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The Merger Agreement Myth

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THE MERGER AGREEMENT MYTH

Jeffrey Manns† *& Robert Anderson IV*††

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]

[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 Gilson, *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); *see also* Nestor M. Davidson, *Values and Value Creation in Public-Private Transactions*, 94 IOWA L. REV. 937, 945–48 (2009) (discussing the general acceptance of Gilson's premise that M&A lawyers add value to merger transactions); George W. Dent, Jr., *Business Lawyers as Enterprise Architects*, 64 BUS. LAW. 279, 281, 299–307 (2009) (arguing that business lawyers add value for their clients by acting as repeat-player "enterprise architects" who design contractual mechanisms to optimize the business entities' performance). *But see* Steven L. Schwarcz, *Explaining the Value of Transactional Lawyering*, 12 STAN. J.L. BUS. & FIN. 486, 487–88, 506–07 (2007) (using survey data from transactional lawyers and their clients to argue that lawyers add value to transactions primarily by reducing regulatory costs through legal expertise rather than more broadly reducing transactions costs or adding reputational value); Matthew D. Cain et al., *Broken Promises: The Role of Reputation in Private Equity Contracting and Strategic Default* (Am.

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 provisions.[4] But do financial markets actually price

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Fin. Ass'n 2012 annual meeting, Working Paper 2012), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1540000 (arguing that the legal terms of merger agreements matter to private equity bidders and concluding that bidders are more likely to opt out of transactions if a specific performance clause is in place and the termination penalty is minor).

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, 850–51 (discussing how unclear judicial interpretations of the contours of material adverse change clauses (MAC) and material adverse effect clauses (MAE) cast 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 the Lawsuit: A Social Norms Theory of Incomplete Contracts*, 34 DEL. J. CORP. L. 191, 192, 197–208 (2009) (arguing that the legal terms in acquisition agreements are intentionally ambiguous in order to deter litigation and incentivize negotiators 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, 108–11 (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, 2013–14 (2009) [hereinafter Miller, *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, 940–41 (2010) (arguing for 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 UCLA. L. REV. 789, 817–23 (2010) [hereinafter Schwartz, *Standard Clause*] (arguing that MAC clauses transform conventional default rules by (1) allowing a contractual exit in cases of frustration of secondary purposes or partial loss of value and (2) shifting exogenous risk from the acquirer to the target); Eric L. Talley, *On Uncertainty, Ambiguity, and Contractual Conditions*, 34 DEL. J. CORP. L. 755, 760–63 (2009) (arguing that Material Adverse Event clauses are a tool for allocating the risk of market uncertainty present while negotiating 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, 653, 657–60 (2000) (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*, 38 FLA. ST. U. L. REV. 55, 60, 96–105 (2010) (advocating contractual limits on fiduciary outs to allow target company managers 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, 1165–67, 1175, 1181 (2010) (discussing attempts at reallocating deal risks through reverse termination fees that compensate target companies should the buyer walk away and assessing the impact such attempts have on acquisition agreement drafting); Thomas W. Bates & Michael L. Lemmon, *Breaking Up is Hard to Do? An Analysis of Termina-*

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 lies in the difficulty in separating the market impact of the merger announcement (and disclosure of financial terms) from the disclosure of the legal terms, because these events occur close in time to one another.[5]

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.[6] 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 analyzed

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tion Fee Provisions and Merger Outcomes, 69 J. FIN. ECON. 469, 472, 484–86, 494 (2003) (arguing that deals with target termination fees entail greater premiums for target shareholder 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, 853–61, 889–91 (2010) (arguing that before closing the deal, the intentional vagueness of MAC clauses create more efficient incentives for the seller than more precise and less costly proxies); Sean J. Griffith, *Deal Protection Provisions in the Last Period of Play*, 71 FORDHAM L. REV. 1899, 1905–06, 1963–70 (2003) [hereinafter Griffith, *Deal Protection*] (discussing the significance of Delaware's judicially created limitations on deal protection provisions meant to resolve the conflicting incentives of the acquirer's and target's management when facing last-minute, third-party bids); Brian JM Quinn, *Optionality in Merger Agreements*, 35 DEL. J. CORP. L. 789, 792–94, 826–28 (2010) (arguing that reverse termination fees that are equal in size to termination fees inefficiently leave targets exposed to more risk from exogenous events).

5 *See* SEC, FORM 8-K, General Instructions: B(1), Item 1.01, at 2, 4 (mandating that public companies disclose material definitive agreements within four business days).

6 For many years, corporate finance studies have examined the impact mergers have on the bidder's and target's stock prices. *See, e.g.*, Gregor Andrade et al., *New Evidence and Perspectives on Mergers*, 15 J. ECON. PERSP. 103, 118 (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); Sanjai Bhagat et al., *Do Tender Offers Create Value? New Methods and Evidence*, 76 J. FIN. ECON. 3, 4–6, 52–53 (2005) (attempting to approximate the value tender offers add by estimating the difference between conventional returns and returns that exclude both the probability of deal completion and information disclosed in the merger announcement); Michael Bradley et al., *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 the market valuation of the target and that the acquisition price generally falls after the merger announcement because of the concern that hoped-for synergies will not be realized); David J. Denis & Antonio J. Macias, *Material Adverse Change Clauses and Acquisition Dynamics*, J. FIN. & QUANTITATIVE ANALYSIS 1, 5–6 (forthcoming 2012), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1609765 (arguing that MAC Clause conditions affect the premium offered and arbitrage spread in acquisitions); Steven N. Kaplan & Michael S. Weisbach, *The Success of Acquisitions: Evidence from Divestitures*, 47 J. FIN. 107, 109 (1992) (finding only weak evidence that acquisitions are value reducing for acquirers). No empirical study, however, has examined the difference between how the target's stock price reacts to the merger announcement—revealing the financial terms—compared to the reaction from disclosing the acquisition agreement—containing the legal terms. Our test of market reactions to these agreement disclosures that occur 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.

market reactions by exploiting the small temporal gap—typically one to four trading days[7]—between the announcement of pending mergers (which lays out the deal's financial terms) and the disclosure of acquisition agreements (which delineates the legal terms). We find that markets react almost exclusively to the initial merger announcement and that there is no economically consequential market reaction to the disclosure of the terms of the acquisition agreement. This finding implies that the extensive negotiations over deal-specific legal terms are not priced into financial market valuation.[8]

This Article considers a range of potential explanations for the lack of a market response to the legal terms of acquisition agreements, such as market expectations about a deal's terms and the slowness of markets (and in particular analysts) to understand the implications of a merger's terms.[9] However, we argue that the most compelling explanation for why markets dismiss the legal terms of merger agreements is found not in the agreements themselves but in the strength of corporate participants' motivations to complete publicly announced deals. Markets understand that the decision to merge appears driven by the hope (or often the hubris) for greater potential returns for the combined company and the target company's shareholders' desire for the takeover premium.[10] As a result, even though mergers and acquisitions (M&A) lawyers carefully craft "walk-away" rights—the centerpiece of public company acquisition agreements—for the prospective acquirer, 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 complete the transaction in a friendly merger. Otherwise, the parties would not have undergone the financial, business, and reputa-

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7 *See* SEC, FORM 8-K, General Instructions: B(1), Item 1.01, at 2,4.

8 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, 384, 413–16 (1970); *see also* Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 554–65, 642–43 (1984) (discussing the weak, semi-strong, and strong efficient market hypotheses as tools for understanding stock price behavior).

9 *See infra* Part III.

10 *See* Richard Roll, *The Hubris Hypothesis of Corporate Takeovers*, 59 J. BUS. 197, 200–05, 209–12 (1986) (arguing that empirical data on the acquirer's stock declines following merger announcements suggests acquirers systematically overpay); *see also* Bernard S. Black, *Bidder Overpayment in Takeovers*, 41 STAN. L. REV. 597, 623–29 (1989) [hereinafter Black, *Bidder Overpayment*] (discussing how the acquirer's managers may systematically overpay for the merger because of excessive optimism and ignorance about the target). *But see* Mark Mitchell et al., *Price Pressure Around Mergers*, 59 J. FIN. 31, 33–37, 49 (2004) (arguing that a large portion of the declines of the acquirer's stock price is attributable to short selling by merger arbitrageurs, a decline that is rapidly reversed).

tional risks of entering into the merger agreement.[11] This "will to close" leads markets to dismiss 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.[12]

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 manifested by the market's nonresponse to walk-away rights, causes acquirers to overinvest in due diligence ex ante.[13] This fact, in turn, may result 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 and 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 MAC provisions that allow clients to call off deals. But they should not replace that effort with additional presigning 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.[14] 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 overpaying 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

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[11] *See* Jie Cai & Anand M. Vijh, *Incentive Effects of Stock and Option Holdings of Target and Acquirer CEOs*, 62 J. FIN. 1891, 1893–95, 1909, 1928 (2007) (discussing the strong incentives to close merger transactions faced by both management of the acquirer and target because of the personal financial and reputational stakes invested into the merger's completion).

[12] *See infra* Part II.D.

[13] *See infra* Part IV.B.

[14] *See infra* Part IV.B.

through legal drafting.[15] The most prominent example of this view is Ronald Gilson's seminal article on value creation by lawyers.[16] Gilson framed M&A lawyers as "transaction cost engineers" whose legal drafting bridges the negotiation gaps between the parties to seal the deal and mitigates moral hazard in the pre-closing period.[17]

Gilson correctly framed the central question when he argued that the test to determine whether lawyers add value is whether their contributions enhance the value of the overall transaction rather than merely reallocate existing resources.[18] But while Gilson and many other legal academics have debated the theoretical impact of termination provisions, such as MAC and MAE covenants, they have sidestepped the empirical question of whether markets price these legal terms at all.[19]

One challenge of assessing the impact of legal terms is determining the proper measuring stick. The casual observer may conclude that the best evidence that legal deal terms add value is the fact that meticulous negotiations surround drafting the agreement provisions. But the extensive and detailed negotiation surrounding deal-specific terms does not necessarily answer the question of whether those terms add value to M&A transactions.[20]

In fact, cynical businesspeople may view deal documentation as a necessary transaction cost for jumping through the complicated regulatory hoops of the merger process.[21] But M&A lawyers do far more than grease regulatory wheels; they add reputational value and integrate the roles of banker, consultant, and lawyer in order to bridge gaps in negotiation and drafting.[22] Lawyers contribute to merger transactions by translating the financial principles of the agreement

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15 *See, e.g.*, Gilson, *Value Creation*, *supra* note 1, at 254–55; Ronald J. Gilson & Robert H. Mnookin, *Foreword: Business Lawyers and Value Creation for Clients*, 74 OR. L. REV. 1, 7–11 (1995); Davidson, *supra* note 1, at 945–48; Dent, *supra* note 1, at 299–307.

16 *See* Gilson, *Value Creation*, *supra* note 1.

