Industry Tournament Incentives and M&A Deal Initiation

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Gulnur Muradoglu*
University of Illinois Springfield

Ni Peng§
Queen Mary University of London

Huai Qin†
China Cinda Asset Management Co., Ltd

Chunling Xia‡
Queen Mary University of London

Abstract

A managerial labor market with tournament-like progression and associated external industry pay gap can incentivize managers to initiate firm sales through M&A deals. We evaluate the link between such industry tournament incentives (ITIs) of aspirant chief executive officers (CEOs) and the probability of their firms initiating firm sales through M&A deals, and how ITIs affect their subsequent labor market outcomes, transaction premia, and shareholder gains. We document that ITIs faced by aspirant CEOs increase the propensity of their firm initiating sales through M&A deals, and such positive relation is more pronounced when executive and industry characteristics indicate greater CEO mobility and better chances for aspirant CEO winning the tournament. Furthermore, aspirant CEOs with greater external industry pay gap are more likely to retain executive positions in the combined firms after deal completion, and gain improved compensation packages. For such target-initiated M&A deals, aspirant CEOs' external industry pay gap is associated with lower transaction premia hence detrimental to

* College of Business and Management, University of Illinois Springfield, Springfield, Illinois 62703, United States, E-mail: ymura@uis.edu
§ School of Business and Management, Queen Mary University of London, London E1 4NS, United Kingdom, E-mail: n.peng@qmul.ac.uk
† China Cinda Asset Management Co., Shenzhen, Ltd, China, E-mail: qinhuai@cinda.com.cn
‡ School of Business and Management, Queen Mary University of London, London E1 4NS, United Kingdom, E-mail: c.xia@qmul.ac.uk

target shareholders. It does not systematically affect the wealth effects of acquiring firms, however. Overall, our findings suggest that ITIs incentivize CEOs to sell their firms via M&A deal initiation and to reap private benefits in the managerial labor market at the cost of incumbent shareholders.

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1. Introduction

What are the driving factors that lead to selling-firm decisions? The extant M&A literature has examined several potential reasons for target firms initiating their own sales. For example, target firms with financial and competitive weaknesses are motivated to sell their firms to achieve strategic and financial objectives (Masulis and Simsir, 2018). Aktas *et al.* (2016) examine the effects of chief executive officers (CEOs)' narcissism on deal initiation decisions and show that the target CEOs with higher narcissism are less likely to initiate the takeover. A few recent studies have paid attention to the importance of managerial motivation in merger and acquisition (M&A) deal initiation. For instance, target CEOs with higher stock ownership are incentivized to initiate deals (Fidrmuc and Xia, 2019). Although this stream of literature has explored certain aspects of managerial motivation in deal initiation decisions, it has ignored the impact of managerial tournament incentives on firms initiating their own sales. This study intends to fill this gap.

There is an active and competitive labor market for CEOs, and their compensation is also influenced by other peer firms (e.g., Bizjak *et al*. 2011). Survey evidence from Graham *et al*. (2005) suggests that external labor market opportunities and mobilities are considered to be more important than current compensation packages for CEOs when making firm decisions. On the one hand, CEOs with a stronger desire to progress in the managerial labor market tournament may have greater incentives to initiate their firm sales. Guiding their firm through a successful and friendly acquisition may enhance their market visibility, and provide them with a good record of their ability and valuable experience that enhances their future job prospects. It facilitates their career moves and increases the chances of moving to more prestigious employers and/or securing better roles. Furthermore, by actively planning and engaging in their firm sales, they may gain a more preferable position in deal negotiations and a better chance to retain satisfactory jobs and/or private benefits in the combined firms with a larger asset size

under control. Both channels could possibly help increase their future compensation after selling their firms. Even without immediate actual move, the CEOs who attempted selling their firms could accumulate reputation and enhanced market visibility which will increase his external opportunity eventually. To summarize, a firm CEO's industry tournament incentive (ITI) reflects his/her potential upward gains from winning the industry tournament prize and extracting the tournament-induced benefits, via either moving up to larger and more prestigious placement with other employers or more preferable positions maintained with the combined firms. Therefore, ITI could increase the likelihood of CEOs actively selling their firms.

