is taken private, these regulations may no longer apply. Blockholders thus appear to use SCs to ensure the continuity of U.S. GAAP-compliant financial reports.

3.11 Arbitration

Description. 9% of the SCs I examined specify that blockholders and targets use arbitration or mediation to resolve SC-related disputes. I observed this clause in both corporate and non-corporate SCs. The non-corporate SC between New World Coffee Manhattan Bagel, Inc. and the blockholder Brookwood New World Investors, LLC, filed in a 13D on September 22, 2000, specifies the following mediation clause:

(b) MEDIATION. If the parties are unable to resolve the dispute within 20 business days following the first request by either party for good faith negotiations, then the parties shall endeavor to resolve the dispute by mediation administered by the American Arbitration Association ("AAA") under its Commercial Mediation Rules.

Analysis. Researchers typically treat litigation as a monitoring mechanism that can impose fines and other penalties on managers for malfeasance (e.g., La Porta et al., 2000, 2002). However, where SCs specify arbitration or mediation, traditional litigation channels are foreclosed. Unlike trials in public courts, arbitration and mediation are typically confidential processes that generate binding resolutions relatively quickly. These mechanisms may compensate for slow or weak legal regimes at the state or federal level.

3.12 SC Termination

Description. All SCs specify a termination clause. The SC between Ford and Cummins Engine Co. Inc. specifies the following:

The term of the Investment Agreement is for a minimum of six years and continues until the earlier to occur of (i) Ford ceasing to beneficially own at least 5.0% of the total voting power of all the then outstanding Voting Securities and (ii) ten years; provided, however, that certain provisions of the Investment Agreement, as set forth in Section 5.1 thereof, survive termination.

Analysis. SCs typically terminate on a specific date or if blockholders decrease their ownership stake in a target to below a threshold specified by the SC.

4 Empirical Foundations of SCs

I next empirically model the probability that a 13D contains an SC, conditional on several relevant variables. This follows Christensen and Nikolaev (2012, 2017), Dichev and Skinner (2002), Nikolaev (2010), and Smith and Warner (1979), all of whom correlate debt contract features with firm-level attributes. A limitation of this approach is that it does not isolate

a quasi-experiment that may facilitate strong causal inference for any one variable. Rather, this approach focuses on the circumstances in which it is optimal for firms and shareholders to write SCs, given these parties' constraints on using other mechanisms to allocate control rights.

Since my sample is the 13D universe, the regressions inherently condition on 13D investment, but impose no other survival criteria. I first perform an analysis that pools all SCs and then follow up with separate analyses for corporate and non-corporate SCs. This follows Gordon and Pound (1993, Section V) and Klein and Zur (2009, Table III), who check whether investor types modulate their pooled regressions in related settings. I base my regressions in part on the regressions in Brav et al. (2008, Table IV) and Klein and Zur (2009, Table III), both of whom model the probability of being a hedge fund's target. Their setting is similar to mine in that the factors that may contribute to becoming a hedge fund's target may be more pronounced for SC writers (e.g., agency conflicts). I also include other covariates that are relevant in the SC setting. I next motivate these covariates by discussing competing predictions from theory, and then I interpret the results. All variables are defined in the Appendix.

4.1 Agency Conflicts at the Target

Kaplan and Strömberg (2004, p. 2178) argue that principal-agent theory predicts that "most agency problems are directly related to asymmetric information, i.e., uncertainties about which the [manager] is better informed than the [investor]." Thus, as information asymmetry increases, blockholders and managers may be more likely to write SCs to help mitigate uncertainties about each other's future actions. Conversely, Shleifer and Vishny (1997, p. 741-752) argue that blockholders may be too uninformed or small to write detailed contracts with managers; they also note that corporate charters may be complete contracts between investors and managers, which may obviate the need for additional contracts. Yet another possibility is that investors ex ante screen their investment opportunities and select

ones that meet their preferences without a contract (Kaplan and Strömberg, 2001, p. 426).

I therefore include in my regressions several widely used proxies for information asymmetry. First, I follow Mian (2006) and Sufi (2007) and include geographical separation between a blockholder's office and a target's headquarters. Sufi (2007, p. 661) argues that geographic separation increases information asymmetry by increasing the cost of overseeing investments. Second, I follow Roberts (2015) and include stock return volatility measured over the prior year, as volatility can proxy for investor uncertainty about management's future actions. Third, I follow Brav et al. (2008, p. 1753) and include institutional investor ownership, because institutions employ analysts who uncover new information about a firm, for example, by demanding additional disclosure (Boone and White, 2015; Schoenfeld, 2017).²¹ Fourth, I follow Balakrishnan et al. (2014) and include analyst following, as analyst reports may decrease information asymmetry about a firm's activities.²²

Table 2 shows that the geographical separation between a blockholder and target is positively associated with the likelihood of an SC (1% level). In addition, SCs are positively associated with 13Ds that are missing geographical separation, which is a distinction that applies mainly to distanced foreign investors (1% level; see fn. 14). SCs are also positively associated with stock return volatility (1% level) and negatively associated with institutional ownership (10% level). I do not find a statistically significant result in either direction for analyst following. For one-standard-deviation changes in geographical separation, return volatility, and institutional ownership, the changes in the likelihood of an SC range from about 0.5% to 2.0%, and the indicator for missing geographical separation is associated with about a 5.7% increase in the likelihood of an SC. Given that about 9% of 13Ds contain SCs, these findings are economically meaningful. One explanation for this result is that blockholders and managers write SCs in part to mitigate increased uncertainty over each

²¹Institutional governance could also decrease agency conflicts (Appel et al., 2016; Crane et al., 2016).

