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Deal Breakage in Domestic and Cross-Border Mergers and Acquisitions: New Data and Avenues for Research

Morgan Ricks*

ABSTRACT

This Article presents a newly constructed mergers and acquisitions (M&A) data set that can support detailed analysis of deal outcomes, including deal breakage. The main novelty of the data set is a detailed classification scheme for characterizing deal outcomes, using information drawn from public announcements and news reports. The data set also includes a number of variables, hand gathered from press releases and merger agreements, that are unavailable in existing data sets in reliable form, or at all. The data set consists of all definitive, signed M&A transactions involving US public company targets with a deal value of at least \$1 billion from 1996 to 2018. The data set excludes negotiations, hostile bids, and unsolicited offers not resulting in a definitive transaction, which cannot be compared apples to apples with deals involving definitive agreements.

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I. Introduction

Richard Beattie of the law firm Simpson Thacher & Bartlett LLP—one of the leading corporate lawyers of his generation—had this to say two decades ago about legal practice in mergers and acquisitions (M&A): "Generally the business people want to get the transaction done, to happen, and they want it to happen with the partner they've picked. But legally you can't always do what they want. Which is why business people don't like lawyers." As Beattie implied, clients rely on their M&A counsel to deliver deal certainty: to get the deal closed on the agreed economic terms.2 Deal certainty can mean somewhat different things for acquiring companies and target companies. For acquirors, it largely means providing deal "protection": basically, preventing the target company from accepting a higher ("topping") bid from a third-party interloper. For targets, it largely means preventing the acquiror from walking away from the transaction prior to closing due to "buyer's remorse" or for other reasons. Both parties typically rely on legal counsel to help them secure any necessary regulatory approvals.4

Despite the importance of deal certainty to M&A legal practice, deal breakage or termination—the failure of a signed M&A deal to reach closing, for whatever reason—has not received systematic

^{1.} Interview by John C. Coates IV & Guhan Subramanian with Richard I. Beattie, Chairman, Simpson Thacher & Bartlett, in N.Y.C., N.Y. (July 23, 1999), quoted in Fernán Restrepo & Guhan Subramanian, *The New Look of Deal Protection*, 69 STAN. L. REV. 1013, 1073 (2017).

^{2.} Id.

^{3.} See, e.g., Christina M. Sautter, Promises Made to Be Broken? Standstill Agreements in Change of Control Transactions, 37 Del. J. Corp. L. 929, 932–33 (2013) (describing deal protection provisions in M&A).

^{4.} See Ilene Knabel Gotts & Franco Castelli, Watchell Lipton Discusses U.S. M&A Antitrust Enforcement for 2019 and the Year Ahead, COLUM. LAW SCH. BLUE SKY BLOG (Jan. 7, 2020), https://clsbluesky.law.columbia.edu [https://perma.cc/JH89-QBJ6] (archived Feb. 16, 2020) (highlighting the role of legal counsel in clearing regulatory hurdles).

treatment from legal scholars.⁵ This gap in the literature can be attributed in part to limitations of available M&A data sets, which do not include reliable and detailed information about deal breakage.⁶

This Article describes a newly constructed M&A data set that can support detailed analysis of deal outcomes, including deal breakage. The key innovation of the data set is a detailed classification system for characterizing deal outcomes, using information drawn from press releases and other public announcements, as well as news reports. The data set consists of all definitive M&A deals involving US public company targets with a deal value of at least \$1 billion from 1996 to 2018. The data set excludes negotiations, letters of intent, hostile bids, and unsolicited offers not resulting in a definitive transaction.⁷

Analysis of M&A deal breakage should be of interest to business law scholars and M&A practitioners. It should also be of interest to investors in public securities markets. When companies are being acquired, their stock prices tend to be driven primarily by the prospect of deal success or failure, including the prospect of material amendments to the consideration offered.⁸ Merger arbitrage—the practice of investing in the securities of publicly traded companies that are parties to pending M&A transactions—is a major "event-driven" investment strategy among institutional investors, especially hedge funds.⁹ Accurate historical data can assist merger arbitrage professionals in evaluating deal risk.

^{5.} Prior studies that have examined some aspects of deal breakage include Matthew D. Cain, Antonio J. Macias & Steven Davidoff Solomon, Broken Promises: The Role of Reputation in Private Equity Contracting and Strategic Default, 40 J. CORP. L. 565, 566 (2015) (examining 227 private equity acquisitions between 2004 and 2010); John C. Coates, Darius Palia & Ge Wu, Are M&A Contract Clauses Value Relevant to Bidder and Target Shareholders? 1–2 (Working Paper, 2019) (studying the relationship between M&A contractual provisions and deal outcomes for 819 US publicly traded target firms for the period 2001–2011).

^{6.} See Cain et al., supra note 5; Coates et al., supra note 5.

^{7.} Some prior studies have lumped definitive deals with other situations, arguably comparing apple and oranges. See, e.g., Jia Wang & Ben Branch, Takeover Success Prediction and Performance of Risk Arbitrage, 15 J. Bus. & Econ. Stud. 10, 16 (2009) (describing various predictor variables used in the data set in addition to definitive deals); Ronald W. Masulis & Serif Aziz Simsir, Deal Initiation in Mergers and Acquisitions, 53 J. FIN. & QUANTITATIVE ANALYSIS 2389, 2390 (2018) (distinguishing among deal types considered by the study).

^{8.} See infra note 35.

^{9.} See KATE WELLING & MARIO GABELLI, MERGER MASTERS: TALES OF ARBITRAGE 1, 2 (2018) (defining "merger arbitrage" as "seeking profits by trading securities involved in announced corporate events . . . in such a way as to limit the trader's risk, should the expected event fail to happen"); Sheng Wang et al., Systematic M&A Arbitrage, DEUTSCHE BANK MKTS. RESEARCH (Sept. 28, 2015).

II. DEAL UNIVERSE

The present study is concerned with definitive M&A transactions involving US public company targets from the beginning of 1996 through the end of 2018, with a deal value of at least \$1 billion. More specifically, the data set consists of all M&A deals meeting the following criteria:

- Definitive transactions only. The data set includes definitive M&A deals only, meaning the parties must have signed a definitive transaction agreement. Negotiations that did not result in a signed merger agreement are not included. Neither are rebuffed, unsolicited, or hostile offers in which the target never agreed to a deal. Such situations are not "broken deals" for purposes of this study since no agreement was reached in the first place.
- 1996 to 2018. The data set includes deals signed on or after January 1, 1996, and concluded (whether by completion or termination) not later than December 31, 2018. The starting date of January 1, 1996, was chosen because 1996 was the first year in which all US public companies were required to use the Securities and Exchange Commission's (SEC) EDGAR database for their securities law filings. Consequently, definitive merger agreements are publicly available and have been downloaded for all deals in the deal universe, permitting a rich set of variables to be gathered.
- US target companies. The data set is limited to US target companies. (The acquiring company, by contrast, may be a US or foreign firm.) Limiting the data set to US targets ensures public availability of definitive merger agreements and a reasonable degree of uniformity of governing law.¹²
- Public company targets. The data set is limited to deals with
 publicly traded target companies; it excludes all deals where
 the target company is private. (The acquiror, by contrast, may
 be public or private.) M&A transactions with public company
 targets differ from those with private company targets along a
 number of significant dimensions. Public company deals
 typically trigger requirements under the federal proxy rules

^{10.} Electronic Filing and the EDGAR System: A Regulatory Overview, SEC. & EXCH. COMM'N, https://www.sec.gov/info/edgar/regoverview.htm (last updated Nov. 16, 2006) [https://perma.cc/Q7UB-26DP] (archived Feb. 5, 2020) (detailing the history of electronic filing via the EDGAR system).

^{11.} Id.

