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The Merger Agreement Myth

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Abstract:

Practitioners and academics have long assumed that financial markets value the deal-specific legal terms of public company acquisition agreements, yet legal scholarship has failed to subject this premise to empirical scrutiny. The conventional wisdom is that markets must value the tremendous amount of time and money invested in negotiating and tailoring the legal provisions of acquisition agreements to address the distinctive risks facing each merger. But the empirical question remains of whether markets actually price the legal terms of acquisition agreements or whether they solely value the financial terms of mergers. To investigate this question, we designed a modified event study to test whether markets respond to the details of the legal terms of acquisition agreements. Our approach leverages the fact that merger announcements (which lay out the financial terms) are generally disclosed one to four trading days before the disclosure of acquisition agreements (which delineate the legal terms). We focused on a data set of cash-only public company mergers spanning the decade from 2002 to 2011 to ensure that the primary influence on target company stock prices is the expected value of whether a legal condition will prevent the deal from closing. Our analysis shows that there is no economically consequential market reaction to the disclosure of the details of the acquisition agreement. Markets appear to recognize that parties publicly committed to a merger have strong incentives to complete the deal regardless of what legal contingencies are triggered. We argue that the results suggest that dealmakers and lawyers focus too much on negotiating "contingent closings" that allow clients to call off a deal, rather than on "contingent consideration" that compensates clients for closing deals that are less advantageous than expected. Our analysis suggests drafting recommendations that could enable counsel to protect clients against the effects of the clients' own managerial hubris in pursuing mergers that may (and often do) fall short of expectations.

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Introduction

Practitioners and academics have long assumed that markets value the deal-specific legal terms of merger agreements, yet legal scholarship has failed to subject this premise to empirical scrutiny.[1] Mergers are high-stakes events, so it is unsurprising that clients (and academics) would posit that value is at stake in drafting acquisition agreements and negotiating conditions,[2] "fiduciary out" clauses,[3] and deal protection[4] provisions. But do financial markets actually price

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[1] *See, e.g.*, Ronald J. Gilson, *Value Creation by Business Lawyers: Legal Skills and Asset Pricing*, 94 YALE L.J. 239, 243, 254-55 (1984) [hereinafter Value Creation] (observing that "the academic literature assume[s] that business lawyers increase the value of a transaction" and arguing that M&A lawyers add value by designing provisions in acquisition agreements that reduce transaction costs and increase mutual gain); Nestor M. Davidson, Values and Value Creation in Public-Private Transactions, 94 Iowa L. Rev. 937, 946-47 (2009) (discussing the widespread embrace of Gilson's premise that M&A lawyers add value to merger transactions, but acknowledging that "the empirical question remains unanswered" as to the accuracy of "Gilson['s] and his successors[' conception] of deal-lawyer value creation" from the design of acquisition agreements); George W. Dent, Jr., Business Lawyers as Enterprise Architects, 64 Bus. Law. 279, 281, 299-307 (2009) (arguing that business lawyers add value to their clients by acting as repeat-player "enterprise architects" who design contractual mechanisms to optimizing business entities' performance). *But see* Matthew D. Cain, Steven M. Davidoff, & Antonio J. Macias, *Broken Promises*, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1540000&download=yes (arguing that private equity bidders were more likely to opt out of transactions if the termination penalty was low); Steven L. Schwarcz, Explaining the Value of Transactional Lawyering, 12 Stan. J.L. Bus. & Fin. 486, 487-88, 506-07 (2007) [hereinafter Transactional Lawyering] (using survey data from transactional lawyers and their clients to argue that lawyers primarily add value to transactions by reducing regulatory costs through legal expertise rather than more broadly reducing transactions costs or adding reputational value).

[2] The implicit premise of legal and finance scholarship that merger "opt-out" provisions are important is borne out in the extensive literature on the topic. *See, e.g.*, Yair Y. Galil, *MAC Clauses in a Materially Adversely Changed Economy*, 2002 COLUM. BUS. L. REV. 846, 850-851 (2002) (discussing how ambiguity over judicial interpretations of the contours of MAC/MAE clause conditions casts a shadow over merger deals); Ronald J. Gilson & Alan Schwartz, *Understanding MACs: Moral Hazard in Acquisitions*, 21 J. L. ECON. & ORG. 330, 340-345 (2005) (using economic modeling to analyze the role that MAC and MAE clauses play in the structure of the standard acquisition agreement and the incentive effects for acquirers and targets); Claire A. Hill, *Bargaining in the Shadow of a Lawsuit: A Social Norms Theory of Incomplete Contracts*, 34 DEL. J. CORP. L. 191, 197-208 (2009) (arguing that the legal terms in acquisition agreements are intentionally ambiguous to deter litigation and incentivize negotiations to close the deal); Robert T. Miller, *Canceling the Deal: Two Models of Material Adverse Change Clauses in Business Combination Agreements*, 31 CARDOZO L. REV. 99, 108-111 (2009) (advocating a judicial framework for interpreting MAC clauses that places the burden of material changes on targets and the burden of immaterial changes on acquirers during the closing period); Robert T. Miller, *The Economics of Deal Risk, Allocating Risk Through MAC Clauses in Business Combination Agreements*, 50 WM. & MARY L. REV. 2007, 2013-2014 (2009) [hereinafter *Deal Risk*] (arguing that the reciprocal allocations of deal risk in MAC clauses serve to further efficiency in transactions by decreasing the likelihood that parties will exercise termination rights); Alan Schwartz & Robert E. Scott, *Contract Interpretation Redux*, 119 YALE L.J. 926, 940-941 (2010) (discussing the significance of interpretative default rules in construing Material Adverse Change clauses). Andrew A. Schwartz, *A "Standard Clause Analysis" of the Frustration Doctrine and the Material Adverse Change Clause*, 57 U.C.L.A. L. REV. 789, 795-799 (2010) [hereinafter *Standard Clause*] (arguing that MAC clauses transform conventional default rules by allowing contractual exit in cases of frustration of secondary purposes or partial loss of value and shifting exogenous risk from the acquirer to the target); Eric L. Talley, *On Uncertainty, Ambiguity, and Contractual Conditions*, 34 DEL. J. CORP. L. 755, 760-61 (2009) (arguing that Material Adverse Event clauses are a tool for allocating the risks of market uncertainty at the time of negotiation of the acquisition agreement).

[3] *See, e.g.*, William T. Allen, *Understanding Fiduciary Outs: The What and the Why of an Anomalous Concept*, 55 BUS. LAW. 653, 657-660 (1999) (discussing the role of fiduciary outs in providing an "escape hatch" to targets to consider unsolicited higher offers from third-party bidders); Christina M. Sautter, *Rethinking Contractual Limits on Fiduciary Duties*, 8 FLA. ST. U. L. REV. 55, 60 (2010) (advocating contractual limits to fiduciary outs to allow target

the highly negotiated legal terms of acquisition agreements, or do markets only value the financial terms forged by management and bankers? The challenge in answering this question is the difficulty in separating the market impact of the merger announcement (and disclosure of financial terms) from the disclosure of the legal terms, since these events occur in close proximity.

In this article, we conduct an empirical study providing evidence that markets do not respond in an economically significant way to the deal-specific legal terms of M&A agreements.[5] We collected a data set of public company mergers spanning the decade from 2002 to 2011 and applied a modified event study to test statistically whether the market reacted to the disclosure of merger agreements. We analyze market reactions by exploiting the (small)

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company mangers to sidestep fiduciary duties to make merger recommendations on third-party bids during the closing period).

[4] Deal protection provisions are designed to deter targets from accepting third-party offers during the closing period and may include "no-shop" provisions barring solicitation of bids, "no-talk" provisions limiting negotiations with other suitors, or termination fees or low-cost "crown jewel" asset sales to the acquirer to undercut third-party bids. *See, e.g.*, Afra Afsharipour, *Transforming the Allocation of Deal Risk Through Reverse Termination Fees*, 63 VAND. L. REV. 1161, 1165-70 (2010) (discussing attempts at reallocating deal risks through reverse termination fees that compensate target companies should the buyer walk away and assessing its impact on acquisition agreement drafting); Thomas W. Bates & Michael L. Lemmon, *Breaking Up is Hard to Do?*, 69 J. OF FIN. ECON. 469, 472-74 (2003) (arguing that deals with target termination fees entail greater target shareholder premiums and higher completion rates than deals without such provisions); Albert Choi & George Triantis, *Strategic Vagueness in Contract Design: The Case of Corporate Acquisitions*, 119 YALE L.J. 848, 855-861 (2010) (arguing that the intentional vagueness of MAC clauses create more efficient incentives for the seller before closing than more precise and less costly proxies); Sean J. Griffith, *Deal Protection Provisions in the Last Period of Play*, 71 FORDHAM L. REV. 1899, 1905-1906, 1922-23 (2003) [hereinafter *Deal Protection*] (discussing the significance of Delaware courts' placing limits on deal protection provisions to resolve the conflicting incentives of acquirer and target management when facing last-minute third-party bids); Brian J.M. Quinn, *Optionality in Merger Agreements*, 35 DEL. J. CORP. L. 789, 792-794 (2010) [hereinafter *Optionality*] (arguing that reverse termination fees that are equal in size to termination fees inefficiently leave targets exposed to more risk from exogenous events).

[5] For many years, corporate finance studies have examined the impact of mergers on stock prices of the bidder and the target companies. *See, e.g.*, Sanjai Bhagat, Ming Dong, David Hirshleifer & Robert Noah, *Do Tender Offers Create Value? New Methods and Evidence*, 76 J. FIN. ECON. 3, 4-5 (2005) (attempting to approximate the value-added by tender offers by estimating the difference between conventional returns and returns that exclude both the deal completion probability and information disclosed in the merger announcement); Michael Bradley, Anand Desai & E. Han Kim, *Synergistic Gains from Corporate Acquisitions and their Division between the Stockholders of Target and Acquiring Firms*, 21 J. FIN. ECON., 3, 30-31 (1988) (finding that acquisition prices generally exceed market valuations of targets and that acquirer prices generally fall after merger announcements because of concerns hoped-for synergies will not be realized); David Denis & Antonio J. Macias, *Material Adverse Change Clauses and Acquisition Dynamics,* J. FIN. & QUANT. ANAL. (forthcoming), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1609765 (arguing that the extent of MAC Clause conditions affect the premium offered and arbitrage spread in acquisitions); Steven Kaplan & Michael S. Weisbach, *The Success of Acquisitions: Evidence from Divestitures*, 47 J. FIN. 107, 108 (1992) (finding only weak evidence that acquisitions are value-reducing for acquirers which suggests firm-specific potential to achieve merger synergies); Gregor Andrade, Mark Mitchell, & Erik Stafford, *New Evidence and Perspectives on Mergers*, 15 J. ECON. PERSP. 103-120 (2001) (assessing the impact of competition among acquirers by comparing the number of bidders publicly attempting to acquire the target and the ultimate merger premiums). No empirical study, however, has examined the difference between the target stock price reaction to the merger announcement (revealing the financial terms), compared to the disclosure of the acquisition agreement (containing the legal terms). Our test of market reactions to these disclosures on separate trading days disentangles the conflation of financial and legal terms and demonstrates the lack of any economically significant market reaction to the legal terms.

temporal gap between the announcement of pending mergers (which lays out their financial terms) and the disclosure of acquisition agreements (which delineates the legal terms) typically one to four trading days later.[6] We find that markets react almost exclusively to the initial merger announcement, and there is no economically consequential market reaction to the disclosure of the acquisition agreement. This finding implies that the extensive negotiations over deal-specific legal terms are not priced into financial market valuation.[7]

This article considers a range of potential explanations for the lack of market response to the legal terms of acquisition agreements, such as market expectations about the deal terms and the slowness of markets (and in particular analysts) to understand the implications of merger terms. However, we argue that the most compelling logic for markets' dismissing the legal terms of merger agreements is found not in the merger agreements themselves, but in the strength of the motivations of the corporate participants to complete publicly announced deals. Markets understand that the decision to merge appears driven by the hope (or often the hubris) of the greater potential returns for the combined company following the merger and the target company shareholders' desire for the takeover premium.[8] As a result, even though M&A lawyers carefully craft "walk-away" rights for the prospective acquirer as the centerpiece of public company acquisition agreements, the market knows the acquirer is highly unlikely to realize or exercise these rights. Markets recognize that both parties are strongly inclined to make whatever adjustments it takes to go through with the transaction in a friendly merger, or they would not have undergone the financial, business, and reputational risks of entering into the merger agreement.[9] This "will to close" leads markets to dismiss any merger agreement provisions to the contrary to the point that the legal terms have little to no material impact on the target company's price.[10]

The conclusion that the legal terms of merger agreements do not move financial markets has the potential to result in a sea change in the assumptions about the workings of M&A law. We argue that the unwillingness to walk away from a negotiated transaction ex post, which is

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[6] *See* Securities & Exchange Commission, Form 8-K Item 101.1 (mandating that public companies disclose material definitive agreements within four business days).