²²Chava and Roberts (2008, p. 2110) similarly use credit analyst ratings to proxy for a firm's information environment. Unless noted otherwise, all variables are measured in the quarter of the 13D filing date, on the 13D filing date, or over the year prior to the 13D filing date. See the Appendix for exact variable definitions.

other's future actions.²³

I next examine additional covariates that studies have linked to agency conflicts. Shleifer and Vishny (1997, p. 746) argue that the worst agency conflicts occur in firms that have excess cash and low dividends (also see Chava and Roberts, 2008, p. 2110 and Klein and Zur, 2009, p. 189). I therefore include a target's cash holdings scaled by assets, net cash flows scaled by assets, and dividends scaled by market value (dividend yield). In Table 2, I find that SCs are positively associated with cash holdings in each of the four regressions (5% level in two of the regressions). Table 2 also shows that SCs are positively associated with net cash flows (1% level in all of the regressions) and negatively associated with dividend yield (1% to 5% level in three of the regressions). For one-standard-deviation changes in these variables, the changes in the likelihood of an SC range from 0.4% to 1.5%, with net cash flows having the largest impact. Overall, these findings suggest that SCs are more prevalent when managers potentially have more latitude to misallocate cash, consistent with the findings of Klein and Zur (2009, p. 189).

Shleifer and Vishny (1997, p. 746) also argue that poor investment opportunities may increase agency conflicts. By contrast, Kaplan and Strömberg (2003, p. 299) argue that firms with poor investment opportunities may be mature firms that have more precise measures of firm performance, which could increase the precision of output-based contracts and decrease agency conflicts. I therefore include a target's book to market (BtM) ratio to proxy for investment opportunities, and R&D scaled by total assets and capital expenditures scaled by total assets (CAPEX) to proxy for actual investment. Table 2 shows that BtM is weakly negatively associated with SCs across the four regressions, which is consistent with Kaplan and Strömberg's (2003) logic. I find no significant result in either direction for R&D, and I find that CAPEX is negatively associated with SCs, which suggests that CAPEX decreases the prevalence of SCs (10% level). This finding squares well with that of Barclay et al. (2009), who find that corporate blockholders commonly prefer CAPEX and thus may not

 $^{^{23}}$ I use linear probability models throughout this analysis. However, I find qualitatively similar results for all of my tests when I use logit and probit models.

need an SC if a target is already undertaking it. This result is also consistent with Brav et al. (2008, p. 1755), who find that investment funds focus on "generalizable" issues at their targets, as they are not CAPEX experts.

Shleifer and Vishny (1997, p. 765) also point out that agency conflicts may be aggravated by intangible assets, that is, firms with few hard assets that could be used to satisfy financiers in bankruptcy. In addition, intangible assets proxy for a target's investments in knowledge-based projects (e.g., the purchase of patents) that may demand manager-specific expertise and discretion, both of which could further increase agency conflicts (Brown et al., 2009; Kaplan and Strömberg, 2004, p. 2179). Consistent with this, Table 2 shows that a one-standard-deviation increase in intangible assets (scaled by total assets) is associated with about a 0.8% increase in the likelihood of an SC across all four of the regressions (1% level).

Next, Greenwood and Schor (2009) and Kaplan and Strömberg (2004) find that firm age proxies for managerial experience, which they argue can increase agency conflicts since the ability of an inexperienced manager is more of an unknown to investors. I therefore include a target's age. Table 2 shows that a one-standard-deviation increase in log of firm age is associated with about a 1.7% decrease in the likelihood of an SC across all the regressions (1% level). This finding suggests that SCs may help to address uncertainties about managerial ability.

Nini et al. (2012) argue that leverage decreases agency conflicts by serving as a governance mechanism over management. They also argue that leverage signals that a firm has credible alternatives to equity financing. These arguments suggest that SCs would be negatively associated with leverage. By contrast, it has long been recognized that shareholders and debtholders may have conflicting preferences for the firm (e.g., Klein and Zur, 2011). If blockholders wish to ensure that managers' incentives are aligned with their own, and not with those of debtholders, SCs may be positively associated with leverage. I therefore include a target's total debt scaled by assets (leverage). Table 2 shows that leverage is positively associated with SCs, but this result is statistically indifferent from zero. This suggests that

the above mechanisms may offset each other, perhaps with weak dominance to the latter argument.

I also include a target's profitability as measured by return on assets (ROA), which can proxy for several agency conflicts. First, decreased profitability can represent firms that managers are running suboptimally (e.g., Klein and Zur, 2009; Shleifer and Vishny, 1989). Second, Roberts and Sufi (2009b, p. 160) reason that increased profitability increases firms' financing options, which may decrease the prevalence of SCs. It follows from both of these arguments that SCs would be negatively associated with ROA. Indeed, Table 2 shows that a one-standard-deviation increase in ROA is associated with a 1% decrease in the likelihood of an SC (1% level for three of the regressions).