^{12.} Of course, corporate and contract law vary by state, and some regulatory approvals (particularly for public utilities) happen at the state level, so there is some variation in relevant law even for US-only deals.

and/or tender offer rules, ¹³ whereas private company deals usually do not. ¹⁴ In addition, private company deals commonly include provisions relating to postclosing indemnification, as well as "earn-out" provisions under which the consideration to be paid depends to some extent on the postclosing performance of the target company's business. ¹⁵ Such provisions are far less common in public company deals. ¹⁶ Also, as explained below, deals with public company targets make it possible to study the premium paid as well as the "arbitrage spread" ¹⁷ in the transaction; these concepts do not apply where the target is a private company. Finally, definitive merger agreements are available through the SEC's EDGAR database for all deals involving public company targets, whereas most private company merger agreements are not publicly available.

• \$1 billion and up. "Deal value" refers to the value of the transaction excluding assumed liabilities. The arbitrary \$1 billion value cutoff was selected to make data gathering manageable. The data set is currently being augmented to include deals between \$500 million and \$1 billion in value.

To construct the deal universe, transactions with the foregoing characteristics were downloaded from Thomson Reuters' Securities Data Company (SDC) Platinum database, which contains exhaustive coverage of global M&A transactions from the 1970s to the present. ¹⁸ However, in constructing the deal universe, the raw SDC Platinum download needed to be adjusted for the following reasons: ¹⁹ (1) In some cases, unsuccessful negotiations were coded as definitive deals. Because this study is concerned only with deals in which there was a signed, definitive M&A agreement, these were excluded. (2) In some cases, acquisitions of partial stakes were coded as whole-company deals. These were excluded. (3) In some cases, subsidiary dispositions and other deals with private company targets were coded as public company deals. Because the present study is concerned only with transactions involving US public company targets, these deals were

^{13.} Securities Exchange Act of 1934 § 14(a), 15 U.S.C.A. § 78(a) (2012) (solicitation of proxies); see also § 14(d)—(e) (tender offers).

^{14. § 14(}a), (d)–(e).

^{15.} Brian J.M. Quinn, Putting Your Money Where Your Mouth Is: The Performance of Earnouts in Corporate Acquisitions, 81 U. CIN. L. REV. 127, 144 (2012) (presenting evidence that "earnouts are much more common in transactions where the seller is a private firm.").

^{16.} Id.

^{17.} See infra Part IV.

^{18.} See SDC Platinum Fact Sheet, THOMSON REUTERS (Dec. 2014), https://my.refinitiv.com/content/dam/myrefinitiv/products/9086/en/BrochuresandF/sdcp latinumfactsheet1214.pdf [https://perma.cc/B44U-MY38] (archived Feb. 5, 2020) (describing the various features of the SDC Platinum database).

^{19.} Items requiring adjustment were identified in the data-gathering process as press releases and definitive transaction agreements for each deal were reviewed.

excluded. (4) In a few cases, so-called two-step M&A transactions—transactions involving a first-stage tender offer followed by a second-stage squeeze-out merger—were coded as two separate deals. These deals are two parts of a single M&A transaction and should therefore only appear once. Duplicate entries were excluded. (5) In a handful of cases, foreign target companies were coded as US companies. These were excluded from the data set.

SDC Platinum also provides an "Attitude" field that records whether the transaction was "Friendly," "Hostile," or "Unsolicited."20 However, hostile bids and unsolicited offers commonly lead to definitive agreements between the parties, at which point they become "friendly" deals. SDC Platinum has an "Attitude Change Flag," which appears to be intended to indicate when a hostile offer turns into a friendly definitive transaction, but this variable turns out to be highly unreliable. SDC Platinum also has a "Definitive Agreement Y/N" variable that should, in principle, indicate whether a definitive transaction agreement was signed between the parties. This field, too, is unreliable; the present research identified more than three hundred transactions in which this field was coded as "No" but in which a definitive transaction agreement was filed in the SEC's Edgar database.²¹ In constructing the data set, all deals were individually reviewed to confirm the existence of a definitive transaction agreement, and deals not involving definitive transaction agreements were excluded.

After the manual adjustments, the resulting deal universe consists of 1,763 deals meeting the criteria specified above.

III. DEAL OUTCOMES

Most M&A deals are completed on the originally announced economic terms, but other outcomes are also observed. In constructing the data set, each deal was assigned an outcome—a "grade" of A, B, C, D, or F—as follows:

- <u>A</u>lternate deal. Target company accepts a third-party topping bid.
- <u>Bump</u> in consideration. Merger agreement is amended to increase the per-share consideration paid to target shareholders.

^{20.} Some deals were coded by SDC Platinum as "Neutral" or "Not Applicable," the meaning of which is not clear. The attitude of each of these deals was verified by examining company press releases. See id.

^{21.} Cf. Coates et al., supra note 5, at 3 ("[W]e manually collect[ed] [M&A agreement] clauses whereas prior studies use SDC data. We find that SDC often has incorrect information about specific M&A contract clauses.").

- <u>Completed.</u> Deal is consummated on the originally announced economic terms.
- <u>Decrease</u> in consideration. Merger agreement is amended to decrease the per-share consideration paid to target shareholders.
- <u>Failure</u>. Deal is canceled for reasons other than a successful topping bid.

These five outcomes are ordered roughly from best to worst from the perspective of target company shareholders.²² In A and B deals, target shareholders receive consideration in excess of what the original merger agreement called for. In C deals, target shareholders receive the consideration specified in the original merger agreement. In D deals, target shareholders receive consideration below what the original merger agreement called for. In F deals—the main focus of this study—target shareholders receive no consideration because the deal is canceled.

The data set further breaks down F deals into three categories: acquiror withdrawal, target withdrawal, and regulatory block. In acquiror withdrawals, the acquiror fails to consummate the transaction despite the wishes of the target. Typically, the acquiror claims that some condition to the consummation of the deal has not been satisfied. The acquiror may claim that circumstances have changed since the deal was signed—for example, a deterioration in the target's business, or an inability to raise external financing given market conditions—entitling or forcing the acquiror to terminate the deal. In a small number of cases, transactions were terminated because the acquiring company's shareholders voted the deal down.²³

In a target withdrawal, the target company backs out of the deal in a situation in which an alternate deal (third-party topping bid) is not present.²⁴ This is a very uncommon deal outcome.²⁵ Most M&A transactions contemplate that target shareholders will receive a premium for their shares, and target companies generally do not want to forgo the premium.²⁶ In the data set, target withdrawals typically involve situations in which the target has agreed that its shareholders will receive consideration in the form of acquiror stock under a fixed exchange ratio, and the acquiror's stock price has nosedived since the signing of the transaction, rendering the consideration unattractive.²⁷

^{22.} See infra Part III, Table 1.

^{23.} See infra Part VIII (acquiror shareholders are entitled to vote on the deal only in some circumstances).

^{24.} See, e.g., Masulis & Simsir, supra note 7.

See id.

^{26.} See id. at 2400 (finding average and median takeover premia of fifty-four percent and forty-four percent, respectively, in a large sample of M&A transactions).

^{27.} See, e.g., Humana Calls Off Merger, CNN MONEY (Aug. 10, 1998), https://money.cnn.com/1998/08/10/deals/united/ [https://perma.cc/7DBL-9G2N]

In these (rare) cases, it may be in target shareholders' economic interest to vote against the transaction.²⁸ The parties may also mutually agree to terminate the transaction in such circumstances.²⁹ These mutual terminations are coded in the data set as target withdrawals.