[7] Economic theory broadly assumes that the semi-strong efficient market hypothesis applies to stock prices. This well-established framework asserts that stock prices immediately incorporate all publicly available information about the issuer, which implies that the information in an acquisition agreement is incorporated into the stock price on the trading day of the disclosure. *See* Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383, 385-87 (1970); *see also* Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 554-56 (1984) (using the weak, semi-strong, and strong efficient market hypotheses as tools for understanding stock price behavior).

[8] *See* Richard Roll, *The Hubris Hypothesis of Corporate Takeovers*, 59 J. BUS. 197, 200-205 (1986) (arguing that empirical data of acquirer stock declines following merger announcements suggests acquirers systematically overpay); Bernard S. Black, *Bidder Overpayment in Takeovers*, 41 STAN. L. REV. 598, 623-629 (1989) (discussing how acquirer managers may systematically overpay for mergers because of excessive optimism and ignorance about targets). *But see* Mark Mitchell, Todd Pulvino, & Erik Stafford, *Price Pressure Around Mergers*, 54 J. OF FINANCE 31, 33-37 (2004) (arguing that a large portion of the declines of acquirers' price is attributable to short selling by merger arbitrageurs which is rapidly reversed).

[9] See Jie Cai & Avand M. Vijh, *Incentive Effect of Stock and Option Holdings of Target and Acquirer CEOs*, 62 J. OF FIN. 1861, 1863-65 (2007) (discussing the strong incentives management of the acquirer and target have to close merger transactions because of the personal financial and reputational stakes they often have in its completion).

[10] *See infra* Part II.

manifested by the market's non-response to walk-away rights, causes acquirers to over-invest in due diligence ex ante.[11] This fact, in turn, results in a suboptimal number of deals being signed, as well as lower returns for the target and acquirer alike.

We suggest that lawyers should learn from the market's assessment of merger motivations to craft provisions that reflect more accurate behavioral assumptions about public company clients. If lawyers take their clients' "will to close" the transaction as a given, then lawyers should focus less on closing conditions, break-up fees, and material adverse change provisions that allow clients to call off deals. But they should not replace that effort with additional pre-signing due diligence—indeed, they should conduct *less* due diligence. Instead, lawyers should focus on designing deal-specific "contingent consideration" provisions that compensate clients for closing deals that are less advantageous than expected, reducing the need for costly diligence.[12] This approach could enable clients to sign more deals, expend less resources on due diligence, and produce higher returns for targets and acquirers alike. At a minimum, the results suggest that M&A lawyers should consider innovations that will protect corporate clients against the clients' own hubris in over-paying for mergers.

I. Background and Approach

A. The Challenge of Assessing the Value of Deal-Specific Legal Terms

The scholarly literature on lawyering in mergers and acquisitions has long embraced the view that lawyers add value to transactions through legal drafting.[13] The most prominent example of this view is Ronald Gilson's seminal article on value creation by lawyers.[14] Gilson framed M&A lawyers as transaction cost engineers whose legal drafting bridges negotiation gaps between the parties to seal the deal and mitigates moral hazard in the pre-closing period.[15]

Gilson correctly framed the central concern in arguing that the test of value added is whether lawyers' contributions enhance the value of the overall transaction, rather than reallocate existing resources.[16] But while Gilson and many other legal academics have debated the theoretical impact of termination provisions, such as Material Adverse Change / Material Adverse Effect covenants, they have sidestepped the empirical question of whether markets price these legal terms at all.[17]

One challenge of assessing the impact of legal terms is determining the proper measuring stick. The casual observer may conclude the best evidence that legal deal terms add value is the meticulous negotiation of the details of agreement provisions. But the extensive and detailed

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[11] *See infra* Part IV.B.
[12] *See infra* Part IV.
[13] *See, e.g.*, Gilson, *Value Creation*, *supra* note 1, at 254-55; Gilson & Mnookin, *supra*, note 1, at 8-10; Davidson, *supra* note 1, at 946-47; Dent, *supra* note 1, at 299-307.
[14] *See* Gilson, *Value Creation*, *supra* note 1.
[15] *See id.* at 244 (arguing that business "lawyers have the potential to add value to a transaction and that the terms of the corporate acquisition agreement demonstrate that business lawyers do play this role").
[16] *See id.* at 246 (arguing that "a business lawyer must show the potential to enlarge the entire pie, not just to increase the size of one piece at the expense of another").
[17] *See, e.g.*, Davidson, supra note 1, at 946-47 (discussing the widespread embrace of Gilson's premise that lawyers add value to merger transactions, but acknowledging that "the empirical question remains unanswered").

negotiation of deal-specific terms by legal counsel does not necessarily illuminate the question of whether those terms add value to M&A transactions.[18]

In fact, cynical businessmen may view deal documentation as a necessary transaction cost for jumping through the complicated regulatory hoops of the merger process.[19] But M&A lawyers do far more than grease regulatory wheels and integrate the roles of a banker, consultant, and lawyer to bridge gaps in negotiation and drafting.[20] Lawyers contribute to merger transactions by translating the financial agreement in principle into a legal framework and legitimize transactions by lending their reputations to the deal.[21] Law firms' standardization of significant parts of agreements may mitigate litigation risks,[22] and legal diligence during the closing period may uncover red flags.[23] But both lawyers and businesspeople would benefit from better understanding whether the *deal-specific negotiations* in legal drafting add value in order to consider how lawyers could contribute to mergers in more productive ways.

Empirically, it is difficult to capture all of the contributions that lawyers may make to mergers.[24] Most significant transactions involve in-house counsel and outside law firms, and almost all sizable transactions involve elite law firms.[25] For this reason it is not possible to compare merger transactions that involve law firms to those that do not in order to capture the value added by lawyers. The complex nature and scale of mergers also makes it implausible to replicate the impact of lawyers in experimental micro-transactions.[26]

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[18] *See, e.g.*, FRANK PARTNOY, THE PARADOX OF CREDIT RATINGS 68-70 (arguing rating agencies lack incentives to gauge credit risks accurately).

[19] *See* Gilson, Value Creation, *supra* note 1, at 241-242.

[20] *See* Robert Eli Rosen, *We're All Consultants Now: How Change in Client Organizational Strategies Influences Change in the Organization of Legal Services*, 44 ARIZ. L. REV. 637, 651-660 (2002) (explaining the incentive effects from M&A lawyers serving simultaneously in consulting, financial, and business roles); JAMES C. FREUND, ANATOMY OF A MERGER: STRATEGIES AND TECHNIQUES FOR NEGOTIATING CORPORATE ACQUISITIONS 4-5 (1975) (discussing how M&A lawyers "frequently point[] out considerations that could be considered 'accounting' or 'business' or 'financial'").

[21] *See* Gilson, *Value Creation*, *supra* note 1, at 244-46 (arguing that law firms lend their high reputation to mergers and potentially risk part of their reputation if the deal does not work out); *see also* Karl S. Okamoto, *Reputation and the Value of Lawyers*, 74 OR. L. REV. 15, 43 (1995); Steven L. Schwarcz, *Regulating Complexity in Financial Markets*, 87 WASH. U. L. REV. 211, 260 n.279 (2009) [hereinafter *Market Complexity*].

[22] *See* Theodore Eisenberg & Geoffrey P. Miller, *The Flight From Arbitration: Am Empirical Study of Ex Ante Arbitration Clauses in the Contracts of Publicly Held Companies*, 56 DEPAUL L. REV. 335, 353-354 (2007) (discussing how standardized contract provisions reduce litigation risks because courts are familiar with the terms).

[23] *See* Eric Simonson, *Specialized Areas of Concern in Acquisition Transactions*, Practicing Law Institute, PLI Order No. 34283, at 273-275 (2012) (discussing the scope of due diligence reviews in M&A transactions).

[24] *See, e.g.*, A. Pashigan, *Theory of Prevention and Legal Defense With an Application to the Legal Costs of Companies*, 25 J.L. & ECON. 247, 250-52 (1982) (discussing the challenges of quantifying lawyers' contributions).

[25] *See* Bloomberg, Global Legal Advisory Mergers & Acquisitions Ranking 2011, at 12-47, available at http://about.bloomberg.com/pdf/glma.pdf (detailing how rankings of M&A law firms show that an elite set of law firms oversee the overwhelming majority of US and cross-border merger transactions) [hereinafter Legal Ranking].

[26] Small-scale experiments can illustrate behavioral economic principles, but this method cannot test the complex negotiations that go into merger agreements. *See, e.g.*, Russell Korobkin & Joseph Doherty, *Who Wins in Settlement Negotiations?*, 11 AMER. L. & ECON. Rev. 162, 163, 168-169 (2009) (discussing the use of nominal financial incentives in simulations to prompt "real-world" reactions from test subjects).

B. The Acquisition Agreement Process

The challenges of assessing market reactions to deal-specific legal terms and the high stakes of mergers may help to explain why academics and practitioners have broadly assumed that the details of legal terms add value to mergers.[27] To assess the potential contributions of negotiating deal terms, it is important to understand the nature of what lawyers are doing when they draft an acquisition agreement. The public company acquisition agreement provides both a framework for the merger and imposes contractual constraints on the target company during the pre-closing period.[28] Lawyers are at the forefront of drafting the acquisition agreement and spend a significant amount of time and money in haggling over the legal details.[29]

The merger agreement incorporates standardized provisions and highly negotiated terms. Agreements generally follow the broad contours of earlier agreements,[30] but are also products of extensive negotiations tailored to the particulars of the transaction. The first part of an acquisition agreement typically lays out an overview of the transaction that identifies the transaction's structure, and the timing and location of the closing.[31] The second part lays out the price and payment formula, such as the timing and relative valuation of the bidder's and target's shares in a stock-for-stock merger, or the amount of cash to be paid in a cash merger. The third part generally lays out representations and warranties of the target company (and, depending on the structure, often to a much lesser extent the bidder company). For example, the target company certifies the accuracy of detailed factual statements concerning the business, such as its financial statements, the absence of contingent or tax liabilities, and discloses the existence of any actual or pending litigation.[32]

Representations and warranties are closely coupled to the acquirer's due diligence review of the target. In the pre-signing period, there is a detailed interplay between the due diligence investigation and the representations and warranties (as well as accompanying disclosure schedules). The logic is that crafting representations and warranties to address any uncertainties uncovered in the pre-signing diligence process will protect the acquirer from disaster. If there is a gap between representations about the target business and reality, then the acquirer (at least in theory) may have the legal right to walk away from the deal.[33]

Legal negotiations also focus on the covenants and closing conditions, which define the rights and responsibilities of the parties during the pre-closing period and the extent of the

[27] *See* Shira Ovide, *The 2011 M&A Markets: Not as Bad as We Thought*, WALL ST. J., Jan. 3, 2012 (noting that the combined dollar value of corporate mergers in 2011 totaled $2.81 trillion).

[28] *See* Alyssa A. Grikscheit, Gavin D. Solotar, *Key Issues in Drafting and Negotiating Acquisition Agreements*, Practicing Law Institute, PLI Order No. 34774, Jan. 25, 2012, at 183-89 (detailing the types of contractual constraints that parties face in mergers).

[29] *See* Evan L. Greebel, *Key Priorities for Lawyers in Acquisitions of Public and Private Companies*, ASPATORE, Nov. 2011, at 2-8 (discussing the focal points of negotiations among lawyers in negotiating merger agreements).

[30] For a broader overview of acquisition agreements, see RONALD J. GILSON & BERNARD S. BLACK, THE LAW AND FINANCE OF CORPORATE ACQUISITIONS 563-601 (2d ed. 1995).

[31] *See* THERESE H. MAYNARD, MERGERS AND ACQUISITIONS 307-312 (2d ed. 2009) (discussing how acquisition agreements follow a uniform structure); Gilson, *Value Creation*, *supra* note 1, at 257-62 (discussing the standardization of the form of acquisition agreements).

[32] *See* Choi & Triantis, *supra* note 4, at 892-93.