On the other hand, higher ITI could also possibly motivate CEOs to exert more effeort and do better to gain greater reputation which will increase their ourside opportunities and promp board to either match any outside offers received by CEO or significantly increase the CEO's compensation to pre-empt any intentions from other firms that look for a CEO. This suggests a lower likelihood of CEOs with stronger ITI to actively sell their firms through M&As. Therefore, it is an empirical question if and to what extent the external incentives of CEOs will influence the decision of selling their firms. In this paper, we empirically investigate the effect of CEOs' ITIs on the decisions to sell their firms, and how their ITIs together with deal initiation decisions affect their subsequent labor market outcomes, deal premia and shareholder gains of both transaction parties.

Since CEOs from similar industry peer firms tend to compete for higher-level positions and better compensation, the highest CEO compensation of these firms possibly represents a reasonable feasible prize of this tournament in the industry. Following Coles *et al.* (2018) and Huang *et al.* (2019), we calculate two different proxies for a CEO's ITI based on the pay gap between the given firm's CEO pay and measures of the maximal CEO pay in the same industry defined based on the Fama-French 30-industry classification (FF30) and size group. Our sample

consists of 499 U.S. domestic deals for public target firms announced between 1997 and 2019, 182 of which are target-initiated, and 317 of which are bidder-initiated.

Our empirical analysis unfolds as follows. We first examine whether a causal link exists between a target firm CEO's ITI and the likelihood of target firm initiating M&A deals, controlling for industry and year fixed effects to account for time-invariant industry factors and time trends. Overall, our empirical results from probit regressions suggest that target CEOs' ITIs increase the likelihood of target initiation. On average, compared to target firm CEOs with weak ITIs, target firm CEOs with strong ITIs have a 3.5% higher probability of initiating their firm sales.

We conduct a battery of tests to check the robustness of our reported findings on the link between target firm CEOs' ITIs and the likelihood of target initiation. First, to alleviate concerns regarding the potential for endogeneity arising from missing latent factors, we estimate instrumented two-stage probit regressions. Following Coles *et al*. (2018) and Huang *et al*. (2019), we use the sum of the total compensation of all other CEOs in the same industry classification as the instrument of ITI measures. Second, to further mitigate endogeneity concerns and build support for our hypotheses, we investigate the cross-sectional variations in the effect of industry tournament incentives on the likelihood of target initiation. We separately estimate the instrumented two-stage probit specifications with three distinct paired subsample settings to check if the impact of industry tournament incentives manifests itself more pronounced in domains where target firm CEOs have more potential and chances to achieve upward gains and retain favorable career positions and/or private benefits through selling their firms (i.e., for target firms with young CEOs, short-tenure CEOs, and high-ability CEOs). We find that the positive relation between industry tournament incentives and target deal initiation is more pronounced when target CEOs are more likely to win or participate in the industry tournament prize. Specifically, our results suggest that target firms whose CEOs have stronger

ITI are more likely to initiate deals, especially when their CEOs are younger or more talented, and have longer tenures with the target firms. Overall, our findings on the link between target firm CEOs' ITIs and the likelihood of target initiation maintain robust to all these additional checks.

Next, we explore if the industry tournament incentives affect target CEOs' subsequent labor market retention. We posit that when target CEOs with stronger industry tournament incentives engage in target-initiated deals, they also possess better chances of negotiating their own private benefits and pursuing career advancement and upward mobility. Management position retention in the merged firm with larger assets under control is among their favorable career prospects. Our empirical results support this conjecture. We find that industry tournament incentives enhance the likelihood of target CEOs being retained in the merged firm of target-initiated acquisitions. Our results remain consistent with both simple probit and stable and instrumented two-stage probit model addressing potential endogeneity. Furthermore, we examine the effect of the CEO's industry tournament incentives on M&A transaction premia and shareholder gains to both parties of the deal. When the deal was initiated by target firms, we find a negative effect of CEO's ITI on deal premia; as a result, target shareholder suffer a greater loss. However, this negative relation to CEO's ITI is reversed when the deal was initiated by bidder firms or third parties. Meanwhile, there is no systematic effect of target firm CEO's ITI on the wealth effects of acquiring firms.