17 *See id.* at 244–55 (arguing that business lawyers "have the potential to create value and that the terms of the corporate acquisition agreement demonstrate that business lawyers do play the role").

18 *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").

19 *See, e.g.*, Davidson, *supra* note 1, at 946–47 (acknowledging that the "empirical question remains unanswered" as to the accuracy of Gilson and his successors' conception of deal-lawyer value creation from the design of acquisition agreements).

20 *See* Gilson, *Value Creation*, *supra* note 1, at 247–48 (recognizing that even assuming the availability of data, methodological problems exist "in determining whether . . . any difference in value could be ascribed to the business lawyer's participation").

21 *See id.* at 241–42.

22 *See* Robert Eli Rosen, *"We're All Consultants Now": How Change in Client Organizational Strategies Influences Change in the Organization of Corporate Legal Services*, 44 ARIZ. L. REV. 637, 651–60 (2002) (explaining the incentive effects from M&A lawyers serving simultaneously in consulting, financial, and business roles); *see also* JAMES C. FREUND, ANATOMY OF A MERGER: STRATEGIES AND TECHNIQUES FOR NEGOTIATING CORPORATE ACQUISITIONS 4–5

into a legal framework, and they also legitimize transactions when they lend their reputations to the deal.[23] Moreover, when law firms standardize significant parts of merger agreements, they may mitigate litigation risks,[24] and their legal diligence during the closing period may uncover red flags.[25] 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 the contributions lawyers may make to mergers.[26] Most significant transactions involve in-house counsel and outside law firms,[27] and almost all sizable transactions involve elite law firms.[28] For this reason, it is not possible to compare merger transactions that involve law firms to those that do not when attempting to capture the value lawyers add to the process. The complex nature and scale of mergers also makes it implausible to replicate the impact of lawyers in experimental micro-transactions.[29]

(1975) (discussing how M&A lawyers "frequently point[ ] out considerations that could be considered 'accounting' or 'business' or 'financial'").

23 *See* Gilson, *Value Creation, supra* note 1, at 289–93 (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, 43–46 (1995) (asserting that "service as a reputational intermediary for clients is a defining function of lawyering"); Steven L. Schwarcz, *Regulating Complexity in Financial Markets*, 87 WASH. U. L. REV. 211, 260 n.279 (2009) [hereinafter Schwarcz, *Regulating Complexity*] ("[A]s repeat players in the transactional world, [transactional lawyers] add value by renting their good reputation to clients.").

24 *See* Theodore Eisenberg & Geoffrey P. Miller, *The Flight from Arbitration: An Empirical Study of Ex Ante Arbitration Clauses in the Contracts of Publicly Held Companies*, 56 DEPAUL L. REV. 335, 353–54 (2007) (discussing how standardized contract provisions reduce litigation risks by "creat[ing] a common understanding that can reduce the disputes over contractual meaning that tend to spark litigation.").

25 *See* Eric Simonson, *Specialized Areas of Concern in Acquisition Transactions*, *in* MERGERS AND ACQUISITIONS 2012: TRENDS AND DEVELOPMENTS (Richard A. Goldberg ed., 2012) (discussing the scope of due diligence reviews in M&A transactions).

26 *See, e.g.*, B. Peter Pashigian, A *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 two contributions lawyers make, prevention and defense, and the challenges of quantifying and separating these contributions).

27 *See* Steven L. Schwarcz, *To Make or to Buy: In-House Lawyering and Value Creation*, 33 J. CORP. L. 497, 527–30 (2008).

28 *See* BLOOMBERG, GLOBAL LEGAL ADVISORY MERGERS & ACQUISITIONS RANKINGS Q3 2012, at 12–47 (2012), *available at* http://about.bloomberg.com/pdf/glma.pdf [hereinafter BLOOMBERG RANKINGS] (detailing how rankings of M&A law firms show that an elite set of law firms oversee the overwhelming majority of U.S., foreign, and cross-border merger transactions).

29 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 AM. L. & ECON. REV. 162, 168–69 (2009) (discussing the use of financial incentives in simulations to prompt "real world" reactions from subjects participating in test settlement negotiations).

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.[30] To assess the potential contributions of negotiating deal terms, it is important to understand the nature of what lawyers do when they draft an acquisition agreement.[31] 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.[32] 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.[33]

The merger agreement incorporates a combination of standardized provisions and highly negotiated terms.[34] Agreements generally follow the broad contours of earlier agreements,[35] but they 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.[36] 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.[37] The third part generally lays out representations and warranties of the target company—and depending on the structure, often to a much

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30 *See* Shira Ovide, *The 2011 M&A Market: Not as Bad as We Thought*, WALL ST. J. (Jan. 4, 2012, 11:04 AM), http://blogs.wsj.com/dealjournalindia/2012/01/04/the-2011-ma-market-not-as-bad-as-we-thought/ (noting that the "combined dollar value of corporate mergers and acquisitions in 2011 reached $2.81 trillion, a 3% increase from 2010").

31 *See* Gilson, *Value Creation*, *supra* note 1, at 254–62.

32 *See* Alyssa A. Grikscheit & Gavin D. Solotar, *Key Issues in Drafting and Negotiating Acquisition Agreements*, *in* DRAFTING AND NEGOTIATING CORPORATE AGREEMENTS (2012 Practising Law Institute, PLI Order No. 34774, Jan. 25, 2012, at 183–89 (detailing the types of contractual constraints that parties face in mergers).

33 *See* EVAN L. GREEBEL, KEY PRIORITIES FOR BUYERS AND SELLERS IN ACQUISITIONS OF PUBLIC AND PRIVATE COMPANIES 2–8 (Aspatore 2011) (discussing lawyers' focal points in negotiating merger agreements).

34 *See* FREUND, *supra* note 22, at 140 ("[M]ost agreements utilized in the merger and acquisition field . . . [include] abundant instances of nearly identical words, phrases and clauses, suggesting that respectful plagiarism is indeed the order of the day."); Gilson, *Value Creation*, *supra* note 1, at 257–62, 257 n.45.

35 For a broader overview of acquisition agreements, see RONALD J. GILSON & BERNARD S. BLACK, THE LAW AND FINANCE OF CORPORATE ACQUISITIONS 1563–601 (1995).

36 *See* THERESE H. MAYNARD, MERGERS AND ACQUISITIONS: CASES, MATERIALS, AND PROBLEMS 317 (2009) (discussing how "the basic architecture of any acquisition agreement follows a certain convention regardless of deal structure"); Gilson, *Value Creation*, *supra* note 1, at 257–62 (discussing the standardization of the form of acquisition agreements).

37 *See* Gilson, *Value Creation*, *supra* note 1, at 258–59; Lou R. Kling et al., *Summary of Acquisition Agreements*, 51 U. MIAMI L. REV. 779, 781–82 (1997).

lesser extent the bidder company.[38] For example, the target company certifies the accuracy of detailed factual statements concerning the business—like its financial statements—and the absence of contingent or tax liabilities; it also discloses the existence of any actual or pending litigation.[39]

Representations and warranties are closely coupled to the acquirer's due diligence review of the target.[40] 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).[41] The logic is that crafting representations and warranties to address uncertainties uncovered in the pre-signing diligence process will protect the acquirer from disaster.[42] Should a representation about the target business prove contrary to reality, the acquirer—at least in theory—may have the legal right to walk away from the deal.[43]

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 parties' obligations to close the transaction.[44] Covenants impose contractual constraints on the parties in order to mitigate moral hazard during the period between signing the agreement and closing.[45] Closing conditions delineate circumstances that give the bidder or target company the right to walk away from the agreement during the pre-closing period.[46] Failures of closing conditions can be triggered by breaches of warranties and representations, failures to satisfy regulatory conditions, or other circumstances that the parties agree upon.[47] Among the most intensely negotiated provisions of the agreement are the MAC or MAE 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.[48]

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38 *See* Gilson, *Value Creation*, *supra* note 1, at 259–60; Kling et al., *supra* note 37, at 781–95.

39 *See* Gilson, *Value Creation*, *supra* note 1, at 259–60; Kling et al., *supra* note 37, at 781–94; *see also* Choi & Triantis, *supra* note 4, at 892–93.

40 *See* Kling et al., *supra* note 37, at 781–95.

41 *See id.*

42 *See id.*

43 *See id.*

44 *See* William J. Carney, Mergers and Acquisitions: Essentials 106–09 (2009).

45 *See* Gilson, *Value Creation*, *supra* note 1, at 260–61.

46 *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"); Gilson, *Value Creation*, *supra* note 1, at 261.

47 Kling et al., *supra* note 37, at 799–804.

48 *See* Afsharipour, *supra* note 4, at 1163–64, 1179–84; Kling et al., *supra* note 37, at 807–08.

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.[49] 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[50] while the acquirer's lawyers seek to preserve flexibility to withdraw or rework the deal if the expectations are not met.[51] 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.[52]

Lawyers have designed two major types of termination provisions to address these challenges—the MAC (also referred to as the MAE)[53] Clause and "Deal Protection"[54] 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 occur between signing and closing that make the deal less advantageous than expected.[55] The Deal Protection provisions are designed to reduce the likelihood that the target board will walk away from the agreement or to require the target to compensate the acquiring company if the target does walk away in favor of a third-party bidder.[56] This provision is designed to limit the target's ability to entertain a higher offer and to keep the deal closing on track.[57]

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49 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 22, at 148–49; Gilson, *Value Creation, supra* note 1, at 260–61.

50 *See* Brian JM Quinn, *Bulletproof: Mandatory Rules for Deal Protection*, 32 J. CORP. L. 865, 876, 881–84. (2007) [hereinafter Quinn, *Bulletproof*] (explaining the presumed objectives of sellers' counsel in acquisition agreement negotiations).

51 *See* Choi & Triantis, *supra* note 4, at 860–65 (arguing that in negotiations, acquirers aim to preserve as great a degree of flexibility as possible in order "to terminate, cancel, or be excused from [their] obligations").

52 *See* Quinn, *Bulletproof, supra* note 50, at 865–66 n.2.

53 MAC and MAE clauses are generally interchangeable terms. *See* Miller, *Deal Risk, supra* note 2, at 2012 n.2.

54 *See, e.g.*, Afsharipour, *supra* note 4, at 1173 (discussing the seller's interest in deal protection provisions); Bates & Lemmon, *supra* note 4, at 470; Quinn, *Bulletproof, supra* note 50, 868–76.

55 *See* Schwartz, *Standard Clause*, supra note 2, at 817–23; *see also* M&A PRACTICE GUIDE § 12.01 (explaining that when 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").

56 *See* Stephen M. Bainbridge, *Exclusive Merger Agreements and Lock-Ups in Negotiated Corporate Acquisitions*, 75 MINN. L. REV. 239, 242–46 (1990) (describing "performance promises" and "cancellation fees" as ways that a bidder protects itself against the target boards reneging on the agreement and then compensating the acquirer for out-of-pocket costs).

