DO TAKEOVER LAWS MATTER?

EVIDENCE FROM FIVE DECADES OF HOSTILE TAKEOVERS

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Abstract

This study evaluates the relation between 16 U.S. takeover laws and hostile takeover activity from 1965 to 2013. Using a hand-collected dataset of largely exogenous legal changes covering 198,845 firm years, we find that certain takeover laws, such as poison pill laws, have had an effect on takeover activity running counter to their original intent, in some instances actually correlating with increased hostile activity. We also provide evidence that our Takeover Index, constructed from the full array of takeover laws, provides a better measure of firms' governance environment than prior studies that have focused almost exclusively on business combination statutes. We conclude by examining the relation between the Takeover Index, firm value, and takeover premiums, and find a non-linear effect across time vintages.

I. Introduction

The takeover battle for Erie Railroad is legend. In 1868, Cornelius Vanderbilt, the railroad baron, began to build an undisclosed equity position in Erie. When the group controlling Erie discovered this, they quickly acted to their own advantage, issuing a substantial number of additional shares of Erie stock for Vanderbilt to purchase. One of the managers, James Fisk, purportedly said at the time that "if this printing press don't break down, I'll be damned if I don't give the old hog all he wants of Erie." The parties then arranged for their own bought judges to issue dueling injunctions prohibiting the other from taking action at Erie. The battle climaxed when Erie's management fled to New Jersey with over $7 million in Erie's funds. By the time the dust settled, they were still in control and Vanderbilt was out over $1 million.[1]

The Erie story is apocryphal, but informative for any attempt to measure the effect of takeover laws. Takeover laws are enacted to regulate takeover activity, and they often take the form of *anti*-takeover laws intended to thwart hostile takeovers. However, these laws can have the opposite effect of their intended purpose. Although they provide protection to targets, they also implicitly rule out certain defensive tactics and therefore provide protection and increased certainty for prospective hostile bidders (Kahan and Rock, 2002). In the case of Erie, it is the bidder that may have benefited from more legal structure, not the target.

The varying effect of takeover laws also has implications for the theory that the takeover market is an external disciplinary mechanism for corporate governance (Manne, 1965). Numerous studies have used variation in specific takeover defenses or anti-takeover laws as a proxy for changes in firm corporate governance.[2] The use of an external influence, such as takeover laws, has come into favor to sidestep the endogeneity problem that arises when measuring takeover defenses at the firm level (Core, Guay, and Rusticus, 2006). But while specific studies have focused on individual or selected anti-takeover statutes, none have examined the full array of takeover laws, and it remains unexplored how the full spectrum of

[1] The story for the Erie railroad is detailed in Gordon (2004) and Markham (2002).
[2] See, for example, Bertrand and Mullainathan (1999, 2003); Schwert (2000); Karpoff and Malatesta (1989)

the legal environment actually impacts hostile takeover activity, either encouraging or discouraging such activity over an extended period of time. Moreover, Coates (2000) criticizes many studies of antitakeover provisions for failing to have a longitudinal time frame sufficient to account for changes in legal regimes and markets. Our study addresses these gaps in the literature.

This study uses a hand-collected dataset of 16 different takeover laws and court decisions from 1965 through 2013 to measure the variation in takeover laws and their long-term impact on hostile activity through time. We also utilize a novel hand-collected dataset of M&A hostility back to 1965. We find that the general susceptibility to a hostile takeover peaked in 1973 and has decreased substantially since 1987. As a proportion of total M&A equal-weighted volume, hostile activity peaked immediately prior to the passage of the Williams Act in 1967 at 40% and has since declined to about 5% in 2013. Although hostile activity is less common than it once was, it has certainly not disappeared.

Bertrand and Mullainathan (1999) use variation in the timing and adoption of business combination (BC) laws by states to proxy for corporate governance quality of firms incorporated in each state. Numerous studies conducted since then rely on business combination laws as a plausibly exogenous proxy for governance quality (Karpoff and Wittry, 2014). However, the relation between these laws and actual levels of hostile takeover activity remains questionable, with Comment and Schwert (1995) concluding that the passage of business combination laws had no discernible deterrence effect on takeover rates. In contrast, by examining the full spectrum of takeover laws over a longer sample horizon we find that the passage of business combination laws was followed by a significant decline in the likelihood of firms being successfully taken over through hostile means. However, we also note that the value-weighted proportion of firms covered by these laws jumped from 0% pre-1985 to over 95% by 1990. Thus, it is unclear whether BC laws provide sufficient cross-sectional variation in coverage to comprise a valid measure of external pressures on firms' corporate governance.

We expand on this analysis by examining the extent to which a wide array of takeover legislation and case law has influenced hostile activity levels over the past five decades. This analysis includes the Williams Act in 1968, the first generation takeover laws and their repeal, business combination laws, fair

price provisions, control share acquisition statutes, control share cash-out statutes, poison pill cases and statutes, expanded constituency laws, disgorgement provisions, anti-greenmail laws, golden parachute restrictions, tin / silver parachute blessings, assumption of labor contract laws, and the Revlon, Unocal, and Blasius standards of review. By focusing on state-level variation in the takeover environment that is largely exogenous to firm-level decisions, such as adopting a classified or staggered board, we are able to more cleanly measure the true impact on hostile activity, takeover premiums, and firm value.

Our empirical results imply that while many of these cases and pieces of legislation have influenced takeover activity, many of them have done so in a way that may not have been anticipated by the original drafters. For example, a firm's probability of being successfully taken over through hostile means *increased* significantly following poison pill validation by case law and state statutes. While many practitioners consider poison pills to be one of the most powerful anti-takeover devices available to incumbent management, our results suggest that this takeover defense may still provide hostile bidders with a clear roadmap for the necessary hurdles to overcome in a successful takeover battle. Our evidence suggests that this clarity appears to benefit bidders more than targets in terms of maintaining target independence in the face of a takeover battle.

We conclude the study by constructing a firm-level index of takeover susceptibility from the significant legal determinants in the hostile takeover models (hereafter, Takeover Index), and examining the relation between the Takeover Index and firm level economic outcomes. We find that during the 1965-1979 period, firm value is decreasing in takeover susceptibility. This era was characterized by coercive and abusive tender offers, which prompted much of the early anti-takeover legislation. In contrast, firm value is increasing in firm takeover susceptibility in the 1980s, 1990s, and 2000s. Shareholders thus appear to value the disciplinary market for corporate control, and the secular decline in hostile takeover rates in recent years may perpetuate problems of the managerial "quiet life" (Bertrand and Mullainathan, 1999). To the extent that firms deploy similar defenses to thwart shareholder activism, this trend underscores the relation between takeover defenses and corporate governance.

We also find that takeover premiums are significantly negatively related to the Takeover Index. This supports the idea that firm susceptibility to hostile takeovers reduces managers' bargaining power in change-of-control transactions. Similarly to the firm value effects, the relation is non-linear through time and strengthens in the latter portion of the sample. In terms of economic magnitudes, the negative effect on firm value and the positive effect on takeover premiums are roughly offsetting.

Our study is unique in that it covers all U.S.-incorporated firms and measures hostile takeover levels over a five-decade period. It documents the efficacy of common governance proxies – namely takeover defenses – but on a level that is largely exogenous from managerial influence. It thus advances prior studies of firm-level defenses or subsets of takeover legislation such as BC laws. Our Takeover Index offers researchers the most comprehensive tool currently available to measure external forces on corporate governance engendered by the legal environment and provides new evidential support for the beneficial role that the disciplinary market for corporate control can play in corporate governance.

II. Existing Literature

M&A and corporate governance each represent a voluminous line of literature. Our study primarily draws upon three areas within these fields: A) the relation between takeover laws and corporate governance, B) the wealth effects of takeover laws, and C) the effect of takeover laws on hostile takeovers.

A. Takeover laws and corporate governance

Studies which have examined attributes related to corporate governance have principally focused on a class of second generation laws, BC laws. These laws prohibit bidders from engaging in a business combination with a target for a pre-set period, typically three to five years, upon the bidder's acquisition of 20% or more of the target's equity unless the purchase is pre-approved by the target's board. Table 1 defines these and other cases or laws under consideration throughout this study.

Previous studies have largely found an inverse relation between measures attributed to governance and the enactment of BC laws. Bertrand and Mullainathan (1999; 2003), for example, examine the enactment of state business combination laws between the period of 1976 and 1995 and whether they allow managers to live the "quiet life." They find that workers' wages rise and that new investment in plants falls in the wake of the passage of business combination laws. The authors conclude that "better governance does in fact improve economic performance and does not involve only a transfer of rents to shareholders." Giroud and Mueller (2010) refine these results and find that business combination laws have greater effect in non-competitive than in competitive industries.

Other studies examining state anti-takeover laws and their effect on corporate governance have focused on specific corporate governance attributes. Garvey and Hanka (1999) examine second generation anti-takeover laws and firm leverage and find that firms protected by the second generation anti-takeover laws reduce their leverage relative to firms unprotected from the takeover market. Cheng, Nagar, and Rajan (2005) find that the enactment of second generation anti-takeover laws resulted in reduced managerial stock ownership. Francis, et al. (2010) also examine the effect of state business combination laws on bondholders, finding that bond prices increase and bond yields decrease in states with stricter business combination laws.

Gompers, Ishii, and Metrick (2003) create the G-Index, a measure of twenty-four corporate governance and takeover related provisions including six types of state takeover laws (business combination laws, golden parachute restrictions, control-share acquisition laws, control-share cash-out laws, expanded constituency laws, and fair price laws). The governance, or "G-Index" covers the S&P 500 and approximately 900-1,300 additional firms and is drawn from Investor Responsibility Research Center data which is published in six different volumes, September 1990, July 1993, July 1996, February 1998; November 1999 and February 2002. The authors find that "firms with stronger shareholder rights have higher firm value, higher profits, higher sales growth, lower capital expenditures, and made fewer corporate acquisitions." Bebchuk, Cohen and Ferrell (2009) attribute these findings largely to six provisions internal to the corporate governance of the firm, which they refer to as the entrenchment, or

"E-Index." Cremers and Ferrell (2013) expand the E and G indices over the 1978 to 2007 period for approximately 1,000 firms and find that the correlation between firm value and shareholder rights is largely driven by the Cremers, Nair, and John (2009) takeover factor which captures time-varying investment opportunities. Though debate continues over the potential endogeneity of these types of firm-level proxies, current evidence indicates that the primary channel through which they influence firms may be takeover susceptibility.

B. The wealth effects of takeover laws

Studies on the wealth effects of state anti-takeover laws have largely focused on the announcement and enactment of second generation anti-takeover laws. Studies of second generation anti-takeover laws generally find a reduction in shareholder and bondholder value in the wake of their enactment (Pugh and Jahera, 1990; Sidak and Woodward, 1990; Karpoff and Malatesta, 1989; Hackl and Testani, 1988; Schumann, 1988; Romano, 1987). Similar findings follow the adoptions of extreme second generation anti-takeover statues (Ryngaert and Netter, 1988 [on Ohio law]; Szewczyk and Tsetsekos, 1992, Karpoff and Malatesta, 1990; 1995 [on Pennsylvania law]; Swartz, 1998 [on Massachusetts law]). These studies are primarily event studies around stock price reactions to news reports or the enactment of these statutes. They do not analyze the longer term wealth effects of these takeover laws, a gap highlighted by Coates (2001) who notes that the impact of these laws varies over time as capital markets shift.