Another result is that a target's stock returns over the year prior to the 13D filing date are positively associated with SCs.²⁴ However, Hermalin and Weisbach (2003, p. 11) argue that one cannot make reliable inferences about the link between returns and governance outcomes because returns are driven by many factors that managers cannot control, including macro and behavioral phenomena. Nonetheless, there are several potential explanations for the positive association between SCs and prior returns. First, blockholders and managers may write SCs when investors' expectations about a target's future are increasingly favorable. Second, SCs may be correlated with investors' expectations about value-increasing blockholder actions. Third, a target's managers may issue stock through private placements that involve SCs when they possess favorable private information.

4.2 Blockholder Ownership in the Target

I next assess whether SCs are associated with a blockholder's ownership level in a target. Barclay and Holderness (1991, p. 861) note that because blockholder ownership levels may alter blockholders' payoffs and effort motives, an important question is whether ownership is associated with corporate activities. Increased ownership confers to blockholders at least

²⁴This result obtains for a variety of returns measures, including raw firm returns minus contemporaneous market returns, and raw firm returns minus the product of market returns and a firm-level market beta.

two potential benefits: (1) increased bargaining power in SC negotiations, and (2) increased payoffs from writing an SC. Conversely, increased control rights give blockholders increased sway over other control mechanisms such as director elections, which could decrease the demand for SCs. I therefore include a blockholder's ownership level in a target, as measured by percentage of shares outstanding. Table 2 shows that a one-standard-deviation increase in blockholder ownership is associated with about a 3.4% increase in the likelihood of an SC across all four of the regressions (1% level). This is one of the strongest findings in Table 2 and suggests that blockholder ownership facilitates the writing of SCs.

Edmans and Holderness (2017, Section 3) also point out that it is costlier in dollar terms for blockholders to acquire voting rights in more expensive targets. This implies that as voting rights become more expensive, blockholders might turn to SCs more frequently. Consistent with this idea, Table 2 shows that a one-standard-deviation increase in log of market value is associated with about a 2.1% increase in the likelihood of an SC across all four regressions (1% level).

4.3 Corporate Versus Non-Corporate SCs

Edmans and Holderness (2017, Section 7) argue that a subject deserving of more study is whether blockholders' heterogeneity drives their investing activities. I therefore next run the Table 2 regressions separately for the main two types of blockholders in my setting, corporate and non-corporate blockholders. Since corporate and non-corporate blockholders may have different investment goals, the attributes of the firms with which they write SCs may also differ.

To perform this analysis cleanly, I define corporate blockholders as those who identify themselves as a corporation and *none* of the following: a holding company, an investment adviser, an investment company, or a partnership (3,880 13Ds and 588 SCs). I define non-corporate blockholders as those who identify themselves as *one or more* of the following: a holding company, an investment adviser, an investment company, or a partnership, but *not*

a corporation (4,593 13Ds and 345 SCs).²⁵

In Table 3 and Table 4, I run the SC regressions from Table 2 separately for corporate and non-corporate blockholders, respectively.²⁶ A few key differences emerge. First, geographic separation matters more for SCs between firms and corporate blockholders. This finding is consistent with Barclay et al. (2009), who find that corporate blockholders conduct business ventures with their targets that likely require direct oversight and site visits. This finding is also consistent with those of Brav et al. (2008, p. 1754), who find that non-corporate blockholders such as investment funds are often generalists who do not oversee any particular project or make frequent site visits.

Second, intangibles are significant only for corporate blockholders, which suggests that non-corporate blockholders do not have the expertise necessary to write contracts involving knowledge-based soft assets (Brav et al., 2008). Similarly, CAPEX is insignificant for both types of blockholders but is more meaningful to corporate blockholders.

Third, cash holdings are significant only for corporate blockholders, but net cash flows are significant only for non-corporate blockholders. The former result is consistent with that of Barclay et al. (2009), who find that corporate blockholders pursue joint ventures that require immediate cash outlays. The latter result is consistent with Brav et al. (2008, p. 1754-1755), who find that non-corporate blockholders such as investment funds specialize in correcting agency conflicts related to recurring cash flows.

Fourth, ROA is negatively associated with SCs for both types of blockholders but is more meaningful for non-corporate blockholders. This is consistent with Brav et al. (2008), who argue that investment funds specialize in payout policy, which may be adversely affected by decreased profits. By contrast, corporate blockholders who invest for joint venture purposes

²⁵This procedure excludes blockholders who leave investor type blank, select "other," or identify themselves as a corporation *and* one or more of the following: a holding company, an investment adviser, an investment company, or a partnership. I remove 248 13Ds that involve employee benefit/endowment funds and religious organizations because these investors' goals differ from those of the investment funds that account for the vast majority of non-corporate 13Ds (e.g., Ertimur et al., 2011; Gillan and Starks, 2000). As in Table 2, observations in the regressions vary slightly due to data availability.

²⁶This approach is similar to that of Klein and Zur (2009, Table III), who assess whether investor heterogeneity alters the drivers of active investment.

are likely more interested in a target's underlying business. Overall, the differences across Tables 3 and 4 provide initial evidence that blockholders' heterogeneity is associated with the prevalence of SCs.

4.4 Additional Tests

I next perform additional comparative statics of SCs, beginning with a target's internal governance. Holderness and Sheehan (1988, Section 4) argue that weak internal governance might alter the extent to which blockholders attempt to influence a target. By contrast, weak internal governance could entrench management so severely as to deter SCs altogether (Bebchuk and Cohen, 2005; Bebchuk et al., 2009, 2013).