57 *See* Quinn, *Bulletproof*, supra note 50, at 868–76 (discussing the rationale for deal protection provisions and the different protections used); *see also* Kling et al., *supra* note 37, at 798–99 (discussing how a "fiduciary out" exception exists in most deals, allowing the

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.[58] This article puts this premise to empirical scrutiny by disentangling the effect the financial terms have on the deal from the effects the legal terms in the agreement have.

II
Framework for Empirical Analysis

A. Disentangling the Financial and Legal Terms of Acquisition Agreements

In this Article, we show that it is possible to separate the market's response to the announcement of a merger from its response to the disclosure of the agreement's legal terms. We are able to separately analyze the two responses by exploiting the small temporal gap— typically one to four business days—between the announcement of the pending merger—which lays out the financial terms—and the disclosure of the merger agreement—which delineates the legal terms. The target's stock price will almost always change dramatically in response to the announcement of a merger.[59] 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 and assess whether financial markets value the legal terms themselves.

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.[60] 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, which lays out the legal terms, is usually filed within four trading days on the Securities and Exchange Commission's (SEC) Electronic Data Gathering Analysis and Retrieval (EDGAR) sys-

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target company to negotiate with third-party bidders if fiduciary duties require the target's board to consider higher offers).

58 *See* Kling et al., *supra* note 37, at 781–83, 799–804, 807–08 (indicating the importance of these provisions in an acquisition agreement).

59 *See* Roger J. Dennis, *This Little Piggy Went to Market: The Regulation of Risk Arbitrage After* Boesky, 52 ALB. L. REV. 841, 848 (1988) ("Upon the announcement of the offer, the price of the target will begin to rise rapidly toward the tender price.").

60 *See* Afsharipour, *supra* note 4, at 1230 (discussing the fact that public companies generally disclose acquisition agreements in their 8-K filings within four days of the merger announcement).

tem.[61] 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 separately analyze the impact of two events that happen in close succession. The semi-strong efficient market hypothesis holds that all publicly available information is quickly reflected in stock prices.[62] 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's shares after the merger announcement.[63] 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's stock price as investors seek to exploit any short-lived arbitrage opportunities.[64] This context creates a laboratory for examining whether the market reacts to the terms of the acquisition agreement. By comparing changes in the target's stock price on the day the merger agreement is filed with days the 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 from standardized legal terms. For example, the law firms involved are sometimes disclosed at the time of the merger announcement.[65] 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.[66] 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

61 *See* SEC, FORM 8-K, General Instructions: B(1), Item 1.01, at 2, 4 (mandating filing of material definitive agreements within four business days).

62 *See* Fama, *supra* note 8; Zachary Schulman, Note, *Fraud-on-the-Market After* Basic Inc. v. Levinson, 74 CORNELL L. REV. 964, 978 n.91 (1989).

63 *See* Meena Krishnamsetty, *Merger Arbitrage Plays Hedge Funds Like*, INSIDER MONKEY (Mar. 22, 2011, 9:48 AM), http://www.insidermonkey.com/blog/merger-arbitrage-plays-hedge-funds-like-3056/.

64 *See id.* (explaining that the risks and complications associated with merger arbitrage, as well as the legal and financial expertise that hedge funds possess, make merger arbitrage ill-suited for ordinary investors).

65 *See, e.g.*, Michael J. de la Merced, *Tyco to Merge Flow Unit With Pentair in All-Stock Deal*, N.Y. TIMES DEALBOOK (Mar. 28, 2012, 8:30 AM), http://dealbook.nytimes.com/2012/03/28/tyco-to-merge-flow-unit-with-pentair-in-all-stock-deal/ (announcing the Tyco-Pentair merger and noting that prominent law firms Simpson Thacher & Bartlett LLP and Cravath, Swaine & Moore LLP advised Tyco and Pentair respectively).

66 *See* BLOOMBERG RANKINGS, *supra* note 28, at 9–43.

the law firms' diligence levels and efforts to secure regulatory approval will parallel earlier deals.[67] 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 from 2002 through 2011 that were listed in LexisNexis's Mergerstat M&A Database.[68] We focused on cash merger transactions for several reasons. Because we are trying to isolate the effect of legal provisions, we wanted to eliminate as much nonlegal stock price fluctuation as possible. After the announcement of a deal, the trading price of the target's stock in a stock-for-stock merger reflects the financial performance of the acquirer, the financial performance of the target, the expected synergies of the deal, and the likelihood the deal will close.[69] 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.[70] Thus, there is less risk that any post-announcement change in the target's share price when an agreement is filed will result from nonlegal 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.[71]

Because this study examines the legal terms of merger agreements, it uses only transactions in which a definitive merger document was executed. As a result, the dataset excludes potential deals that are identified by Mergerstat as "rumors," letters of intent, mere proposals, or offers.[72] The dataset also excludes tender offers and all hostile bids as well as deals in which a significant shareholder was identified as

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67 *See* Okamoto, *supra* note 23, at 22–26 (discussing how law firms assume the role of reputational intermediaries).

68 *See* MERGERSTAT M&A DATABASE, http://w3.nexis.com/sources/scripts/info.pl?156282 (last visited Feb. 15, 2013).

69 *See, e.g.*, Lawrence A. Hamermesh, *Premiums in Stock-for-Stock Mergers and Some Consequences in the Law of Director Fiduciary Duties*, 152 U. PA. L. REV. 881, 883–84 (2003) (contrasting "premiums" in stock-for-stock mergers with cash mergers).

70 *See* Gaurav Jetley & Xinyu Ji, *The Shrinking Merger Arbitrage Spread: Reasons and Implications*, 66 FIN. ANALYSTS J. 54, 65 (2010) ("Cash transactions might be associated with higher certainty in the offer price and thus result in a lower arbitrage spread.").

71 *See* Andrade et al., *supra* note 6, at 111–12 (2001) (discussing how cash mergers raise fewer exogenous variables than stock-for-stock mergers).

72 We also excluded transactions when the definitive merger document could not be located on EDGAR, which eliminated a small number of companies.

taking a company private.[73] 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.[74] Finally, this study analyzes merger deals with a "Total Invested Capital"[75] of $300 million or more to exclude transactions that do not involve significant market trading volume.[76] 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.[77]

These principled exclusions resulted in a data set of 463 transactions for the ten-year period from June 1, 2002, to December 31, 2011.[78] This timeframe was chosen because it covers a complete cross-section of the economic cycle: from the period after the Internet bubble's burst, 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.[79] For each transaction, the date on which the merger was

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73 Tender offers and other hostile bids introduce statutory constraints and uncertainties that extend beyond the scope of legal drafting. *See generally* Guhan Subramanian et al., *Is Delaware's Antitakeover Statute Unconstitutional? Evidence from 1988–2008*, 65 BUS. LAW. 685, 688–701 (2010) (providing an overview of anti-takeover regulation). Although hostile bids account for only a handful of mergers in our dataset, we excluded these data points because the atypical concerns in this context may distort the analysis of lawyers' independent contributions to the merger process.

74 *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 conclusions from that assumption that cannot be tested); Lawrence A. Hamermesh, *Silos, Corporate Law, and Bankruptcy Law*, DEL. L., Fall, 2010, at 8, 9–10 (discussing the divergence in bankruptcy courts' valuations of companies from conventional valuation methods in the merger context).

75 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.

76 We use Total Invested Capital as a proxy for sufficient market interest and trading activity for the semi-strong efficient markets hypothesis to plausibly apply. *See* Lawrence A. Hamermesh & 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).

77 *See* Steven L. Schwarcz, *Rethinking the Disclosure Paradigm in a World of Complexity*, 2004 U. ILL. L. REV. 1, 4–5, 30–31 n.187, 36 (2004) (mentioning how the efficient market hypothesis assumes that analysts and sophisticated institutional investors swiftly incorporate public disclosures into stock prices but how in reality these actors potentially fail to do so when complex structured transactions are involved).

78 Our data set begins in June, 2002, instead of January 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 became publicly available.

79 For some quick background reading on these economic events, see Jorn Madslien, *Dotcom Bubble Burst: 10 Years On*, BBC NEWS (Mar. 9, 2010, 11:27 PM), http://news.bbc.co.

announced was recorded, as well as the date and time of the first filing of the merger agreement on the SEC's EDGAR database.[80] Each merger announcement day is recorded as *T*, 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.[81]

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%	14%	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 "Financial" and "Horizontal" mergers.[82] 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 such codings as "canceled" for renegotiated mergers that were listed in the Mergerstat database as having a "Cancelled Date" or "Amendment Date" entry. These transactions are of special interest because the original merger agreement did not carry the parties through to the closing of the deal and either a change or a termination of the agreement occurred.

uk/2/hi/business/8558257.stm (arguing that the dot-com bubble peaked in March, 2000, and subsequently crashed); Richard Posner, *Asset-Price Bubbles*, BECKER-POSNER BLOG (May 16, 2010), http://www.becker-posner-blog.com/2010/05/assetprice-bubblesposner.html (arguing that the real-estate bubble crashed in 2006); *see also Get Ready for the M&A Boom*, FORBES (May 2, 2012, 1:47 PM), http://www.forbes.com/sites/thestreet/2012/05/02/get-ready-for-the-ma-boom/ (arguing that global M&A may soon spike after plummeting in 2008 and 2009).

[80] Some deals were announced after the close of trading. We retrieved the official press release for each deal from Westlaw's NewsRoom—using 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.

[81] SEC, FORM 8-K, General Instructions: B(1), Item 1.01, at 2, 4.

[82] *See* STANLEY FOSTER REED & ALEXANDRA REED LAJOUX, THE ART OF M&A: A MERGER/ACQUISITION/BUYOUT GUIDE 11–12 (3d ed. 1998) (distinguishing between "financial" deals that focus on overhauling and reselling the target, such as leveraged buy-outs, and "strategic" deals that seek to integrate the target with the acquirer).

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 compare the target's stock price change magnitude (positive or negative) on the particular day the acquisition agreement was filed with the price change magnitude that would be expected on that day if the agreement had not been filed. Our approach is closely related to the "event study," a well-established empirical method in finance studies.[83] We rely on many of the same assumptions used in standard event studies[84] 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 additional challenges and 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").[85] 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.[86] 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.[87] To assess what would have been the normal performance during the event window, an event study uses data over a period of time that usually consists of the several months prior to the event window.[88] If there is a significant difference between the actual

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83 *See* A. Craig MacKinlay, *Event Studies in Economics and Finance*, 35 J. ECON. LIT. 13, 13–16 (1997); *see also, e.g.*, Lucian A. Bebchuk & Ehud Kamar, *Bundling and Entrenchment*, 123 HARV. L. REV. 1549, 1586 (2010) (describing the event study approach and noting that it is the standard methodology used in corporate finance to assess market reactions to acquisition announcements); Eugene F. Fama et al., *The Adjustment of Stock Prices to New Information*, 10 INT'L ECON. REV. 1, 6–10 (1969) (incorporating the event study approach to study the effects of splits on individual company returns); G. William Schwert, *Markup Pricing in Mergers and Acquisitions*, 41 J. FIN. ECON. 153, 161–62 (1996) (using an event study approach to study the "relation between pre-bid runups and post-bid markups" in the merger and tender offer context).