C. The effect of takeover laws on hostile activity

Studies on the general effect of takeover laws on hostile activity have largely focused on individual laws. Comment and Schwert (1995) examine the general effect of business combination laws on hostile takeover activity. They find that poison pill and control share laws result in higher premiums but do not appear to significantly deter M&A transactions, on average. This is contrary to a prior study by Hackl and Testani (1988) which examines business combination laws through 1988, finding that these

laws reduced hostile takeover rates, with states passing these laws experiencing a 48% reduction in relative hostile takeover rates. Similarly, Jarrell and Bradley (1980) find that takeover premiums increased significantly following the enactment of the first generation antitakeover laws, and Smiley (1981) documents a significant deterrent effect on hostile bids from these regulations.

Our study builds on each of these three research areas by exploring the wealth effects of a full array of takeover laws over a five decade period.

III. Sample Description

To compile a list of takeover laws from 1965 through 2013 we draw upon various data sources. Aranow, et. al (1977) provide detailed tables on the provisions of the first generation antitakeover statutes adopted by most states. Jarrell and Bradley (1980) provide the effective dates of most of these statutes. The RiskMetrics publication, Takeover Laws, provides details and effective dates for the second generation antitakeover statutes as well as details of many relevant cases. Barzuza (2010) reports further detail on the strength of poison pill statutes and cases, strength of constituency statutes, and relevant cases for the application or rejection of standards of review for directors (Revlon, Unocal, and Blasius). We supplement these data with our own search of relevant case law through WestLaw, LexisNexis, and readings of state business codes.

Our data on M&A and hostile takeover activity comes from several sources. We rely on SDC coverage from 1981 through 2013. We use data provided by Schwert (2000) for the period 1975 through 1980. For the period 1965-1974 we hand-collect M&A hostility by first obtaining data on all CRSP delistings due to merger-related reasons. We then search for Wall Street Journal articles about the delistings and drop any observations for which we are unable to locate articles describing the merger/takeover. For those found, we code whether the article indicates hostility as part of the bidding process for the target. For this purpose, we measure hostility as an unsolicited deal accompanied by target resistance for a period of time. This provides a fairly consistent measure of hostility across all of our data sources.

For all data sources, we code observations for successfully completed deals of U.S. publicly-traded targets by both domestic and foreign acquirers. We exclude the (historically) regulated industries of banking & financials (SIC codes 6000-6999), railroads (SIC codes 4000-4099), airlines (SIC codes 4500-4599), and utilities (SIC codes 4900-4999).

We combine our merger data with CRSP/Compustat to obtain a sample of 198,845 firm-years with 4,453 merger-related delistings. We merge takeover law coverage for all firms based on their state of incorporation data, which we first draw from the WRDS SEC Analytics Suite, then from SDC, and finally from Compustat if the prior data source fails to match a given firm.[3] We supplement this approach with incorporation data from historical Moody's manuals, which provides much more comprehensive coverage for sample firms in the 1960s and 1970s.

The disciplining force of the hostile takeover market depends upon takeovers being a real threat. Figure 1 reports the equal-weighted hazard rate of being acquired by hostile takeover in any given year. The figure shows that the unconditional susceptibility to a hostile takeover peaked at .52% in 1973 and peaked again in 1987, in the midst of the fourth merger wave at .23%. Since 1995 the hazard rate has fluctuated from near zero to 0.10%.

Figure 2 sets forth the equal-weighted probability of hostility conditional on a firm being successfully acquired in a given year. The 1960s, 1970s and 1980s were decades characterized by high rates of hostile takeover activity. In 1967, just before the enactment of the Williams Act in 1968, 40% of takeovers were hostile, a number which fell quickly by 1969 to 8.3%. In the 1970s another wave of hostile activity peaked at 28.9% and then again fell. The next peak was in the 1980s, around the demise of first generation anti-takeover laws. Since that time and with the regime shift that occurred in the late 1980s, the chance of any acquisition being hostile has averaged below 5%. However, hostile activity recently surged in 2013, following the depressed market valuations in the recent recession and coinciding with a rise in shareholder activism.

[3] SEC Analytics provides annual state of incorporation tagged in public filings through Edgar, with coverage from 1995 onwards.

Table 1 provides a concise summary of the state laws and cases in our study. We cover 12 different types of state takeover laws, one federal statute, and three state court standards of review over the 49 year period of our study. Coverage in our study begins with the federal Williams Act which became effective for all states on July 29, 1968. In addition to legislative acts, we also code for the Revlon, Unocal, and Blasius takeover standards of review. These standards are named for the Delaware court cases which adopted them. Many other states have either accepted or explicitly rejected these standards through subsequent case law (Barzuza, 2010). In sum, our study evaluates the effects of these 16 laws and cases on hostile takeover activity from 1965 through 2013.

Table 2 reports the dates of adoption in each state for each of the takeover laws and cases. For first generation takeover statutes we code the date of their adoption and place an asterisk next to the dates if the statutes fail to provide target managers and/or directors with power to seek an injunction to block a takeover. We omit these statutes in subsequent tables. We also mark in the column "1st Gen Days" the number of days the first generation takeover statute provided for state review of the tender offer, since the primary effect of these statutes was to delay the takeover. First generation state anti-takeover statutes were eventually struck down in a series of court cases culminating in the Supreme Court. In "1st Gen Case" we mark the date a federal court struck down that states' first generation statute. All of these statutes were effectively overturned by the Supreme Court's decision in *Edgar v. Mite* which was decided on June 22, 1982. We subsequently code as zero all 1st generation statutes after this date.

Poison Pill statutes (PP Statute), poison pill case decisions (PP Case), and expanded constituency statutes (Exp. Const.) are of average strength unless otherwise noted as strong (S) or weak (W). Poison Pill statutes are coded weak if they provide the board solely the ability to adopt a poison pill which is subject to judicial review. The statutes are coded strong if they provide that a board can adopt dead-hand or no-hand poison pills. Dead-hand and no-hand pills, prohibited in Delaware by court decision, allow for a board to provide that the pill will survive for a certain period after even the directors are voted out of the board. In addition to including state cases we search for court cases validating the use of poison pills of varying strength. Bebchuk and Jackson (2014) theorize that poison pill statutes are vulnerable to

challenge due to preemption by the Williams Act, but none have been overturned to date. Constituency statutes are average strength if the board has the option to consider, and coded strong if the board is required to consider, interests other than those of its shareholders in a takeover decision. These expanded constituency interests include employee welfare, impacts on the local economy, environmental concerns, etc.

For Revlon, Unocal, and Blasius standards we note when they are either adopted or rejected on a date, by noting "Yes" (Y) if adopted or "No" (N) if rejected. Listed in the bullet points below the table are dates of adoption by the few states adopting: control share cash-out statutes for Maine, Pennsylvania, and South Dakota, disgorgement statutes for Ohio and Pennsylvania, anti-greenmail statutes for Arizona, Minnesota, New York, Tennessee, and Wisconsin, tin parachute blessing statutes for Pennsylvania and Rhode Island, and assumption of labor contract statutes for Delaware, Illinois, Massachusetts, Pennsylvania, and Rhode Island. We observe that several states passed multiple takeover statutes within the same bill. For example, on July 22, 1987, Arizona adopted its business combination law, control share acquisition statute, expanded constituency statute, anti-greenmail statute, and golden parachute restriction. Nonetheless, most states passed separate enactments of given laws, providing ample variation in firm-level coverage for empirical tests.

The majority of these statutes include provisions for companies to opt out of their application by board decision. Consistent with other studies (Comment and Schwert, 1995), we do not take into account opt outs from the takeover laws in our sample due to evidence that there is a low number of opt outs for these laws (Listokin, 2010). We also exclude from our laws the Indiana, Iowa, Massachusetts and Oklahoma laws requiring mandatory classified boards, because of the high rate of opt outs from application of these statutes (Faleye, 2007).[4]

Table 3 reports the frequency of firm-years covered by various laws over the 1965-2013 sample period on both an equal-weighted and asset value-weighted basis. The strength of certain laws are coded

[4] Additionally Georgia's fair price and business combination statute and Tennessee's control share acquisition statute are opt-in statutes (Karpoff and Wittry, 2014). These statutes cover 1.17% of our sample in firm years.

as follows: First generation laws are coded zero before a state's enactment date, then one through four depending on the length of the waiting period granted by each statute – one for 40 days or less, two for 41-80 days, three for 81-120 days, and four for more than 120 days. Poison pill is coded zero prior to the Moran decision, one after the Moran decision for all states, back to zero if a state adopts a weak statute or case, one after a state approves the use of standard poison pills through either statute or case decision, and two after a state approves the use of strong (dead-hand or no-hand) poison pills through statute or case. Expanded constituency is coded one after a state adopts a standard statute or two after adopting a strong statute. Again, these indications are provided in the Table 2 dates.

The sample covers 198,845 firm years, and the equal-weighted coverage frequencies are relative to the full sample period. First generation takeover laws in their varying strength cover the 33 states but because of their short duration only cover 7,255 firm years. Second generation takeover statutes in the form of business combination laws cover 33 states and because most remain in effect today, cover 121,644 firm years. Standard strength poison pill statutes and cases cover 46 states, 139,162 firm years and 70% of the equal-weighted firm years. In contrast, golden parachute restriction statutes were enacted in only two states and cover 4,061 firm years or about 2% of the equal-weighted firm years in our sample. Finally, assumption of labor contracts applies to five states, but because one of these is Delaware it covers a large proportion of the sample at 83,495 firm years.

In terms of cases, the Revlon standard has been adopted by 12 states while 10 states have explicitly rejected the Revlon standard. The Unocal standard has been adopted by 14 states and rejected by 10 states. The Blasius standard has been adopted by 6 states and rejected by nine states. These results are in accord with Barzuza (2010) who highlights that not all states adopt these standards, providing variation to takeover regimes not just in laws but also in cases. The following section provides empirical analysis of the various takeover laws and their impact on takeover activity across the U.S. and through time.

Table 4 reports the correlation matrix for all the takeover law variables. In general, the laws are not highly correlated, mitigating concerns about multicollinearity in subsequent regressions.

Table 5 reports information on the states of headquarters and incorporation for firms in our sample. This information highlights the variance in incorporations and headquarters over time due to firm choices with respect to jurisdiction of incorporation and the relevant takeover laws applicable to the firm. Panel A reports incorporations over time for the top ten states of incorporation over the time period of the entire sample. The column (All) is for the entire time period and shows that Delaware dominates the market for corporate charters with 54.57% of incorporations out of 211,929 observations.[5] The next biggest state is New York with 5.15% and thereafter California with 4.38%. The top 10 states comprise 81.71% of all incorporations. The remaining columns report the shifting number of incorporations over time. Delaware goes from 47.3% of incorporations during the period 1965-1979 to 61.68% of incorporations in the period 2000-2013, showing the increasing dominance of Delaware. Meanwhile New York goes from 9.5% of incorporations in 1965-1979 to 2.63% in the 2000-2013 period. New Jersey, Ohio and Pennsylvania also experience significant declines from 3.16%, 4.21% and 4.02% of incorporations in the period 1965-1979 to 1.12%, 1.51% and 1.44% in 2000-2013, respectively. Nevada has specifically set out to draw incorporations and the figures show its success as it goes from 1.44% of incorporations in 1965-1979 to 7.68% of incorporations by 2000-2013.