I therefore test whether SCs are associated with a target's Entrenchment Index (E-Index). Since E-Index data are available for only 3,316 of the 13Ds in my sample, I perform this analysis at the univariate level.²⁷ Table 5, Panel A shows that the percentage of 13Ds with SCs generally increases in a target's E-Index. When I include the E-Index in the Table 2 regressions, I find a positive but statistically insignificant result, potentially due to low power.

I also test whether SCs are associated with a target CEO's wealth sensitivity to firm value, as measured by Edmans et al.'s (2009) CEO wealth-performance sensitivity measure (CEO WPS). Since this measure is available for only 3,347 of the 13Ds in my sample (large Execucomp firms), I perform this analysis at the univariate level as well. The extent to which a CEO's personal wealth is tied to stock price could help to align the incentives of the CEO and shareholders, which could decrease agency conflicts, or it could facilitate CEO control over the board, which could increase agency conflicts (e.g., Jensen and Meckling,

²⁷Brav et al. (2008, Table IV) similarly lose over 60% of their sample due to the G-Index. The E-Index, which is available only for relatively large targets, takes a value from 0 to 6 and increases by one for each of the following: a staggered board, limits to shareholder bylaw amendments, a poison pill/shareholder rights plan, a golden parachute, and a supermajority requirement for mergers and for charter amendments. Bebchuk et al.'s (2009) E-Index data are available from 1990 to 2006, but I obtained hand-collected data through 2012. To maximize the number of 13Ds to which I can apply the E-Index, for each 13D I use a target's most recent E-Index. For 13Ds filed from 2013 to 2015, I use a target's E-Index from 2012.

1976; Stulz, 1988). Consistent with the former argument, Table 5, Panel B shows that the prevalence of SCs is decreasing in CEO WPS. When I include the CEO WPS in the Table 2 regressions, I find a negative but statistically insignificant result.

I next test whether SCs are associated with a target's financing constraints, as measured by Hoberg and Maksimovic's (2015) delaycon variable, which is available for 11,407 of my 13Ds and proxies for the extent to which firms are at risk of delaying investment due to liquidity constraints. Roberts and Sufi (2009b, p. 160) argue that firms with liquidity constraints have decreased bargaining power over financiers, which may confer to blockholders increased bargaining power to elicit an SC from managers. Indeed, Table 5, Panel C shows that SCs are increasing in a target's liquidity constraints. This result also obtains when I include delaycon in the Table 2 regressions (1% level).

Lastly, I test whether SCs are associated with a target's product-pricing power, as measured by Hoberg et al.'s (2014) firm-level HHI measure, which links to 17,492 of my 13Ds. Kaplan and Strömberg (2004) argue that firms with increased pricing power have more financing options, which may decrease the prevalence of SCs. Table 5, Panel D shows that SCs are in fact decreasing in a target's pricing power. This result also obtains when I include the HHI measure in the Table 2 regressions (5% level).

5 Conclusion

A key function of accounting is its use in writing financial contracts that constrain the actions of firms and capital providers (Watts and Zimmerman, 1978, 1990). However, existing research on these contracts is limited primarily to debt contracts. Hart (2001, 2017) suggests extending this research by looking at contracts involving other capital providers such as shareholders. I therefore examine firms' binding bilateral contracts with shareholders (SCs). I find that these contracts can specify clauses that pertain to financing terms, trading, directorships, dividends, joint ventures, financial reporting, and selective disclosure, among

other phenomena. The contract provisions are commonly stated in terms of accounting numbers, and the prevalence of these contracts is significantly positively associated with several proxies for shareholder-manager agency conflicts. Overall, my findings suggest that accounting serves a key contracting function for equity financing, an important consideration for future research on financial contracts.

In explaining contracts between firms and shareholders, this study closely follows the structure of the seminal debt contract study by Smith and Warner (1979). This approach is needed because there is limited theoretical research on explicit action-based contracts between firms and shareholders, and the notion of which actions are contractible in practice is not a well-defined empirical construct. Indeed, Gow, Larcker, and Reiss (2016, Section 4.4) and Zimmerman (2001) argue that it is imperative to conduct detailed descriptive research in fields not yet formalized by theoretical models. As an exemplar of this approach, Smith and Warner (1979) spurred a large body of research on debt covenant heterogeneity (e.g., Dichev and Skinner, 2002).

Given that this study is one of the first on SCs in public companies, one could pursue a variety of other research avenues with these contracts. First, one could examine the extent to which SC covenants modify U.S. GAAP accounting numbers (e.g., Leftwich, 1983). Second, one could assess the stock price consequences of SCs to ascertain any impact on firm value (e.g., Nini et al., 2012). Third, one could study whether SCs are renegotiated (e.g., Nikolaev, 2018; Roberts and Sufi, 2009b).