84 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 8, at 384–87.

85 *See* Bebchuk & Kamar, *supra* note 83, at 1586.

86 *See id.*

87 *See* MacKinlay, *supra* note 83, at 14–15.

88 *See, e.g.*, Bebchuk & Kamar, *supra* note 83, at 1586 (regressing daily price changes for individual stocks on index changes in the New York Stock Exchange for a period of six

return over the event window and the normal (or expected) return, the event is considered to reveal information to the market.[89]

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.[90] 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.[91] Thus, the standard estimation of alpha and beta parameters based on preannouncement target stock prices would be meaningless in the postannouncement cash merger context.[92]

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.[93] This fact leaves no room for multiple-day event windows. The only way to measure the relative impact of the financial versus legal terms is to compare the individual trading days of each of these disclosures.

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months, starting approximately one year before the announcement of the deal, to approximate normal performance during the event window).

89 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, Essay, *Reputational Sanctions in China's Securities Market*, 108 COLUM. L. REV. 929, 961 n.136 (2008) (discussing the use of estimation windows in event studies).

90 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.*, Basic Inc. v. Levinson, 485 U.S. 224, 241–42 (1988) (discussing the "fraud-on-the-market" presumption in securities litigation); Frank Torchio, *Proper Event Study Analysis in Securities Litigation*, 35 J. CORP. L. 159, 160–65 (2009) (discussing event study methodology in the context of securities fraud litigation).

91 *See* Jetley & Ji, *supra* note 70, at 64 (discussing how "[c]ompletion risk is the main risk in merger arbitrage, together with uncertainty as to the loss in the event of failure").

92 For a basic overview of alpha and beta, see Richard Loth, *Measuring Risk with Alpha, Beta and Sharpe*, FORBES (Nov. 5, 2007, 12:15 PM), http://www.forbes.com/2007/11/05/risk-alpha-beta-pf-education-in_rl_11050investopedia_inl.html. These parameters are irrelevant when a security is likely to be converted to cash because cash is essentially a risk-free asset.

93 *See* SEC, FORM 8-K, General Instructions: B(1), Item 1.01, at 2, 4.

Our solution to these unique features is to focus on a shorter time horizon and to assess cash-only mergers. In this context, the target company's shareholders' only concern would be whether the transaction will close.[94] 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.[95] 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 when the agreement was filed with deals where the agreement was not filed on that date.[96] 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.[97] The target's median 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.[98] Since we are examining

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94 Knapp v. N. Am. Rockwell Corp. v. Mrs. Smith's Pie Co., 506 F.2d 361, 365 (3d Cir. 1974) ("In a merger a corporation absorbs one or more other corporations, which thereby lose their corporate identity. 'A merger of two corporations contemplates that one will be absorbed by the other and go out of existence, but the absorbing corporation will remain.'" (citation omitted)).

95 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 had not taken place. *See* MacKinlay, *supra* note 83, at 15. Here, there is no "normal return" because the merger consideration is cash.

96 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 to the price change on the trading dates immediately before and after that date. For reasons discussed below, however, this approach is not as promising as the first.

97 *See, e.g.*, Andrade et al., *supra* note 6, at 109–11; Michael C. Jensen & Richard S. Ruback, *The Market for Corporate Control: The Scientific Evidence*, 11 J. FIN. ECON. 5, 6–8 (1983).

98 *See* Kahn v. Kahn, 559 N.Y.S.2d 103, 104 (Sup. Ct. 1990) (noting that publicly traded stocks are by their nature volatile); Petko S. Kalev et al., *Public Information Arrival and Volatility of Intraday Stock Returns*, 28 J. BANK. & FIN. 1441, 1446 (discussing "intraday

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.[99]

Deals in which the agreement is filed on the announcement day *T* (the solid line) tend to have higher returns on *T*—and over the whole period—than deals in which the merger agreement is filed later (the dashed 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.

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 that filed their agreement on the announcement day by almost exactly the amount of the immediate postannouncement 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 a day other than the announcement day. Because the revelation of the merger agreement cannot cause the increase in the 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[100] or that some other common cause ac-

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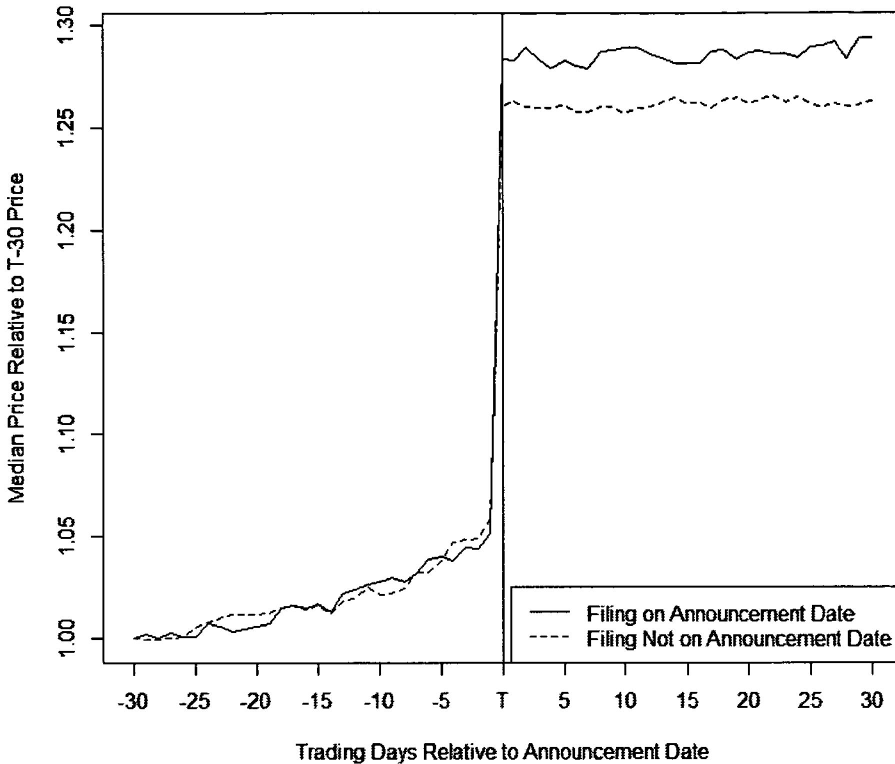
return volatility" for publicly traded stocks as an endogenous factor that may mitigate the "robustness" of the relationship between the arrival of news information and stock return volatility).

99 *See, e.g.*, Black, *Bidder Overpayment*, *supra* note 10, at 601–02 (1989) (discussing how studies show that target shareholders reap significant premiums); Bernard S. Black & Joseph A. Grundfest, *Shareholder Gains from Takeovers and Restructurings Between 1981 and 1986: $162 Billion Is a Lot of Money*, J. APPLIED CORP. FIN., Spring 1988, 5, 8–9 (compiling numerous studies on the large premiums target company shareholders receive in takeovers).

100 The effect is not limited to the filing day versus non-filing days. For each day the filing is delayed, the announcement day price change declines. The lower the premium over the *T-30* price, the greater the delay in filing.

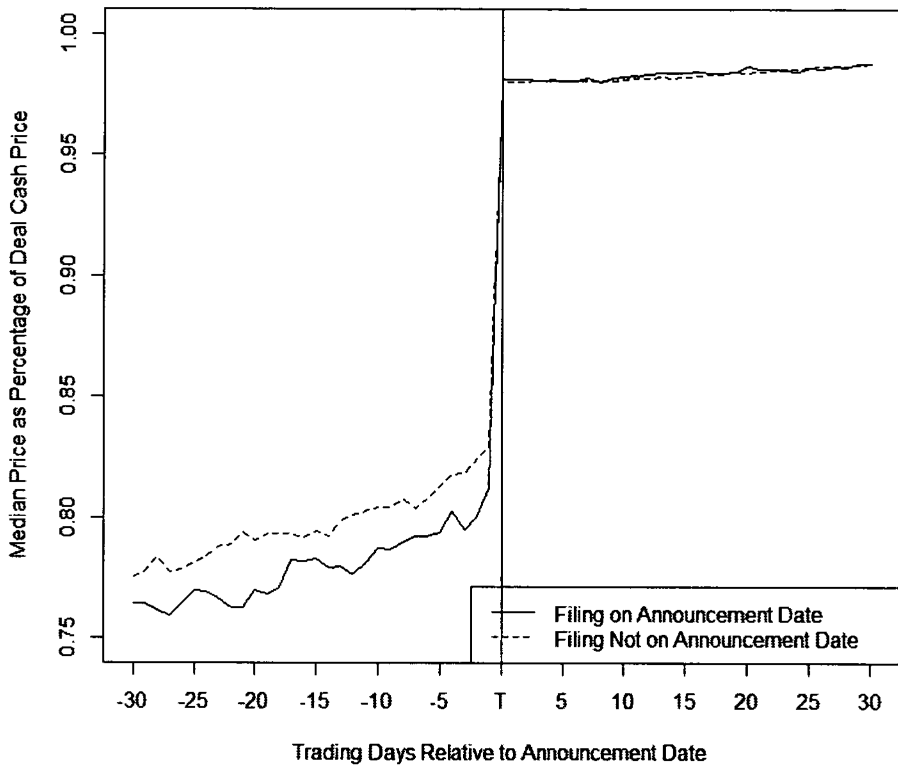
FIGURE 1.
MEDIAN PRICE CHANGE OVER 61-DAY WINDOW RELATIVE TO T-30 PRICE.



counts 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 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.

The plot in Figure 2 shows that there is no difference in the deal price *after the announcement* between companies that filed their merger agreement on the same date that they announced the deal from companies that filed their merger agreement on a later dare. The difference in the price occurred *before the announcement*. Therefore, mergers that ultimately file later than the announcement date tend to see the market anticipate the merger announcement. Thus, we can conclude that the simultaneous announcement and filing do not *cause* the increased price on the announcement date. Instead, it is possible that the reverse is true: the upward price movement in the period before

FIGURE 2.
MEDIAN PRICE CHANGE OVER 61-DAY WINDOW RELATIVE TO DEAL PRICE.