Regulatory blocks involve any situation in which a regulatory agency blocks a deal.³⁰ US and foreign antitrust authorities are the most common sources of regulatory blocks in the data set. Regulatory blocks can also come from sectoral regulators, such as federal bank regulators, the Federal Communications Commission, state public utility commissions, and the like. The Committee on Foreign Investment in the United States (CFIUS) is empowered to block acquisitions of US companies by foreign companies where the transaction implicates US national security.³¹ A handful of deals in the data set were blocked by CFIUS; most involved acquiring companies domiciled in China.³²

SDC Platinum provides data fields that are pertinent to deal outcomes, but these fields do not contain sufficient (or sufficiently reliable) data to allow outcomes to be assigned at the level of granularity just described. Specifically, SDC Platinum has an "Outcome" field that classifies deals as "Completed" or "Withdrawn." However, this field classifies deals in which the target accepted thirdparty topping bids (category "A" above) as withdrawn deals. While SDC Platinum also provides an "Outcome" field, which in some cases is coded as "Sold to Other Bidder" or "Sold to Raider," the field is not reliably coded; in a number of deals involving successful third-party topping bids, the "Outcome" field does not indicate this outcome. SDC Platinum also has a "Value Amended" field that purports to indicate when there was an increase or decrease in the consideration paid to shareholders (categories "B" and "D" in the typology described above). However, this field too is inconsistently coded: a large number of deals not involving any amendment to the consideration are coded in SDC as

⁽archived Feb. 16, 2020) ("Humana Inc. is pulling the plug on its \$5.5 billion merger with United HealthCare Corp., citing a \$2.9 billion drop in United HealthCare's stock value.").

^{28.} See id

^{29.} *Id.* ("The two companies said they had 'mutually agreed' to end the union and that the decision was approved by both boards of directors.").

^{30.} See infra Part III, Table 1.

^{31.} See The Committee on Foreign Investment in the United States (CFIUS), U.S. DEP'T OF THE TREASURY, https://home.treasury.gov/policy-issues/international/the-committee-on-foreign-investment-in-the-united-states-cfius (last visited Mar. 16, 2020) [https://perma.cc/PP2C-APJM] (archived Feb. 5, 2020) (explaining the role of CFIUS and the transactions it is authorized to review).

^{32.} The attempted 2007 acquisition of 3Com Corporation by Bain Capital and Chinese technology company Huawei Technologies is an example. See Bain Says It Has Terminated 3Com Deal, N.Y. TIMES DEALBOOK (Mar. 20, 2008), https://dealbook.nytimes.com/2008/03/20/bain-says-it-has-terminated-3com-deal/[https://perma.cc/ZEA2-874S] (archived Feb. 5, 2020).

involving such an amendment. Finally, while SDC Platinum offers a "Synopsis" field describing each deal, it does not consistently provide enough information to decipher deal outcomes at the level of granularity described above.

Consequently, in constructing the data set, deals had to be manually reviewed to assign outcomes. For every deal, company press releases between the signing date and outcome date were reviewed for each transaction to determine the deal outcome. In cases of deal breakage, specific reasons for deal failure were recorded based on press releases, news reports, and SEC filings (principally 8-K filings). As a cross check, target company stock prices as of the outcome date were compared with the originally agreed consideration per share to verify the value received by target shareholders as of consummation.

Table 1. Deal Outcomes

	Count	Percent
A - Alternate Deal	33	1.9%
B - Bump in Consideration	43	2.4%
C - Completed as Announced	1,580	89.6%
D - Decrease in Consideration	17	1.0%
Acquiror Withdrawal	38	2.2%
Regulatory Block	30	1.7%
Target or Mutual Withdrawal	22	1.2%
F - Failure	90	5.1%
	1,763	100.0%

Table 1 presents the resulting deal outcomes for the 1,763 transactions in the data set. Approximately 90 percent of deals were completed on the originally announced economic terms. Of the remaining deals, a little over 4 percent achieved "premium" (A or B) outcomes, meaning the target either agreed to a transaction with a third party on superior economic terms or extracted additional consideration from the original acquiror. Around 6 percent of deals resulted in "adverse" outcomes, meaning either a contractual decrease in consideration or deal breakage (failure).

IV. MARKET EXPECTATION OF DEAL BREAKAGE

How good is the market at judging deal breakage risk at the time a deal is announced? As noted in Part I, merger arbitrage specialists seek to profit from the spread between the per-share consideration and the trading price per share of target companies in pending M&A transactions.³³ To the extent capital markets are efficient, deal spreads should equilibrate to a level that compensates the merger arbitrageur for the risk she assumes in taking a long position in the target company's stock. The main risk is the possibility that the deal will break, causing the target's stock price to fall back to the "unaffected" price it would fetch without the deal.³⁴

The deal spread thus conveys information about the market's estimate of the likelihood that a deal will break. To illustrate, consider a hypothetical deal in which one company (the target) agrees to be acquired by another company (the acquiror) for \$30 per share in cash. Prior to announcing the deal, the target company's common stock is trading at an unaffected price of \$20. The deal premium is therefore 50 percent (premium of \$10 divided by unaffected price of \$20). Assume for simplicity that the target company does not pay dividends on its common stock and that the risk-free rate is zero (no time value of money). Assume also that market participants assign zero probability to any third-party topping bid or amendment of consideration.

When the deal is publicly announced, the target's stock price immediately rises to (say) \$28. What probability does the market assign to deal breakage? The probability can be calculated as the deal spread of \$2 (that is, the \$30 in per-share consideration minus the \$28 market price) divided by the premium of \$10 (that is, the \$30 in per-share consideration minus the \$20 unaffected price), or 20 percent. In trader terminology, this is the "market-implied probability" of deal breakage. The simplified setting described here, market-implied probability of breakage consists of the deal spread divided by the deal premium.

In practice, merger arbitrageurs must adjust this calculation for the relevant risk-free rate (assumed in the example above to be zero), as well as expected target dividends per share between the signing date and the projected closing date.³⁶ Also, in deals involving stock consideration, the merger arbitrageur must short the acquiring company's stock in order to "lock in" the spread,³⁷ requiring additional adjustments to the calculation of the market-implied probability of

^{33.} See, e.g., Mark Mitchell & Todd Pulvino, Characteristics of Risk and Return in Risk Arbitrage, 56 J. FINANCE 2135, 2135 (2001) ("After the announcement of a merger or acquisition, the target company's stock typically trades at a discount to the price offered by the acquiring company. The difference between the target's stock price and the offer price is known as the arbitrage spread. Risk arbitrage, also called merger arbitrage, refers to an investment strategy that attempts to profit from this spread. If the merger is successful, the arbitrageur captures the arbitrage spread.").

^{34.} See Samuel G. Hanson, Merger Arbitrage at Tannenberg Capital, HARV. BUS. SCH. 1–3 (Jan. 2, 2018).

^{35.} See id. at 3 ("[A]n arbitrageur [can] back out a market-implied "break-even" probability of deal failure by using the net deal spread and a downside estimate.").

^{36.} See id. at 2.

^{37.} Shorting involves taking a position that will produce positive returns if the security's price falls.

deal breakage in order to account for expected acquiror dividends between signing and closing, as well as stock borrow fees that are incurred in the process of shorting.³⁸

Table 2 presents the market-implied probabilities of deal breakage for all deals in the data set, broken down by deal outcome. These probabilities were calculated on the basis of arbitrage spreads as of the day following deal announcement, adjusted for the relevant risk-free rate, projected quarterly dividends prior to closing, and estimated stock borrow fees. The average market-implied probability of breakage for all deals is 12.7 percent, measured as of deal announcement.³⁹ This is considerably higher than the observed 5.1 percent incidence of actual deal failure.40 A number of possible explanations for this divergence can be hypothesized. One explanation might be that merger arbitrageurs have systematically overestimated deal risk in the time period under study. It seems doubtful, however, that sophisticated investors would systematically overestimate deal risk over a period spanning over two decades. Another possible explanation might be that merger arbitrageurs expect deals to fail in correlated fashion during "crisis" periods, making deal risk more difficult to diversify (or more expensive to hedge) and thus causing required risk premiums in merger arbitrage to be higher than they would otherwise be. A third, related explanation might be that merger arbitrageurs "correctly" anticipate the risk of crisis periods and impound this risk into their trading decisions, but that such crises happened to be underrepresented in the twenty-three-year period under study. In other words, perhaps over a century or more, 12.7 percent of deals would ordinarily fail, but the twenty-three-year period studied here just happened to contain only one major crisis event (i.e., the financial crisis of 2007 to 2009).