[33] *See* Lou R. Kling, Eileen Nugent Simon, & Michael Goldman, *Summary of Acquisition Agreements*, 51 U. MIAMI L. REV. 779, 794 (1997).

parties' obligations to close the transaction.[34] Covenants impose contractual constraints on the parties in order to mitigate moral hazard during the period between the signing of the agreement and closing.[35] Closing conditions delineate circumstances which give the bidder or target company the right to walk away from the agreement during the pre-closing period.[36] Failures of closing conditions can be triggered by breach of warranties and representations, failures to satisfy regulatory conditions, or other circumstances that the parties agree upon.[37] Among the most intensely negotiated provisions of the agreement will be the "material adverse change" clause and the "termination fee" triggered by a termination of the deal for specified reasons, traditionally paid by the seller but in an increasing number of deals paid by the purchaser.[38]

The key purpose of the acquisition agreement is to mitigate and allocate risks between the parties during the period between signing of the agreement and closing.[39] In the closing conditions and termination sections of the agreement the target company's lawyers generally seek to heighten the certainty of closing by incorporating incentives to close the deal,[40] while the acquirer's lawyers seek to preserve flexibility to withdraw or rework the deal if the expectations are not met.[41] At the same time, the acquirer will want to ensure it is protected from a competing bidder who might emerge and make a higher bid.

Lawyers have designed two major types of termination provisions to address these challenges—the "Material Adverse Change" (also referred to as the Material Adverse Event)[42] Clause and "Deal Protection"[43] provisions. The MAC/MAE Clause gives teeth to the closing conditions in specifying what type of events would entitle the acquiring company to call the deal off if events between signing and closing make the deal less advantageous than expected.[44] The Deal Protection provisions are designed to reduce the likelihood the target board will walk away from the agreement or to compensate the acquiring company if the target does walk away in

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[34] *See* WILLIAM J. CARNEY, MERGERS AND ACQUISITIONS: THE ESSENTIALS 106-108 (2009).
[35] *See* Gilson, *Value Creation*, *supra* note 1, at 258-59.
[36] *See* Choi & Triantis, *supra* note 4, at 863 (framing closing conditions as "the contingencies under which the parties are free to walk away from the deal).
[37] *See* MAYNARD, *supra* note 43, at 313.
[38] *See* Afsharipour, *supra* note 4, at 1165-70.
[39] In public company merger transactions, signing and closing cannot occur simultaneously because, among other requirements, the target must distribute a proxy statement to its shareholders to secure the vote required for the merger. *See* FREUND, *supra* note 20, at 148-149.
[40] *See* Brian J.M. Quinn, *Bulletproof: Mandatory Rules for Deal Protection*, 32 J. CORP. L. 865, 822-24 (2007) (explaining the presumed objectives of sellers' counsel in acquisition agreement negotiations).
[41] *See* Choi & Triantis, *supra* note 4, at 863 (arguing that the objective of acquirers in negotiations is to preserve as great a degree of optionality as possible "to terminate, cancel, or be excused from its obligations").
[42] Material adverse change and material adverse effect clauses are generally interchangeable terms. *See* Miller, *Deal Risk, supra* note 2, at 2012 n.2.
[43] *See, e.g.*, Afsharipour, *supra* note 4, at 1165-70 (discussing the virtues of deal protection provisions for incentivizing closing the deal); Bates & Lemmon, *supra* note 4, at 470 (arguing that target termination fees entail greater target shareholder premiums and high completion rates than deals without such a provision);
[44] *See* Schwartz, *Standard Clause*, supra note 2, at 795-799; Talley, *supra* note 2, at 760-761; *see also* M&A Practice Guide, at §12.01 (explaining that using closing conditions "[b]uyers will often seek to enhance their ability to walk away from a transaction in the event that the target suffers a downturn…").

favor of a third-party bidder.[45] This provision is designed to limit the target's ability to entertain a higher offer and to keep the deal closing on track.[46]

Given the extraordinary nature and dramatic consequences of potential contractual outs from a public company merger agreement, it is understandable that academics would simply assume that markets place a high value on the deal-specific legal provisions, especially the closing conditions and termination rights. This article puts this premise to empirical scrutiny by disentangling the effect of the financial terms of the deal and the legal terms of the agreement.

II. Framework for Empirical Analysis

A. Disentangling the Financial and Legal Terms of Acquisition Agreements

We show that it is possible to separate the market response to the announcement of a merger from the impact of disclosure of the legal terms of the merger agreement. We are able to analyze separately the two effects by exploiting the (small) temporal gap between the announcement of pending mergers (which lays out their financial terms) and the disclosure of merger agreements (which delineates the legal terms) typically one to four business days later. The target's stock price will almost always change dramatically in response to the announcement of a merger. Our question is whether the target's stock price will have a second (ostensibly much smaller) price change in response to the revelation of the merger agreement's legal terms. The objective is to isolate the effect of these legal terms to assess whether the financial markets value the legal terms themselves beyond the financial aspects of the "deal" revealed in the merger announcement press release.

The key to this empirical study's efficacy is the fact that corporate mergers (and their financial terms) are often announced before the acquisition agreement is publicly available. The merger is typically first disclosed to the financial markets in a press release, often before the market opens on the day of announcement. However, the acquisition agreement laying out the legal terms is usually filed later, typically within four business/trading days on the Securities and Exchange Commission's Electronic Data Gathering Analysis and Retrieval (EDGAR) system.[47] This interval of time allows the market to digest the announcement of a merger on one trading day before giving the market the opportunity to react to the legal terms of the agreement on another trading day.

The underlying assumption for our analysis is that the semi-strong efficient market hypothesis applies, which allows us to analyze separately the impact of two events that happen in

[45] *See* Stephen M. Bainbridge, *Exclusive Merger Agreements and Lock-Ups in Negotiated Corporate Acquisitions*, 75 MINN. L. REV. 239, 242-246 (1990) (describing "performance promises" and "cancellation fees" as ways that bidders protect against target boards reneging on agreements and compensating acquirers for out-of-pocket costs).

[46] *See* Quinn, *Optionality*, supra note 4, at 791-92 (discussing the rationale for deal protection provisions); *See* Lou R. Kling, Eileen Nugent Simon, & Michael Goldman, *Summary of Acquisition Agreements*, 51 U. MIAMI L. REV. 779, 799 (1997) (discussing how judicial decisions have led to the incorporation of a "fiduciary out" exception in most deals which allows target negotiations with third-party bidders if fiduciary duties require consideration of higher offers).

[47] *See* Securities & Exchange Commission, Form 8-K Item 101 (mandating filing of material definitive agreements within four business days). Public companies are not required to file the acquisition agreement as an exhibit to the 8-K, but almost always do.

close succession. The semi-strong efficient market hypothesis holds that all publicly available information is quickly reflected in stock prices. This premise has particularly strong applicability in the merger context because hedge funds and investors specialize in investing in merger target companies and rapidly acquire (often most of) the target company shares after the merger announcement. These sophisticated investors have the means and self-interest to assess the impact of the legal conditions on the deal's probability of closing. This analysis is rapidly translated into the target company stock price as investors seek to exploit any short-lived arbitrage opportunities. This context creates a laboratory for examining whether the market reacts to the terms of the acquisition agreement. By comparing changes in the target prices on days on which a merger agreement is filed with days on which a merger agreement is not filed, this study disentangles the announcement effect from the filing effect.

We recognize that this approach will not capture all of the contributions lawyers make in the merger process or even the contributions of standardized legal terms. For example, the law firms involved are sometimes disclosed at the time of the merger announcement. This fact allows the market to generalize assessments of the merger's prospects based off of (the almost universal) use of a prominent law firm for large-scale transactions.[48] It also allows the market to intuit the reputational imprimatur of the law firms, to take into account past legal terms from deals the firms were involved in, and to assume that the law firms' diligence levels and efforts to secure regulatory approval will parallel earlier deals.[49] The virtue of our approach is that it isolates the market's response to the individually crafted legal terms of the merger as opposed to the universal boilerplate provisions. This method provides a clear prism for understanding whether markets value the deal-specific legal terms of the acquisition agreement.

B. Overview of the 2002-2011 Merger Data Set

We compiled the data for this study by reviewing cash merger announcements and acquisition agreements for the years 2002 through 2011 that were listed in LexisNexis's Mergerstat M&A Database. We focus on cash merger transactions for several reasons. Because we are trying to isolate the effect of legal provisions, we want to eliminate as much non-legal stock price fluctuation as possible. After the announcement of a deal, the trading price of the target in a stock-for-stock merger reflects the financial performance of the acquirer, the financial performance of the target, and the expected synergies of the deal, as well as the likelihood the deal will close.[50] In contrast, in a cash merger, the stock price of the target reflects almost exclusively the (cash) consideration to be paid and the likelihood the deal will close. Thus, there is less risk that any post announcement change in the target's share price when an agreement is filed will result from non-legal business factors. For this reason the cash-only merger offers the clearest prism for separating the impact of the merger announcement from the impact of disclosure of the actual legal terms.[51]

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[48] *See* Bloomberg, Legal Ranking, *supra* note 25, at 12-47.
[49] *See* Okamoto, *supra* note 21, at 22-26 (discussing the reputational intermediary role of law firms).
[50] *See, e.g.*, Lawrence A. Hammermesh, *Premiums in Stock-for-Stock Mergers and Some Consequences in the Law of Director Fiduciary Duties*, 152 U. PENN. L. REV. 881, 883-884 (2003) (laying out different concerns and variables in stock-for-stock mergers compared with cash mergers).
[51] *See* Gregor Andrade, *New Evidence and Perspectives on Mergers*, 15 J. ECON. PERSP. 103, 111-112 (2001) (discussing how cash mergers raise less exogenous variables than stock-for-stock mergers).

Because this study is examining the legal terms of merger agreements, it uses only transactions in which a definitive merger document was executed. As a result, the data set excludes potential deals that are identified by Mergerstat as "rumors," letters of intent, mere proposals, or offers.[52] The data set excludes tender offers and all hostile bids, as well as deals in which a significant shareholder was identified as taking a company private.[53] The study also excludes deals involving companies in bankruptcy (because of difficulties in assessing the impact of mergers in cases where creditors are the primary beneficiaries).[54] Finally, this study analyzes merger deals with a "Total Invested Capital"[55] of $300 million or more to exclude transactions that do not involve significant market trading volume.[56] The logic of focusing on companies with substantial capitalization is that significant trading volume, analyst coverage, and merger arbitrage is needed to ensure rapid processing of the legal terms of the merger that would be swiftly reflected in the market.[57]

These principled exclusions resulted in a data set of 463 transactions for the ten years from January 1, 2002 to December 31, 2011.[58] This time frame was chosen because it covers a complete cross-section of the economic cycle: from the period after the burst of the Internet bubble to the peak of the real estate and M&A boom, to the depths of the financial crisis, and the two subsequent years of gradual recovery. For each transaction, the date on which the merger was announced was recorded, as well as the date and time of the first filing of the merger agreement on the SEC's EDGAR database.[59] Each merger announcement day is recorded as T,

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[52] We also excluded transactions for which the definitive merger document could not be located on EDGAR, which eliminated a small number of companies.

[53] Tender offers and other hostile bids introduce statutory constraints and uncertainties that extend beyond the scope of legal drafting. *See, e.g.*, Guhan Subramanian, Steven Herscovici, & Brian Barbetta, *Is Delaware's Anti-Takeover Law Unconstitutional? Evidence from 1988-2008*, 65 BUS. LAW. 685, 688-699 (2010) (providing an overview of anti-takeover regulation). Although hostile bids account for only a handful of mergers in our data set (in the single digits), we are excluding these data points because the atypical concerns in this context may distort the analysis of lawyers' independent contributions to the merger process.

[54] *See* David Gray Carlson, *Secured Creditors and the Eely Character of Bankruptcy Valuations*, 41 AM. U. L. REV. 63, 70-75 (1991) (describing the difficulty of bankruptcy valuations because they entail assuming factual settings that have not yet occurred and drawing untestable conclusions from that assumption); Lawrence A. Hammermesh, *Silos, Corporate Law, and Bankruptcy Law*, 28 DEL. LAW. 8, 9-10 (2010) (discussing the divergence in bankruptcy court valuations of companies from conventional valuation methods in the merger context).

[55] The variable for "Total Invested Capital" in Mergerstat is a measure that takes into account the target's implied market value of common equity, the face value of debt, and the book value of preferred stock. *See* Mergerstat/BVR Control Premium Study, *available at* http://www.bvmarketdata.com/defaulttextonly.asp?f=CPS%20Faqs. This figure is a proxy for the total "enterprise value" of the target company.