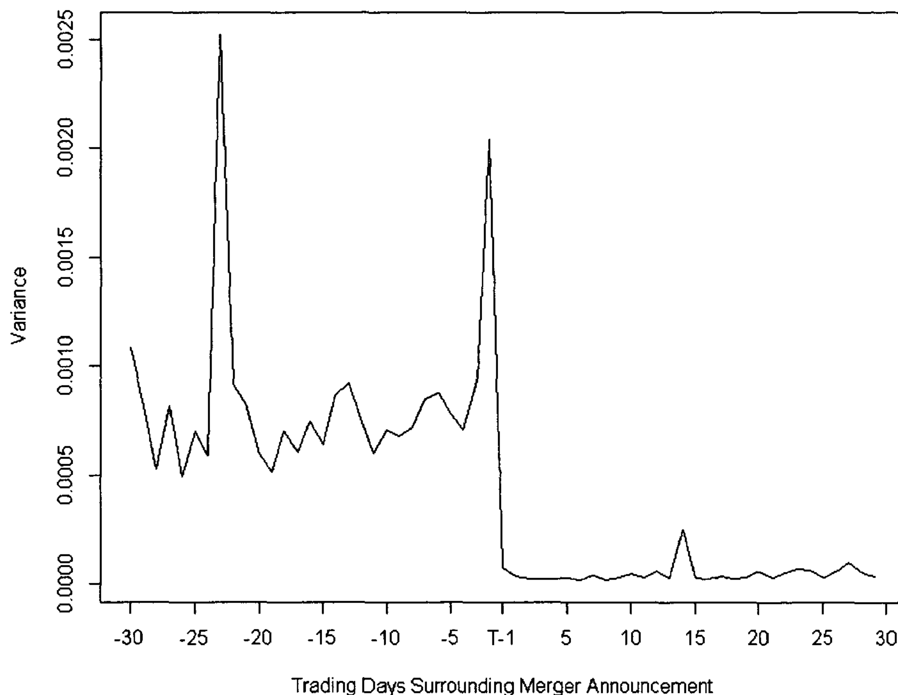
the announcement causes the later filing.[101] The most likely explanation is that when rumors of a merger begin to leak out and cause the target's stock price to increase, the companies feel obligated to rush and announce the merger sooner than they would have otherwise. In such cases, the companies may announce the merger before they are able to fully prepare and file the agreement. 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.

Therefore, to estimate the effect of the legal terms, we examine the trading days following the announcement day to provide a clean test for the effect of disclosing the agreement. The days following the announcement see a tremendous reduction in price volatility com-

101 *Cf.* ANDREW HICKS & S.H. GOO, CASES AND MATERIALS ON COMPANY LAW 573 (discussing takeover law in the United Kingdom and how "untoward movement" in the target's stock price requires an announcement that information may have been leaked); SKADDEN, ARPS, MEAGHER & FLOM (UK) LLP, GENERAL GUIDE TO THE UK TAKEOVER REGIME 12–13 (describing the duty to monitor speculation and "untoward movement" in the target's stock price and the components of a "leaks announcement").

pared to the volatility on the day the merger was announced, making it more likely that we would find any effect due to the agreement's legal terms. This reduction in volatility is dramatically illustrated in Figure 3, which shows that the variance of target stock price changes for each of the thirty 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 ANNOUNCEMENT.



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, percentage target price change for the four individual trading days following the announcement of the merger (e.g., *T+1*, *T+2*, *T+3*, and *T+4*).[102] We use the absolute value 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. Moreover, we are not concerned with the direction of the change. We are only concerned with whether the price changes. Thus, this measure is similar to the variance in the price change but

102 That is, the entry for *T+1* gives the percentage change in the target's stock price between day *T*'s closing price and day *T+1*'s closing price.

uses the *L1* norm rather than the *L2* norm.[103] Each row denotes the filing date of the merger agreement and includes the change that occurred on each of the four days following the announcement date (*T+1* through *T+4*). Thus, for example, column 1 (labeled *T+1*) gives the median absolute price change for the trading day immediately 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*. 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*, or *T+4*. The shaded cells on the diagonal line are the median absolute price changes on the agreement's filing dates (when the price date column is the same as the filing date row).

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 disclosing merger agreements affects a target's stock price, we would expect the shaded cells (price changes that occur on dates when the agreements are filed) to be larger than the non-shaded cells in the same column (price changes on dates other than the filing date).[104] In each column, the shaded cell should have a larger median absolute price change than the non-shaded cells if the merger agreement reveals information to the market.

The results in Table II 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 that day is approximately 0.290%, only slightly larger than the price change experienced that same day by companies that

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

[104] 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, comparing entries in one column to those in another column could be misleading.

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*.

To test whether the filing date cell is statistically significantly different from the other cells, we use a Wilcoxon Rank Sum Test.[105] This test is roughly analogous to the t-test in parametric statistics but does not require assumptions about the exact distribution of the data, and distributional assumptions can be problematic in this context.[106] 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 the merger agreement's disclosure had on price would be most clearly separated from the effect of the merger announcement because a number of 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.

Overall, Table II demonstrates 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

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105 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 402–10 (2d ed. 1995).

106 We use the nonparametric test because the data is nonnormal in its distribution, posing problems for the t-test, *see* GEORGE W. SNEDECOR & WILLIAM G. COCHRAN, STATISTICAL METHODS 144 (8th ed. 1989), and the data is affected by outliers, but the outliers are moderated in the nonparametric test, *see* RICE, *supra* note 105, at 402–03. The tradeoff is that, under certain circumstances, the nonparametric test 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* SNEDECOR & COCHRAN, *supra* at 144.

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* that the market reacts to the agreement, that evidence is equivocal at best.

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 illustrate the largest likely economic significance of these numbers, we now focus on the upper bound of the confidence interval. The upper bound of 0.00090 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.[107] If we exclude *T+1* because of its obviously higher variance and perform a pooled test for *T+2* through *T+4* only, the estimate is 0.000019 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 subsets 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.[108]

[107] 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 nonnormally distributed data. *See* RICE, *supra* note 105, at 402–03; SNEDECOR & COCHRAN, *supra* note 106, at 144. The results were not qualitatively different from those presented.

[108] *See* Frederick C. Dunbar & Dana Heller, *Fraud on the Market Meets Behavioral Finance*, 31 DEL. J. CORP. L. 455, 478 (2006) (noting that frictions in the market associated with high transaction costs can result in situations where no meaningful arbitrage opportunity exists, even where the underlying security involved was mispriced).

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 qualitative results also do not change when we limit the data to the subset of non-strategic (what Mergerstat calls "financial") rather than strategic (what Mergerstat calls "horizontal") deals.[109] This is illustrated below in Table V. The objective of strategic or horizontal deals is to exploit the potential synergies from integrating the acquirer and target companies.[110] 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.[111] The basic contrast between the two types of deals is that strategic acquirers tend to finance transactions with their own cash flows or stock while financial acquirers often use leveraged buyouts that rely primarily on debt.[112] Acquisition agreements for financial transactions are decidedly different because, among other things, the target company's assets may be used as collateral for the lenders, and the target company's "income is used to service the debt."[113]

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109 *See* REED & LAJOUX, *supra* note 82, at 11–12 (distinguishing between "financial" and "strategic"/"horizontal" deals).

110 *See* STEPHEN M. BAINBRIDGE, MERGERS AND ACQUISITIONS 41–42 (2d ed. 2009) (discussing various motivations for companies to seek strategic acquisitions).

111 *See* MAYNARD, *supra* note 36, at 516–19 (providing an overview of the emergence of large-scale financial transactions and the rise of the leveraged buyout industry); Afsharipour, *supra* note 4, at 1169–70 (stating that financial buyers "seek to acquire companies that they can grow and/or improve with the ultimate goal of selling 'the cleaned up company to another buyer within a few years for a substantial gain, or alternatively, [taking] the company public'").

112 *See* Jeffrey A. Blomberg, *Private Equity Transactions: Understanding Some Fundamental Principles*, 17 BUS. L. TODAY 51, 51–52 (2008) (describing the divergence of motives and means between strategic and financial transactions).

113 Afsharipour, *supra* note 4, at 1170, 1184–90.

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, this subset of data reveals almost no evidence of a market response to disclosing the agreement's legal terms; 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 agreement's terms in both financial and strategic deals is striking because financial transactions typically have different provisions than strategic transaction acquisition agreements.[114] The fact that the results are very similar between financial transactions and strategic transactions, given the "markedly" different agreement terms,[115] bolsters the interpretation that financial markets do not respond to the content of the legal terms.[116]

The results presented above may seem surprising, but they actually closely correspond to data from other studies about price reactions to mergers—the arbitrage spread.[117] When a merger is announced, the price of the target will generally climb to a level just below the consideration to be paid for the target's shares in the merger,[118] as graphically depicted in Figure 2. The difference between the trading price of target's shares and the per-share consideration in the merger is called the "merger arbitrage spread" and may be attributed to the risk that the deal will not close.[119] The risk that 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 the acquirer or target can terminate the deal.[120]

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114 *See id.* at 1169–70, 1184–90 (describing the differences between the terms used in acquisition agreements involving financial and strategic transactions).

115 *Id.* at 1170.

116 Rows *T+3* and *T+4* in Table IV are based on a small sample set. Therefore, no firm inferences could be drawn about statistical significance for these rows.

117 *See* Micah S. Officer, *Are Performance Based Arbitrage Effects Detectable? Evidence from Merger Arbitrage*, 13 J. CORP. FIN. 793, 795–97 (2007) (discussing how investors create an arbitrage spread during the closing period that is typically just below the merger announcement price reflecting, for example, the risk that the acquirer and the target will not consummate the merger).

118 *See id.*; Dennis, *supra* note 59, at 848.

119 *See* Officer, *supra* note 117, at 796–97.

120 *See id.* at 796–97, 796 n.5.

In recent years the arbitrage spread has been quite small compared to historical standards. Over the past two decades, the median arbitrage spread has shrunk from nearly 8% in 1990 to about 2% in 2007.[121] Our data, which covers 2002 through 2011, show that the thin arbitrage spread has continued, with a median of 1.94% through the period. Even during the turbulent uncertainty that accompanied 2008 through 2010, the median spread was only about 1.99% in our sample of cash deals,[122] which roughly corresponds with what others have found.[123] 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. Given the decreasing merger arbitrage spread, it seems that the financial markets either believe that announced mergers are extremely likely to close or believe that even if the deal does not close, another nearly equally attractive deal will materialize.[124] 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 on 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.[125] Our results suggest that such analyses are unlikely to discover significant relationships between specific legal provisions and target stock prices. The fact that on the day that the agreement is revealed the target company's stock price's variance is essentially equal to the variance on days when the agreement is not revealed implies that no cross-sectional study is likely to detect an economically significant effect of any legal term on the target's stock price.[126]

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121 *See* Jetley & Ji, *supra* note 70, at 57 tbl.2.

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

123 *See, e.g.*, Cain et al., *supra* note 1, at 42 tbl.8 (finding a median arbitrage spread of 1.8% for transactions occurring between 2008 and 2010).

124 *Cf.* STUART A. MCCRARY, HOW TO CREATE & MANAGE A HEDGE FUND 36–37 (2008); (noting that "[t]he success of a particular [merger arbitrage] trade hinges almost entirely on whether the announced deal is completed."); Mitchell et al., *supra* note 10, at 35 ("[I]f the merger fails, the target firm's stock price usually falls dramatically, generating a large negative return. Merger arbitrageurs are compensated for bearing this transaction risk.").