^{38.} See Hanson, supra note 34, at 2.

^{39.} Specifically, the market-implied probability of failure is calculated on the basis of the deal spread observed at the close of trading on the trading day following the deal announcement.

^{40.} Rob Copeland, This Old School Hedge Fund Is Going Quant, WALL. St. J. (May 24, 2017), https://www.wsj.com/articles/this-old-school-hedge-fund-is-going-quant-1495635267 [https://perma.cc/NQ9H-HHEM] (archived Feb. 5, 2020) (According to a 2017 news report, hedge fund Magnetar Capital studied historical deal failure over a three-decade period and found that "while 7% of announced transactions eventually collapse, the market behaves as if nearly twice as many do."). While the deal universe they were studying isn't disclosed, my findings are roughly consistent with theirs.

Table 2. Market-Implied Probability of Deal Breakage

		% of All	Market-implied
	Count	Deals	p(failure) on "Day 1"
A - Alternate Deal	33	1.9%	10.5%
B - Bump in Consideration	43	2.4%	13.1%
C - Completed as Announced	1,580	89.6%	12.0%
D - Decrease in Consideration	17	1.0%	18.9%
F - Failure	90	5.1%	24.3%
All Deals	1,763	100.0%	12.7%

Broken down by deal outcome, the market on "Day 1" assigns higher probabilities of failure to deals that go on to fail (24.3 percent on average) than to deals that go on to close on the announced terms (12.0 percent). In other words, the market appears to successfully identify ex ante which deals are more likely to break. Risk arbitrageurs clearly do not have perfect foresight, however. For deals that went on to break, the market on Day 1 assigned a 75.7 percent chance of ultimate completion—in other words, arbitrageurs believed deal completion was much more likely than not.

V. TIME TRENDS

Have patterns of deal breakage changed during the twenty-three-year period under study? No obvious patterns emerge from the data. Figure 1 shows "Adverse Outcome Incidence" by year of deal announcement. "Adverse outcome" is defined as deals that break due to either regulatory blockage or acquiror withdrawal, plus deals in which there is a decrease in consideration—in other words, all deals with outcomes of D or F, excluding F deals where the target withdrew. In several years (2002, 2009, 2010, 2012, and 2018) there were no deals with adverse outcomes. 2015 was an outlier, with 12.3 percent of deals announced that year experiencing adverse outcomes, driven by an unusual number of regulatory blocks. Deals announced in 2007 had the next highest level of adverse outcomes, at 8.5 percent, driven by acquiror withdrawals in the financial crisis.

Figure 1. Time Trends

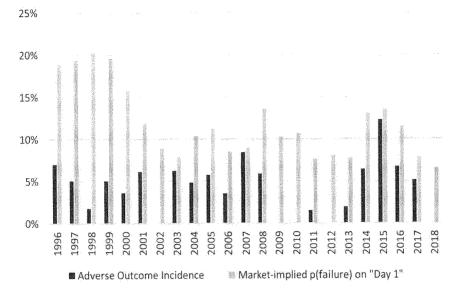


Figure 1 also shows the average "Day 1" market-implied probability of deal breakage by year. Notably, the market-implied probability of failure exceeds realized adverse outcome incidence in every year. In addition, a time trend is apparent: the first five years have the five highest values on this metric. The actual incidence of adverse outcomes for deals announced in those years was, however, typical. In other words, the spread between market expectation and realized outcomes seems to have narrowed somewhat after 2000. What might explain these trends? One possibility is that market participants learned over time to more accurately judge deal risk. Another related possibility is that merger arbitrage may have been an undercapitalized investment strategy in those earlier years. Several years of high returns may have attracted more capital to the strategy, lowering spreads and bringing market-implied probabilities of failure somewhat closer to reality. A

John Coates has observed that between 1996 and 2015, M&A contracts more than doubled in size as well as in measures of linguistic complexity.⁴⁴ Impressionistically, contractual growth has not

^{41.} Joseph A. McCahery & F. Alexander D. Roode, *The Lost Decade for Hedge Funds: Three Threats* 23–24 Table 3 (European Corp. Governance Inst. Working Paper in Law No. 486, 2019).

^{42.} See id.

^{43.} See id

^{44.} See John C. Coates IV, Why Have M&A Contracts Grown? Evidence from Twenty Years of Deals 1 (European Corp. Governance Inst. Working Paper in Law No.

obviously affected the incidence of adverse deal outcomes as defined herein. The extent to which specific contractual features are associated with greater likelihood of deal completion is a key topic for further study.

VI. TARGET COMPANY CHARACTERISTICS

The deal universe under study consists of transactions involving US public company targets with a deal value of at least \$1 billion. Even within these constraints, the characteristics of target companies vary in a number of respects that correlate with adverse outcomes. This section looks at two dimensions of variation: target company industry and size.

A. Target Industry

It would not be surprising to find that adverse deal outcomes correlate with the target company's industry in predictable ways. The incidence of regulatory blocks, for example, might be expected to be elevated in industries in which sectoral regulators are empowered to block transactions, such as in portions of the financial services, telecommunications, and public utility industries. ⁴⁵ In addition, one might predict that the incidence of acquiror withdrawals and decreases in consideration would be elevated in industries with high underlying business volatility (such as the technology sector), and correspondingly muted in industries with low underlying business volatility (such as public utilities, which are legally shielded from competition and are subject to rate regulation). ⁴⁶

To enable these and related hypotheses to be tested, all target companies in the data set were assigned to one of nine industries: Technology; Real Estate and Lodging; Energy, Metals, and Mining; Healthcare; Financial Services; Consumer/Retail; Diversified Industries; Media and Telecommunications; and Public Utilities. This classification system corresponds to the common method of industry

³³³, 2016) (examining core findings that the quantity of M&A contracts and the language of those contracts both grew in complexity over a twenty-year period).

^{45.} The Federal Reserve, the Federal Communications Commission, and state public utility commissions are empowered to block business combinations in large portions of the banking, telecommunications, and public utility sectors, respectively. See, e.g., 12 U.S.C. Sec. 1842(a) (Federal Reserve Board approval required for bank holding company acquisitions); 47 U.S.C. Sec. 214(a) (F.C.C. approval required for certain acquisition transactions).

^{46.} See RICHARD J. PIERCE, JR. & ERNEST GELLHORN, REGULATED INDUSTRIES IN A NUTSHELL 8 (4th ed. 1999) ("In connection with public utility regulation . . . the ruling agency will specify who can enter the business, what service they must provide, what prices they may lawfully charge . . . and what investments they can include in their rate base.").

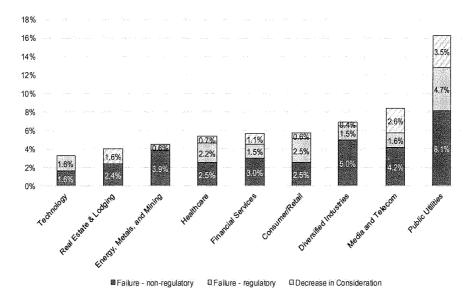
classification that securities firms employ in their equity research and investment banking operations.⁴⁷ These assignments were based on each company's primary industry code under the North American Industrial Classification System (NAICS), which are provided by SDC Platinum.⁴⁸ First, each NAICS code was manually classified into one of the nine industries. Second, each company was assigned to one of the nine industries based on the company's primary NAICS code.

Figure 2 shows adverse outcomes by target company industry, and it reveals some surprises. Neither financial services deals nor media and telecommunications deals exhibit a high incidence of regulatory blocks, despite the power of sectoral regulators to block many of these transactions. Indeed, apart from public utilities, consumer/retail deals have the highest rate of regulatory blocks, despite the fact that few consumer/retail transactions are subject to sectoral regulatory approval; almost all of these regulatory blocks were on antitrust grounds. Deals with public utility targets do, however, conform to the prediction of a high incidence of regulatory blocks. Public utility deals are uniquely exposed to regulatory risk in the form of state public utility commissions. In other sectors, regulatory blocks—whether attributable to sectoral regulators or antitrust authorities—are driven by federal regulators (or, in the case of antitrust, overseas regulatory bodies in some cases).