[56] We use Total Invested Capital as a proxy of sufficient market interest and trading activity for the semi-strong efficient markets hypothesis to plausibly apply. *See* Laurence A. Hammermesh & Michael L. Wachter, *Rationalizing Appraisal Standards in Compulsory Buyouts*, 50 B.C. L. REV. 1021, 1043 n.128 (2009) (explaining the use of Total Invested Capital in standard valuation methodology).

[57] *See* Steven Schwarcz, *Rethinking the Disclosure Paradigm in a World of Complexity*, 2004 U. ILL. L. REV. 1, 30 n.187 (discussing the role of analysts and sophisticated institutional investors in swiftly incorporating public disclosures into stock prices).

[58] Our data set begins in June, 2002 because the EDGAR system did not post filing times prior to that date. Without the filing time, we would be unable to determine on which trading day the agreement was publicly available.

[59] Some deals were announced after the close of trading. We retrieved the official press release for each deal from Westlaw's NewsRoom with Reuters database to identify the press release time and listed the effective date as the next trading day. In many cases, the merger agreement was filed after the close of trading, and we similarly recorded the filing date as the following trading day.

and the subsequent trading days as T+1, T+2, T+3, and so on. The agreement filings typically are made either the same day as the announcement (T) or the day after (T+1), with almost all filings falling within four trading days of the announcement, as depicted in the following table.[60]

Table I. Filing dates of merger agreements relative to merger announcement dates. (T is the announcement day and each additional day is reflected with an additional number).						
	T	T+1	T+2	T+3	T+4	T+5
Percentage Filed	30%	41%	13%	7%	6%	2%
Number Filed	139	188	62	33	27	7

The data set also includes the closing stock price of each target company covering thirty trading days before and after the merger announcement. The "Purpose" of each transaction as listed in Mergerstat was also coded, which distinguishes between a "Financial" and "Horizontal" mergers.[61] This coding allows analysis of whether the nature of the merger could lead to greater scrutiny of and market reactions to the legal terms of the agreement. Lastly, the study collected data on the outcome of each transaction, which included coding as "canceled" or renegotiated mergers that were listed in the Mergerstat data base as having a "Cancelled Date" or "Amendment Date" entry. These transactions are of special interest, because in such cases the original merger agreement did not carry the parties through the closing of the deal, and either a change or a termination of the agreement occurred.

C. Methodology for Statistical Analysis

The key test is whether the filing of the merger agreement reveals information to the market beyond what is included in the initial press release announcement. To test this premise, we look for a target stock price change magnitude (positive or negative) on a particular day when the acquisition agreement is filed compared to the price change magnitude on that day when the agreement is not filed. Our approach is closely related to the "event study," a well-established empirical method in finance studies.[62] We rely on many of the same assumptions used in

[60] *See* Securities & Exchange Commission, Form 8-K Item 101.1.

[61] See STANLEY FOSTER REED & ALEXANDRA REED LAJOUX, THE ART OF M&A: A MERGER ACQUISITION BUYOUT GUIDE 7-8 (3d ed. 1999) (distinguishing between "financial" deals that focus on overhauling and reselling the target, such as leveraged buy-outs, and "strategic" or "horizontal" deals that seek to integrate the target with the acquirer).

[62] *See, e.g.*, E. Fama, L. Fisher, M. Jensen, & R. Roll, *The Adjustment of Stock Prices to New Information*, 10 INT. ECON. REV. 1, 6-10 (1969); G. William Schwert, *Markup Pricing in Mergers and Acquisitions*, 41 J. FIN. ECON. 153, 161-62 (1996); Lucian A. Bebchuk & Ehud Kamar, *Bundling and Entrenchment*, 123 HARV. L. REV. 1549, 1585-1586 (2010) (explaining how the event study approach is the standard methodology used in corporate finance to assess market reactions to acquisition announcements).

standard event studies[63] but make some notable departures to address the distinctive challenges posed by our tightly compressed time period. Because our announcement and filing dates are contained within a compressed time period, we have both some additional challenges and some important advantages not present in the ordinary event study context.

Conventional event studies attempt to assess price changes that result from an event (the "abnormal return") by comparing the price change around the event to the price change that would have been expected in the absence of the event (the "normal return"). To measure abnormal return, event studies calculate the "actual" return around the event and then subtract the estimated "normal" return to give the abnormal return. The actual return, normal return, and abnormal return are calculated over an "event window," which is a period of time that typically extends for one or more days before and after the event.[64] To assess what would have been the normal performance during the event window, an event study uses data over a period of time usually consisting of the several months prior to the event window. If there is a significant difference between the actual return over the event window and the normal (or expected) return, the event is considered to reveal information to the market.[65]

The standard event study methodology, therefore, usually includes both a several-month estimation period to estimate "normal" performance and a multiple-day event window to ascertain the effect of the event.[66] In this study, however, the estimation period is unnecessary and the multiple-day event window is not feasible. The estimation period is unnecessary because the target company will not survive the merger. The target's stock is being converted into cash, and therefore its stock price will no longer reflect its business prospects or fluctuate with the broader market. Instead, the only factors shaping the target stock price after the announcement are the cash consideration (the financial terms), the probability of closing (the legal terms), and the value of the company if the merger is cancelled. Thus, the standard estimation of alpha and beta parameters based on pre-announcement target stock prices would be meaningless in the post-announcement cash merger context.

Second, because the agreement is filed in close proximity to the announcement of the transaction, it is not feasible to extend the event window to cover multiple days around the filing. Virtually all merger agreements in our dataset are filed within four business days of the announcement of the transaction due to Form 8-K disclosure requirements.[67] This fact leaves no room for multiple-day event windows. The only way to measure the relative impact of the

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[63] The most important assumption is that the semi-strong efficient market hypothesis applies, which posits that stock prices swiftly incorporate all publicly available information about the issuer. *See* Fama, *supra* note 7, at 385-87.

[64] *See* A. Craig MacKinlay, *Event Studies in Economics and Finance*, 35 J. ECON. LIT. 13, 14-15 (1997).

[65] This approach is designed to identify any effect from information "leaking" prior to the announcement, such as insider trading. *See* Benjamin L. Liebman & Curtis J. Milhaupt, *Reputational Sanctions in China's Securities Market*, 108 COLUM. L. REV. 929, 961 n.136 (2009) (discussing the use of estimation windows in event studies).

[66] A paradigm case for event studies is a "fraud-on-the-market" securities litigation case in which the event study substantiates materiality, loss causation, and the degree of price impact independent of broader market changes. *See, e.g.*, Frank Torchio, *Proper Event Study Analysis in Securities Litigation*, 35 J. CORP. L. 159, 160-62 (2009); *Basic Inc. v. Levinson*, 485 US 224, 241-242 (1988) (discussing "fraud-on-the-market" in securities litigation).

[67] *See* Securities & Exchange Commission, Form 8-K Item 101.1.

financial versus legal terms is to focus on the period during which each of these disclosures is made.

Our solution to these unique features of this study is to focus on a shorter time horizon and to assess cash-only mergers. In this context the target company shareholders' only concern would be whether the transaction will close. Either the transaction will close and target shareholders will receive cash, or the merger will be called off and the stock will usually return to a different (typically lower) price. This approach mitigates the need for an estimation period and allows us to focus on the very narrow window between merger announcements and disclosure of the acquisition agreements. We use a modified event study technique relying on single-day returns in the five-trading-day period following the merger announcement.[68] We estimate the reaction to legal terms by holding the trading date on which prices are measured (e.g., T+1, T+2, etc.) constant and comparing the magnitude of price changes on that single trading date in deals where the agreement was filed on that date and deals where the agreement was not filed on that date.[69] This approach is designed to isolate any price movement attributable to the merger announcement from that attributable to disclosure of the legal terms.

D. Results of Statistical Analysis

The data confirms the well-documented fact that the merger *announcement* (disclosure of the financial terms) typically has a strong positive impact on the target's stock price.[70] The median target share price change over the 61-trading day period surrounding the announcement date is depicted in Figure 1 below. We present the median data because the mean data is much more sensitive to outliers, which are common in daily stock returns. Since we are examining relatively small movements in stock prices, the median data is more informative concerning the impact of the disclosure of acquisition agreements and ensures that our results are not skewed by a small portion of the data.

The vertical line in the center of the graph shows the position of the announcement date (T). Prior to T, the price rises as information leaks out about the proposed transaction. On date T, the target's stock price jumps up to just below the amount of the cash consideration payable in the merger. The degree of the market's reaction to merger announcements is consistent with the conventional wisdom that this disclosure sparks surges in target company stock prices.[71]

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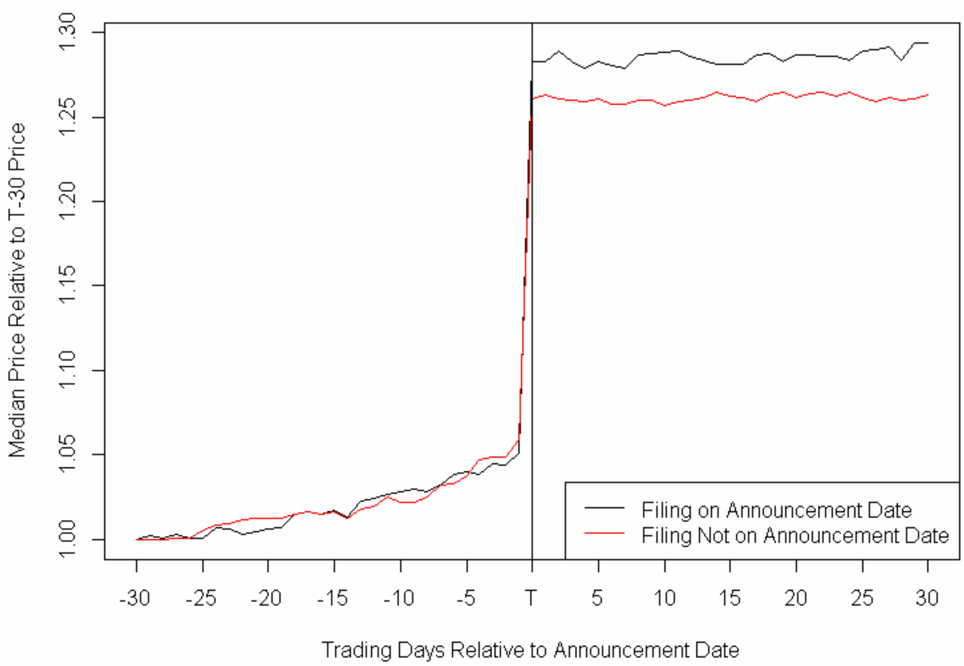
[68] Since any effect of "leaking" the agreement is likely to be small relative to the market's adjustment to the merger announcement itself, we do not use pre-event days in the event window. An additional difference is that in most event studies, one needs a measure of the "abnormal return," to compare with the "normal return" one would expect over the event window if the event hadn't taken place. *See* A. Craig MacKinlay, *Event Studies in Economics and Finance*, 35 J. ECON. LIT. 13, 15 (1997). Here, there is no "normal return" because the merger consideration is cash.

[69] Our results also allow a second dimension of comparison in which one holds the agreement filing date constant and compares the price change on that filing date (on which filings did occur) to the price change on the trading dates immediately before and after that date (on which filings did not occur). For reasons discussed below, however, this approach is not as promising as the first.

[70] *See, e.g.*, Jensen & Ruback, *supra* note 5, at 6-7.

[71] *See, e.g.*, Bernard S. Black, *Bidder Overpayment in Takeovers*, 41 STAN. L. REV. 598, 601-02 (1989) (discussing how studies show that target shareholders reap significant premiums); Bernard S. Black & Joseph Grundfest, *Shareholder Gains from Takeovers and Restructurings Between 1981 and 1986*, 1 J. APPLIED CORP. FIN. 5, 8-9 (Spring 1988) (compiling numerous studies on the large premiums target company shareholders receive in mergers).

Figure 1. Median Price Change Over 61-day Window Relative to T-30 Price.