125 For example, one study found that the disclosure of MAC exclusions did have a significant effect on arbitrage spreads. *See* Denis & Macias, *supra* note 6, at 22–23 tbl.6.

126 A cross-sectional model of the target's stock price on the day the agreement is revealed would take the form of $y = \acute{a} + \hat{a}_1 x_1 + \hat{a}_2 x_2 + \ldots + e$, where y denotes the price change of

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 temporal window this study analyzes. 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 that 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 lack of a market reaction to disclosing 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.[127] Once the merger is announced, the market already has expectations about the typical legal terms that accompany the sort of deal announced.[128] If the actual deal fulfills those expectations in vir-

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the target on the day an agreement is revealed, x_1, x_2, etc. are attributes of the merger agreement's terms, and $\hat{a}_1$, $\hat{a}_2$, 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 ($\hat{a}_1x_1$+ $\hat{a}_2x_2$+. . .) must be zero because $\hat{a}$ is a constant and e is uncorrelated with the x_is by the assumption of the linear model. This means that either (1) $\hat{a}_1$ and $\hat{a}_2$ are zero, i.e., the terms of the agreement have no effect on the return y, or (2) that $\hat{a}_1x_1$ and $\hat{a}_2x_2$ 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) reveals that there is no cross-sectional relationship between y and attributes of the merger agreement x_1, x_2, etc., and therefore cross-sectional investigations of this type of data would be fruitless.

[127] Claire A. Hill, *Why Contracts are Written in Legalese*, 77 CHI.-KENT L. REV. 59, 70–71 (2001) [hereinafter Hill, *Legalese*] (stating that lawyers meet expectations when they achieve an "industry-wide standard of competence", which they can accomplish by "[u]sing time-tested forms, and changing them as little as possible").

[128] *See id.* (suggesting that the market disfavors innovation because of the "network effects," low "incremental cost," and existing judicial interpretations of standard provisions).

tually all cases, the market will not react when the agreement is revealed even if the market believes that the legal terms are important.

This explanation is consistent with how many lawyers see their own role in the merger agreement process—translating the business deal into a legal agreement that will realize, not destabilize, the expectations of the parties and the market.[129] Lawyers generally do not want to surprise the market with the agreement's legal terms, even if that surprise were to be positive.[130] Instead, lawyers seek to satisfy expectations by taking advantage of past precedents in legal drafting.[131] Borrowing text from earlier provisions means that both lawyers and their clients have the security of knowing that the provisions have survived past judicial scrutiny—or at minimum past public scrutiny.[132] This approach creates stability because borrowing clauses from earlier deals may heighten certainty and understanding for the market and the parties.[133] To the extent this hypothesis is accurate, it would appear that the market places value on M&A lawyers and firms as both reputational intermediaries and due diligence providers whose main

129 *See id.* at 70–72, 72 n.32 (stating that attempts to go above and beyond parties' expectations are more likely harmful, even if the innovation resulted in a "better" provision).

130 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* Hill, *Legalese*, *supra* note 127, at 71–72, 72 n.32 (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: Increasing Returns, Herd Behavior and Cognitive Biases*, 74 WASH. U. L. Q. 347, 353–58 (1996) (arguing that lawyers shy away from contractual innovation because "a standard term offers a lower variance in potential outcomes for the client than does a customized term," and lawyers avoid innovation "unless the expected value of innovating is sufficiently large or the reputational cost to failure is sufficiently small").

131 *See* Charles J. Goetz & Robert E. Scott, *The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contract Terms*, 73 CALIF. L. REV. 261, 286–88 (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").

132 *See* Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")*, 83 VA. L. REV. 713, 718–29 (1997) (discussing the "learning benefits," "network benefits," and "switching costs" of using standardized or boilerplate contractual terms); *see also* Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J. 557, 611–16 (1992) (discussing the role of precedents in giving the meaning of rules greater predictability and the high cost related to a legal system that "postpon[es] the establishment of precedents").

133 *See* Goetz & Scott, *supra* note 131, at 287–88.

function is to signal to the market the deal's quality, rather than to put their legal tool kit and creativity to use in legal drafting.[134]

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.[135] Such a hypothesis would imply a radical departure from the reality of legal drafting of M&A agreements.[136] Although public company merger agreements tend to have a standardized structure and set of provisions, they are not boilerplate.[137] Lawyers do not mechanically fill in the blanks when they craft complex business contracts like merger agreements.[138] Instead, lawyers dedicate significant time and energy to crafting merger agreement terms that are distinctive to each proposed merger.[139] If the literal text of merger agreements were perfectly predictable from the announcement itself, then the considerable efforts counsel expends 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 and that variation largely results from the relative leverage of the two parties.[140] In some transactions, the target has more leverage and is able to negotiate a

134 *See* Schwarcz, *Regulating Complexity*, *supra* note 23, at 260 n.279 (discussing lawyers' roles as "reputational intermediaries" and noting that "high-reputation law firm[s]" bond themselves "to good performance" (citing Gilson, *Value Creation*, *supra* note 1, at 299)).

135 Some of the legal terms are occasionally summarized in the initial press release. But those summaries are very cursory at best and are often are not included at all. *See, e.g.*, Duke Energy Corp. and Progress Energy Inc., Joint Merger Announcement Filing (Form 8-K) (Jan. 10, 2011), *available at* http://www.sec.gov/Archives/edgar/data/1326160/000119312511004568/dex991.htm (detailing the financial but not the legal terms of the merger); *see also* Duke Energy Corp. and Progress Energy, Inc., Merger Agreement Filing, (Form 8-K) (Jan. 11, 2011), *available at* http://www.sec.gov/Archives/edgar/data/1326160/000119312511006050/dex21.htm (detailing the legal terms of the merger).

136 Merger agreements are complex, dense, and vague; it is unlikely that investors could predict these agreements from the merger announcement alone. *See generally* Choi & Triantis, *supra* note 4, at 881–96 (indicating that some terms in merger agreements are intentionally vague and evaluating the "costs and benefits of [such] vagueness"). By comparison, merger announcements are typically pithy. *See e.g.*, Duke Energy Corp. and Progress Energy Inc., Joint Merger Announcement Filing (Form 8-K) (Jan. 10, 2011), *available at* http://www.sec.gov/Archives/edgar/data/1326160/000119312511004568/dex991.htm.

137 *See* ROBIN V. FOSTER, EFFECTIVE NEGOTIATION STRATEGIES AND APPROACHES FOR M&A LAWYERS AND THEIR CLIENTS 10 (Aspatore 2011) ("Lawyers make the negotiation process more efficient and predictable by using . . . standard deal documentation to manage the process and focus the parties' attention in an organized way . . . . [But] [l]awyers should not . . . allow the legal drafting process to eclipse the actual substance of a deal.").

138 *See* Hill, *Legalese*, *supra* note 127, at 59, 63, 75–81.

139 *See, e.g.*, FOSTER, *supra* note 137, at 4–8 (discussing the range of areas on which M&A lawyers focus during acquisition agreement negotiations).

140 *See* Hill, *Legalese*, *supra* note 127, at 79 ("[N]egotiated changes to contracts are almost always narrowly tailored to satisfy the particular parties . . . .").

seller-friendly agreement and, in some cases, the acquirer has more leverage and is able to negotiate a buyer-friendly agreement.[141] For example, the details of the MAC definition, and the number of exceptions, vary from deal to deal,[142] and that provision is the linchpin of the acquirer's ability to walk away from a merger.[143] Unless the markets are able to perfectly foresee the target's leverage in each case merely from the announcement, the deal-specific terms should provide new information to the markets when the parties reveal the agreement. Yet, the markets do not react to the revelation of the legal agreement's terms, which suggests that the markets simply do not respond to the deal-specific variations in the agreements.

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 their positive and negative aspects 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" where more favorable terms to one party are countered by more favorable provisions to the other.[144] The argument in favor of 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

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141 *See* Afsharipour, *supra* note 4, at 1209–10 (noting an increase in buyers using leverage as a result of the recent economic downturn, which is reflected in an increase in sellers agreeing to reverse termination fees); Griffith, *Deal Protection*, *supra* note 4, at 1903 n.16 (indicating that sellers have greater negotiating power in "friendly" deals compared to "hostile" deals, which typically involve the buyer bypassing the seller's board of directors); Quinn, *Bulletproof*, *supra* note 50, at 881–84 ("The structural problems faced by both private and public sellers give rise to a distribution of bargaining power in favor of buyers.").

142 *See, e.g.*, NIXON PEABODY, 2011 NIXON PEABODY MAC SURVEY 2-4, *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 definitional terms and exclusions). *See also* Galil, *supra* note 2, at 848 ("MAC clauses vary considerably. Some are quite simple, tersely requiring that there be no material adverse change . . . . Others are complex and heavily negotiated, specifying numerous exemptions and carve-outs from exemptions . . . .").

143 *See* Galil, *supra* note 2, at 849 (stating that the acquirer seeks a MAC that "give[s] it maximal leeway to walk away from the deal—or, more often, maximal bargaining leverage to renegotiate price"); Denis & Macias, *supra* note 6, at 8 ("MACs are primarily geared towards providing walk-away rights to acquiring firms.")

144 *See* STANLEY FOSTER REED et al., THE ART OF M&A 263–67 (2007) (arguing that negotiations over taxes in an asset sale can often be a zero-sum game between acquirer and target, which should give rise to "lively negotiations—and even an adjustment of price in favor of the conceding party").

into shape. Concessions in one area may be paralleled by gains in another.[145]

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.[146] 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 strictly limited to 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 between the target's and acquirer's assessments about what the target company is worth by allowing price flexibility once uncertainties have been resolved.[147] Compromise on the legal terms could actually be offset by sweeteners in the nonlegal, financial terms of the transaction.[148] 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.[149] 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.[150] The fact is, however, that the financial "deal" is typically independent of the legal terms of the agreement, suggesting that the parties themselves do not place a financial value on the deal-specific legal details.[151]

C. The Possible Role of Slow Processing of Disclosures

A third possibility is that markets do process the legal terms, but that markets take time to parse out the details of the agreement and

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145 *See, e.g.*, Sean J. Griffith, *The Costs and Benefits of Precommitment: An Appraisal of* Omnicare v. NCS Healthcare, 29 J. CORP. L. 569, 613–15 (2004) (arguing a target may offer transactional certainty to its acquirer "in exchange for an increase in price or other concessions in the merger agreement").

146 *See* FREUND, *supra* note 22, at 53–56 (lamenting that lawyers typically have a nominal role in preliminary discussions that often involve price and financial terms and indicating that lawyers at this stage should "confine their contributions to legal points").

147 *See, e.g.*, Gilson, *Value Creation*, *supra* note 1, at 262–64 (arguing that legal terms providing for earnouts can foster agreement even when gaps on valuation persist between the acquirer and target).