Banking, J.P. MORGAN, 47. About UsInvestment https://www.jpmorgan.com/global/about/investment-banking (last visited Feb. 16, 2020) [https://perma.cc/Z6G3-GHXX] (archived Feb. 5, 2020) (For example, J.P. Morgan's website indicates the following industry coverage groups in its investment banking division: Consumer & Retail; Diversified Industries; Energy; Financial Institutions & Governments; Financial Sponsors; Healthcare; Real Estate & Lodging; and Technology, Media & Telecom. This is very similar to the industry groups shown in the figure, the only difference being that the figure (1) breaks out Technology from Media and Telecom, (2) breaks out Public Utilities from Energy, and (3) omits Financial Sponsors (i.e., private equity firms, which appear only as acquirors and never as targets in the deal universe)).

^{48.} North American Industry Classification System, U.S. CENSUS BUREAU, https://www.census.gov/eos/www/naics/ (last visited Feb. 16, 2020) [https://perma.cc/8E6Z-SZSH] (archived Feb. 5, 2020) (NAICS is the standard used by federal agencies in classifying US business establishments for statistical purposes).

Figure 2. Target Company Industry



Even more surprising is the incidence of acquiror withdrawals and decreases in consideration by industry. Deals with technology company targets, far from having a high incidence of these adverse outcomes, have the lowest, with only 1.6 percent of technology company deals failing on account of acquiror withdrawals, and zero of these deals involving a contractual decrease in consideration. Likewise, deals with public utility targets, far from having a low incidence of acquiror withdrawals and decreases in consideration, have by far the highest, at 8.1 percent and 3.5 percent, respectively. Further study is needed to explain this outlier status. In any case, acquiror withdrawals and decreases in consideration do not seem to be heavily driven by the volatility of the target company's industry.

B. Target Size (Deal Value)

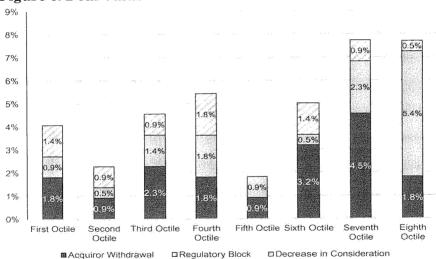
How does the incidence of adverse deal outcomes correlate with deal value (a reasonable proxy for the size of the target company)? It would be reasonable to expect that, holding everything else constant, larger deals would encounter greater regulatory resistance—in particular from antitrust authorities—because market power is likely to increase with company size. 49 No such clear hypothesis suggests

^{49.} Stephen Epstein et al., Mergers and Heightened Regulatory Risk, HARV. LAW SCH. FORUM ON CORP. GOVERNANCE (May 5, 2016), https://corpgov.law.harvard.edu/2016/05/05/mergers-and-heightened-regulatory-risk/

itself with respect to acquiror withdrawals and decreases in consideration, however. One might, for example, predict that larger target companies would retain higher quality deal counsel—experienced (but expensive) M&A attorneys—leading to "tighter" contracts and fewer acquiror withdrawals or renegotiations. At the same time, acquirors would likewise be expected to retain higher quality counsel in larger, higher-stakes deals, leading to transaction agreements that present more optionality to acquirors to eject in the event of a change of heart. In that case, acquiror counsel might neutralize the effect of target counsel.

Deal value is available from SDC Platinum. Figure 3 shows adverse deal outcomes by deal value, broken down by octile, with each octile containing either 220 or 221 transactions. The octile ranges are as follows: first octile, \$1.0 billion to \$1.3 billion; second octile, \$1.3 to \$1.6 billion; third octile, \$1.6 to \$2.0 billion; fourth octile, \$2.0 billion to \$2.6 billion; fifth octile, \$2.6 billion to \$3.6 billion; sixth octile, \$3.6 billion to \$5.6 billion; seventh octile, \$5.6 billion to \$10.3 billion; eighth octile, \$10.3 billion and up.





The figure suggests that, overall, adverse deal outcomes tend to increase with deal value. The seventh and eighth octiles have the highest overall incidence of adverse outcomes, at 7.7 percent each. The composition is different, however: the seventh octile is driven primarily by a high level of acquiror withdrawals, whereas the eighth octile is driven by regulatory blocks. Consistent with the hypotheses suggested

[[]https://perma.cc/7UJ2-B69E] (archived Feb. 21, 2020) ("[I]t is clear that it has become increasingly difficult to obtain antitrust approval of large mergers.").

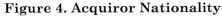
above, regulatory blocks are correlated with the largest deals: the seventh and eighth octiles have the largest incidence of regulatory blocks, at 2.3 percent and 5.4 percent, respectively. No clear pattern emerges with respect to the other two categories of adverse outcomes (acquiror withdrawals and decreases in consideration).

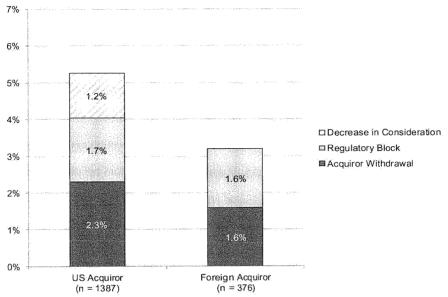
VII. ACQUIRING COMPANY CHARACTERISTICS

As described above, the deal universe under study consists of deals with US public company targets. No restriction is placed on *acquiror* characteristics, however. The data set therefore includes transactions involving not just US but also foreign acquirors, and not just public but also private acquirors. This section examines deal outcomes along several acquiror characteristics: acquiror nationality, acquiror size (for public company acquirors), and financial versus strategic acquirors.

A. Acquiror Nationality

US acquirors outnumber foreign acquirors in the deal universe by a ratio of around four to one. How do US and foreign acquirors stack up when it comes to deal outcomes? SDC Platinum supplies an "Acquiror Nation" field for each transaction in the deal universe under study here. Figure 4 shows that the incidence of adverse deal outcomes has been higher for the US than for foreign acquirors. While the incidence of regulatory blocks is roughly the same, the combined incidence of acquiror withdrawals and downward adjustments are more than twice as high for the US than for foreign acquirors, at 3.5 percent and 1.6 percent, respectively. Of course, transactions with US acquirors and foreign acquirors may differ systematically in other ways that are pertinent to deal outcomes, so caution is warranted in interpreting these statistics.





B. Acquiror Size

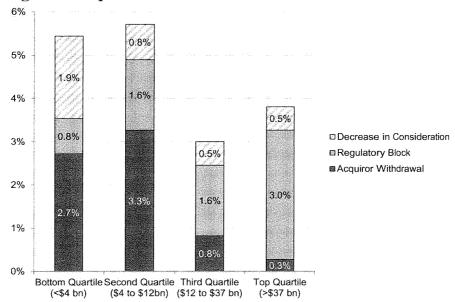
Approximately 83 percent of the transactions in the deal universe involved public company acquirors. In these transactions, the size of the acquiror (as measured by equity market capitalization) can be observed. Generally speaking, one would hypothesize that deals with larger acquirors would face more regulatory risk, since larger acquirors are more likely (all else equal) to possess more market power ex ante. 50 As for whether large acquirors are more or less likely than smaller acquirors to withdraw from pending transactions, no obvious hypothesis suggests itself. Figure 5 shows adverse deal outcomes by acquiror size, broken down by quartile. Equity market capitalizations were downloaded from Bloomberg L.P.⁵¹ As expected, regulatory blocks increase with acquiror size. More interesting is the relationship between acquiror size and the other types of adverse deal outcomes (acquiror withdrawals and decreases in consideration). These nonregulatory adverse outcomes have occurred far more frequently in the bottom and second quartiles than in the third and top quartiles of acquiror size. For acquirors in the top quartile—those with a market cap north of \$37 billion-acquiror withdrawals are extremely

^{50.} Epstein et al., *supra* note 49 ("[I]t is clear that it has become increasingly difficult to obtain antitrust approval of large mergers.").