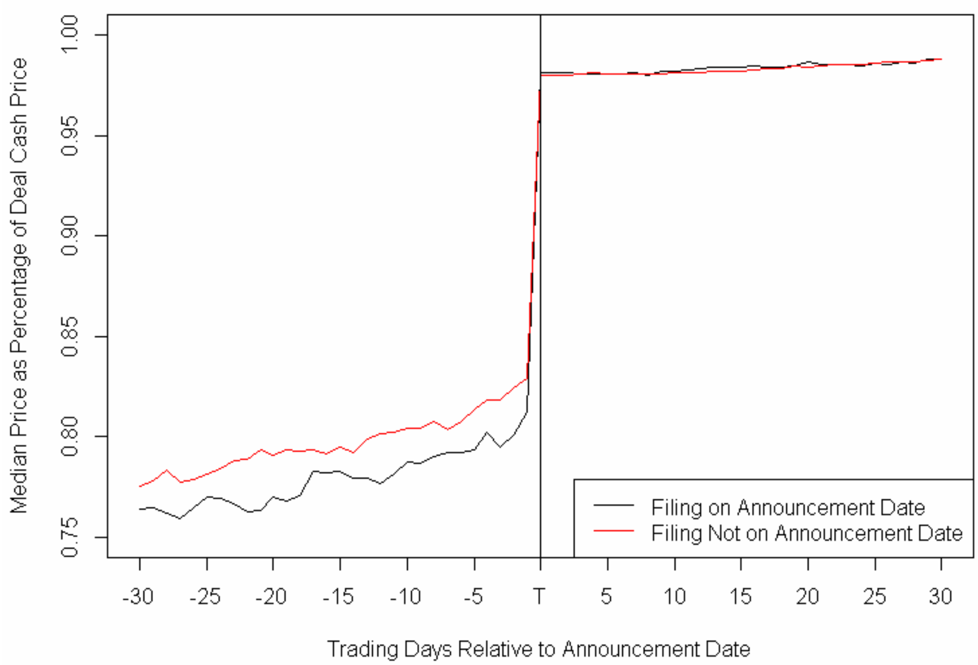
Deals in which the agreement is filed on the announcement day T (the black line) tend to have higher returns on T (and over the whole period) than deals in which the merger agreement is filed later (the red line). Mergers with filings on the announcement day T have slightly higher median price reactions (approximately 1.28 times the T-30 price) than mergers with filings on days after T (approximately 1.26 times the T-30 price). This effect persists through the 30 trading days following the announcement date. At first glance this finding appears to suggest that the market reacts (positively) to the filing of the agreement on the same day as the announcement.

In fact, however, the filing of the agreement on the announcement date does not cause the modest additional price difference. The causation likely runs the other way. The difference on the announcement day cannot be attributed to the revelation of the agreement because the premium itself is higher in the deals filed on the announcement day by almost exactly the amount of the immediate post-announcement gap in Figure 1. The median premium over the T-30 price is approximately 1.23 for transactions with a filing on the announcement day and 1.20 for transactions with a filing on other days. Because the revelation of the merger agreement cannot cause the increase in premium set before the revelation of the merger agreement (and indeed before the announcement), it is more likely that higher premiums for targets may lead to a quicker filing,[72] or that some other common cause accounts for both phenomena. In actuality, the most plausible story is shown by comparing the target's price to the consideration to be paid in the merger or the *deal price*, rather than to the T-30 price. We depict this in Figure 2, which

[72] The effect is not limited to the filing day versus non-filing days. For each day the filing is delayed, the (past) announcement day price change declines. The lower the premium over the T-30 price, the greater the delay in filing.

shows the same plot of median target stock prices over the 61-day window as a percentage of the price to be paid for target shares in the merger.

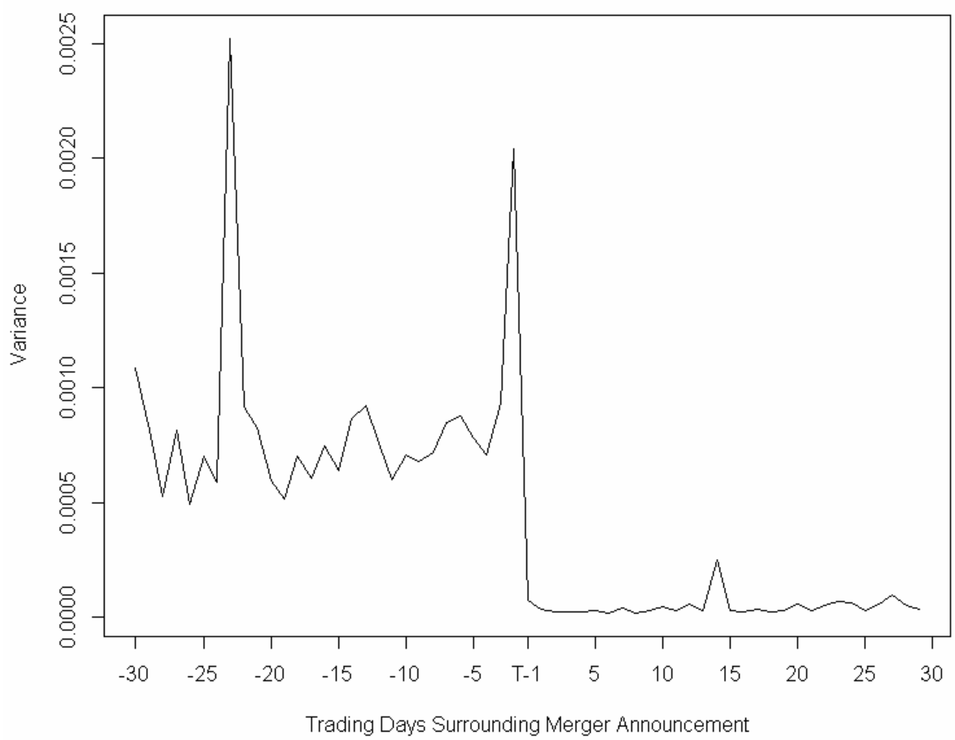
Figure 2. Median Price Change Over 61-day Window Relative to Deal Price.



The plot in Figure 2 shows that there is no difference in price relative to the deal price *after the announcement* between mergers when the agreement is filed on the same date as the announcement from those where the agreement is filed later. The difference in price is *before the announcement*, such that the mergers that will ultimately file later than the announcement date tend to see the market anticipating the merger announcement. Thus, we can conclude that the simultaneous announcement and filing does not *cause* the increased price on the announcement date. Instead, it is possible that the reverse is true: the upward price creep in the period days before the announcement causes the later filing. The most likely explanation is that when rumors of a merger begin to leak out and cause the target's stock price to increase, the companies feel obligated to rush to announce the merger sooner than they would have otherwise. In such cases, the companies may announce the merger before they have had the time to prepare fully to file the agreement on the same day as the announcement. Thus, the agreement ends up being filed later in exactly the cases in which some of the price jump on the announcement day has already partly seeped into the market.

To estimate the effect of legal terms, therefore, we examine the trading days following the announcement day to provide a clean test of the effect of disclosure of the agreements. The days following the announcement see a tremendous reduction in price volatility compared with that on the day of the merger announcement, making it more likely we would find any effect due to the legal terms. This reduction in volatility is dramatically illustrated by Figure 3, which shows the variance of target stock price changes for each of the 30 trading days before and after the merger announcement (excluding the day of the announcement itself).

Figure 3. Target Variance for Each Trading Day Surrounding Merger Announceme



We now proceed to present in Table II the main price data for assessing the impact of the merger agreement filing. Each column gives the median (absolute) target price change percentage for the four individual trading days following the announcement of the merger (e.g., T+1, T+2, T+3, and T+4).[73] We use absolute values of the price change because we do not expect the merger agreement's revelation to affect the target's price in a positive or negative direction a priori. We are only concerned with whether the price changes regardless of direction. Thus, this measure is similar to the variance of the price change, but using the L1 norm rather than the L2 norm.[74] Each row denotes the filing date of the merger agreement, on the same scale of five individual trading days on and after the announcement (T, T+1 through T+4). Thus, for example, column 1 (labeled T+1) gives the median absolute price change for the next trading day after the announcement (T+1) for deals in which the merger agreement was filed on T, T+1, T+2, T+3 or T+4, as denoted by the rows. Row 1 (labeled T) gives the median absolute price change for deals in which the merger agreement was filed on T for trading days T+1, T+2, T+3 and T+4. The shaded cells on the diagonal are the median absolute price changes on the filing dates of the agreements (when the price date column is the same as the filing date row).

[73] That is, the entry for T+1 gives the percentage change in the of the target's stock between day T's closing price and day T+1's closing price.

[74] Using squared price changes produced similar results, but makes the Table less readable because of the small decimal values. Using the mean rather than the median produced qualitatively similar results.

	Table II. Absolute Price Change Percentage by Filing Date					
		Median Absolute Price Change Percentage on Date				Number of Filings
		T+1	T+2	T+3	T+4	
Merger Agreement Filed on Date	T	0.228	0.167	0.157	0.199	139
	T+1	0.290	0.154	0.185	0.139	188
	T+2	0.264	0.185	0.151	0.179	62
	T+3	0.193	0.1290	0.154	0.111	33
	T+4	0.267	0.189	0.084	0.119	27

If the disclosure of merger agreements affects the target's stock price, we would expect the shaded cells (price changes on dates when the agreements are filed) to be larger than the non-shaded cells of the same column (price changes on dates on which agreements are not filed).[75] . In each column, the shaded cell should have a larger median absolute price change than the non-shaded cells in the same column if the merger agreement reveals information to the market.

The results in the Table suggest that the markets do not react strongly to the revelation of the legal terms of merger agreements. The first shaded cell (for T+1) is slightly larger than the other entries in its column, with an entry of 0.290%. When the merger agreement is filed the day after the merger is announced, the median absolute price change on that day from the day before is approximately 0.290%, which is only slightly larger than the price change on the same date for companies that filed their agreements on other days (maximum of 0.267%). If one looked only at this raw data, there would appear to be a small but perceptible effect from revealing the merger agreement on date T+1.

[75] The shaded entries cannot be meaningfully compared to the entries in their rows because the variance of the columns (especially of T+1) is dramatically different from one-another regardless of when the merger agreement is filed. In fact, the T+1 price change is statistically significantly larger than those on T+2, T+3, and T+4 (pooled together, p-value 0.004), even when the agreement is filed on T rather than T+1. Thus, comparison entries in one column to those in another column could be misleading.

To test whether the filing date cell is statistically significantly different from the other cells, we use a Wilcoxon Rank Sum Test.[76] The test is roughly analogous to the t-test in parametric statistics, but does not require assumptions about the exact distribution of the data, which assumptions can be problematic in this context.[77] Applying the Wilcoxon Rank Sum Test, the shaded T+1 cell was not statistically significantly different from any of the entries in its column at traditional 95% confidence levels. This means that the price change is not significantly larger on T+1 when the agreement is filed on T+1 than when the agreement is filed on other days. Therefore, this finding is mixed evidence at best for a market response to the acquisition agreement.

The other shaded cells suggest similarly ambiguous results for day T+2, and even less clear results for days T+3 and T+4. On day T+2 the shaded cell is the second largest in its column. But the shaded entries in the columns for T+3 and T+4 show little difference relative to the other entries, suggesting that the filings on those days do not cause any noticeable increase in price change. This is important because T+3 and T+4 are the instances in which any effect of the merger agreement's disclosure is most clearly separated from the effect of the merger announcement because trading days have elapsed between the two events. Thus, the failure to find any pattern on these days may be the most important information in the table. It is worth noting, however, that the sample sizes for the rows for T+3 and T+4 are small (33 and 27, respectively), leaving a degree of uncertainty about the point estimates.

The overall message from the Table is that if there is an impact from filing the merger agreement on the first or second day after the announcement, it is likely very small, and that there is no evidence of any effect on other days. To give a sense for the precision of the estimates, Table III below presents the results of the Wilcoxon Rank Sum Test for each trading day together with 95% confidence intervals. We cannot reject the null hypothesis of zero agreement effect for any of the individual trading days, and two of them actually show smaller price changes on the day the agreement is filed (T+3 and T+4) than when the agreement is not filed. Thus, although there is some evidence in T+1 and T+2 for a market reaction to the agreement, that evidence is equivocal at best.

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[76] The Wilcoxon Rank Sum Test, also called the Mann-Whitney Test, is a nonparametric test for statistical significance of the difference between two groups. *See* JOHN A. RICE, MATHEMATICAL STATISTICS AND DATA ANALYSIS 402-403 (2d ed. 1995).

[77] We use the non-parametric test because the data are non-normal in their distribution, posing problems for the t-test, *see* GEORGE W. SNEDECOR AND WILLIAM G. COCHRAN, STATISTICAL METHODS 144 (8th ed. 1989), and are affected by outliers, which is moderated in the non-parametric test, *see* JOHN A. RICE, MATHEMATICAL STATISTICS AND DATA ANALYSIS 403 (2d ed. 1995). The tradeoff is that under certain circumstances the non-parametric text may lack statistical power which means there could be significant relationships we fail to uncover because the test is less powerful than a t-test. *See* ID. at 144.