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Appendix

Variable Construction

This appendix describes each variable used in this study and its source. Index i represents each 13D observation. Index d represents the event day and q represents the event year-quarter, where d=0 and q=0 are the 13D filing day and year-quarter, respectively. Index f represents the target firm, r represents raw target firm returns, and n is the number of trading days in the corresponding observation window. Data source C = Compustat, F = FactSet, and SEC = Securities and Exchange Excha

Variable	Definition	Source
Shareholder $Contract_i$	1 if 13D contains a shareholder contract, 0 otherwise	SEC
Geographical $Distance_i$	Distance in miles between the blockholder's office and the target's headquarters, 0 if missing	SEC
Missing Geographical Distance $_i$	1 if Geographical Distance $_i$ is missing, 0 otherwise	SEC
Return Volatility $_i$	$\sigma(r_{fd_{[-365,-6]}})$	CRSP
Institutional Investor $Holdings_i$	Institutional Investor Holdings $_{f,q=0}$	F
Analyst Following $_i$	Analyst Following $f, d=0$	IBES
Cash_i	(Cash + Short Term Equiv. $_{f,q=0}$)/Total Assets $_{f,q=0}$	С
Net Cash Flows $_i$	$(\text{Net Operating Activities}_{f,q=0} + \text{Net Investing Activities}_{f,q=0} + \text{Net Financing Activities}_{f,q=0})/\text{Total Assets}_{f,q=0}$	С
Dividend $Yield_i$	${\rm Dividends}_{f,q=0}/{\rm Market~Cap.}_{f,d=0}$	C, CRSP
Book:Market $_i$	Common Equity $_{f,q=0}$ /Market Cap. $_{f,d=0}$	С
$R\&D_i$	Research and $\mathrm{Development}_{f,q=0}/\mathrm{Total}\ \mathrm{Assets}_{f,q=0}$	С
$CAPEX_i$	Capital Expenditures $_{f,q=0}$ /Total Assets $_{f,q=0}$	С
Intangibles $_i$	Intangibles $_{f,q=0}$ /Total Assets $_{f,q=0}$	С
Company Age_i	Days since target was first listed in $CRSP_{f,d=0}$	CRSP
$Leverage_i$	Total $\mathrm{Debt}_{f,q=0}/\mathrm{Total}\ \mathrm{Assets}_{f,q=0}$	С
ROA_i	Net $Income_{f,q=0}/Total Assets_{f,q=0}$	С
Returns $[X, Y]_i$	$\left[\exp\left[\sum_{d=X}^{Y}\ln\left(1+r_{fd}\right)\right]-1\right]$	CRSP
Blockholder Ownership Level_i	Blockholder's ownership as a $\%$ of Common Stock Outstanding $f, d=0$, 0 if missing	SEC
Missing Blockholder Ownership $_i$	1 if Blockholder Ownership Level $_i$ is missing, 0 otherwise	SEC
$Market Value_i$	Shares $\text{Outstanding}_{f,d=0} \times \text{Stock Price}_{f,d=0}$	CRSP
$E ext{-Index}_i$	Target's most recent E-Index as of $d=0$ from Bebchuk et al. (2009)	SEC
CEO WPS_i	The scaled wealth-performance sensitivity of the target's CEO at time q from Edmans et al. (2009)	С
Liquidity Constrained $_i$	Target's likelihood of delaying their investments due to liquidity constraints at time q from Hoberg and Maksimovic (2015)	SEC
Pricing Power $_i$	Target's product market pricing power at time q from Hoberg et al. (2014)	С

Table 1 Panel A: Descriptive Statistics for 13D Filings from 1996–2015

The sample consists of 18,927 13D filings, 1,637 of which contain an SC (see Section 2). Index i represents the 13D filing and the corresponding blockholder and target. Shareholder Contract $_i$ equals 1 if the filing contains an SC, and 0 otherwise. Income statement and balance sheet variables are measured for a target firm in the year-quarter of the filing date. If necessary, variables are increased by 1 before being logged. All variables are winsorized at the 2% level except for indicator variables, Institutional Holdings, Blockholder Ownership, the E-Index, CEO WPS, Liquidity Constrained, and Pricing Power. Variables that have a natural lower bound of zero (e.g., Geographical Distance) are winsorized from the top only. Winsorizing at the 1% level or not at all does not qualitatively change any results. The "Diff." column provides the t-statistic from a two-tailed t-test of the mean for all 13Ds minus the mean for 13Ds with SCs. See the Appendix for variable definitions.

	All 13Ds			13			
Variable	N	Mean	σ	N	Mean	σ	Diff.
Shareholder $Contract_i$	18,927	0.09	0.28	1,637	1.00	0.00	(.)
Log of Geographical Separation $_i$	18,927	4.04	3.13	1,637	3.96	3.19	(1.04)
Missing Geographical Separation $_i$	18,927	0.14	0.34	1,637	0.20	0.40	(-7.14)
Log of Return Volatility $_i$	18,550	0.04	0.03	1,590	0.05	0.03	(-4.73)
Institutional Holdings $_i$	18,927	0.29	0.30	1,637	0.29	0.29	(-0.85)
Log of Analyst Following $_i$	18,927	0.69	0.78	1,637	0.81	0.81	(-5.85)
Cash_i	18,927	0.34	0.40	1,637	0.39	0.43	(-5.69)
Net Cash Flows $_i$	18,927	1.04	7.42	1,637	2.63	10.27	(-6.69)
Dividend $Yield_i$	18,927	0.01	0.04	1,637	0.01	0.04	(0.61)
Book:Market $_i$	18,927	0.66	0.70	1,637	0.54	0.66	(7.63)
$R\&D_i$	18,927	0.05	0.12	1,637	0.06	0.13	(-3.38)
$CAPEX_i$	18,927	0.05	0.07	1,637	0.05	0.07	(0.46)
$Intangibles_i$	18,927	0.12	0.18	1,637	0.14	0.20	(-4.92)
$Log of Company Age_i$	18,927	6.98	2.43	1,637	6.35	2.82	(9.54)
$Leverage_i$	18,927	0.25	0.24	1,637	0.26	0.25	(-0.89)
ROA_i	18,927	-0.12	0.32	1,637	-0.16	0.34	(4.31)
$[-365, -5) \text{ Returns}_i$	18,762	0.08	0.65	1,611	0.13	0.68	(-3.08)
Blockholder Ownership Level $_i$	18,927	14.68	16.76	1,637	21.55	19.74	(-14.95)
Missing Blockholder Ownership $_i$	18,927	0.08	0.27	1,637	0.08	0.26	(0.60)
$Log of Market Value_i$	18,927	18.64	1.80	1,637	19.11	1.83	(-10.71)
$\operatorname{E-Index}_i$	3,316	2.22	1.22	306	2.24	1.21	(-0.40)
$\mathrm{CEO}\;\mathrm{WPS}_i$	3,347	401.87	9861.42	270	25.03	100.55	(2.21)
Liquidity Constrained $_i$	11,407	0.00	0.09	1,057	0.01	0.09	(-2.53)
Pricing $Power_i$	17,492	0.24	0.23	1,493	0.23	0.22	(1.95)