^{51.} See Stocks, BLOOMBERG L.P., https://www.bloomberg.com/markets/stocks (last visited Feb. 16, 2020) [https://perma.cc/9JTJ-7CRR] (archived Feb. 16, 2020) (describing the financial analytics available through the Bloomberg L.P. service).

uncommon, occurring in only 0.3 percent of cases, versus an incidence of 3.0 percent in the bottom two quartiles combined.

Figure 5. Acquiror Size



Why might larger acquirors walk away from deals less frequently? One hypothesis is that they sign "better" deals by, for example, doing more thorough due diligence and thereby avoiding postsigning buyer's remorse. A second hypothesis, in tension with the first, is that larger acquirors are poor negotiators and fail to include provisions in their agreements affording optionality to back out of a deal that turns out to be bad. A third possibility is that larger acquirors give up this optionality not because they are bad negotiators but because they systematically trade optionality for other deal terms. Fourth, because (holding everything else constant) any given acquisition is "lower stakes" for a larger acquiror than for a smaller one, larger acquirors might more readily decide to bite the bullet and complete a deal whose fundamentals have gone south. Further research is needed on this topic.

C. Strategic versus Financial

M&A acquirors can be classified as either "strategic acquirors" or "financial acquirors." Financial acquirors are private equity funds, which are in the business of collecting money from large capital suppliers (pension funds, university endowments, very wealthy individuals, etc.) in order to acquire companies for a limited time period, typically four to seven years, with the expectation of disposing

of their investments through either privately negotiated sales or public offerings of securities.⁵² Private equity firms aim to produce high returns for their investors in part by improving the operations of the companies they acquire.⁵³ Acquisitions by private equity firms typically involved large amounts of debt (leverage) and are therefore often referred to as leveraged buyouts (LBOs).⁵⁴ Strategic acquirors, by contrast, are operating companies that intend to integrate the target with their existing operations rather than to sell it later for a profit.

Conventional wisdom among deal practitioners and market participants is that financial acquirors are more likely than strategic acquirors to fail to consummate transactions. 55 In part this is because of private equity's heavy reliance on debt financing. When debt markets experience disruption, private equity firms may be unwilling or unable to consummate pending M&A transactions. This happened repeatedly in 2007 and 2008, when private equity funds backed out of announced public company acquisitions of Huntsman Corporation, Sallie Mae. United Rentals, and Penn National Gaming, among others. 56 On the other hand, one might hypothesize that regulatory blocks would be observed less frequently in financial acquiror deals than in strategic acquiror deals, since strategic acquirors by definition seek to integrate the target company with existing (possibly competing) operations, whereas financial acquirors may or may not have existing portfolio company operations that are within or adjacent to the target's business line.57

SDC Platinum supplies a Y/N field for "Acquiror is a Leveraged Buyout Firm," but this field contains large numbers of errors; some acquisitions by well-known private equity firms such as Apollo Global Management, Blackstone Group, and KKR & Co. are misclassified as non-LBOs. In addition, many "club deals" involving multiple private equity acquirors are misclassified as non-LBOs, as are acquisitions by existing private equity portfolio companies. In view of these errors, a new "financial acquiror" field was constructed by reviewing announcement press releases for each deal.

^{52.} Ronald W. Masulis & Randall S. Thomas, *Does Private Equity Create Wealth? The Effects of Private Equity and Derivatives on Corporate Governance*, 76 U. CHI. L. REV. 219, 222–24 (2009).

^{53.} Id.

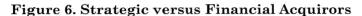
^{54.} Id.

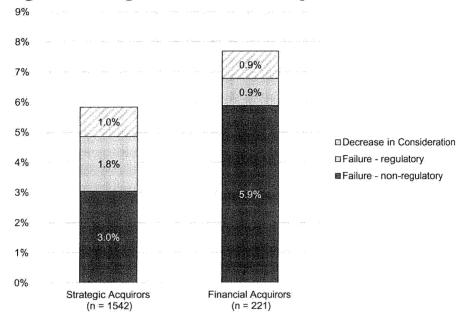
^{55.} See, e.g., Steven Davidoff Solomon, The Failure of Private Equity, 82 S. CAL. L. REV. 481, 520 (2009) ("Strategic transactions lack the optional nature of private equity acquisitions.").

^{56.} See id. at 498, 502, 514; Cain et al., supra note 5, at 566.

^{57.} See Strategic vs. Financial Buyer, CORP. FIN. INST., https://corporatefinanceinstitute.com/resources/knowledge/deals/strategic-buyer-vs-financial-buyer/ (last visited Feb. 21, 2020) [https://perma.cc/DEV7-ARQ4] (archived Feb. 21, 2020).

Figure 6 shows adverse deal outcome incidence by acquiror type (strategic versus financial acquirors). The data are consistent with the conventional wisdom and with the hypotheses described above: financial acquirors have withdrawn from deals at nearly twice the frequency of strategic acquirors. On the other hand, deals with strategic acquirors have experienced regulatory blocks at twice the frequency of deals with financial acquirors.





While these statistics should be interpreted with caution, they provide suggestive evidence that target companies should seek to extract a premium when negotiating a sale to a private equity firm, given the possible higher likelihood of deal breakage. This topic merits further study.

VIII. TRANSACTION CHARACTERISTICS

Which aspects of deal structure influence deal outcomes? This Part uncovers some correlations that are visible in the data set; questions of causation are left to future research.

A. Acquiror Shareholder Vote

Whether or not the acquiring company's shareholders are entitled to vote on the deal might be expected to affect deal completion rates. In M&A deals involving public company targets, shareholders of the target company virtually always have the right to vote on the deal. If the acquiror is a public company, its shareholders may or may not be entitled to vote on the deal. If the interaction of deal structure with the governing law of the acquiring company's jurisdiction determines whether the acquiring company's shareholders have such an entitlement. Generally speaking, if the acquiring company is a US public company, its shareholders are entitled to vote on the transaction only if the transaction involves an issuance of stock that increases the acquiring company's number of shares outstanding by more than 20 percent. If the acquiror is not a US company, the governing law in its jurisdiction may require a shareholder vote in a broader range of circumstances.

^{58. &}quot;Voting" may consist of electing to tender shares into a tender offer.

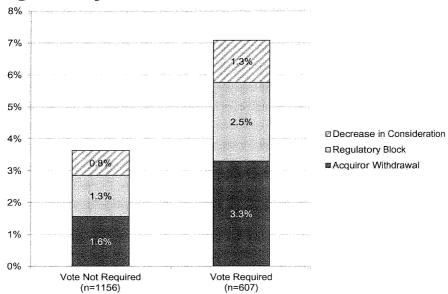
^{59.} See DEL. CODE ANN. tit. 8, § 252 (2019).

^{60.} See id.

^{61.} See NASDAQ Stock Market Rule 5635(a)(1)(B), NASDAQ STOCK MKT., http://nasdaq.cchwallstreet.com/NASDAQTools/PlatformViewer.asp?selectednode=chp %5F1%5F1%5F3%5F3%5F8%5F3&manual=%2Fnasdaq%2Fmain%2Fnasdaq%2Dequit yrules%2F (last visited Apr. 18, 2020) [https://perma.cc/5MUC-GW9Y] (archived Apr. 18, 2020) (shareholder approval); Shareholder Approval § 312.03(c)–(d), N.Y.S.C. LISTED CO. MANUAL, https://nyse.wolterskluwer.cloud/listed-company-manual/document?treeNodeId=csh-da-filter!WKUS-TAL-DOCS-PHC-%7B0588BF4A-D3B5-4B91-94EA-BE9F17057DF0%7D--WKUS_TAL_5667%23teid-94 (last visited Feb. 16, 2020) [https://perma.cc/7P4B-JHVC] (archived Feb. 5, 2020) (shareholder approval).