Panel B reports headquarters for the top ten states of headquarters over the time period of the entire sample. Delaware is not included since only 0.28% of firms headquarter in that state during the sample time period. Similarly, Nevada has only 1.18% of firm headquarters. The jurisdiction with the highest number of headquarters is California (16.48%) then Texas (9.57%) and New York (9.22%). Headquarters are more heterogeneously dispersed than places of incorporation and the top ten comprise only 65.31% of headquarters compared to 81.71% for all incorporations. The number of headquarters also shifts over time. California goes from 10.07% to 19.46% representing its success in technology companies. Texas goes from 8.38% to 10.26% while New York declines from 11.32% to 8.31%. The large differences between headquarters locations in Panel B and incorporations in Panel A highlights that

[5] In subsequent tables, our requirements for firm characteristics control variables reduce the sample size.

companies often choose Delaware, Nevada or jurisdictions other than their headquarters state for incorporation, a fact we explore further in Panel D.

Panel C reports initial incorporations over time. The difference between Panel A and Panel C is that Panel C reports only the first time an observation appears in the sample. These figures show more starkly the dominance of Delaware and the rise of Nevada. Delaware has 45.88% of new appearances in the period 1965-1979, but this figure rises to 66.31% by 2000-2013. Meanwhile Nevada goes from 1.79% in the period 1965-1979 to 19.61% by 2000-2013. The rise of Nevada is likely attributable to their lax regulation laws and efforts of the state to attract incorporations (Barzuza and Smith, 2013). New York and California also experience steep declines from 9.09% and 4.44% respectively in 1965-1979 to 0.52% and 1.82%, respectively, in 2000 to 2013. The remaining states remain relatively static in the number of initial incorporations over time.

Panel D reports changes in headquarters versus incorporations over time. The numbers show that over time more companies are opting to incorporate outside their jurisdiction of headquarters to either Delaware or Nevada. In 1965-1979, 39.53% of companies had the identical headquarters and incorporation state, a number which falls to 23.59% by 2000-2013. For companies that have differing headquarters and incorporation, Delaware dominates with 53.97% of all incorporations and Nevada next at 3.53% over the entire sample period. However, a large number of corporations opt for different states with 11.66% of companies in the sample opting to incorporate outside their headquarters state and not in Delaware or Nevada. These numbers show perhaps a greater degree of selection by companies than other studies which have reported that for IPOs, the choice is either the home state or Delaware (Daines, 2002). These figures show some level of firm choice in jurisdiction, but that the vast number of companies still select either their headquarters state, Delaware, or Nevada as their place of incorporation. We defer our exploration of reincorporations to Table 13, as a robustness check, but note that they are not common in our sample.

IV. Empirical Results

Bertrand and Mullainathan (1999, 2003) test the quiet life hypothesis of managerial entrenchment using business combination (BC) laws as a proxy for firms' corporate governance environment. However, Comment and Schwert (1995) conclude that BC laws have no discernible impact on aggregate M&A levels. It thus remains to be seen whether BC laws impact a) aggregate M&A levels, b) the unconditional probability of a firm being successfully taken over through hostile means in any given year, and c) the likelihood of observing hostility conditional on successful M&A activity. In Table 6 we examine these three possibilities.

We construct logit models that predict a) in Columns (1) and (2), b) in Columns (3) and (4), and c) in Columns (5) and (6).[6] We include the following control variables: log of firm age and its square, log of firm total assets, a time trend counter of years, and capital liquidity. Capital liquidity is defined as the rolling four-quarter average of the spread between the rate on Commercial & Industrial (C&I) loans minus the Federal Funds rate. Harford (2005) documents that this spread is a significant predictor of aggregate M&A activity and waves. The independent variable of interest – Bus. Combination – equals one if a firm is covered by a BC law in its state of incorporation in a given year and zero otherwise. We also examine the other second generation laws passed around the same time period – Fair Price, Control Share Acquisition, and Control Share Cash-Out statutes. Standard errors are clustered by state of incorporation.

All models report a significantly negative coefficient on capital liquidity, indicating that as spreads widen and capital becomes more expensive, aggregate M&A levels and hostile activity decline, consistent with Harford (2005). In Columns (1) and (2), M&A levels have been increasing over time and show a concave relation with firm age and positive relation with firm size. The key independent variable – BC law coverage – is not significantly related to overall M&A levels, consistent with Comment and

[6] The sample size drops slightly in Columns (3) and (4) as we are unable to determine hostility in a small subset of hand-collected merger observations from 1965 through 1974.

Schwert (1995). Overall M&A activity appears to have declined following the passage of Control Share Acquisitions laws and increased in response to Fair Price and Control Share Cash-Out laws.

Hostile takeovers are essentially discrete time hazard data, similar to the data on bankruptcy examined by Shumway (2001). As demonstrated by Shumway, single period static models can be biased and lead to incorrect inferences whereas hazard models are more precise and less biased. He suggests that a multiperiod logit model can be interpreted as a hazard model when it is estimated on each firm in each year of its existence as independent observations. The binary dependent variable only takes a value of one if the firm is acquired by hostile means in the following year. In Columns (3) and (4), we estimate a multiperiod logit model and find that firms covered by BC laws are significantly less likely to be successfully acquired through hostile means in any given year. This supports the use of this proxy as a potential measure of managerial entrenchment. The smaller conditional sample in Column (6) shows a negative coefficient on BC laws but not statistically significant at conventional levels. The coefficients on Fair Price, Control Share Acquisition, and Control Share Cash-Out laws are not statistically significant in the hostile regressions.

While the results provide support for the studies which rely on BC laws as a common governance proxy, Figure 3 provides a muted picture of the variability in this metric over time. Figure 3 reports the asset value-weighted percentage of firms covered by BC laws over the full sample period. It jumps from 0% through 1984 to over 95% by 1990. Thus, even though states and hence firms exhibited some cross-sectional variability in coverage during this short five year window, over longer horizons the BC proxy appears to be driven predominantly by a time shift around the late 1980s. This is likely due to the Supreme Court's case in CTS Corp. v. Dynamics Corp. of America, decided in 1987, which validated a business combination law and other types of anti-takeover laws. The sharp rise in coverage of these firms highlights that prior studies of business combination laws have minimal cross-sectional variability across firms. It thus appears important to examine the effects of other laws in order to obtain sufficient cross-sectional variability in governance / entrenchment proxies.

Our next set of tests in tables 7, 8, and 9 continue to investigate the legal determinants of takeover activity, but we now expand the sample to include the full set of takeover laws and cases. In Table 7 we examine aggregate M&A activity, in Table 8 we examine unconditional rates of hostile takeovers, and in Table 9 we examine the rate of hostility conditional on M&A activity.[7] In each table we start with all variables in the first logit model, examine the Akaike Information Criterion (AIC), then drop the variable with the least statistical significance, re-estimate the model, and examine the resulting AIC. If it improves to a lower value, we drop another variable and continue to iterate through this process until the AIC is minimized. The model with the minimum AIC is estimated in the final column in each table, and represents the model of best fit. The goal of this process is to determine which laws matter for takeover activity, and in what direction they matter. Initial models include a time trend variable to capture fixed trends in takeover activity throughout the sample period, and as in Table 6, standard errors are clustered by state of incorporation.

We begin with the full spectrum of M&A activity, both friendly and hostile, to extend results from prior studies such as Comment and Schwert (1995) that examine the effect of specific laws on aggregate M&A activity. Specifically, Comment and Schwert test the effect of poison pills, control share laws, and business combination laws on takeover activity over the period 1975 to 1991. Our data allow us to expand the analysis to all 16 statutes and to include the post-BC law period from 1991 to 2013.

As Comment and Schwert note, there is little theoretical support for the notion that anti-takeover laws should be associated with declines in the overall market for corporate control. It could be the case that bidders who formerly would have taken a hostile tact will still pursue the takeover, but are now compelled to complete the deal through friendly means, potentially benefitting target shareholders. The countervailing argument is that anti-takeover laws entrench managers who are now able to stop all potential bidders at the door, leading to a decrease in overall M&A activity.

[7] The initial logit models for Table 9 do not achieve convergence when including all independent variables. We thus approach the estimation by iteratively dropping the least significant variables based on Table 7 results until a model converges, which is reported in Column (1) of Table 9.

In Table 7 we estimate the effects of takeover laws on aggregate M&A activity. Each legal variable is coded zero for firm-incorporation-years in which a law is not in effect, and one or the weight indicated in Table 3 if a law is in effect at that time. Even though we code for exact dates of enactment for the various laws as shown in Table 2, we take the value in force at the end of each firm-year. For example, a firm incorporated in Delaware would have a zero on the BC law for all years of existence in 1986 and prior, and a one for 1987 and beyond. Similarly, a firm incorporated in California would have a zero on the Revlon standard prior to 1982, a "+1" for 1982-1983, and a "-1" for 1984 and beyond.

Results in Table 7 reveal that, as in Table 6, business combination laws are negatively signed, but by adding the full spectrum of anti-takeover legislation we find that business combination laws are still not significantly related to levels of M&A activity in aggregate. Further, we find that a variety of laws designed solely for hostile activity are significantly related to changes in the overall level of activity in the market for corporate control. Specifically, Control Share Acquisition laws are related to lower levels of aggregate activity. Curiously, very early legislation such as the Williams Act and first generation laws appear to have increased M&A activity. This may be due to the path-defining effect of these laws, but also may be related to the reduced premiums which Jarrell and Bradley (1980) document in the wake of the passage of the Williams Act, which spurred greater aggregate takeover activity. Additionally, we find increased M&A activity following Poison Pills and Tin Parachute Blessings. Taken together, these findings on aggregate activity motivate the further exploration of the effects of these statutes on hostile activity specifically.

Table 8 comprises the most direct test of the effects of the various laws on hostile takeover rates and ultimately the disciplinary market for corporate control. In Table 8 (Column 10), we find that larger firms are more likely to become the target of hostile takeovers, consistent with Schwert (2000). Hostile takeover rates remain lower after the passage of BC laws as in Table 6, and also decline following Control Share Acquisition laws and assumption of labor contracts, as would be predicted. Certain less common laws, such as tin parachute blessings statutes, also have a significant effect on hostile takeover rates among the few states enacting them. Surprisingly, hostile rates actually increased following the

introduction of poison pills in the 1980s, contrary to the intended purpose of the pill. Similarly contrary results hold for disgorgement provisions and golden parachute restrictions.

Thus, it appears that some laws, such as poison pills designed to thwart takeovers, have had an effect opposite that of their original intention. It is possible that because these laws provide a designated roadmap for takeover success, they provide greater clarity for would-be bidders, which in some cases encourages them to embark on takeover battles (Kahan and Rock, 2002). This conclusion is buttressed by our finding on the Revlon standard of review, which imposed a board obligation to sell to the bidder offering the highest bid reasonably available in a takeover contest. We find that Revlon's adoption incentivized hostile takeover activity, an event likely attributable to the heightened obligation Revlon placed on a board to consider such bids.

Although we believe our multi-period logit tests in Table 8 provide the clearest picture of the effect of takeover laws on hostile activity for the reasons cited by Shumway (2001), we also estimate a single period logit for robustness. Table 9 reports the results from these tests. The main difference is that the sample in Table 9 is constructed solely from firm-year observations with successful takeover attempts, rather than the full sample used in Table 8. The results are generally similar, although several variables retain a similar sign but lose statistical significance in this specification. Overall, the tests illustrate that single period logit models, as utilized by numerous prior studies of hostile activity, are likely to provide similar, but less powerful tests relative to multi-period models such as the ones estimated in this study.[8]

The external threat of takeover is an important corporate governance mechanism, and it is frequently the case that researchers require a reliable measure of this threat. Indices based on firm-level variables, such as the G-index or E-index have been criticized for endogeneity concerns.[9] As a result, largely exogenous measures, such as the adoption of BC laws, have been increasingly utilized in recent

[8] Examples of single period logit models in studies of hostile activity can be found in Palepu (1986), Morck, et al. (1988), Shivdasani (1993), and Schwert (2000).