Table 1 Panel B: Year Distribution for 13D Filings from 1996–2015

Year t	$\frac{13\mathrm{Ds}_t}{\mathrm{N} = 18,927}$	$\frac{13\text{Ds with SCs}_t}{\text{N} = 1,637}$	$\frac{13\text{Ds with } \text{SCs}_t}{13\text{Ds}_t}$
1996	7.6%	5.6%	6.3%
1997	12.7%	9.9%	6.7%
1998	10.4%	6.5%	5.3%
1999	8.5%	7.7%	7.8%
2000	7.9%	9.9%	10.9%
2001	5.3%	5.6%	9.0%
2002	3.8%	2.9%	6.7%
2003	3.5%	3.1%	7.5%
2004	2.9%	3.2%	9.7%
2005	3.8%	2.6%	6.0%
2006	4.0%	3.2%	7.1%
2007	4.7%	4.3%	8.0%
2008	4.6%	3.4%	6.5%
2009	2.4%	4.2%	14.8%
2010	2.6%	5.1%	16.7%
2011	2.4%	4.2%	15.4%
2012	2.5%	3.5%	12.4%
2013	3.0%	4.6%	13.3%
2014	3.8%	5.4%	12.3%
2015	3.6%	5.1%	12.1%
Total	100%	100%	-

Table 1 Panel C: Industry Distribution for 13D Filings from 1996–2015

Industry i	$\frac{13\mathrm{Ds}_i}{\mathrm{N} = 18,927}$	$\frac{13\text{Ds with SCs}_i}{\text{N} = 1,637}$
Consumer Nondurables	5.1%	3.7%
Consumer Durables	2.1%	1.9%
Manufacturing	7.4%	6.3%
Energy, Oil, Gas, and Coal	4.6%	4.0%
Chemicals and Allied Products	1.7%	1.7%
Business Equipment	18.8%	21.3%
Telecommunications	5.2%	8.9%
Utilities	1.1%	0.9%
Wholesale and Retail	9.8%	7.4%
Health Care	12.3%	13.3%
Finance	16.9%	14.5%
Other	15.0%	16.1%
Total	100%	100%

Table 1 Panel D: Investor Type for 13D Filings from 1996-2015

13Ds let blockholders self-select their type from a menu of categories. Blockholders can self-classify as more than one category, which explains why the percentages in each column sum to more than 100%.

Investor Type i	$\frac{13\mathrm{Ds}_i}{\mathrm{N} = 18,927}$	$\frac{13 \text{Ds with SCs}_i}{\text{N} = 1,637}$
Bank	0.9%	1.8%
Broker Dealer	2.2%	1.1%
Corporation	38.8%	56.1%
Employee Benefit/Endowment Fund	1.1%	0.6%
Holding Company	9.8%	11.5%
Insurance Company	0.8%	0.9%
Investment Adviser	13.7%	6.8%
Investment Company	4.4%	7.0%
Partnership	29.0%	29.3%
Religious Organization	0.2%	0.3%
Savings Association	0.3%	0.4%
Other	32.8%	36.8%

Table 2 An Empirical Model of Shareholder Contracts from 1996-2015

This table reports linear probability models of the probability that a 13D includes a shareholder contract. Index i represents the 13D filing and the corresponding blockholder and target. Shareholder Contract_i equals 1 if the filing contains an SC, and 0 otherwise. Income statement and balance sheet variables are measured for a target firm in the year-quarter of the filing date. See the Appendix for exact variable definitions. T-statistics are in parentheses and standard errors are robust to heteroskedasticity. ***, **, and * indicate statistical significance at the two-tailed 1%, 5%, and 10% level, respectively.