^{62.} See, e.g., A GUIDE TO TAKEOVERS IN THE UNITED KINGDOM, SLAUGHTER & MAY 5 (Mar. 2020), https://www.slaughterandmay.com/media/39320/a-guide-to-takeovers-in-the-united-kingdom.pdf [https://perma.cc/5ESN-QAPQ] (archived Apr. 5, 2020) (describing UK listing rules requiring approval by the offeror's shareholders under certain circumstances).

Figure 7. Acquiror-Side Shareholder Vote



It would be reasonable to hypothesize that deals conditioned on an acquiror-side shareholder vote would, everything else equal, experience a higher rate of adverse outcomes, given the additional midstream veto point on the deal. In constructing the data set, merger agreements for each deal were reviewed to determine whether the deal was conditioned on an acquiror-side shareholder vote. About one-third of the merger agreements contain such a condition. As shown in Figure 7, these deals had an adverse outcome incidence nearly twice that of deals where no acquiror-side shareholder vote was required.

B. Type of Consideration

How does consideration type—all cash, all stock, or a mix of the two—correlate with deal outcomes? On the one hand, using all-cash consideration commonly allows deals to be closed more quickly, barring significant antitrust or other regulatory hurdles.⁶³ On the other hand, private equity (leveraged buyout) transactions are virtually always all-cash deals and are widely perceived to present an elevated risk of acquiror withdrawal.⁶⁴

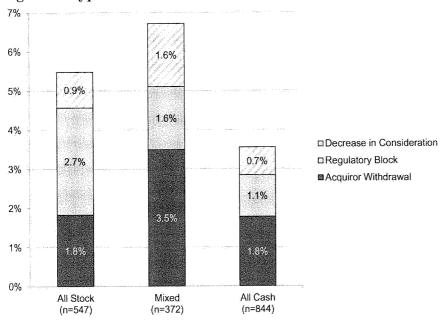
SDC Platinum includes information on consideration type. As shown in Figure 8, all-cash deals have a lower overall incidence of

^{63.} See GUIDE TO ACQUIRING A US PUBLIC COMPANY, LATHAM & WATKINS LLP 11–12 (2015), https://www.lw.com/thoughtLeadership/lw-acquiring-a-us-public-company-for-the-non-us-acquirer [https://perma.cc/X842-GWAN] (archived Apr. 5, 2020) (describing speed advantage of two-step, all-cash transactions).

^{64.} See Solomon, supra note 55 (documenting private equity deal breakage).

adverse outcomes than other consideration types. All-cash and all-stock deals have an equal incidence of acquiror withdrawals, but all-stock deals were more than twice as likely as all-cash deals to be blocked on regulatory grounds. This stands to reason: very large deals, which are associated with elevated antitrust risk, are disproportionately all stock. An interesting finding is that adverse outcomes apart from regulatory block (i.e., acquiror withdrawals and decreases in consideration) are elevated in *mixed* consideration (cash and stock) deals. Indeed, these (nonregulatory) adverse outcomes are more than twice as common in mixed-consideration deals as in all-stock and all-cash deals.

Figure 8. Type of Consideration



C. Premium

Most M&A transactions are announced at a premium: the agreed per-share consideration as of the signing date exceeds in value the unaffected, standalone trading price of the target company's shares. 65

^{65.} There are exceptions; for example, in a so-called merger of equals transaction, target company shareholders typically receive little or no premium—indeed, the concept of a "target" company often does not apply in these transactions. In constructing the data set, announcement press releases were searched for the phrase "merger of equals" or "combination of equals" to identify these transactions, which have special features worth studying in their own right. Cf. Tommaso Ebhardt & Ania Nussbaum, Plunging Peugeot Shows Who the Buyer Is in Merger of Equals, BLOOMBERG L.P. (Oct. 31, 2019), https://www.bloomberg.com/news/articles/2019-10-31/investors-know-who-the-buyer-is-

The relationship between premium offered and deal outcome is not a priori obvious. On the one hand, high premiums may reflect high motivation on the part of acquiring companies, suggesting that the incidence of acquiror withdrawals might decrease with premium paid. On the other hand, it is conceivable that acquirors are willing to pay higher premiums in exchange for greater optionality to walk away from the deal, in which case high premiums might be associated with a higher frequency of adverse outcomes. Moreover, high-premium deals might be more susceptible to buyer's remorse from overpaying, with correspondingly higher motivation to back out of a transaction ex post.

To gather deal premiums as of the announcement date. announcement press releases were reviewed to determine the pershare consideration offered to target shareholders. Where the consideration included acquiror stock on the basis of a fixed exchange ratio, acquiror stock prices as of the day before the announcement were downloaded from Bloomberg L.P. in order to calculate the value of stock consideration. The total per-share consideration as of the day preceding announcement was then compared against the target's fiftytwo-week low stock price as of that date. This fifty-two-week low was chosen as a common baseline. In many transactions, the target's share price just prior to announcement of the definitive transaction has already been affected by the prospect of the transaction. For example, the acquiror may have made public overtures or a hostile bid in advance of the definitive agreement; the parties may have announced negotiations; the existence of negotiations may have leaked to the market; the target company may have announced "strategic alternatives" or sale process; and so forth. In all but a small number of cases, the fifty-two-week low excludes these preannouncement effects. albeit at the cost of deviating from "true" unaffected price.

Figure 9 shows adverse deal outcomes by premium-to-fifty-two-week low, broken down by quartile. The correlations provide initial support for the hypothesis that high premiums reflect high acquiror motivation. The incidence of acquiror withdrawals decreases monotonically with this measure of deal premium. Whether deal premium correlates with other variables that are pertinent to deal outcomes requires further study.

in-fiat-peugeot-merger-of-equals [https://perma.cc/LT7Z-HANM] (archived Feb. 5, 2020) ("Fiat Chrysler Automobiles NV and PSA Group went out of their way to make their combination as equal as possible, shedding assets, paying special dividends and distributing board seats. It didn't take long for investors to figure out who the buyer is. Shares of Fiat Chrysler jumped 10% Thursday after the two sides announced the deal, billed as a 50-50 merger. Peugeot owner PSA fell by about the same amount, taking the typical acquirer's hit.").

0%

7% 6% 1.4% 1.7% 5% 0.5% 1.4% 4% □ Decrease in Consideration 2.1% □ Regulatory Block 3% 2.6% Acquiror Withdrawal 2% 0.5% 3.3% 0.7% 2.4% 1% 1.7%

Figure 9. Premium to Target's 52-Week Low

Bottom Quartile Second Quartile Third Quartile

IX. LEGAL ADVISORS

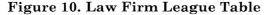
1.0%

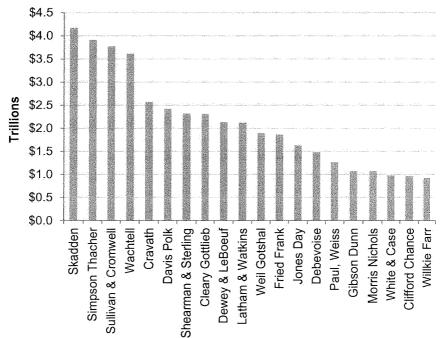
Top Quartile

Mergers and acquisitions are a high-profile and lucrative area of corporate legal practice. Clients rely on their M&A counsel to navigate legal and regulatory hurdles and to negotiate favorable deal terms. In theory, more competent and experienced M&A counsel will deliver better deal terms for their clients. As noted in Part I, target companies favor contracts that limit the acquiror's ability to withdraw from the deal, while also preserving maximum optionality for the target to accept a third-party topping bid if one materializes. 66 Acquiring companies prefer the opposite: contracts that preserve their ability to withdraw from the deal, while also limiting the target company's ability to accept a third-party topping bid.