[9] See Core, et al. (2006), Bhagat, et al. (2008), and Brickley and Zimmerman (2010).

years.[10] As demonstrated in Tables 6 through 9, state-level legislation that determines the threat of takeover is demonstrably richer than BC laws alone, and some of the legislation moves hostile activity in a counterintuitive direction. We take all coefficients from the best fit model, column (10) of Table 8, and construct a firm-level takeover index. The equal-weighted average of this index, multiplied by 100, is produced in Figure 4, which is essentially the fitted prediction of the Figure 1 hostile takeover hazard. We believe this index serves as a more robust measure of exogenous changes in the threat of takeover and has substantial variation both cross-sectionally across states as well as in the time-series over nearly five decades. To our knowledge, there is no tool like this readily available to corporate governance researchers.[11]

Table 10 reports descriptive statistics on this index by decade. It also reports descriptive statistics for control variables used in Tables 11 and 12, most of which come from Schwert (2000): return on equity (ROE), year-over-year sales growth, liquidity (current assets minus current liabilities, divided by total assets), long-term debt divided by book equity (D/E), and Loss Dummy, which equals one if the firm reports a net loss in the given fiscal year.

In Table 11 we examine the correlation of firms' takeover susceptibility and firm value. Specifically, Table 11 reports results from regressing firms' market-to-book (M/B) ratio, a proxy for firm value, on control variables and the Takeover Index as a proxy for firms' susceptibility to hostile takeover. All models include firm fixed effects. Since the index represents largely exogenous changes to the takeover environment, it provides a cleaner test of the relation between this governance proxy and firm value than most other managerially-controlled takeover defenses. In Column (1) for the full sample, firm value is decreasing in firms' takeover susceptibility. This is consistent with Smith (2013) who finds positive announcement returns of about 3% around the passage of anti-takeover provisions.

Columns (2) through (5) of Table 11 run the regressions on subsamples from 1965-1979, the 1980s, 1990s, and 2000-2013, respectively. Column (2) reports a strong and economically significant

[10] See, for example, Bertrand and Mullainathan (2003), Qiu and Yu (2009), Giroud and Mueller (2010), and Atanassov (2013).
[11] The index is available for download at http://data.stephenbmckeon.com.

negative correlation between takeover susceptibility and firm value. This could represent the detrimental impact of coercive takeovers in the 1960s and 1970s when firms had little bargaining power from takeover defenses. The remaining columns for the 1980s, 1990s, and 2000s all report positive coefficients on the Takeover Index, indicating that firm value is increasing in its susceptibility to hostile takeover. Our finding that firm value is related to hostile takeover susceptibility supports the theory of Manne (1965) and the managerial entrenchment / quiet life hypothesis put forth by Bertrand and Mullainathan (1999). It also highlights the effect of takeover laws on the disciplinary market for corporate control and ultimately, the tradeoff between bargaining power and entrenchment with the resulting impact on firm valuation.

In Table 12, we report results from estimating the effect of takeover protections on observed takeover premiums. We follow Schwert's (1996) definition of takeover premium: specifically, the cumulative abnormal return over the period 42 trading days prior to the announcement until 126 days after the announcement, or deal completion, whichever comes first. Abnormal returns are estimated using the market model.

Over the entire sample period, we find a negative relation between takeover premiums and takeover susceptibility, consistent with the Bargaining Power Hypothesis (Stulz (1988), Subramanian (2003)) in which takeover protections offer target firms a stronger negotiating position. However, when we estimate the model decade by decade, we find that the relation is not present in all time periods. In the early part of the sample, we find no relation between premiums and legal protection. In contrast, as protections increased broadly in later years and firms were on average less susceptible, variation in premiums emerges. The negative relation is strongest in the most recent period, 2000-2013, with a coefficient of -0.924 and a p-value of 0.01. Interestingly, the results in both tables 11 and 12 strengthen through time. Taken together, they suggest that in recent years when many states have stronger protections, firms that remain more susceptible are characterized by higher firm values in the cross-section, but once they become takeover targets they are not able to extract the same premiums as firms in high protection states.

To compare the economic significance of the results in Tables 11 and 12, we estimate the effect of a one standard deviation drop in the takeover index for a hypothetical firm with $1 billion in market equity, and book equity of $500 million (i.e., a market-to-book ratio of 2.0). Table 10 reports the standard deviation of the index to be 0.105. If a firm experiences an index decrease of 0.105, it has become more susceptible to hostile takeover. In Table 11 column 5, a one standard deviation decrease in the index is associated with a decrease in M/B of 0.20 (calculated as 0.105 * -1.913). For this hypothetical firm, a 0.20 decrease in M/B would imply a market value decrease of $100 million, holding book value constant. In other words, the stronger shield from the takeover market is associated with 10% lower firm market value in this example.

In terms of acquisition premium, the figures reported in Table 12 column 5 indicate that a firm with a market value of $1 billion would experience a 9.7% increase in takeover premium for a one standard deviation decrease in the index (calculated as 0.105 * -0.924). With a mean takeover premium of 42%, the hypothetical firm would receive $1.517 billion instead of $1.42 billion, an increase of $97 million. On net, the two effects cancel out, suggesting there is little reason for firms to reincorporate in higher protection environments merely to increase bargaining power, at least in the 2000s.

Firms may respond to changes in takeover laws by reincorporating from one state to another. As a robustness check, Table 13 examines the reincorporation of firms in the sample. For these purposes, we collect reincorporation data for the time period 1995 through 2013. We limit our analysis to these years because the incorporation data source remains constant, using SEC Analytics data from firm SEC filings. Panel A reports the number of reincorporations by year, which is the number of firms that reincorporate from one state to another. The number of reincorporations is a low 0.65% of the sample over the full time period. The highest number of reincorporations in any year occurs in 2013 with 1.37% of firms reincorporating, with a low of reincorporations at .09% of firms in 1996. It thus appears that similar to opt out rates, reincorporation rates are low among firms.

In Panel B we examine where firms reincorporate. The majority of reincorporations, 64.95% are to Delaware with Nevada being next at 7.98%. No other state comprises more than 3% of

reincorporations over the applicable time period. It thus does not appear from the descriptive evidence that firms which reincorporate do so due to changes in takeover laws. Instead it appears that the majority of firms do so to bond to either Delaware or Nevada law, neither of which have a markedly high nor low value in the takeover index.

Panel C further explores this question by examining whether firms which do reincorporate do so to a state that is not their headquarters state. 18% of firms reincorporate to the state of their headquarters, with the bulk of the remainder going to Delaware (64.79%) or Nevada (7.2%). Only 64 reincorporations, or 10.02% of reincorporations in the 19 year period, are to a state that is not the headquarters of the firm, Delaware, or Nevada. It thus does not appear from the descriptive evidence that companies are responding to takeover laws by reincorporating to other states in search of stronger or weaker takeover laws.

Panel D examines changes in the level of takeover protection around reincorporation events to determine if increased anti-takeover protection is a motivating factor in the relocation decision. We do so by measuring the average change in Takeover Index values (μ) from one year prior to reincorporation (in the old state) to one year after reincorporation (in the new state). We find that when firms reincorporate, they generally reincorporate to states with a higher number of takeover statutes, as indicated by the significantly negative change in the index (i.e., lower firm takeover susceptibility). However, consistent with the findings of Romano (1985), this result is driven by reincorporations to Delaware, which are not likely to be predominantly motivated by the desire for greater anti-takeover protection, since there are many other states with a higher number of anti-takeover laws than Delaware. In reincorporations to states other than Delaware, the sign reverses, suggesting the reincorporating firms become more susceptible to takeover, although the change is not significantly different from zero. Taken together, there does not appear to be strong evidence that firms reincorporate to more protective states in order to gain greater anti-takeover protection, mitigating concerns of endogeneity along this dimension.

V. Conclusion

This study uses a hand-collected dataset of 16 different takeover laws and court decisions from 1965 through 2013 to measure the variation in takeover laws and their long-term impact on hostile activity through time. We also utilize a novel hand-collected dataset of M&A hostility back to 1965. We find that the general susceptibility to a hostile takeover peaked in 1973 and has decreased significantly since 1987. As a proportion of total M&A equal-weighted volume, hostile activity peaked in 1967 at 40% and has since declined to about 5% in 2013.

Many studies utilize business combination (BC) laws to proxy for firms' exogenous governance environment, yet no studies have yet documented a robust relation between BC laws and actual hostile takeover rates. We find that the passage of business combination laws was followed by a significant decline in the likelihood of firms being successfully taken over through hostile means. However, we also note that the value-weighted proportion of firms covered by these laws jumped from 0% pre-1985 to over 95% by 1990. Thus, the variation in firms' coverage by this proxy appears to be limited primarily to a short five-year window of time. The lack of variation in Business Combination laws implies that prior studies of anti-takeover laws and their wealth effects have low statistical power.

We also develop an index following our empirical analysis of the full set of 16 takeover laws and cases. Our results imply that while many of these cases and pieces of legislation have influenced takeover activity, some of them have done so in a way that may not have been anticipated by the original drafters. For example, a firm's probability of being successfully taken over through hostile means actually increased significantly following poison pill validation by case law and state statutes. We make this index publically available for use in future research on topics related to corporate governance.

We conclude by documenting the correlation between firms' takeover susceptibility and firm value, and find that firm value was decreasing in takeover susceptibility in the 1960s and 1970s, an era characterized by coercive takeovers. In contrast, firm value is increasing in takeover susceptibility in the 1980s, 1990s, and 2000s, consistent with the incentive benefits of the disciplinary market for corporate control. Our capital markets have changed vastly since the time of the battle for the Erie railroad, but the

presence or absence of takeover laws continues to affect and drive takeover activity, perhaps in unintended ways.

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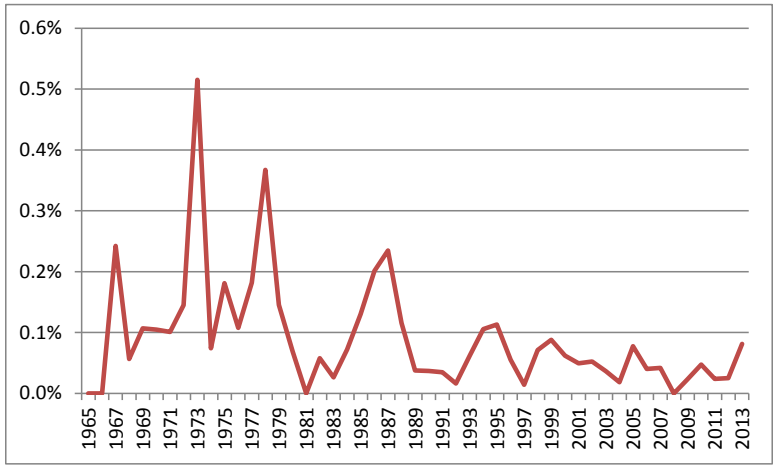

Figure 1. Hazard rate of being acquired by hostile takeover in any given year (equal-weighted). Firm-years are coded 0 for no takeover or for friendly takeover and 1 for hostile takeover.