Table III. Wilcoxon Rank Sum Tests for Each Trading Day.		
Trading Day	Estimated Effect	Confidence Interval
T+1	0.00028	(-0.00016, 0.00083)
T+2	0.00034	(-0.00012, 0.00090)
T+3	-0.00009	(-0.00073, 0.00051)
T+4	-0.00021	(-0.00080, 0.00039)

To have an idea of the largest likely economic significance of the numbers the upper bound of the confidence interval (.00090) would imply a change in market capitalization of about $1 million on a $1.2 billion target value, which is approximately the median-sized deal in the database. Even if we used the largest actual estimate of the difference (0.00034), the amount would be only $408,000 on a $1.2 billion deal. These figures are literally the magnitude of a rounding error for a billion-dollar deal.[78] If we exclude T+1 because of its obviously higher variance and perform the a pooled test for T+2 through T+4 only, the estimate is .000019, with a 95% confidence interval of -0.00025 to 0.00038, meaning that even with pooled data one cannot reject the null hypothesis that the effect is zero.

The results hold up even when we tested sub-sets of the data using theoretically relevant variables. For example, the results do not change qualitatively when we limit analysis to larger deals (those with a Total Invested Capital of $1.2 billion or more), set forth in Table IV, below. This point is relevant because it addresses the potential claim that our results are driven by smaller deals (potentially as small as $300 million) in which risk arbitrageurs would not have adequate incentives to digest the legal terms.

[78] For completeness, we also computed these same figures using a t-test, which for reasons discussed above is likely biased by the presence of large outliers and non-normally distributed data. The results were not qualitatively different from those presented.

	Table IV. Absolute Price Change Percentage for Large Deals (> $1.2 billion) by Filing Date					
		Median Absolute Price Change Percentage on Date				Number of Filings
		T+1	T+2	T+3	T+4	
Merger Agreement Filed on Date	T	0.226	0.148	0.127	0.182	68
	T+1	0.293	0.156	0.198	0.143	91
	T+2	0.379	0.241	0.229	0.236	39
	T+3	0.218	0.115	0.158	0.114	20
	T+4	0.278	0.189	0.115	0.119	17

Similarly, and even more surprisingly, the results also do not change qualitatively when we subset the data to non-strategic (what Mergerstat calls "financial") rather than "strategic" (what Mergerstat calls "horizontal") deals,[79] set forth in Table V, below. The objective of strategic (or horizontal) deals is to exploit the potential synergies from integrating the acquirer and target companies.[80] In contrast, non-strategic or financial deals aim to improve the operations of the target with the ultimate goal of selling the target to maximize returns.[81] The basic contrast is that strategic acquirers tend to finance transactions with their own cash flows and/or stock, while financial acquirers often use leveraged buy-outs that rely primarily on debt.[82] Acquisition agreements for financial transactions are markedly different because, among other things, the target company's assets may be used as collateral for lenders and the seller's income is used to service the debt.[83]

[79] See STANLEY FOSTER REED & ALEXANDRA REED LAJOUX, THE ART OF M&A: A MERGER ACQUISITION BUYOUT GUIDE 7-8 (3d ed. 1999) (explaining the distinction between "financial" deals that focus on overhauling and reselling the target and "strategic" or "horizontal" deals that focus on integrating the target into the acquirer).

[80] *See* STEPHEN M. BAINBRIDGE, MERGERS AND ACQUISITIONS 41-42 (2d ed. 2009) (discussing strategic acquisitions in a variety of contexts).

[81] *See* MAYNARD, *supra* note 31, at 516-519 (providing an overview of the emergence of large-scale financial transactions and the rise of the leveraged buy-out industry).

[83] *Id.* at 52-53.

	Table V. Absolute Price Change Percentage by Filing Date for Financial Deals					
		Median Absolute Price Change Percentage on Date				Number of Filings
		T+1	T+2	T+3	T+4	
Merger Agreement Filed on Date	T	0.246	0.280	0.189	0.228	35
	T+1	0.383	0.155	0.266	0.184	50
	T+2	0.396	0.241	0.148	0.344	13
	T+3	0.337	0.096	0.150	0.114	8
	T+4	0.356	0.191	0.043	0.175	6

Again, there is almost no evidence of a market response to the legal terms in this subset of the data; the results are very similar to those in Tables III and IV. The fact that there was very little evidence of a market reaction to the terms of merger agreements in both financial and strategic deals is striking since "financial" transactions typically have different provisions than strategic transaction acquisition agreements.[84] The fact that the results are very similar between financial transactions and strategic transactions, given the "marked" difference in agreement terms, bolsters the interpretation that the financial markets do not respond to the content of the legal terms.[85]

The results presented above may seem surprising, but they actually correspond closely to data from other studies about the price reactions to mergers—the arbitrage spread.[86] When a merger is announced, the price of the target will generally climb to a level just below the consideration to be paid for target shares in the merger, as graphically depicted in Figure 2. The difference between the trading price of target shares and the per-share consideration in the

[84] *See* Afsharipour, *supra* note 4, at 1169-70, 1184-93 (describing the differences in agreement terms between financial and strategic transactions).
[85] Rows T+3 and T+4 in Table IV are based on a small sample set, so no firm inferences could be drawn about statistical significance for these rows.
[86] *See* Micah S. Officer, *Are Performance Based Arbitrage Effects Detectable? Evidence From Merger Arbitrage*, 13(5) J. CORP. FIN. 793, 795-97 (2007) (discussing how investors create an arbitrage spread during the closing period that is just below the merger announcement price reflecting the assessment of the risk the deal will not close).

merger is called the "merger arbitrage spread" and may be attributed to the risk the deal will not close.[87] The risk the deal will not close, in turn, is at least in theory driven by the terms of the merger agreement (as well as other factors such as regulatory obstacles), which govern how easily (or not) the acquirer or target can terminate the deal.

In recent years the arbitrage spread has been quite small by historical standards. Over the past two decades the median arbitrage spread has shrunk from nearly 8% in 1990 to about 2% in 2007.[88] Our data, which covers 2002 through 2011, show that the thin arbitrage spread has continued, with a median of 1.94% through the period. The median spread even during the turbulent uncertainty of years 2008 through 2010 was only about 1.99% in our sample of cash deals,[89] which roughly corresponds with what others have found.[90] As a result, to the extent that the terms of the merger agreement affect the market price by affecting the probability of deal completion, there is only a very narrow band in which those provisions can operate. The financial markets either believe that announced mergers are extremely likely to close, or they believe that even if the deal doesn't close another nearly equally attractive deal will materialize. Either way markets do not factor in the deal-specific legal terms in any economically important fashion, an empirical finding which challenges the conventional wisdom.

Our results also have important implications for future studies of the market value of legal terms. The obvious alternative to our event study approach would be to disaggregate the legal terms on a cross-sectional basis, then look for market reactions to particular types of terms individually. For example, one might propose a study that coded the legal provisions of agreements to test whether the target's stock price reacted to particular legal terms.[91] Our results suggest that such analyses are unlikely to discover significant relationships between legal provisions and target stock prices. The fact that the target company's stock price variance on days in which the agreement is revealed is essentially equal to the variance on days on which the agreement is not revealed implies that no cross-sectional study is likely to detect an effect of any legal term on the target's stock price.[92]

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[87] *Id.* at 796-97.

[88] *See* Gaurav Jetley & Xinyu Ji, *The Shrinking Merger Arbitrage Spread: Reasons and Implications*, 66 FINANCIAL ANALYSTS JOURNAL 57 (2010).

[89] In general, the arbitrage spread for all-cash deals is slightly smaller than those for stock deals, *see id.*, at 65, so this data may not actually point to a decline in spread after 2007.

[90] *See, e.g.*, Cain, *supra* note 1, at 42.

[91] For example, one study of MAC Clauses did not find a significant reaction to the disclosure of MAC terms. *See* David Denis & Antonio J. Macias, *Material Adverse Change Clauses and Acquisition Dynamics*, J. FIN. & QUANT. ANAL. (forthcoming), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1609765.

[92] A cross-sectional model of the target's stock price on the day the agreement is revealed would take the form of $y = \alpha+\beta_1 x_1+ \beta_2 x_2+\ldots+e$, where y denotes the price change of the target on the day an agreement is revealed, x_1, x_2, etc. are attributes of the merger agreement's terms, and β_1, β_2, etc. are the effects of each term on the target's price. In such a model, e is the error term that is not due to the revelation of the terms of the merger agreement and therefore is estimated from the variance of y when the agreement is not filed. Our basic result in the paper is that var(y) is roughly the same as var(e). This implies, however, that the variance of $(\beta_1 x_1+ \beta_2 x_2+\ldots)$ must be zero because α is a constant and e is uncorrelated with the x_is by the assumption of the linear model. This means that either (1) β_1 and β_2 are zero, i.e., the terms of the agreement have no effect on the return y, or (2) that $\beta_1 x_1$ and $\beta_2 x_2$ always sum to the same constant and therefore have zero variance, such as if that they were perfectly negatively correlated. In either case, there cannot be any correlation of y with x_1, x_2, etc. Thus, showing that var(y)=var(e) shows that there is no

III. Interpretation of Results

The results raise the question of whether markets are failing to price legal terms appropriately or whether alternative explanations are more consistent with the results. Four possible explanations merit consideration, each of which has important implications. First, markets may expect certain standardized terms in the acquisition documents, and lawyers may generally meet those expectations. Second, the legal terms may have both positive and negative aspects that tend to cancel one another out as targets and acquirers compromise in offsetting ways. Third, it is possible that the market takes longer to digest and respond to the legal terms of the agreement than the window this study considers. Finally, we argue the most plausible explanation is that markets have strong faith that deals will close and do not believe that the terms of the merger agreement materially affect the probability the transaction will be completed. This final explanation has the most significant implications for the theory and practice of acquisitions.

A. The Role of Market Expectations

The first alternative hypothesis is that the absence of market reaction to merger agreements is not because the market does not price legal terms, but rather that lawyers seek to meet the market's expectations and almost always succeed in meeting those expectations. Once the merger is announced, the market has expectations about the legal terms that would typically accompany a deal of the type announced. If those expectations are fulfilled in virtually all cases, there would be no market reaction when the agreement is revealed even if the market believes the legal terms are important.

This explanation is consistent with how many lawyers see their role—translating the business "deal" into a legal agreement that will realize, not destabilize, the expectations of the parties and the market. Lawyers generally do not want to "surprise" the market with the legal terms, even if that surprise were positive.[93] Instead, lawyers seek to satisfy expectations by taking advantage of past "precedents" in legal drafting.[94] Borrowing text from earlier provisions means that both lawyers and their clients can have the security of knowing that the provisions

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cross-sectional relationship between y and attributes of the merger agreement x_1, x_2, … and therefore cross-sectional investigations of this type of data would be fruitless.

[93] M&A lawyers may fear a reputational backlash if deviations from market expectations have a negative effect. For this reason lawyers may believe innovative legal terms may carry more of a downside risk than potential upside. *See* Claire A. Hill, *Why Contracts are Written in Legalese*, CHICAGO KENT L. REV. 59, 71-72 (2001) (arguing that corporate lawyers have incentives to replicate contractual provisions to avoid negative outcomes than could affect their job security, rather than to engage in innovative contractual design); Marcel Kahan & Michael Klausner, *Path Dependence in Corporate Contracting,* 74 WASH. U. L.Q. 347, 353-58 (1996) (arguing that lawyers shy away from contractual innovation because legal drafting changes raise the possibility of bad outcomes during transition periods).

[94] *See* Charles J. Goetz & Robert E. Scott, *The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contractual Terms*, 73 CAL. L. REV. 261, 287-88 (1985) (arguing that standardization reduces uncertainties by creating widely agreed understandings of the meaning of legal terms and by heightening the degree of judicial consensus about validity and enforceability); Robert C. Clark, *Contracts, Elites, and Traditions in the Making of Corporate Law*, 89 COLUM. L. REV. 1703, 1731 (1989) (discussing how building off of corporate law traditions "greatly reduc[es] the very high costs of repeated discovery, learning, and rational decisionmaking").

have survived past judicial scrutiny (or at minimum past public scrutiny).[95] This approach creates stability because borrowing clauses from earlier deals may heighten certainty for the market and the parties.[96] To the extent this hypothesis is accurate, it would appear the market places value on M&A lawyers and firms as reputational intermediaries and due diligence providers whose main function is to serve as market signals of quality, rather than to put their legal tool kit and creativity to use in legal drafting.[97]

To the extent that markets can predict merger agreements' legal terms, our study would not capture the value of those terms when the agreement is revealed. Although the market may develop some expectations about the likely legal terms from the broad contours of the announcement, it is implausible that the agreement's text can be perfectly predicted from the merger announcement. Such a hypothesis would imply a radical departure from the reality of legal drafting of M&A agreements. Although public company merger agreements tend to have a standardized structure and set of provisions, they are not "boilerplate." Lawyers do not mechanically "fill in the blanks" of merger agreement terms. Instead, lawyers dedicate significant time and energy to crafting merger agreement terms that are distinctive to each proposed merger.[98] If the literal text of merger agreements were perfectly predictable from the announcement itself, then the considerable efforts of counsel would be wholly superfluous.