Figure 10 shows the twenty law firms with the leading market shares in the deal universe, as measured by the aggregate value of transactions on which the law firm served as advisor to either the target or acquiror. Skadden leads the league table with over \$4 trillion in deals involving US public company targets of at least \$1 billion in the 1996 to 2018 time period. There is a sizeable gap of over \$1 trillion between the fourth and fifth firms. This discontinuity suggests a distinction between what can be labeled the "bulge bracket" M&A law

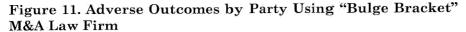
firms—the top four in this league table, consisting of Skadden, Simpson Thacher, Sullivan & Cromwell, and Wachtell—and the rest.





How do deal outcomes correlate with engagement of bulge bracket M&A counsel? SDC Platinum indicates the law firm(s) that advised the parties in each deal. Figure 11 shows adverse deal outcomes for deals in which only the target company engaged a bulge bracket law firm and those in which only the acquiring company engaged a bulge bracket law firm. These two categories comprise 930 deals, or a little more than half of the deal universe. This initial cut at the data provides suggestive evidence that the most experienced M&A law firms deliver value to their clients. Deals in which a bulge bracket firm represents the target but not the acquiror experience a significantly lower frequency of acquiror withdrawals than do those in which a bulge bracket firm represents the acquiror but not the target. This finding is consistent with the hypothesis that the most experienced M&A counsel (measured at the law firm level) succeed in negotiating superior deals for their clients, at least when matched against less experienced M&A counsel.67

^{67.} Cf. C.N.V. Krishnan & Ronald W. Masulis, Law Firm Experience and Merger and Acquisition Outcomes, 56 J.L. & ECON. 189, 189 (2013) (finding that "top-market-



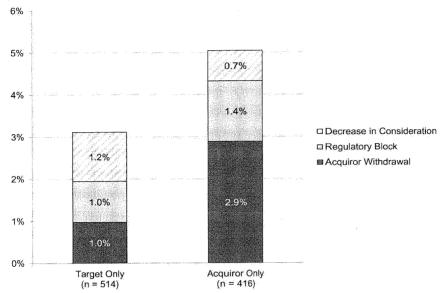
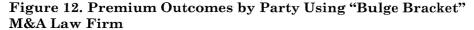
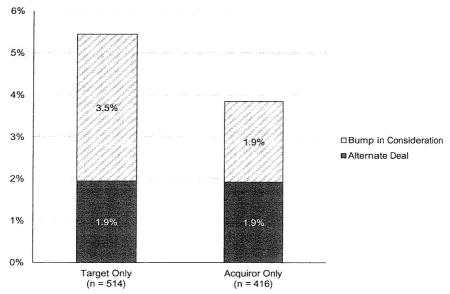


Figure 12 provides further preliminary support for the hypothesis that law firms matter. Instead of showing adverse outcomes, it shows premium outcomes: deals in which the target later received a more favorable deal (from an economic perspective) than the one originally signed. Here again, target companies have achieved better outcomes at higher frequencies when they have retained bulge bracket counsel and the acquiror has not. Acquirors have done better—specifically, they have avoided the need to pony up additional consideration—when they alone have used a bulge bracket firm.

share law firms are associated with a number of important bid outcomes and characteristics.").





As with the other statistics reported in this Article, these correlations should be interpreted with caution. Use of bulge bracket counsel by one party or the other may correlate with company or deal characteristics in systematic ways that are relevant to deal outcomes. While the "target only" and "acquiror only" deals are roughly the same size on average—\$5.4 billion and \$5.6 billion, respectively—the deals may vary along other important dimensions. The influence of legal counsel on transactional outcomes has previously been studied in a variety of settings; ⁶⁸ extending these studies to M&A deal outcomes may be a fruitful area for future research.

X. Postsigning Market Developments

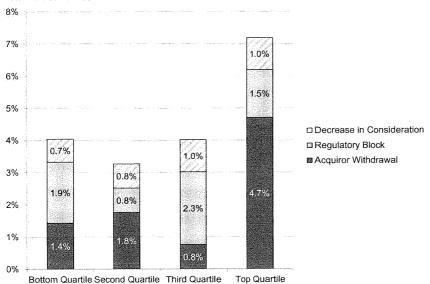
So called financing conditions—provisions in merger agreements specifying that the acquiror's obligation to complete the transaction is conditioned on its ability to raise the requisite external financing—are very unusual in public company M&A deals. Data from SDC Platinum indicate that only twenty-one deals (1.2 percent of deals) in the deal

^{68.} See, e.g., Adam B. Badawi & Elisabeth de Fontenay, Is There a First-Drafter Advantage in M&A?, 107 CALIF. L. REV. 1119, 1120–21 (2019); John C. Coates IV, Explaining Variation in Takeover Defenses: Blame the Lawyers, 89 CALIF. L. REV. 1301, 1302 (2001); Elisabeth de Fontenay, Law Firm Selection and the Value of Transactional Lawyering, 41 J. CORP. L. 393, 395 (2015); Julian Nyarko, Stickiness and Incomplete Contracts 6 (Working Paper, 2019).

universe contain such a condition. Of the twenty-one deals with a financing condition, there were four acquiror withdrawals and no other adverse outcomes. Given the scarcity of financing contingencies in the deal universe, one might hypothesize that postsigning developments in financial markets would have little bearing on deal outcomes.

Figure 13 analyzes the relationship between adverse deal outcomes and changes in the BBB bond spread during the period between deal signing and deal outcome, broken down by quartile. The BBB bond spread, downloaded from the Federal Reserve Economic Database, ⁶⁹ measures the difference between the yields on a basket of BBB-rated corporate bonds and the risk-free rate. It is commonly used as a measure of financial disruption, as bond spreads tend to spike during financial crises, when the availability of debt financing tends to decrease sharply. ⁷⁰

Figure 13. Change in BBB Bond Spread from Signing to Outcome Date



The figure indicates that transactions in the top quartile (i.e., those coinciding with the largest increase in the BBB bond spread between the signing date and the outcome date) experienced adverse outcomes with substantially greater frequency than those in lower

^{69.} FRED Economic Data, FED. RESERVE BANK ST. LOUIS, https://fred.stlouisfed.org (last visited Feb. 16, 2020) [https://perma.cc/E58Q-KQ8P] (archived Feb. 5, 2020).

^{70.} See, e.g., Ben S. Bernanke, Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression, 73 AM. ECON. REV. 257, 262-64 (1983) (explaining that the banking problems of the Great Depression "disrupted the credit allocation process by creating large, unplanned changes in the channels of credit flow.").

Combined acquiror withdrawals and decreases in quartiles. consideration were 5.7 percent in top quartile, more than double the frequency observed in any other quartile. At least two possible explanations suggest themselves. First, acquirors may sometimes find that closing a transaction during a period of financial market disruption is practically or legally infeasible. Committed sources of debt financing may renege on their commitments; alternatively, the acquiror or its financing sources may conclude that completing a transaction under stressed conditions may constitute a fraudulent conveyance under applicable debtor-creditor law. Second, it may be that acquirors tend to exercise otherwise latent optionality in the merger agreements (apart from explicit financing contingencies) at higher frequencies during periods of financial market disruption. Further research on this topic may shed light on the degree to which "efforts" are contractible, even in high-stakes situations with sophisticated and deep-pocketed contracting parties.

XI. CONCLUSION

Nine out of ten M&A transactions are completed on the originally announced economic terms. The remainder end in some other outcome: a successful topping bid, an amendment to the economic terms of the transaction, or deal failure. M&A deal breakage provides an opportunity for the empirical study of contracting outcomes in a high-stakes setting with sophisticated and deep-pocketed parties, and in which all agreements are publicly available. This Article provides an initial look into a new data set that was constructed specifically for the study of M&A deal breakage, a topic of interest to business law scholars, transactional lawyers, other deal professionals, and merger arbitrage investors.