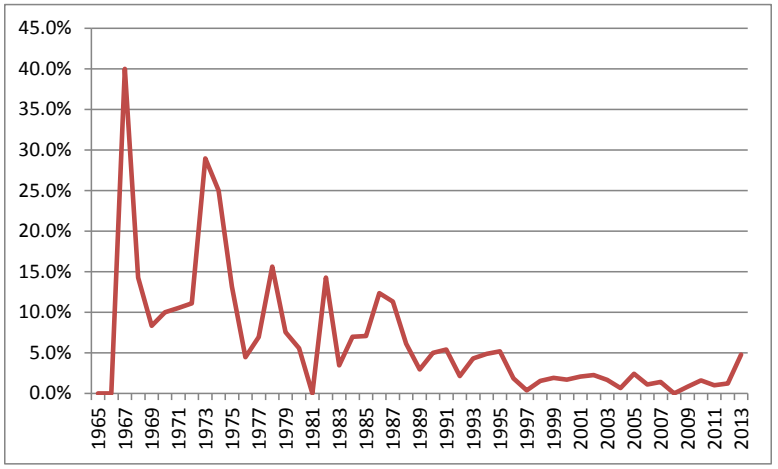

Figure 2. Conditional on being acquired in a given year, probability of hostility (equal-weighted). Firm-years are coded 0 for friendly takeover and 1 for hostile takeover. Firm-years with no takeovers are excluded.

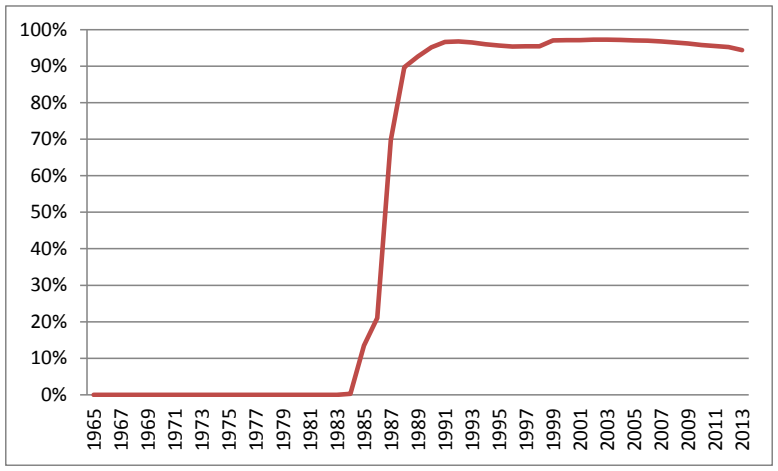

Figure 3. Value-weighted percentage of firms covered by a Business Combination law annually. Weighted by firms' total assets.

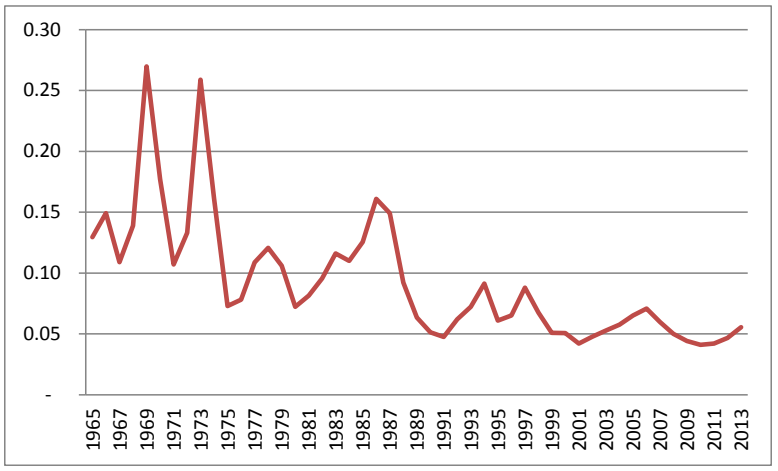

Figure 4. Equal-weighted Takeover Index values in basis points by year.

Table 1. Takeover Laws Defined

Williams Act	1968 amendment to SEC Act of 1934 to regulate tender offers: requires SEC filings, disclosure, and waiting periods. Applies equally to all firms in all states.
1st Generation Statutes	Requires state filing and review requirements. Allows target firm executives, directors, and/or state commissioners to seek a hearing to delay or block a proposed takeover. The U.S. Supreme Court struck down the Illinois statute (and all other states' statutes by implication) in its *Edgar v. Mite* decision in 1982; several states struck down their statutes before or after this (1st Gen Case in Table 2).
Business Combination (BC)	Also known as "freeze-out" statutes, prohibits bidders from engaging in a business combination with a target for a pre-set period upon the bidder's acquisition of 20% or more of the target's equity unless the purchase is pre-approved by the target's board or a specified percentage of disinterested target stockholders.
Fair Price	Requires disinterested board approval, a supermajority vote of shareholders (usually 80%) or the payment of a minimum price in any second step merger.
Control Share Acquisition	Any target shares acquired by bidder in excess of a threshold cannot be voted by the bidder unless approved by a majority or supermajority of disinterested target shareholders.
Control Share Cash-Out	Dissident target shareholders gain the right to "cash-out" or sell their shares to the bidder at the highest acquiring price paid during the acquisition period.
Poison Pill (PP)	If executed, dilutes a hostile bidder's toehold stake significantly. Validated by Delaware in *Moran v. Household International* in 1985 and by numerous states through statutes or cases after this.
Expanded Constituency	Allow boards to consider welfare interests other than shareholders in their deliberations, including workers, creditors, localities and social considerations.
Disgorgement	Allows a target to recover any potential profits obtained by a person or group who held more than 20% of the issuer in an eighteen month period prior to the takeover.
Anti-Greenmail	Prohibits targets from repurchasing toehold shares from a hostile bidder at a premium to the current stock price.
Golden Parachute Restriction	Limits the ability of a target to issue large severance payments to executives in the event of a successful takeover.
Tin Parachute Blessing	Also known as "silver parachutes", allows the target to issue large severance payments to a significant number of employees in the event of a successful takeover.

Table 1, continued

Assumption of Labor Contracts	Requires a successful hostile bidder to assume all preexisting labor contracts of the target firm after a change in control.
Revlon	Delaware case *Revlon, Inc. v. MacAndrews & Forbes Holdings* requiring target directors to obtain the best price reasonably available; may prevent a target from accepted an inferior offer from a friendly "White Knight" bidder. This duty or standard has been explicitly adopted or rejected by several other states in subsequent cases.
Unocal	Delaware case *Unocal v. Mesa Petroleum* requiring that a board's defensive response to a takeover threat be reasonable in relation to the threat posed; allows the "just say no" strategy. This duty or standard has been explicitly adopted or rejected by several other states in subsequent cases.
Blasius	Delaware case *Blasius Industries v. Atlas Corp.* preventing boards from taking actions that interfere with shareholder voting, such as delaying shareholder meetings or imposing new supermajority approval requirements on major decisions. This duty or standard has been explicitly adopted or rejected by several other states in subsequent cases.

Table 2. Takeover Law Dates of Enactment

Dates of enactment by state of various takeover laws and cases. Laws and cases are defined in Table 1. See additional dates of enactment for statutes in bullet points below the table.

	1st Gen	1st Gen Days	1st Gen Case	BC	Fair Price	Control Shr. Acq.	PP Statute	PP Case	Exp. Const.	Revlon	Unocal	Blasius
AL												
AK	6/8/1975	51										
AZ				7/22/1987		7/22/1987			7/22/1987			
AR	3/24/1977	50									7/12/1993 (Y)	
CA										6/1/1982 (Y) 9/5/1984 (N)	4/12/1989 (Y)	
CO	*7/1/1975**	25					3/31/1989					
CT	6/2/1976	40	12/3/1980	6/7/1988	10/1/1985		10/1/2003		1/1/1997			7/27/2000 (Y)
DE	*5/1/1976**	40	11/17/1978	12/23/1987				11/19/1985		3/13/1986 (Y)	6/10/1985 (Y)	7/25/1988 (Y)
FL	*10/1/1977**	30			7/2/1987	7/2/1987	6/22/1989		6/22/1989		6/7/1989 (Y)	
GA	3/23/1977	40		3/3/1988	7/1/1985		2/7/1989	7/3/1997 (S)	7/1/1989			7/3/1997 (N)
HI	5/24/1974	81				4/23/1985	6/17/1988		6/7/1989			
ID	7/1/1975	40	8/10/1978	3/22/1988		3/22/1988	3/22/1988		3/22/1988			
IL	9/8/1978	74	10/17/1980	8/2/1989	8/23/1985		8/2/1989		8/23/1985	12/1/1988 (Y)	12/1/1988 (Y)	
IN	5/1/1975	110		1/23/1986		3/4/1986	4/1/1986		1/31/1989 (S)	4/21/1987 (Y) 4/10/2001 (N)	4/21/1987 (Y) 4/10/2001 (N)	6/18/1993 (N)
IA	1/1/1979	46		7/1/1997			12/31/1989		12/31/1989			
KS	7/1/1974	40		7/1/1989		4/21/1988				9/26/2003 (Y)	9/26/2003 (Y)	
KY	7/1/1976	70		3/28/1986			7/13/1984		1/1/1989			
LA	6/28/1976	110	4/30/1979		7/13/1984	6/11/1987			7/10/1988			
ME	3/17/1978	70		4/6/1988			7/1/2003		7/16/1986			
MD	*7/1/1976**	30	9/3/1982	1/11/1989		4/11/1989	6/1/1999 (S)		6/1/1999 (S)	11/4/2004 (N) 11/12/2009 (Y)	11/9/1988 (Y) 4/1/2004 (N)	6/1/1999 (N) 3/15/2005 (Y)
MA	5/22/1976	150		7/18/1989		7/21/1987	7/18/1989		7/18/1989		6/30/2003 (N)	4/11/1990 (Y)
MI	7/1/1976	100	1/21/1981	5/29/1984		4/1/1988	7/23/2001			9/26/1986 (Y)	9/26/1986 (Y)	5/8/2003 (Y)
MN	8/1/1973	50		6/1/1987	8/1/1991	6/1/1987			6/1/1987	2/4/1987 (Y)	2/4/1987 (Y)	
MS	7/1/1977	120			7/1/1985	1/1/1991	1/1/1988		7/1/1990			
MO	6/7/1978	61	9/3/1981	6/23/1986		9/28/1987			5/6/1986	6/17/1999 (Y)	6/17/1999 (Y)	
MT												
NE	4/27/1977	60		4/9/1988		4/9/1988			3/7/2007			
NV	*3/4/1969**	31	4/8/1981	10/1/1991		7/1/1987	10/1/1989		10/1/1991 (S)	6/19/1997 (Y) 7/1/1999 (N)	3/20/1985 (N)	6/19/1997 (Y) 7/1/1999 (N)
NH	3/25/1977	130								11/20/2001 (Y)		
NJ	4/27/1977	110	12/17/1980	1/23/1986			6/29/1989		6/29/1989		2/11/1998 (N)	2/11/1998 (N)
NM									4/9/1987			