We do not believe that is the case, however, because there is in fact considerable variation in the deal-specific terms of mergers, and that variation results in large measure from the relative leverage of the two parties. In some transactions the target has more leverage and is able to negotiate a "seller friendly" agreement, and in some cases the acquirer has more leverage and is able to negotiate a "buyer friendly" agreement. For example, the details of the Material Adverse Change definition varies widely from deal to deal,[99] and that provision is the linchpin of the acquirer's ability to walk away from a merger. Unless the markets are able to foresee perfectly the target's leverage in each case on the announcement, then the deal-specific terms should provide new information to the markets when the agreement is revealed. Yet, the markets do not react to the revelation of the legal agreement's terms, which suggests that the markets simply are not responding to the deal-specific variations in the agreements.

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[95] *See* Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting,* 83 VA. L. REV. 713, 717-20 (1997) (discussing the network benefits of using standardized or boilerplate contractual terms); *see also* Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J. 557, 611-616 (discussing the role of precedents in giving parties greater confidence about the meaning of rules).

[96] *See* Goetz & Scott, *supra* note 94, at 287-88.

[97] *See* Schwarcz, *Market Complexity*, supra note 21, at 260 n.279 (discussing lawyers' role as reputational intermediaries).

[98] *See, e.g.*, Robyn V. Foster, *Effective Negotiation Strategies and Approaches for M&A Lawyers and Their Clients*, ASPATORE 6-9 (Nov. 2011) (discussing the range of areas which M&A lawyers focus on during acquisition agreement negotiations).

[99] *See, e.g.*, Nixon Peabody 2011 MAC Survey, available at http://www.nixonpeabody.com/files/144739_MAC_Survey_2011.pdf (compiling statistics on various aspects of MAC Clauses, and showing considerable variation in most of the terms).

B. The Shortcomings of a "Legal Wash" Interpretation

The fact that lawyers invest significant time in negotiating the legal terms of mergers raises a second potential explanation. The legal terms of merger agreements may exhibit considerable deal-specific variation and have significant legal consequences, but tend to have both positive and negative aspects that cancel one another out as targets and acquirers compromise in offsetting ways. The premise of this view is that haggling over legal terms is effectively a "legal wash" with more favorable terms to one party being countered by favorable provisions for the other party elsewhere.[100] The argument for this perspective would be that acquisition agreements are part of a larger game of tradeoffs amongst the parties once the basic outlines of the financial terms have come into shape. Concessions in one area may be paralleled by gains in another.[101]

The problem is that in order for this "legal wash" hypothesis to hold, it must be the case that legal terms are only traded off against one another, not against financial terms. In practice the price and other financial terms are often set independently of any haggling over the legal text. But if the legal terms had significant financial value, then one would expect that the negotiation of legal terms would not be a game of tradeoffs only among the legal terms themselves. Instead, legal terms might facilitate agreement by allowing parties to reach a meeting of the minds even when a gap persists in the target's and acquirer's assessments about what the target company is worth by allowing price flexibility once uncertainties have been resolved.[102] Compromise on the legal terms could actually be offset by sweeteners in the (non-legal) financial terms of the transaction. For example, acquirers would have to pay a higher merger premium in exchange for more expansive MAC/MAE conditions that would allow it to nullify the merger, which would serve as a de facto hedge.[103] At least in some cases, we would expect concessions concerning the legal terms to be offset with modified financial terms, which would not cancel out the market reaction on the filing date. The fact is, however, that the financial "deal" is typically independent of the legal terms of the agreement, suggesting the parties themselves do not place a financial value on the deal-specific legal details.

C. The Possible Role of Slow Processing of Disclosures

A third possibility is that markets do process the legal terms of mergers, but that markets take time to parse out the details of the agreement and this process unfolds over a longer time horizon than the window of time used in this study. The benign version of this explanation is that it takes time to process the significance of acquisition agreements' terms. A more insidious version would be that analysts only scramble to examine legal terms when evidence of a potential break-up looms on the horizon. This view may fuel willful blindness to the

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[100] *See* STANLEY FOSTER REED, ALEXANDRA REED LAJOUX, & H. PETER NESVOLD, THE ART OF M&A 263-67 (2007) (arguing that merger negotiations can often be a zero sum game between acquirer and target).

[101] *See, e.g.*, Sean J. Griffith, *The Costs and Benefits of Precommitment*, 29 J. CORP. L. 569, 615-616 (2004) (arguing that targets may offer transactional certainty to acquirers in exchange for increases in price or other concessions in the legal terms of the acquisition agreement).

[102] *See, e.g.*, Gilson, *Value Creation*, *supra* note 1, at 255 (arguing that legal terms providing for earnouts can foster agreement even when gaps on valuation persist between the acquirer and target).

[103] *See* Miller, *Deal Risk*, *supra* note 2, at 2013-2014 (arguing that the allocations of deal risk in MAC clauses serve to further efficiency in transactions that benefits both the acquirer and target).

implications of the legal terms at least until the writing of a potential collapse of the merger is on the wall.

The variants of this argument are difficult to completely dismiss with the data available. Our study does rely on the market's swift incorporation of merger information during a short trading window. Legalese can be difficult to penetrate and understand, even for merger arbitrage hedge funds that have incentives and ample time to process this information.[104] Thus, it is possible that the legal terms of a merger agreement take more time to digest than we allow in our study because the processing and incorporation of public information into stock prices may be a slower process in practice than traditional economic theory suggests. For example, analysts and their lawyers may belatedly scrutinize the fine print of legal terms when regulatory road blocks arise to discern distinctive incentives and opportunities for the acquirer and target in the agreement that justify deviating from broad-based assumptions. Nonetheless, it is unlikely that markets can accurately predict the legal terms prior to the revelation of the agreement, which suggests that analysts would have strong incentives to process deal terms swiftly upon their disclosure.

D. Faith in the Parties' Determination to Complete the Merger

The most plausible explanation for our results, and the most significant one for corporate deal making, is that the lack of market reaction to the legal terms of mergers reflects recognition of the parties' "will to close" an announced merger of public companies. Markets know that in friendly mergers both the acquirer and target will usually do whatever it takes to close the merger regardless of the legal rights to walk away. For this reason markets may place little value on legal provisions that are designed to address the risk of failure on the theory those provisions are unlikely to be exercised, even if available.

Our explanation says as much about the motivations of corporate merger participants as about drafting practices of deal lawyers. The "will to close" interpretation of the market's verdict on legal terms could be framed as the post-signing reflection of the "hubris hypothesis" of corporate takeovers.[105] The same excessive optimism that leads acquirer managers to overpay for targets when signing the deal may lead them to proceed in the post-signing period with a souring acquisition prospect in the face of a contractual "out." Targets appreciate the fact that acquirers are generally thought to overpay and therefore will seek to accommodate the acquirer if legal terms are triggered.[106] In our sample of 463 transactions, only 5% were cancelled during a decade marked by both excessive exuberance and market panic. These statistics help to put in perspective the probability of a dispute actually arising under the merger agreement, and the rational market indifference towards the agreement's terms.

Thus, it appears that markets consistently believe that the legal terms are not material since acquirer outs are unlikely to be triggered and even less likely to be exercised. The law firms representing the target and acquirer can negotiate detailed escape clauses for their

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[104] *See, e.g.*, Griffith, *Deal Protection*, *supra* note 4, at 1955 n.236 (expressing skepticism that board members can be expected to read, let alone understand legalese in merger agreements).
[105] *See* Roll, *supra* note 8, at 197.
[106] *See* Teri Lombardi Yohn, *Valuator's Role in Assessing Management Projections*, 2007 J. BUS. VALUATION 63, 68 (2007) (discussing the incentives created for target companies by the fact that acquirers routinely overpay).

respective clients. But if clients are unlikely to invoke those escape clauses—as the market seems to have concluded—the firms cannot protect clients against the risks of the bargain with conditions to closing alone. Our findings, therefore, imply that the behavioral assumptions corporate lawyers bring to acquisition clients may be inaccurate. In the next Part, we propose changes in the perspective M&A lawyers take to the bargaining table that would protect clients who are committed to close a signed transaction. The "contingent consideration" perspective we propose would make drafting practice responsive to the behavioral realities of acquisition clients, increasing efficiency, decreasing risk, and encouraging more deals.

IV. From Contingent Closings to Contingent Consideration

As discussed above, the most persuasive reason markets do not value legal provisions is that the carefully-crafted rights in the acquisition agreement are unlikely to be exercised. Corporate managers, whether because of "hubris" or reputational concerns, are unlikely to avail themselves of the contractual "outs" their lawyers worked diligently to create. The market knows this, so it does not scrutinize the carefully drafted terms of the agreement until signs of danger arise. But this explanation suggests that deal lawyers may be operating on a faulty behavioral assumption about their clients—that the clients would want to exercise legal "outs"to escape from a souring deal. In reality, that right is unlikely to be invoked, and therefore is not valued by the markets ex ante. We suggest, therefore, that deal lawyers shift their emphasis from the "contingent closing" perspective that focuses on calling the deal off toward the "contingent consideration" perpective that would create value in virtually every merger transaction.

A. Learning from Innovation in Private Merger Agreements

The lack of market reaction to legal deal-specific details in public company acquisition agreements is in part a product of the peculiarities of public company deal structures. In private company acquisitions, the legal provisions such as representations and warranties, indemnification provisions, escrows, and earnouts typically survive the closing. These provisions are both common and carefully negotiated in private company acquisitions because they impose financial obligations on target company shareholders that endure long after the merger is complete to ensure the interests of the parties are aligned to maximize the value for both sides of the transaction.[107] The tradeoff is that purchasers in private deals may end up paying a premium for longer lasting legal terms, while target shareholders may potentially share in the down or up side of designated post-closing uncertainties (such as the value of products in development). For this reason the legal terms directly impact the value of the target company even when the deal closes since the proceeds from the merger (and potential liability) are contingent on whether the representations, warranties, and other provisions of the acquisition agreement are accurate.[108]

In contrast, in public company deals the representations, warranties, and covenants generally cover only the pre-closing period and terminate at the closing of the deal.[109] The practice of indemnifying the buyer for breaches of representations, warranties, or covenants is

[107] *See* FREUND, *supra* note 20, at 160-161.
[108] In practice it is much harder empirically to test the value added of legal drafting to private companies because of the lack of transparency and absence of market valuation of the companies.
[109] *See* FREUND, *supra* note 20, at 160.

very unusual in public company transactions.[110] The general consensus has long been that public company deals need to be complete at closing because it would be impracticable and undesirable for the buyer to "chase down" public stockholders for indemnification.[111] The legal terms only end up mattering, therefore, when the deal does not close, which on the surface would suggest the closing conditions and termination provisions are critical. But the significance of these provisions ultimately depends on the willingness of one of the parties to call off or renegotiate the deal, which we argue the market has assessed as a small probability.

The evidence reveals, however, that few public company deals have actually been called off or renegotiated. We argue that the reason so few public company deals are called off is not that the contractual terms fail to protect the parties' rights to call of the deal, but that management is committed to the deal "no matter what" because their reputations and business judgment are on the line.[112] The tendency of managers faced with a target with declining prospects may be to double down on the acquisition, rather than to call it off. This means that no matter how carefully the attorneys craft escape clauses, most announced transactions are effectively unconditional agreements to purchase.[113] At the same time, because of the increased risk of litigation and reputational damage from a deal that falls through, public company closing conditions tend to be "fewer in number and narrower in scope" than those in private target transactions.[114] This explanation is consistent with what we see in the data—relatively few transactions actually fail to close. Thus, in exactly the situation M&A lawyers perceive the need for contractual outs—public company deals where post-closing indemnification is impracticable—they are very unlikely to be exercised.