148 *See* Denis & Macias, *supra* note 6, at 7 (finding significant evidence affirming the hypothesis that acquirers with a "stronger abandonment option (i.e. fewer MAE exclusions) will be willing to offer a higher *ex ante* premium for the target firm").

149 *See id.* at 26–29. *See generally* Miller, *Deal Risk*, *supra* note 2, at 2013–14, 2070–91 (arguing that the allocations of deal risk in MAC clauses serve to further efficiency in transactions that benefits both the acquirer and target).

150 *See, e.g.*, Gilson, *Value Creation*, *supra* note 1, at 262–64 (discussing the role of earnouts and the potential modification of the purchase price).

151 *See* FREUND, *supra* note 22, at 53–56.

this process unfolds over a longer time horizon than the window of time used in this study.[152] The benign version of this explanation is that it takes time to process the significance of acquisition agreements' terms.[153] 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 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. After all, 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.[154] Thus, it is possible that the legal terms in a merger agreement take more time to digest than we allow in our study, especially because processing and incorporating public information into stock prices may be slower in practice than traditional economic theory suggests.[155] For example, analysts and their lawyers may belatedly scrutinize the fine print of legal terms when regulatory road blocks arise in order 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,[156] 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 reflects a market recognition that the parties' will to close an announced merger between public companies is

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152 Various scholars have examined "delayed reaction" cases in which an announcement does not have an immediate effect on stock prices, but instead produces a shift months later. *See* Stefan J. Padfield, *Who Should Do the Math? Materiality Issues in Disclosures that Require Investors to Calculate the Bottom Line*, 34 PEPP. L. REV. 927, 967–73 (2007).

153 For example, plaintiffs trying to establish materiality in fraud cases have sometimes argued that it takes time to interpret announcements to explain why a "material" announcement produced no immediate change in stock prices. *See id.* However, this argument runs counter to the semi-strong efficient market hypothesis. *See, e.g.*, *In re* Merck & Co. Sec. Litig., 432 F.3d 261, 270, 271 (3d. Cir. 2005).

154 *See, e.g.*, Griffith, *Deal Protection*, *supra* note 4, at 1955 n.236 (expressing skepticism that board members read, let alone understand, the "turgid legalese" in merger agreements).

155 For an exemplar of traditional economic theory, see Gilson & Kraakman, *supra* note 8, at 560. The authors state that under the efficient market hypothesis, the market reflects new information "'always'—i.e., very promptly." *Id.*

156 *See supra* notes 135–38 and accompanying text.

strong.[157] 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 option 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 that those provisions are unlikely to be exercised even if available.

Our explanation says as much about the motivations of corporate merger participants as about the drafting practices of deal lawyers. One could frame the overriding "will to close" interpretation of the market's lack of reaction to the agreement's legal terms as the post-signing version of the "hubris hypothesis" of corporate takeovers.[158] The same excessive optimism that leads acquiring managers to overpay for targets may lead those same managers to proceed in the post-signing period with a souring acquisition prospect in the face of a contractual out.[159] Targets appreciate the fact that acquirers are generally thought to overpay and therefore will seek to accommodate the acquirer if legal terms are triggered.[160] In our sample of 463 transactions, only about 5% were cancelled during a decade marked both by excessive exuberance and market panic. These statistics help to put in perspective the probability of a dispute actually arising under a 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 because the contractual provisions that provide outs are unlikely to be triggered and it is even less likely that the acquirer will exercise those provisions. The law firms representing the target and acquirer can negotiate detailed escape clauses for their respective clients. But if clients are unlikely to invoke those escape clauses—as the market seems to believe—then the firms cannot protect their 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 Part IV, we propose changes to the perspective M&A lawyers take to the bargaining table that would protect clients who are committed to close the signed transaction. The "contingent consideration" perspective we propose would make drafting practices responsive to the behavioral realities of acquisition clients, increasing efficiency, decreasing risk, and encouraging more deals.

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157 *See supra* note 11 and accompanying text.

158 *See* Roll, *supra* note 10, at 197, 200.

159 *See id.* at 212 (stating that "hubris is necessary to explain why managers do not abandon" bids that reflect errors in valuation).

160 *See* Black, *Bidder Overpayment*, *supra* note 10, at 606–37 (discussing how targets benefit from systematic overpayments by bidders).

IV
From Contingent Closings to Contingent Consideration

As discussed above, the most persuasive reason markets do not value legal provisions is that the parties are unlikely to exercise the carefully crafted provisions in the acquisition agreement. Corporate managers, whether because of hubris or reputational concerns, are unlikely to avail themselves of the contractual outs their lawyers worked diligently to create.[161] The market knows this and, consequently, it does not scrutinize the carefully drafted terms until signs of danger arise. But this explanation suggests that M&A lawyers may operate on a faulty behavioral assumption about their clients—that the clients would want to exercise legal outs to escape from a souring deal.[162] In reality, however, parties are unlikely to invoke that right, and therefore the markets do not value it ex ante.[163] In light of this, we suggest that M&A lawyers shift their emphasis from the "contingent closing" perspective that focuses on calling the deal off and move towards the "contingent consideration" perspective 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 like representations and warranties, indemnification provisions, escrows, and earnouts typically survive the closing.[164] These provisions are both common and carefully negoti-

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161 *See* Cai & Vijh, *supra* note 11, at 1909 (discussing reputation as contributing to management's will to close); Roll, *supra* note 10, at 197, 200 (discussing the will to close because of the hubris of acquirer's management).

162 *See* Andrew M. Herman & Bernardo L. Piereck, *Revisiting the MAC Clause in Transaction: What Can Counsel Learn from the Credit Crisis?*, Bus. L. Today, Aug. 2, 2010, at 1, *available at* http://www.kirkland.com/siteFiles/Publications/Article%20PDF%20-%20PRINTING%20ALLOWED%20-%20Business%20Law%20Today%20-%20Herman%20byline.pdf ("[B]uyer's counsel should consider whether they can successfully shift the risk . . . in a manner that allows their clients to walk away from a transaction with little to no cost . . . ."); Nixon Peabody, 2012 Nixon Peabody MAC Survey 2, *available at* http://www.nixonpeabody.com/files/152990_MAC_Survey_Web_2012.pdf (stating that bidders use MAC clauses to "provid[e] more room to untie the knot in the event of adverse circumstances").

163 *See* Arthur Fleischer, Jr. & Alexander R. Sussman, Takeover Defense, Mergers and Acquisitions § 14.07 n.777 (2013) (stating that in 2008, only 70 out of 2300, or about 3%, of signed deals were "cratered"—parties reached an agreement but terminated the deal before it was consummated—a percentage "approximately double what it was for 2006–2007").

164 *See* Carney, *supra* note 44, at 102–03, (noting that where the target is a private company, the merger agreement typically provides for the survival of representations and warranties, with twelve to fourteen months as the most common survival period). Carney also notes that "[v]irtually all merger agreements include the buyer's covenant to continue

ated in private company acquisitions because they impose financial obligations on the target company's shareholders that endure long after the merger is completed, ensuring that the interests of the parties are aligned to maximize the value for both sides of the transaction.[165] 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 upside of designated postclosing uncertainties—like the value of products in development.[166] For this reason, the legal terms directly impact the value of the target company even when the deal closes because the proceeds from the merger—and potential liability—are contingent on whether the representations, warranties, and other provisions of the acquisition agreement are accurate.[167]

In contrast, the representations, warranties, and covenants in public company deals generally cover only the preclosing period and terminate at the closing of the deal.[168] The practice of indemnifying the buyer for breaches of representations, warranties, or covenants is very unusual in these transactions.[169] The general consensus has long been that public company deals need to be complete at their closing because it would be impracticable and undesirable for the buyer to chase down public stockholders for indemnification.[170] Therefore, the legal terms only end up mattering when the deal does not close, which on the surface would suggest that 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

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to indemnify the seller's officers and directors for their past actions for a stated period of time." *Id.* at 108. Earnouts, because they are contingent on future events, survive the closing out of necessity. *See* M&A PRACTICE GUIDE § 9.10(1)–(2).

165 *See* FREUND, *supra* note 22, at 160–61 (discussing the differences between public company acquisitions and private company acquisitions with respect to indemnification provisions and their survival after closing).

166 Buyers may claim that they "bargained for the warranties as a means to allocate risk and minimize cost" or purchased the warranties from the seller. *See* Charles K. Whitehead, *Sandbagging: Default Rules and Acquisition Agreements*, 36 DEL. J. CORP. L. 1081, 1084 (2011). Selling shareholders in a private transaction may share in the upside (e.g., earnouts) and downside (e.g., survival of representations and warranties) of postclosing activities. *See* CARNEY, *supra* note 44, at 100–03.

167 In practice, it is much harder to empirically test the value added by legal drafting to private companies because of the lack of transparency and absence of market valuation for such companies.

168 *See* FREUND, *supra* note 22, at 160; *see also* CARNEY, *supra* note 44, at 102 (stating that a public "seller's representations and warranties effectively die at closing because the seller disappears as a separate entity").

169 *See* M&A PRACTICE GUIDE § 10.02(2).

170 *See* FREUND, *supra* note 22, at 160–61. An exception sometimes occurs when the target, although a public corporation, has a large or majority stockholder who could be persuaded to provide indemnification. *See id.* at 161.

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.[171] 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 off the deal but that management is committed to close the deal no matter what because their reputations and business judgment are on the line.[172] Managers faced with a target suffering from declining prospects may opt to double down on the acquisition rather than to call it off. This means that no matter how carefully attorneys craft escape clauses, most announced transactions are effectively unconditional agreements to purchase.[173] 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.[174] This explanation is consistent with what we see in the data—relatively few transactions actually fail to close. Thus, even when M&A lawyers perceive the need for contractual outs—for example, public company deals where postclosing indemnification is impracticable—it is unlikely that the parties will exercise the contractual outs.

B. The Case for Contingent Consideration

If acquisition agreements appear to function as unconditional obligations to purchase, notwithstanding the legal closing conditions, the question of what lawyers can do to protect acquirer-clients remains. We recommend that public M&A lawyers deploy the deal technologies already available in private transactions to the public transaction context. Postclosing indemnification is difficult in public transactions[175] given the challenges of tracking down public shareholders to answer for breaches of representations and warranties.[176]

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171 *See* FLEISCHER & SUSSMAN, *supra* note 163, at § 14.07 n.777 (finding roughly 3% of deals were agreed upon but later terminated before completion in the 2006 to 2007 period).

172 *See* Cai & Vijh, *supra* note 11, at 1909 (identifying that "loss of reputation in the managerial job market" is a concern that contributes to the acquiring management's will to close); Roll, *supra* note 10, at 197, 200 (identifying managerial hubris as something that bolsters the acquirer's will to close).

173 The unconditional nature of agreements is illustrated by the fact that "Delaware courts have never found a material adverse effect to have occurred in the context of a merger agreement." Hexion Specialty Chems., Inc. v. Huntsman Corp., 965 A.2d 715, 738 (Del. Ch. 2008).