Table 2, continued

	1st Gen	1st Gen Days	1st Gen Case	BC	Fair Price	Control Shr. Acq.	PP Statute	PP Case	Exp. Const.	Revlon	Unocal	Blasius
NY	11/1/1976	80		12/16/1985			12/21/1988 (W)		7/23/1987	1/6/1986 (Y) 6/17/1997 (N)	1/6/1986 (N)	
NC	6/28/1977	51			4/23/1987	5/13/1987	7/1/1990 (W)		10/1/1993 (S)	8/10/2001 (N)	8/10/2001 (N)	10/10/1984 (N)
ND									8/1/1993			
OH	10/9/1969	70		4/11/1990		11/18/1982	11/22/1986		10/10/1984 (S)	5/9/1990 (N)	11/22/1986 (N)	11/22/1986 (N)
OK	6/12/1980	35	7/17/1981	9/1/1991		6/24/1987						
OR				4/4/1991		7/18/1987	3/5/1989		3/5/1989		12/15/1993 (Y)	
PA	3/3/1976	70	2/12/1981	3/23/1988		4/27/1990	3/23/1988	10/8/1998 (S)	4/27/1990 (S)	6/30/1987 (N)	4/7/1986 (N)	4/27/1990 (N)
RI				7/30/1990			7/30/1990		7/30/1990			
SC	6/12/1978	60	12/4/1980	4/22/1988		4/22/1988	6/9/1998					
SD	7/1/1975	40		7/1/1990			7/1/1990		7/1/1990			
TN	3/17/1976	40		3/11/1988		3/11/1988	5/29/1989		3/11/1988			
TX	5/6/1977	42		9/1/1997			9/1/2003		1/1/2006		2/24/1989 (Y)	
UT	2/5/1976	50				5/29/1987	4/24/1989					
VT									4/16/1998			
VA	3/5/1968	81	1/6/1983	3/31/1988		2/22/1989	4/2/1990	9/6/2000 (S)		6/11/1999 (N)	9/22/1995 (N)	1/1/1986 (N)
WA				8/11/1987			6/11/1988					
WV												
WI	7/1/1972	40		9/10/1987		4/22/1986	9/13/1987		6/13/1987	2/4/1999 (N)	3/18/1989 (Y)	
WY				3/11/1989		7/1/1990			1/1/1990			

Additional Information: 1st Gen dates with an asterisk (*) indicate that the given statute provides target managers and/or directors with no direct power to seek an injunction to block a takeover. We omit these statutes (i.e., code as nonexistent, or zeros) in subsequent tables. Poison Pill statutes and cases and Expanded Constituency statutes are of average strength unless otherwise noted as strong (S) or weak (W). Revlon, Unocal, and Blasius standards are either adopted by given states on a date, i.e., "Yes" (Y) or rejected, i.e., "No" (N).

- Control Share Cash-Out statutes were adopted by ME on 7/16/1986, PA on 12/23/1983, and SD on 7/1/1990.
- Disgorgement statutes were adopted by OH on 4/11/1990 and PA on 4/27/1990.
- Anti-Greenmail statutes were adopted by AZ on 7/22/1987, MN on 3/1/1988, NY on 2/14/1986, TN on 3/11/1988, and WI on 9/18/1987.
- Golden Parachute Restrictions were adopted by AZ on 7/22/1987 and MN on 6/26/1987.
- Tin Parachute Blessings were adopted by MA on 7/18/1989, PA on 4/27/1990, and RI on 7/30/1990.
- Assumption of Labor Contracts provisions were adopted by DE on 4/8/1988, IL on 1/1/1988, MA on 7/18/1989, PA on 4/27/1990, and RI on 7/30/1990.
- The Williams Act became effective for all states on 7/29/1968.
- The 1st Generation statutes were overturned by the "1st Gen Case" if given; all statutes were eliminated (by implication) after the *Edgar v. Mite* case on 6/22/1982.

Table 3. Sample Coverage by Takeover Laws

Percentage of equal-weighted and asset value-weighted firm years associated with each takeover law or case. Laws and cases are defined in Table 1. Firm-years are coded zero prior to the adoption of state laws and one after. Strong-form laws or cases as reported in Table 2 are coded equal to two. Acceptance or rejection (i.e., "Yes" / "No") of Revlon, Unocal, and Blasius standards are not mutually exclusive for a given state if the state has multiple cases to accept *and* reject a standard over time. If a state has not issued a case ruling on Revlon, Unocal, or Blasius prior to a given firm-year, that firm-year is coded as zero.

	States	Firm-Years	Equal-Weighted Firm-Years %	Value-Weighted Firm-Years %
1st Generation = 1	8	785	0.39%	0.16%
1st Generation = 2	16	4,481	2.25%	2.38%
1st Generation = 3	7	1,519	0.76%	0.62%
1st Generation = 4	2	470	0.24%	0.04%
Business Combination	33	121,644	61.20%	73.36%
Fair Price	8	10,600	5.33%	3.58%
Control Share Acquisition	26	34,829	17.52%	11.96%
Control Share Cash-Out	3	3,145	1.58%	1.91%
Poison Pill Strength = 1	46	139,162	70.01%	66.36%
Poison Pill Strength = 2	4	3,274	1.65%	3.43%
Expanded Constituency = 1	28	24,812	12.48%	16.30%
Expanded Constituency = 2	6	13,641	6.86%	5.88%
Disgorgement	2	4,368	2.20%	3.15%
Anti-Greenmail	5	11,746	5.91%	10.04%
Golden Parachute Restriction	2	4,061	2.04%	0.64%
Tin Parachute Blessing	3	4,601	2.31%	2.02%
Assumption of Labor Contracts	5	83,495	42.00%	49.64%
Revlon (Yes) = +1	12	94,237	47.41%	54.35%
Revlon (No) = -1	10	21,191	10.66%	13.00%
Unocal (Yes) = +1	14	105,729	53.19%	54.81%
Unocal (No) = -1	10	21,935	11.04%	17.83%
Blasius (Yes) = +1	6	81,379	40.94%	48.08%
Blasius (No) = -1	9	15,253	7.67%	9.80%

Table 4. Takeover Law Correlation Matrix

Correlation matrix of various takeover laws and cases over time. Laws and cases are defined in Tables 1 through 3.

	Williams Act	1st Gen	Bus Comb	Fair Price	CSA	CSCO	Poison Pill	Exp Const	Disgmt	Anti-Grnml	Golden Par Rest	Tin Par Bless	Assum Labor Contrct	Revlon	Unocal	Blasius
Williams Act	1.00															
1st Generation	0.03	1.00														
Business Combination	0.20	(0.23)	1.00													
Fair Price	0.04	(0.04)	(0.05)	1.00												
Control Share Acquisition	0.07	(0.08)	0.15	0.35	1.00											
Control Share Cash-Out	0.02	(0.02)	0.05	(0.03)	0.17	1.00										
Poison Pill	0.24	(0.28)	0.66	0.13	0.29	0.15	1.00									
Expanded Constituency	0.07	(0.08)	0.24	0.29	0.74	0.26	0.21	1.00								
Disgorgement	0.02	(0.03)	0.12	(0.04)	0.32	0.59	0.16	0.45	1.00							
Anti-Greenmail	0.04	(0.04)	0.19	0.24	0.21	(0.03)	(0.09)	0.30	(0.04)	1.00						
Golden Parachute Restriction	0.02	(0.03)	0.11	0.45	0.31	(0.02)	0.08	0.18	(0.02)	0.56	1.00					
Tin Parachute Blessing	0.02	(0.03)	0.12	(0.04)	0.32	0.57	0.16	0.32	0.48	(0.04)	(0.02)	1.00				
Assumption of Labor Contracts	0.14	(0.16)	0.68	(0.18)	(0.28)	0.07	0.50	(0.26)	0.03	(0.21)	(0.12)	0.18	1.00			
Revlon	0.09	(0.10)	0.49	(0.02)	(0.36)	(0.22)	0.28	(0.43)	(0.30)	(0.01)	0.12	(0.19)	0.71	1.00		
Unocal	0.10	(0.11)	0.29	0.06	(0.34)	(0.24)	0.39	(0.54)	(0.31)	(0.19)	0.10	(0.23)	0.61	(0.69)	1.00	
Blasius	0.09	(0.10)	0.46	(0.19)	(0.47)	(0.21)	0.28	(0.55)	(0.32)	(0.14)	(0.08)	(0.08)	0.84	(0.80)	(0.73)	1.00

Table 5. Incorporations and Headquarters for Sample Period

Descriptive Statistics on incorporations and headquarters over time. Panel A reports descriptive statistics for location of firm incorporations over time for the following periods: full sample (All), 1965-1979, 1980-1989, 1990-1999 and 2000-2013. The percentages for each column are a percent of all firm-years in that time period. States listed are those which comprise the top ten states for incorporations over the entire sample. Panel B reports descriptive statistics for location of firm headquarters over similar time periods, and similar for the top 10 headquarters states over the full sample. Panel C reports similar statistics as in Panel A, but only for firms' initial incorporation years, for the top 10 initial incorporation states over the full sample. Panel D reports descriptive statistics on firm-years with identical vs. different headquarters and incorporation state locations. *Headquarters = (≠) Incorporation* indicates those observations in which the headquarters is identical to (different from) the firm's jurisdiction of incorporation. Headquarters ≠ Incorporation (DE/Nevada/Other) indicates those observations in which the headquarters differs from the firm's jurisdiction of incorporation and the location of incorporation is Delaware/Nevada/Other.

Panel A: Incorporations Over Time

	All	1965-1979	1980-1989	1990-1999	2000-2013
California	4.38%	3.43%	5.08%	5.37%	3.44%
Delaware	54.57%	47.30%	47.28%	55.43%	61.68%
Florida	2.30%	1.72%	2.37%	2.58%	2.27%
Massachusetts	2.06%	2.67%	2.72%	2.18%	1.26%
Minnesota	2.50%	1.79%	2.88%	2.91%	2.21%
New Jersey	2.05%	3.16%	2.97%	1.89%	1.12%
Nevada	4.20%	1.44%	2.63%	2.93%	7.68%
New York	5.15%	9.50%	7.17%	4.33%	2.63%
Ohio	2.24%	4.21%	2.62%	1.79%	1.51%
Pennsylvania	2.26%	4.02%	2.66%	1.98%	1.44%
Other	18.29%	20.74%	21.64%	18.61%	14.75%
Total N	211,929	32,984	42,894	66,337	69,714

Panel B: Headquarters Over Time

	All	1965-1979	1980-1989	1990-1999	2000-2013
California	16.48%	10.07%	14.37%	17.74%	19.46%
Colorado	3.04%	1.92%	3.33%	3.28%	3.14%
Florida	4.91%	3.39%	4.72%	5.22%	5.41%
Illinois	4.25%	6.42%	4.36%	3.81%	3.62%
Massachusetts	4.93%	3.95%	4.59%	5.42%	5.12%
New Jersey	5.15%	5.62%	6.00%	5.03%	4.53%
New York	9.22%	11.32%	10.47%	8.38%	8.31%
Ohio	3.56%	5.58%	4.16%	3.24%	2.58%
Pennsylvania	4.20%	5.90%	4.01%	3.95%	3.78%
Texas	9.57%	8.38%	9.38%	9.52%	10.26%
Other	34.69%	37.44%	34.61%	34.40%	33.78%
Total N	210,124	31,228	42,883	66,324	69,689

Panel C: Initial Incorporations Over Time

	All	1965-1979	1980-1989	1990-1999	2000-2013
California	5.08%	4.44%	6.47%	6.32%	1.82%
Colorado	2.34%	1.28%	3.95%	2.08%	1.92%
Delaware	56.71%	45.88%	52.44%	61.34%	66.31%
Florida	2.60%	1.85%	2.97%	2.92%	2.40%
Massachusetts	1.75%	2.89%	2.30%	1.55%	0.14%
Minnesota	2.23%	2.22%	3.15%	2.37%	0.79%
New Jersey	1.67%	3.13%	2.62%	0.84%	0.27%
Nevada	6.76%	1.79%	3.50%	5.01%	19.61%
New York	3.91%	9.09%	4.46%	2.09%	0.52%
Texas	1.99%	1.82%	3.18%	2.00%	0.65%
Other	14.97%	25.62%	14.96%	13.49%	5.56%
Total N	15,054	3,291	3,743	5,108	2,912

Panel D: Headquarters Versus Incorporations Over Time

	All	1965-1979	1980-1989	1990-1999	2000-2013
Headquarters = Incorporation	30.84%	39.53%	36.83%	30.27%	23.59%
Headquarters ≠ Incorporation	69.16%	60.47%	63.17%	69.73%	76.41%
Headquarters ≠ Incorporation (DE)	53.97%	44.68%	47.08%	55.20%	61.42%
Headquarters ≠ Incorporation (NV)	3.53%	1.17%	2.14%	2.41%	6.57%
Headquarters ≠ Incorporation (Other)	11.66%	14.63%	13.95%	12.12%	8.42%
Total N	211,929	32,984	42,894	66,337	69,714

Table 6. Do Business Combination Laws Affect M&A Levels and Hostility?