			Dependent '	Variable:	Shareholder	Contract	i	
	(1)		(2)		(3)		(4)	
Log of Geographical Separation $_i$	0.004***	(5.49)						
Missing Geographical Separation $_i$	0.057***	(7.52)						
Log of Return Volatility $_i$			0.645^{***}	(6.20)				
Institutional Holdings $_i$					-0.016*	(-1.90)		
$Log of Analyst Following_i$							0.002	(0.60)
Cash_i	0.010	(1.50)	0.011	(1.57)	0.014**	(2.16)	0.014**	(2.11)
Net Cash Flows $_i$	0.002***	(4.20)	0.001^{***}	(3.94)	0.002***	(4.16)	0.002***	(4.24)
Dividend $Yield_i$	-0.103*	(-1.88)	-0.074	(-1.33)	-0.113**	(-2.05)	-0.106*	(-1.92)
$Book:Market_i$	-0.006*	(-1.81)	-0.006*	(-1.90)	-0.006*	(-1.78)	-0.006*	(-1.82)
$R\&D_i$	0.005	(0.20)	0.009	(0.35)	0.010	(0.41)	0.008	(0.29)
$CAPEX_i$	-0.060*	(-1.93)	-0.062**	(-1.99)	-0.057*	(-1.85)	-0.056*	(-1.83)
$Intangibles_i$	0.043***	(3.45)	0.040***	(3.14)	0.049^{***}	(3.87)	0.047^{***}	(3.72)
$Log of Company Age_i$	-0.006***	(-6.26)	-0.007***	(-6.81)	-0.006***	(-6.06)	-0.006***	(-6.25)
$Leverage_i$	0.011	(1.14)	0.009	(0.90)	0.012	(1.28)	0.012	(1.23)
ROA_i	-0.031***	(-3.37)	-0.015*	(-1.65)	-0.030***	(-3.24)	-0.032***	(-3.49)
[-365, -5) Returns _i	0.011***	(3.08)	0.010***	(2.96)	0.010***	(2.89)	0.010***	(2.94)
Blockholder Ownership $Level_i$	0.002***	(14.14)	0.002***	(13.62)	0.002***	(13.82)	0.002***	(14.10)
Missing Blockholder Ownership $_i$	0.035***	(4.64)	0.035***	(4.62)	0.034***	(4.50)	0.035***	(4.66)
Log of Market $Value_i$	0.011***	(9.05)	0.016***	(10.90)	0.013***	(8.95)	0.011***	(6.82)
Observations	18,762		18,550		18,762		18,762	
R^2	0.04		0.04		0.03		0.03	

This table reports linear probability models of the probability that a 13D includes a shareholder contract in the subpopulation of corporate blockholders. I define corporate blockholders as those who identify themselves as a corporation and *none* of the following: a holding company, an investment adviser, an investment company, or a partnership (see Section 4.3). Index i represents the 13D filing and the corresponding blockholder and target. Shareholder Contract $_i$ equals 1 if the filing contains an SC, and 0 otherwise. Income statement and balance sheet variables are measured for a target firm in the year-quarter of the filing date. See the Appendix for exact variable definitions. T-statistics are in parentheses and standard errors are robust to heteroskedasticity. ***, ***, and * indicate statistical significance at the two-tailed 1%, 5%, and 10% level, respectively.

	Dependent Variable: Shareholder $\mathrm{Contract}_i$							
	(1)		(2)		(3)		(4)	
Log of Geographical Separation $_i$	0.009***	(3.94)						
Missing Geographical Separation $_i$	0.074***	(4.41)						
Log of Return Volatility $_i$			0.819^{***}	(2.94)				
Institutional $Holdings_i$					0.008	(0.33)		
$Log of Analyst Following_i$							0.010	(0.90)
Cash_i	0.040**	(2.04)	0.038*	(1.95)	0.047^{**}	(2.44)	0.046**	(2.37)
Net Cash Flows $_i$	0.001	(0.68)	0.001	(0.73)	0.001	(0.71)	0.001	(0.73)
Dividend Yield $_i$	-0.238*	(-1.78)	-0.187	(-1.37)	-0.262*	(-1.94)	-0.251*	(-1.86)
Book:Market $_i$	-0.012	(-1.40)	-0.013	(-1.50)	-0.013	(-1.51)	-0.013	(-1.53)
$R\&D_i$	-0.028	(-0.41)	-0.009	(-0.13)	-0.023	(-0.34)	-0.026	(-0.38)
$CAPEX_i$	-0.113	(-1.57)	-0.116	(-1.59)	-0.113	(-1.57)	-0.120	(-1.64)
Intangibles $_i$	0.093***	(2.63)	0.091**	(2.54)	0.100***	(2.82)	0.099***	(2.77)
$Log of Company Age_i$	-0.005*	(-1.93)	-0.006**	(-2.18)	-0.005*	(-1.87)	-0.005*	(-1.96)
$Leverage_i$	-0.022	(-0.81)	-0.016	(-0.56)	-0.019	(-0.69)	-0.019	(-0.69)
ROA_i	-0.040*	(-1.80)	-0.019	(-0.80)	-0.042*	(-1.88)	-0.042*	(-1.90)
[-365, -5) Returns _i	0.014	(1.60)	0.013	(1.43)	0.014	(1.54)	0.014	(1.58)
Blockholder Ownership Level _i	0.002***	(5.06)	0.001***	(4.74)	0.002***	(4.82)	0.002***	(4.84)
Missing Blockholder Ownership $_i$	0.045**	(2.06)	0.046**	(2.07)	0.043**	(1.96)	0.044**	(1.99)
Log of Market $Value_i$	0.022^{***}	(6.68)	0.026***	(6.88)	0.021^{***}	(5.63)	0.019***	(4.26)
Observations	3,856		3,822		3,856		3,856	
R^2	0.04		0.04		0.03		0.03	

Table 4 An Empirical Model of Non-Corporate Shareholder Contracts from 1996–2015

This table reports linear probability models of the probability that a 13D includes a shareholder contract in the subpopulation of non-corporate blockholders. I define non-corporate blockholders as those who identify themselves as one or more of the following: a holding company, an investment adviser, an investment company, or a partnership, but not a corporation (see Section 4.3). Index i represents the 13D filing and the corresponding blockholder and target. Shareholder Contract_i equals 1 if the filing contains an SC, and 0 otherwise. Income statement and balance sheet variables are measured for a target firm in the year-quarter of the filing date. See the Appendix for exact variable definitions. T-statistics are in parentheses and standard errors are robust to heteroskedasticity. ****, ***, and * indicate statistical significance at the two-tailed 1%, 5%, and 10% level, respectively.