174 M&A PRACTICE GUIDE § 12.02(1).

175 *See* Kling et al., *supra* note 37, at 782 (explaining that "[i]n the typical public company acquisition, no post-closing indemnification or similar remedy will be available for the buyer").

176 *See* FREUND, *supra* note 22, at 161.

But innovation in the use of contingent consideration is a viable alternative. Contingent consideration is conventionally thought of as a way to bridge the valuation gap between buyer and seller by allowing for adjustments to compensate the parties based on preclosing developments or diligence confirmations of value.[177] 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 unknown variables in the acquisition process.

Contingent consideration can take a variety of forms in acquisition agreements, but it 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."[178] 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, in which case the contingent consideration is often referred to as "contingent value rights" or "value support rights."[179] In either case, the contingent consideration mitigates the risk to each party that the other party's performance is less than expected.[180] 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.[181] In return, acquirers should be willing to pay more for the target in the first place.[182]

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177 *See* CARNEY, *supra* note 44, at 100–01 (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"). The earnout arrangement is typically described as follows:

> [T]he 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. at 100.

178 M&A PRACTICE GUIDE § 9.10(1).

179 *Id.* § 9.10(1).

180 *Id.* § 9.10(2); *see* Kevin Levy et al., *Return of the Earnout: An Important Tool for Acquisitions in Today's Economy*, BUS. L. TODAY, Jun. 2011, at 1 ("Utilizing an earnout limits the buyer's risk that it is overpaying for an underperforming asset, while also providing the seller with what it considers appropriate deal consideration if the target business' projected performance is achieved.").

181 *See* Levy et al., *supra* note 180, at 1 (describing earnouts as the portion of the purchase price the buyer pays after closing only if the acquired business meets performance targets).

182 *See id.* (stating that an earnout can be a "win-win" by allowing the seller to realize a higher purchase price and enabling the buyer to get what it paid for).

The use of some forms 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.[183] In part, the difference may result 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.[184] 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.[185] Indeed, contingent consideration has become used more frequently in recent deals in the life sciences sector, in part due to the intrinsic challenges of gauging the viability and value of products in research and development pipelines or undergoing clinical tests.[186] The most notable case was the Sanofi-Aventis blockbuster acquisition of Genzyme for $20.1 billion in early 2011, in which contingent value rights played a key role in lubricating a negotiation process that had dragged on for many months.[187]

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.[188] This means that the seller may have difficulty credibly communicating information about its business or prospects through

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183 *See* M&A PRACTICE GUIDE § 9.04(2) (2011) ("Escrows are a common feature of many acquisitions, particularly those involving private targets."); *id.* § 9.10 (noting that in the Private Target Survey, 38% of transactions included an earnout); *id.* § 9.10(1) (suggesting that an earnout would be less common when the target is a public company with many shareholders because "[e]arn-outs are most commonly used when the target has only a limited number of stockholders, and those stockholders anticipate continued involvement in the business after the acquisition").

184 *See* Frank Aquila & 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, 4366–67; *see also* FREUND, *supra* note 22, at 204–05 (suggesting that complex tax and accounting considerations may reduce the "popularity" of using earnouts).

185 *See* FREUND, *supra* note 22, at 205 (finding that "[n]evertheless, the contingent deal retains a measure of vitality as one of the few means to bridge the negotiating gap").

186 *See* John Haggerty, *Bridging the Value Gap: Sanofi-Aventis, Genzyme and Contingent Value Rights*, 55 BOS. B.J. 36–37 (2011) (describing use of contingent value rights in recent biotech transactions).

187 *See* Chris V. Nicholson, *Sanofi Agrees to Buy Genzyme for $20.1 Billion*, NY TIMES DEALBOOK (Feb. 16, 2011, 3:00 AM), http://dealbook.nytimes.com/2011/02/16/sanofi-agrees-to-buy-genzyme-for-at-least-20-1-billion.

188 *See* Gilson, *Value Creation*, *supra* note 1, at 282–83 ("Indemnification is typically used if the seller is a private company, but . . . indemnification provisions are rarely, if ever, used when the seller is a public company.").

representations and warranties because those terms are likely to have no teeth after the closing.[189] As a result, the due diligence process may serve as the buyer's key protection against unexpected problems with the target's business.[190] 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.[191]

The exclusive reliance on due diligence in public target acquisitions is inefficient and unnecessary when the technology already exists for postclosing 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.[192] Diligence is expensive and may not be the best way to uncover information already in the possession of the target.[193] Instead, representations and warranties that have teeth after closing in a private deal serve as a means of signaling information,[194] which elimi-

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189 *See* CARNEY, *supra* note 44, at 102 (indicating that the seller's representations and warranties do not survive the deal's closing when the seller is a public corporation).

190 *See* CARNEY, *supra* note 44, 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"); FRANCIS J. AQUILA, A LOOK AT DUE DILIGENCE 4 (Aspatore 2012) ("In a transaction where the purchaser has no post-closing recourse against the seller[,] . . . a purchaser should . . . view the due diligence investigation as its only bite at the apple to identify and allocate risk prior to signing the definitive transaction agreement."). *But see* Gilson, *Value Creation*, *supra* note 1, at 283–87 (suggesting that other verification techniques—like continuing disclosure obligations under the Securities Exchange Act of 1934 and separation of ownership and management in public companies—increase the likely accuracy of the seller's representations and warranties).

191 *See* CARNEY, *supra* note 44, at 102 (stating that the nonsurvival of representations and warranties past closing "puts the burden on the buyer to find any problems in the preclosing period"); FREUND, *supra* note 22, at 160 ("[I]n acquiring a public company, your investigative prowess must be exhibited *prior* to the closing . . . . [I]f you do not catch the misrepresentation before you close, you may well lack recourse.").

192 *See supra* note 164 and accompanying text.

193 Our argument's aim is not to diminish the role of due diligence but rather to suggest that alternatives may work better in certain circumstances. *See, e.g.*, Lawrence G. Baxter, *Betting Big: Value, Caution and Accountability in an Era of Large Banks and Complex Finance*, 31 REV. BANKING & FIN. L., 765, 800 (2012) ("The costs of mergers are often far greater than was estimated in pre-merger due diligence, to the extent that such due diligence even actually takes place, and the pressures to cut expenses can lead to counterproductive actions such as reckless outsourcing." (footnote omitted)). *But see* CARNEY, *supra* note 44, at 83–84 (suggesting that due diligence may lead a buyer to cancel the deal or renegotiate before the deal closes, particularly in a public company acquisition where the representations and warranties do not survive closing); PETER HOWSON, DUE DILIGENCE: THE CRITICAL STAGE IN MERGERS AND ACQUISITIONS 7 (2003) (suggesting that due diligence serves a crucially important role in "unearthing problems no one really knew existed and has important value for helping buyers negotiate non-standard representations and warranties").

194 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*

nates the need for costly investigations 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.[195] 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.[196] The absence of credible representations and warranties after closing in the public company case likely leads to excessive expenditures on due diligence, yet produces modest protection for acquirers.[197]

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 the target company's shareholders' compensation contingent would mitigate the potential for over- and underestimation of uncertainties after closing.[198] This approach would make premerger legal negotiations more important in delineating contingent compensation provisions.[199] But this approach may diminish the stakes of the preclosing period, better align the incentives of both parties, and enhance the overall efficiency of transactions.[200] The acquirer would have better presigning information and therefore would pay more for the target, benefiting both

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Disclosure About Product Quality, 24 J.L. & ECON. 461, 479 (1981); Michael Spence, *Consumer Misperceptions, Product Failure and Producer Liability*, 44 REV. ECON. STUD. 561, 571 (1977) (observing that "guarantees can function *as signals* of reliability"). Although this literature is largely focused on warranties about consumer 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). Arguably, this assumption is more likely to be true in the acquisition context where parties have access to experienced financial and legal experts.

195 *See* Schwartz & Wilde, *supra* note 194, at 1396 ("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 . . . .").

196 *See* Christopher J. Zinski, *Mergers and Acquisitions of Financial Institutions: A Primer on Deal Points*, 119 BANKING L.J. 311, 324 (2002) ("Of course in a merger transaction where the representations and warranties expire at closing and there is no post-closing indemnification, the seller's risk exposure terminates at closing.").

197 *See* HOWSON, *supra* note 193, at p. 26 (discussing the shortcomings of due diligence and the role of representations and warranties as another "line of defence" against misrepresentations in acquisition agreements).

198 *See* M&A Practice Guide § 9.10(1)–(3), (12); Levy et al., *supra* note 180, at 1–2.

199 *See* Igor Kirman et al., *The ABCs of CVRs: A Guide for M&A Dealmakers*, M&A LAW., Mar. 2011, at 12, *available at http://www.wlrk.com/webdocs/wlrknew/AttorneyPubs/WLRK.20 102.11.pdf* (arguing that CVRs can provide increased deal certainty and afford the buyer "protection similar to that offered by a closing condition without threatening the overall transaction").

200 *See* M&A Practice Guide § 9.10(1)–(3), (12).

parties. Thus, more deals would be signed with less due diligence expenditures, creating value for targets and acquirers alike.[201]

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 even significantly respond to the deal-specific legal terms, 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 their 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 a company's likely behavior in the postsigning period. 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 through 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 account for the market's assessment of merger motivations and innovate legal drafting, taking it in a new direction. If M&A lawyers assumed—as the market does—that their clients' priority is successfully closing the merger and not calling it off, they would 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 a lower risk of buyer's remorse in public company acquisitions.

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201 *See* Kirman at al., *supra* note 199, at 12 (arguing that a CVR could allow a buyer to get "comfortable with more streamlined due diligence with respect to certain issues when the value of certain contingent assets is made the subject of a contingent payout.")

APPENDIX–DATA COLLECTION

The merger transactions data for this study were collected through the Mergerstat M&A Database available through Lexis-Nexis.[202] For each year from January 1, 2002, through 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 examined 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 News-Room with Reuters database to identify the time of the press release.[203] 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

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202 MERGERSTAT M&A DATABASE, http://w3.nexis.com/sources/scripts/info.pl?156282 (last visited Apr. 14, 2013).

203 WESTLAW REUTERS DATABASE, *available at* https://web2.westlaw.com/scope/default.aspx?db=REUTERS&RP=/scope/default.wl&RS=WLW13.01&VR=2.0&SV=Split&FN=_top&MT=205&MST= (last visited Apr. 14, 1013).

attached to the filing.[204] The date and time of 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.[205] 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:

Equation: $$APC_i = \frac{100 \cdot |P_i - P_{i-1}|}{P_{i-1}}$$

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*.

204 *See* SEC, EDGAR SYSTEM, http://www.sec.gov/edgar/searchedgar/webusers.htm (last visited Apr. 14, 2013).

205 *See* WHARTON RESEARCH DATA SERVICES, STOCK PRICES DATABASE, *available at* http://wrds-web.wharton.upenn.edu/wrds/ (last visited Apr. 14, 2013).