Logit models with dependent variable in Columns (1) and (2) equal to one if a firm is successfully acquired in a given year and zero otherwise; in Columns (3) and (4) equal to one if a firm is successfully acquired as part of a hostile takeover in a given year and zero otherwise; in Columns (5) and (6) equal to one if a successful acquisition involves hostility and equal to zero if a successful acquisition does not involve hostility. Age is firm age in years publicly traded, Assets is firm total assets (in CPI-adjusted 2013 US dollars), Time Trend is a yearly counter, Capital Liquidity is the spread between the Commercial and Industrial (C&I) loan rate and the Federal Funds rate, and Bus. Combination, Fair Price, Control Share Acquisition, and Control Share Cash-Out equal one if a firm is covered by that law in a given year and zero otherwise. All models include an unreported constant. Standard errors are clustered by state of incorporation and p-values are reported in parentheses with ***, **, and * indicating statistical significance at the 1%, 5%, and 10% levels, respectively.

	Acquired		**Hostile Hazard**		**Hostile Single-Period**	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Ln Age	3.554 ***	3.541 ***	1.905 ***	1.903 ***	0.006	0.017
	(0.000)	(0.000)	(0.002)	(0.002)	(0.996)	(0.990)
$(\text{Ln Age})^2$	-0.710 ***	-0.705 ***	-0.212 *	-0.210 *	0.127	0.124
	(0.000)	(0.000)	(0.083)	(0.083)	(0.598)	(0.606)
Ln Assets	0.093 ***	0.090 ***	0.192 ***	0.188 ***	0.328 ***	0.327 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Time Trend	0.044 ***	0.045 ***	-0.008	-0.004	-0.062 ***	-0.061 ***
	(0.000)	(0.000)	(0.433)	(0.729)	(0.000)	(0.000)
Capital Liquidity	-0.375 ***	-0.378 ***	-0.394 ***	-0.411 ***	-0.265 ***	-0.268 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)
Bus. Combination	0.059	0.069	-0.537 ***	-0.602 ***	-0.360	-0.389
	(0.573)	(0.451)	(0.007)	(0.003)	(0.166)	(0.158)
Fair Price		0.176 **		-0.422		-0.220
		(0.032)		(0.224)		(0.582)
Control Share Acquisition		-0.212 **		-0.175		0.054
		(0.016)		(0.431)		(0.830)
Control Share Cash-Out		0.183 **		0.289		0.113
		(0.034)		(0.782)		(0.910)
N	198,845	198,845	196,955	196,955	4,453	4,453
Pseudo R^2	5.43%	5.49%	6.62%	6.70%	15.17%	15.19%

Table 7. Which Takeover Laws Predict Aggregate M&A Activity?

Logit models with dependent variable equal to one if the firm is successfully acquired in a given year and zero otherwise. All variables are defined in preceding tables. All models include an unreported constant. Standard errors are clustered by state of incorporation. P-values are in parentheses with ***, **, and * representing statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Ln Age	3.557 ***	3.557 ***	3.559 ***	3.562 ***	3.560 ***	3.561 ***	3.557 ***	3.557 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
$(\text{Ln Age})^2$	-0.707 ***	-0.707 ***	-0.707 ***	-0.708 ***	-0.707 ***	-0.707 ***	-0.706 ***	-0.706 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ln Assets	0.090 ***	0.090 ***	0.089 ***	0.090 ***	0.090 ***	0.090 ***	0.090 ***	0.090 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Time Trend	0.036 ***	0.036 ***	0.035 ***	0.035 ***	0.035 ***	0.035 ***	0.036 ***	0.036 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Capital Liquidity	-0.341 ***	-0.341 ***	-0.340 ***	-0.338 ***	-0.338 ***	-0.339 ***	-0.342 ***	-0.342 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Williams Act	1.451 ***	1.452 ***	1.454 ***	1.457 ***	1.457 ***	1.455 ***	1.457 ***	1.458 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
1^{st} Gen	0.180 ***	0.180 ***	0.180 ***	0.180 ***	0.180 ***	0.180 ***	0.177 ***	0.177 ***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Bus. Combination	-0.043	-0.043						
	(0.640)	(0.639)						
Fair Price	0.124 *	0.125 *	0.138 **	0.117 **	0.114 *	0.114 **	0.111 *	0.102 *
	(0.061)	(0.057)	(0.035)	(0.048)	(0.052)	(0.048)	(0.052)	(0.057)
Control Share Acquisition	-0.220 ***	-0.220 ***	-0.222 ***	-0.250 ***	-0.243 ***	-0.239 ***	-0.240 ***	-0.245 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Control Share Cash-Out	-0.180	-0.176	-0.167	-0.161	-0.104			
	(0.289)	(0.284)	(0.281)	(0.285)	(0.430)			
Poison Pill	0.384 ***	0.385 ***	0.372 ***	0.367 ***	0.370 ***	0.361 ***	0.348 ***	0.350 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Expanded Const.	-0.040	-0.039	-0.049					
	(0.501)	(0.534)	(0.456)					
Disgorgement	0.130	0.134	0.134	0.096				
	(0.402)	(0.330)	(0.319)	(0.465)				
Anti-Greenmail	0.122	0.120	0.102	0.086	0.082	0.081		
	(0.164)	(0.172)	(0.244)	(0.316)	(0.334)	(0.342)		
Golden Parachute Restriction	-0.126	-0.125	-0.128	-0.115	-0.107	-0.117	-0.041	
	(0.304)	(0.306)	(0.294)	(0.356)	(0.381)	(0.324)	(0.602)	
Tin Parachute Blessing	0.438 ***	0.436 ***	0.449 ***	0.446 ***	0.442 ***	0.408 ***	0.408 ***	0.404 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)	(0.002)	(0.002)
Assumption of Labor Contracts	-0.076	-0.081	-0.101 *	-0.102 *	-0.092 *	-0.100 **	-0.108 **	-0.103 **
	(0.496)	(0.289)	(0.056)	(0.058)	(0.081)	(0.040)	(0.035)	(0.038)
Revlon	0.077	0.076 *	0.068	0.069	0.063	0.069	0.074	0.070 *
	(0.103)	(0.089)	(0.177)	(0.172)	(0.186)	(0.130)	(0.110)	(0.090)
Unocal	0.060	0.060	0.065 *	0.081 **	0.077 **	0.081 **	0.074 **	0.072 **
	(0.183)	(0.197)	(0.096)	(0.029)	(0.037)	(0.022)	(0.015)	(0.016)
Blasius	-0.006							
	(0.931)							
N	198,845	198,845	198,845	198,845	198,845	198,845	198,845	198,845
AIC	52,981.0	52,979.0	52,977.5	52,976.7	52,975.2	52,973.9	52,972.9	52,971.1

Table 8. Which Takeover Laws Predict Hostile Takeover Hazard?

Logit models with dependent variable equal to one if the firm is acquired through hostile takeover in a given year and zero otherwise. All variables are defined in preceding tables. All models include an unreported constant. Standard errors are clustered by state of incorporation. P-values are in parentheses with ***, **, and * representing statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Ln Age	2.023 ***	2.028 ***	2.026 ***	2.022 ***	2.031 ***	2.027 ***	2.032 ***	2.067 ***	2.046 ***	2.055 ***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
$(\text{Ln Age})^2$	-0.245 *	-0.246 *	-0.246 *	-0.245 *	-0.247 *	-0.244 *	-0.243 *	-0.252 **	-0.247 **	-0.249 **
	(0.055)	(0.056)	(0.056)	(0.058)	(0.054)	(0.060)	(0.057)	(0.034)	(0.043)	(0.038)
Ln Assets	0.202 ***	0.202 ***	0.203 ***	0.202 ***	0.202 ***	0.201 ***	0.199 ***	0.203 ***	0.200 ***	0.201 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Time Trend	-0.014 *	-0.015 *	-0.015 *	-0.015 *	-0.015	-0.015 *	-0.010			
	(0.098)	(0.098)	(0.095)	(0.088)	(0.100)	(0.087)	(0.336)			
Capital Liquidity	-0.357 ***	-0.355 ***	-0.359 ***	-0.357 ***	-0.358 ***	-0.357 ***	-0.373 ***	-0.415 ***	-0.415 ***	-0.415 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Williams Act	0.561	0.566	0.554	0.556	0.552	0.566				
	(0.382)	(0.379)	(0.393)	(0.390)	(0.395)	(0.381)				
1st Gen	-0.034	-0.034								
	(0.741)	(0.742)								
Bus. Combination	-0.657 *	-0.672	-0.673	-0.649 *	-0.672 *	-0.669	-0.701 *	-0.760 *	-0.634 **	-0.608 **
	(0.095)	(0.106)	(0.106)	(0.095)	(0.092)	(0.108)	(0.086)	(0.071)	(0.024)	(0.023)
Fair Price	-0.376	-0.402	-0.402	-0.404	-0.438	-0.457	-0.475	-0.511	-0.507	
	(0.391)	(0.347)	(0.347)	(0.345)	(0.317)	(0.302)	(0.280)	(0.237)	(0.242)	
Control Share Acquisition	-0.294	-0.329	-0.329	-0.323	-0.336	-0.382	-0.395	-0.422	-0.443	-0.513 *
	(0.388)	(0.288)	(0.288)	(0.292)	(0.283)	(0.249)	(0.240)	(0.207)	(0.180)	(0.096)
Control Share Cash-Out	0.762	0.769	0.773	0.821	0.833					
	(0.539)	(0.528)	(0.526)	(0.488)	(0.488)					
Poison Pill	0.544 ***	0.545 ***	0.550 ***	0.522 ***	0.507 ***	0.553 ***	0.529 ***	0.412 ***	0.364 ***	0.319 **
	(0.006)	(0.006)	(0.005)	(0.001)	(0.001)	(0.000)	(0.001)	(0.004)	(0.007)	(0.025)
Expanded Const.	-0.070									
	(0.802)									
Disgorgement	1.414 **	1.361 ***	1.363 ***	1.397 ***	1.247 ***	1.234 ***	1.250 ***	1.283 ***	1.220 ***	1.325 ***
	(0.011)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)
Anti-Greenmail	0.368	0.349	0.354	0.404	0.420	0.423	0.407	0.329		
	(0.367)	(0.350)	(0.344)	(0.262)	(0.258)	(0.267)	(0.299)	(0.392)		
Golden Parachute Restriction	-0.880 **	-0.861 **	-0.866 **	-0.955 **	-0.923 **	-0.874 **	-0.864 **	-0.802 *	-0.575	-0.901 ***
	(0.030)	(0.026)	(0.025)	(0.013)	(0.018)	(0.037)	(0.040)	(0.058)	(0.127)	(0.004)
Tin Parachute Blessing	-1.660	-1.674	-1.679	-1.684	-1.868 *	-1.194 **	-1.147 **	-1.017 *	-0.907 **	-0.869 **
	(0.130)	(0.120)	(0.120)	(0.118)	(0.088)	(0.025)	(0.037)	(0.051)	(0.047)	(0.046)
Assumption of Labor Contracts	-0.821	-0.817	-0.818	-0.831	-0.619	-0.625	-0.663	-0.747 *	-0.855 ***	-0.852 ***
	(0.127)	(0.130)	(0.130)	(0.125)	(0.145)	(0.149)	(0.142)	(0.073)	(0.004)	(0.004)
Revlon	0.417	0.413	0.414	0.398 *	0.417 *	0.382 *	0.405 *	0.444 **	0.457 **	0.470 **
	(0.107)	(0.103)	(0.102)	(0.077)	(0.065)	(0.093)	(0.084)	(0.043)	(0.036)	(0.038)
Unocal	-0.085	-0.071	-0.070							
	(0.696)	(0.716)	(0.717)							
Blasius	0.219	0.232	0.232	0.207						
	(0.503)	(0.478)	(0.479)	(0.523)						
N	196,955	196,955	196,955	196,955	196,955	196,955	196,955	196,955	196,955	196,955
AIC	2,462.8	2,460.9	2,458.9	2,457.0	2,455.3	2,454.9	2,454.2	2,452.7	2,451.2	2,450.3

Table 9. Which Takeover Laws Predict Hostility Conditional on Acquisition?