B. The Case for Contingent Consideration

If acquisition agreements appear practically to function as unconditional obligations to purchase (notwithstanding the legal closing conditions), the question remains of what lawyers can do to protect acquirer clients? We suggest public M&A lawyers can deploy the deal technology already available in private transactions to public transaction context. Post-closing indemnification is difficult in public transactions[115] given the challenges of tracking down public shareholders to answer for breaches of representations and warranties.[116] But innovation in the use of contingent consideration is a viable alternative. Contingent consideration is conventionally thought of as a way to bridge a valuation gap between buyer and seller by allowing for adjustments to compensation based on pre-closing developments or diligence

[110] *See* M&A Practice Guide § 10.02[2] (2011).
[111] *See* FREUND, *supra* note 20, at 161. An exception sometimes occurs when the target although public has a large or majority stockholder who could be persuaded to provide indemnification. *See id*.
[112] *See* Roll, *supra* note 8, at 197 (discussing the "will to close" because of the hubris and reputational stakes for the acquirer's management).
[113] The unconditional nature of agreements is illustrated by the fact that the Delaware Chancery Court has never found a material adverse change to have occurred. *See Hexion Specialty Chems., Inc. v. Huntsman Corp.*, 965 A.2d 715, 737 (Del. Ch. 2008).
[114] *See* M & A PRACTICE GUIDE § 12.02 (2011).
[115] *See* Lou R. King, Eileen Nugent Simon & Michael Goldman, *Summary of Acquisition Agreements*, 51 U. MIAMI L. REV. 779, 782 (1997) (explaining that "[i]n the typical public company acquisition, no post-closing indemnification or similar remedy will be available for the buyer").
[116] *See* FREUND, *supra* note 20, at 160.

confirmations of value.[117] We propose that lawyers should focus on the potential for contingent consideration to enhance value in transactions by creating legal frameworks for navigating between the known and the unknown variables in the acquisition process.

Contingent consideration can take a variety of forms in acquisition agreements, but usually involves consideration where "a portion is paid at closing and an additional amount is to be paid in the future depending on future events."[118] The "future events" may involve the performance of the target business to be purchased, in which case the contingent consideration is often called an "earnout," or the value of stock consideration of the acquiring company given as consideration, in which case the contingent consideration is often referred to as "contingent value rights" or "value support rights."[119] In either case, the contingent consideration mitigates the risk to each party that the other party's performance is less than expected. In particular, contingent consideration offers a more nuanced alternative to the blunt instrument of closing conditions. If the target's business is worse than expected, but not bad enough to amount to a "material adverse change," the acquirer can receive some compensation rather than none. In return, acquirers should be willing to pay more for the target in the first place.

The use of some form of contingent consideration such as escrows or earnouts is common in private company acquisitions but the use of similar mechanisms has been relatively limited in public company transactions.[120] In part, the difference probably results from the additional securities, accounting, and tax complexities associated with contingent consideration when large numbers of shareholders are involved, as well as deal-structuring issues.[121] But the case for contingent consideration is normally that the extra complexity is often outweighed by the potential to bridge valuation gaps that otherwise may prove intractable.[122] Indeed, contingent consideration has become used more frequently in recent deals in the life sciences sector in recent years, in part due to the intrinsic challenges of gauging the viability and value of products in research and development pipelines or undergoing clinical tests.[123] The most notable case was the Sanofi/Aventis blockbuster $20 billion acquisition of Genzyme in early 2011, in which contingent value rights played a key role in lubricating a negotiation process that had dragged on for many months.[124]

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[117] *See* CARNEY, *supra* note 34, at 100-101 (explaining that "[w]here buyers and sellers are far apart, based on differing expectations about the future profits of the business, one way to bridge the gap is the earn-out.") In an earnout arrangement, "the buyer makes a firm commitment to pay a price it believes is reasonable based on its cautious estimate of future performance. But the seller gets the promise of additional payments to compensate it for the more valuable business it believes it's selling, only if its future performance lives up to the seller's claims." *Id.*

[118] M&A PRACTICE GUIDE, 9-28, 9.10 (2011).

[119] ID. at 9.10.

[120] *See* M&A PRACTICE GUIDE, 9-10, 9.04[2] (2011) ("Escrows are a common feature of many acquisitions, particularly those involving private targets." *See* id. at 9-28, 9.10 (noting that earnouts are included in approximately 19% of deals).

[121] *See* Frank Aquila and Melissa Sawyer, *Contingent Value Rights -- Means to an End: Using CVRs to Bridge Valuation Gaps in Public Company M&A Deals*, 2009 EMERGING ISSUES 4364, 4367 (2009).

[122] *See id.* at 4368-70.

[123] *See* John Haggerty, *Bridging the Value Gap: Sanofi-Aventis, Genzyme, and Contingent Value Rights*, 55 BOSTON BAR JOURNAL 36 (2011) (describing use of contingent value rights in recent biotech transactions).

[124] *See* Chris V. Nicholson, *Sanofi Agrees to Buy Genzyme for $20.1 Billion*, NY TIMES DealBook, *available at* http://dealbook.nytimes.com/2011/02/16/sanofi-agrees-to-buy-genzyme-for-at-least-20-1-billion/.

We argue that the case for contingent consideration is actually more compelling in public company acquisitions than in private company acquisitions, but for different reasons. No matter how carefully crafted the representations and warranties are in the agreement, and even if the parties are able to bridge the valuation gap, the absence of indemnification in public transactions leaves the parties with no post-closing protection for breaches of those representations and warranties. This means that the seller cannot credibly communicate information about its business or prospects through representations and warranties, because those terms are likely to have no teeth after the closing. As a result, the due diligence process serves as the buyer's sole protection against unexpected problems with the target's business.[125] The buyer must discover any negative information prior to closing, because after closing the representations and warranties expire, and then the buyer "owns" any problems subsequently discovered, both literally and figuratively.

The exclusive reliance on due diligence in public target acquisitions is inefficient and unnecessary when the technology already exists for post-closing contingent consideration. There is a reason that parties do not rely on due diligence alone in private company transactions (or in commercial life generally), but instead seek representations and warranties that survive the closing from the other party. Diligence is expensive and is not the best way to uncover information already in the possession of the target.[126] Instead, representations and warranties with "teeth" after closing in private deals serve as a means of signaling information,[127] which eliminates the need for costly investigation of quality (e.g., due diligence). The signaling function only works, however, when a cost is imposed on the maker of the warranty when the warranty is untrue.[128] The fact that the representations and warranties in public company deals expire at closing reduces their cost to the maker, even when untrue, and therefore makes them less credible to the buyer. The absence of credible representations and warranties post-closing in the public company case likely leads to excessive expenditures on due diligence yet produces modest protection for acquirers.

For this reason we believe that lawyers could use contingent consideration in public company deals to greatly increase the efficiency of acquisition transactions. Tailoring the deal to make part of target company shareholders' compensation contingent would mitigate the potential

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[125] *See* CARNEY, *supra* note 34, at 84 (explaining that "the last chance a buyer may get to protect itself is prior to the closing, and the due diligence is the critical activity in implementing that protection").

[126] *See* Peter Howson, DUE DILIGENCE: THE CRITICAL STAGE IN MERGERS AND ACQUISITIONS 7 (2003) (discussing the significant expense imposed by accounting and legal due diligence in mergers).

[127] One of the conventional explanations of warranties is that they signal information about quality. *See, e.g.*, Sanford J. Grossman, *The Informational Role of Warranties and Private Disclosure about Product Quality*, 24 J.L. & ECON. 461, 470-77 (1981); Michael Spence, *Consumer Misperceptions, Product Failure and Producer Liability*, 44 REV. ECON. STUD. 561, 569-71 (1977). Although this literature is largely focused on consumer warranties about products, its logic actually applies with greater force to warranties in the acquisition agreement. Indeed, one of the criticisms of the signaling theories in the consumer context is that they "assume that consumers know prices and contract terms well," *See* Alan Schwartz & Louis L. Wilde, *Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests*, 69 VA. L. REV. 1387, 1397 (1983). This assumption is more likely to be true in the acquisition context than in the consumer context.

[128] *See* Alan Schwartz & Louis L. Wilde, *Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests*, 69 VA. L. REV. 1387, 1396 (1983) ("The cost to firms of making warranties varies inversely with product quality -- the more likely a product will fail, the more expensive it will be to comply with warranties for that product.").

for over or under-estimation of uncertainties after closing. This approach would make pre-merger legal negotiations more important in delineating contingent compensation provisions. But this approach would diminish the stakes of the pre-closing period, better align the incentives of both parties, and enhance the overall efficiency of transactions. The acquirer would have better pre-signing information and therefore would pay more for the target, benefiting both parties. More deals would be signed with less expenditures in due diligence, creating value for targets and acquirers alike.

V. Conclusion

Contrary to what many scholars and practitioners assume, markets do not hang on every word that appears in an acquisition agreement. Our results suggest that markets do not respond significantly to the deal-specific legal terms of merger agreements, posing a challenge to the conventional wisdom of M&A law. Our conclusions tell us as much about the behavior of corporate clients as about the efforts of lawyers. The most compelling explanation for our findings is that the same exuberance that drives acquirers to pay premiums for target companies shapes the markets' view of companies' likely behavior in the post-signing period of mergers. Corporate clients may have the best advice and the most carefully crafted merger agreements, but markets believe that these agreements have little significance since both acquirers and targets are intent on seeing the transaction to completion. While acquirers, targets, and markets as a whole may more carefully weigh the legal terms when significant regulatory hurdles exist, M&A agreements matter less than the extent that academics and lawyers have widely assumed.

We suggest that lawyers should take into account the market's assessment of merger motivations to take innovation in legal drafting in a new direction. If M&A lawyers assume—as does the market—that their clients' priority is successfully closing the merger and not calling it off, they should focus less on closing conditions, break-up fees, and MAC/MAE provisions that empower clients to call off deals. Instead, lawyers should innovate by designing provisions that compensate clients for closing deals that are less advantageous than expected. The objective is not merely to allay risk and close valuation gaps between the parties, but to eliminate the excessive incentives to invest in costly due diligence investigations. Contingent consideration provisions offer potential means to advance this objective, and lawyers can build off of the use of contingent consideration in private company deals to add value to public company mergers. This focus on contingent consideration, rather than contingent closings, will mean more deals signed, higher returns for acquirers and targets alike, and lower risk of buyer's remorse in public company acquisitions.

Appendix – Data Collection

The merger transactions data for this study were collected through the Mergerstat M&A Database available through LexisNexis. For each year from January 1, 2002 to December 31, 2011, the public target transactions were collected using the following search syntax (example for 2005 deals):

> TRANS-TYPE("acquisition of public company") and TRANS-VALUE >(300000000) and ADOPTION-DATE IS(2005)

To eliminate transactions that involved tender offers (whether friendly or hostile), transactions that included “Tender Offer” in the “Deal Type” field were eliminated. To limit the data to cash mergers, the “Deal Description” portion of each entry was reviewed for whether the consideration was cash, stock, or a combination of the two and only cash transactions were retained. The data was then coded for the “Announce Date,” “Total Invested Capital,” and “Ticker” for the Target company. To limit the data to independent acquirers and targets, transactions that had a non-zero entry in the “Percent Owned Before” were eliminated. To exclude partial acquisitions of target companies, transactions with entries in the “Percent Sought” field less than 100% were eliminated.

The announcement date is a critical piece of data for this study because we examine stock prices in a tight window around the announcement date. In some cases the announcement date collected from Mergerstat did not reflect the date on which the market reacted to the announcement, usually because the announcement occurred after the close of the market on that date. To identify these deals, we retrieved the official press release for each deal from Westlaw’s NewsRoom with Reuters database to identify the time of the press release. If the official announcement had a time stamp after 4:00 PM Eastern Time, the date of the announcement was changed to the next trading day. In some cases, it was unclear whether the transaction was announced before or after 4:00 PM Eastern Time, and these cases were omitted from the database.

The agreement filing time and date are another critical piece of data. The filing date and time were ascertained by reviewing all EDGAR filings for the target and the acquirer (when applicable) surrounding the announcement date for an acquisition agreement attached to the filing. The date and time the first filing to contain the acquisition agreement was recorded as the disclosure date of the agreement. Similar to the procedure for announcement dates, filings after 4 PM Eastern Time were treated as filed on the next trading day.

The stock price data were collected from the Wharton Research Data Service’s Center for Research on Stock Prices database.[129] For each announcement, the target’s stock price for the period beginning 30 trading days before the announcement to 30 trading days after the announcement were collected. The core price change percentages used in calculating Tables II, III, and IV were performed as follows:

$$APC_i = \frac{100 \cdot \left|P_i - P_{i-1}\right|}{P_{i-1}}$$

Where APC_i is the absolute price change from day i-1 to day i and P_i is the stock price on day i.

[129] *See* Wharton Research Data Services, Stock Prices Database, *available at* http://wrds-web.wharton.upenn.edu/wrds/.