	Dependent Variable: Shareholder $\mathrm{Contract}_i$							
	(1)		(2)		(3)		(4)	
Log of Geographical Separation $_i$	0.001	(0.35)						
Missing Geographical Separation $_i$	-0.003	(-0.20)						
Log of Return Volatility $_i$			0.690***	(2.99)				
Institutional Holdings $_i$					0.025	(1.54)		
Log of Analyst Following $_i$							0.003	(0.36)
Cash_i	0.018	(1.37)	0.019	(1.42)	0.016	(1.27)	0.017	(1.33)
Net Cash Flows $_i$	0.001**	(2.14)	0.001**	(2.00)	0.002**	(2.21)	0.002**	(2.18)
Dividend $Yield_i$	-0.181*	(-1.72)	-0.174*	(-1.69)	-0.172	(-1.64)	-0.182*	(-1.73)
Book:Market $_i$	0.000	(0.05)	0.000	(0.02)	0.000	(0.04)	0.000	(0.03)
$R\&D_i$	0.012	(0.24)	-0.000	(-0.01)	0.012	(0.23)	0.011	(0.23)
CAPEX_i	-0.079	(-1.20)	-0.096	(-1.46)	-0.077	(-1.19)	-0.082	(-1.25)
$Intangibles_i$	0.015	(0.65)	0.008	(0.33)	0.013	(0.57)	0.015	(0.61)
Log of Company Age_i	-0.010***	(-5.17)	-0.011***	(-5.61)	-0.010***	(-5.21)	-0.010***	(-5.22)
$Leverage_i$	0.024	(1.25)	0.017	(0.90)	0.023	(1.20)	0.024	(1.26)
ROA_i	-0.044**	(-2.12)	-0.030	(-1.37)	-0.047**	(-2.22)	-0.044**	(-2.12)
[-365, -5) Returns _i	0.004	(0.68)	0.006	(0.91)	0.005	(0.69)	0.005	(0.70)
Blockholder Ownership Level $_i$	0.003***	(6.78)	0.002***	(6.68)	0.003***	(6.98)	0.003***	(6.88)
Missing Blockholder Ownership $_i$	0.027	(1.58)	0.027	(1.58)	0.028*	(1.65)	0.027	(1.57)
$Log of Market Value_i$	0.004*	(1.82)	0.008***	(2.95)	0.002	(0.79)	0.004	(1.13)
Observations	4,544		4,477		4,544		4,544	
R^2	0.04		0.05		0.04		0.04	

Most Pricing Power

Index i represents the 13D filing and the corresponding blockholder and target. Section 4.4 assesses the statistical significance of these findings. See the Appendix for exact variable definitions.

Panel A: Managerial Entre	Total 13Ds	% of 13Ds with SCs	
Least Entrenched	$E\text{-Index}_i = 0$	379	8.1%
	$\text{E-Index}_i = 1$	848	8.2%
	$\text{E-Index}_i = 2$	958	11.2%
	$E\text{-Index}_i = 3$	735	9.0%
	$E\text{-Index}_i = 4$	320	9.5%
Most Entrenched	$5 \le \text{E-Index}_i \le 6$	76	11.8%
Panel B: CEO Wealth-Peri	formance Sensitivity at the Target	Total 13Ds	% of 13Ds with SCs
Lowest CEO WPS	CEO WPS Quintile 1	670	9.0%
	CEO WPS _i Quintile 2 CEO WPS _i Quintile 3	669 670	$8.2\% \ 7.0\%$
	CEO WPS _i Quintile 3 CEO WPS _i Quintile 4	673	6.9%
Highest CEO WPS	CEO WPS $_i$ Quintile 5	665	6.2%
Panel C: Liquidity Constra	ints at the Target	Total 13Ds	% of 13Ds with SCs
Least Liquidity Constrained	Liquidity Constrained $_i$ Quintile 1	2,282	8.8%
	Liquidity Constrained, Quintile 2	2,281	8.1%
	Liquidity Constrained, Quintile 3	2,282	9.3%
	Liquidity Constrained, Quintile 4	2,281	10.1%
Most Liquidity Constrained	Liquidity Constrained $_i$ Quintile 5	2,281	10.0%
Panel D: Product-Market	Pricing Power of the Target	Total 13Ds	% of 13Ds with SCs
Least Pricing Power	Pricing Power $_i$ Quintile 1	3,499	10.4%
	Pricing $Power_i$ Quintile 2	3,498	10.3%
	Pricing Power _i Quintile 3	3,499	8.8%

Pricing Power $_i$ Quintile 4

Pricing Power $_i$ Quintile 5

3,498

3,498

8.9%

7.2%