Logit models with dependent variable equal to one if a given acquisition involves hostility and zero if friendly. All variables are defined in preceding tables. All models include an unreported constant. Standard errors are clustered by state of incorporation. P-values are in parentheses with ***, **, and * representing statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Ln Age	0.252					
	(0.839)					
$(\text{Ln Age})^2$	0.071	0.117 ***	0.117 ***	0.117 ***	0.120 ***	0.119 ***
	(0.754)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ln Assets	0.348 ***	0.344 ***	0.344 ***	0.345 ***	0.343 ***	0.346 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Time Trend	-0.070 ***	-0.070 ***	-0.070 ***	-0.072 ***	-0.077 ***	-0.078 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Capital Liquidity	-0.222 ***	-0.221 ***	-0.220 ***	-0.213 ***	-0.202 ***	-0.200 **
	(0.007)	(0.007)	(0.006)	(0.007)	(0.009)	(0.012)
Bus. Combination	-0.540	-0.544	-0.560	-0.538	-0.677 **	-0.511 **
	(0.174)	(0.164)	(0.132)	(0.144)	(0.038)	(0.048)
Fair Price	-0.239	-0.241	-0.268			
	(0.617)	(0.614)	(0.550)			
Control Share Acquisition	-0.096	-0.097				
	(0.776)	(0.775)				
Poison Pill	0.509 ***	0.506 ***	0.496 ***	0.485 ***	0.549 ***	0.554 ***
	(0.003)	(0.003)	(0.004)	(0.004)	(0.002)	(0.003)
Disgorgement	1.388 ***	1.374 ***	1.322 ***	1.349 ***	1.400 ***	1.089 ***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.000)
Anti-Greenmail	0.693 **	0.686 *	0.694 **	0.708 **	0.939 ***	0.854 ***
	(0.047)	(0.056)	(0.049)	(0.047)	(0.000)	(0.000)
Golden Parachute Restriction	-1.103 ***	-1.088 ***	-1.134 ***	-1.318 ***	-1.255 ***	-1.144 ***
	(0.005)	(0.003)	(0.001)	(0.000)	(0.000)	(0.000)
Tin Parachute Blessing	-1.750 ***	-1.738 ***	-1.787 ***	-1.800 ***	-2.136 ***	-2.173 ***
	(0.002)	(0.003)	(0.001)	(0.001)	(0.000)	(0.000)
Assumption of Labor Contracts	-0.414	-0.417	-0.377	-0.351		
	(0.339)	(0.343)	(0.354)	(0.395)		
Revlon	0.288	0.290	0.291	0.290	0.179	
	(0.281)	(0.286)	(0.288)	(0.303)	(0.420)	
N	4,453	4,453	4,453	4,453	4,453	4,453
AIC	1,193.4	1,191.5	1,189.6	1,187.9	1,186.7	1,185.5

Table 10. Descriptive Statistics on Takeover Index and Performance Variables

M/B is market value of equity divided by book value of equity. Takeover Index is the predicted value using coefficients from Column (10) of Table 8, multiplied by 100. ROE is return on equity: net income divided by book value of equity. Sales Growth is $\ln(sales_t/sales_{t-1})$. Liquidity is current assets minus current liabilities, divided by total assets. D/E is book value of long-term debt divided by book value of equity. Loss Dummy is an indicator that equals one if the firm has a net loss in the given fiscal year and zero otherwise.

	Mean	Std. Dev.	25%	Median	75%
All Years					
M/B	2.31	1.87	1.00	1.72	2.98
Takeover Index	0.082	0.105	0.019	0.046	0.102
ROE	-1.1%	106.9%	-7.0%	9.0%	18.0%
Sales Growth	13.0%	56.6%	-1.9%	9.7%	24.0%
Liquidity	19.4%	65.5%	7.8%	26.5%	45.0%
D/E	40.3%	124.9%	0.0%	14.7%	57.8%
Loss Dummy	0.36	0.48	0.00	0.00	1.00
Subsets					
Takeover Index, 1965-1979	0.137	0.143	0.037	0.094	0.192
Takeover Index, 1980-1989	0.109	0.135	0.023	0.063	0.145
Takeover Index, 1990-1999	0.066	0.084	0.016	0.038	0.083
Takeover Index, 2000-2013	0.052	0.056	0.016	0.035	0.067

Table 11. Takeover Susceptibility and Firm Value

OLS regressions with market-to-book value of equity (M/B) as the dependent variable. All variables are defined in the header for Table 10. Firm fixed effects and a constant are included in all models. P-values are reported with ***, **, and * representing statistical significance at the 1%, 5%, and 10% levels, respectively.

	All Years	**1965-1979**	**1980-1989**	**1990-1999**	**2000-2013**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
Takeover Index	-0.893 ***	-1.381 ***	0.390 ***	0.521 ***	1.913 ***
	(0.000)	(0.000)	(0.000)	(0.005)	(0.000)
ROE	0.017	0.996 ***	0.090 ***	-0.119 ***	-0.023
	(0.106)	(0.000)	(0.000)	(0.000)	(0.136)
Sales Growth	0.448 ***	1.010 ***	0.403 ***	0.323 ***	0.304 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Liquidity	-0.063 **	0.086	-0.431 ***	-0.196 ***	0.160 ***
	(0.026)	(0.411)	(0.000)	(0.001)	(0.003)
D/E	0.276 ***	0.104 ***	0.263 ***	0.235 ***	0.324 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Loss Dummy	-0.407 ***	0.161 ***	-0.309 ***	-0.443 ***	-0.473 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
N	138,520	23,490	29,133	40,805	45,092
R^2	48.29%	52.42%	63.07%	63.23%	58.07%

Table 12. Takeover Susceptibility and Takeover Premiums

OLS regressions with takeover premium as the dependent variable. Takeover premium is defined following Schwert (1996) as the cumulative abnormal return over the window [-42,126] around the acquisition announcement, estimated using the market model. All other variables are defined in the header for Table 10. All models include an unreported constant. P-values from White standard errors are reported, with ***, **, and * representing statistical significance at the 1%, 5%, and 10% levels, respectively.

	All Years	1970-1979	1980-1989	1990-1999	2000-2013
	(1)	(2)	(3)	(4)	(5)
Takeover Index	-0.252 **	-0.171	0.160	-0.384 *	-0.924 **
	(0.023)	(0.749)	(0.365)	(0.066)	(0.010)
Ln(assets)	-0.005	0.021	-0.030 *	0.006	0.008
	(0.514)	(0.519)	(0.093)	(0.680)	(0.620)
ROE	-0.150 ***	-0.081	-0.299 *	-0.074 *	-0.219 **
	(0.002)	(0.492)	(0.061)	(0.069)	(0.020)
Sales Growth	0.006	0.030	-0.014	-0.079	0.069
	(0.878)	(0.870)	(0.903)	(0.125)	(0.336)
Liquidity	0.194 ***	0.107	-0.123	0.217 ***	0.27 ***
	(0.001)	(0.586)	(0.332)	(0.009)	(0.004)
D/E	0.037 ***	-0.035	0.041	0.032 *	0.040
	(0.010)	(0.525)	(0.320)	(0.075)	(0.139)
M/B	-0.063 ***	-0.026	-0.057 ***	-0.059 ***	-0.077 ***
	(0.000)	(0.395)	(0.008)	(0.000)	(0.000)
N	3,117	220	453	1,155	1,289
R^2	5.80%	1.94%	6.65%	5.32%	9.07%

Table 13: Reincorporations (1995-2013)

Descriptive statistics on reincorporations during the period from 1995-2013. Panel A lists the number of reincorporations for each year from 1995 to 2013. % Reincorporation is the number of reincorporations for each year as measured against the number of firm observations each year. Panel B reports the number of reincorporations by state (i.e., the jurisdiction the firm reincorporates *to*) during the time period. Panel C reports the number of reincorporations and whether it is to firms' state of headquarters or elsewhere. Reincorporation = headquarters is the number of reincorporations during the sample time period in which the firm reincorporates to the location of their headquarters. Reincorporation ≠ incorporation (DE/NV/Other) is the number of reincorporations during the sample time period in which the firm reincorporates to Delaware/Nevada/Other, and Delaware/Nevada/Other is not the firm headquarters. Panel D reports t-tests of the mean change in Takeover Index values (μ) from one year prior to reincorporation to one year after reincorporation, for all reincorporations and for reincorporations to states other than DE.

Panel A: Reincorporations by year (1995-2013)

Year	Same Incorporation	Reincorporation	% Reincorporation	Total
1995	6,391	7	0.11%	6,398
1996	6,826	6	0.09%	6,832
1997	6,797	39	0.57%	6,836
1998	6,534	49	0.74%	6,583
1999	6,375	88	1.36%	6,463
2000	6,068	94	1.53%	6,162
2001	5,749	66	1.13%	5,815
2002	5,467	36	0.65%	5,503
2003	5,241	26	0.49%	5,267
2004	5,091	19	0.37%	5,110
2005	4,988	24	0.48%	5,012
2006	4,773	35	0.73%	4,808
2007	4,570	20	0.44%	4,590
2008	4,341	17	0.39%	4,358
2009	4,168	23	0.55%	4,191
2010	4,036	17	0.42%	4,053
2011	3,898	18	0.46%	3,916
2012	3,849	11	0.28%	3,860
2013	3,167	44	1.37%	3,211
Total	98,329	639	0.65%	98,968

Panel B: Reincorporation states (1995-2013)

State	N	%
Delaware	415	64.95%
Nevada	51	7.98%
Florida	18	2.82%
California	16	2.50%
Colorado	13	2.03%
Maryland	10	1.56%
Texas	10	1.56%
Ohio	9	1.41%
Washington	9	1.41%
Georgia	8	1.25%
Other	80	12.52%
Total	639	100.00%

Panel C: Reincorporations outside of headquarters state (1995-2013)

	N	%
Reincorporation = headquarters	115	18.00%
Reincorporation ≠ headquarters (DE)	414	64.79%
Reincorporation ≠ headquarters (NV)	46	7.20%
Reincorporation ≠ headquarters (other)	64	10.02%
Total	639	100.00%

Panel D: t-tests of changes in Takeover Index values around reincorporations

Issuance type	N	***μ***	***σ***	***t***	***p-value***
Change in index (t-1 to t+1), all reincorporations	468	-0.0097	0.0554	-3.79	<0.001
Change in index (t-1 to t+1), all reincorporations other than DE	142	0.0076	0.0631	1.43	0.155