Our paper makes contributions to the following strands of research. First, this paper sheds light on recent literature on M&A deal initiation. With regard to the motives of firms initiating their own sales, Masulis and Simsir (2018) document the firm economic and financial weakness and negative economic-wide shocks as important drivers for target deal initiation. Focusing on CEO incentives and characteristics, Fidrmuc and Xia (2019) find that CEOs' ownership affects the decision to initiate deals, while Aktas *et al*. (2016) investigate the relation between CEOs'

narcissism and deal initiation. Our study adds to this line of research by showing the impact of managerial tournament incentives on target deal initiation: external tournament incentives encourage target CEOs to actively engage in deal initiation, and increase their probability of obtaining a prestigious position in the merged firm. Second, our study contributes to the recent literature on tournament incentives and is most closely tied to the literature on CEO ITIs and corporate policies and strategies. Recent studies have paid attention to the importance of industry tournament incentives to firm performance and investment policy (Coles *et al*. 2018), hedging policies (Lonare et al., 2022), corporate cash holding (Huang *et al*. 2019), corporate innovation (Nguyen and Zhao, 2021), and stock price crash risk (Kubick and Lockhart, 2021), IPO failure risk (Colak, 2021), corporate social responsibility (Zhao *et al*., 2023), management earning forecast (Cheng et al., 2024) and earnings manipulations (Huang *et al*., 2022 ECGI working paper). Our paper complements this line of literature by highlighting the role of industry tournament incentives on deal initiation in M&A decisions. The larger the pay gap the stronger will be the preference of the aspirant CEOs to move up the industry hierarchy through selling their firms. To the best of our knowledge, this paper is the first empirical work that investigates the role of industry tournament incentives in the context of M&As.

The remainder of this chapter proceeds as follows: Section 2 reviews the previous literature and develops hypotheses. Section 3 describes the sample, variable construction, and empirical methodology. Section 4 presents the results and provides a discussion of robustness tests. Section 5 concludes.

2. Literature Review and Hypotheses Development

2.1 Industry tournament incentives and the likelihood of target deal initiation

The main aim of this paper is to understand how managerial labor market incentives would influence decisions on firm sales and deal initiation. In the context of M&As, extant literature has explored various aspects that could drive decisions on deal initiation ((Jensen and Ruback,

1983; Andrade *et al.* 2001). Heitzman (2011) points out that target-initiated deals account for a nonnegligible proportion in M&As, representing about 35% of the sample deals. Regarding the potential reasons for target firms initiating their own sales, a stream of recent studies has explored the role of financial status and managerial motivation. Masulis and Simsir (2018) report that target firms with financial and competitive weaknesses are motivated to sell their firms to achieve strategic and financial objectives. Fidrmuc and Xia (2019) emphasize the importance of managerial motivation in target deal initiation. Aligning with their viewpoint, several studies have paid attention to target CEO's motivation and linked it to target deal initiation. Aktas *et al.* (2016) show that target CEOs psychological characteristics (narcissism) affect the probability of initiating a takeover. Jenter and Lewellen (2015) find that the retirement age of target CEOs also affects firm sales.

However, extant studies have so far neglected the impact of target firm CEO's external tournament incentives, i.e., managerial labor market incentives, on decisions of target deal initiation. Prior empirical evidence suggests that managerial labor market incentives are economically important to firms' operation and strategic decisions (Fee and Hadlock, 2003). Coles *et al*. (2018) argue that industry tournament incentives provide CEOs with career-enhancing incentives to shape corporate financial policies. Huang *et al*. (2019) further show that CEOs with industry tournament incentives are motivated to pursue value-added cash policies to achieve career-enhancing goals.

As one of the most important strategic decisions for a firm, M&A deals provide CEOs with industry tournament incentives with substantial potential to achieve career enhancement. Driven by career-enhancing motivations, target firm CEOs facing industry tournament incentives are likely to strategically seek acquirers and proactively engage in deal negotiations. First, target CEOs may believe that selling their firms to other firms with greater potential and competency and proactively engaging in deal negotiations would increase their chances to move

up to bigger and more reputable firms. Meanwhile, acquiring firms have motivations to build a competitive advantage by retaining target firm CEOs (Wulf and Singh, 2011). Second, even if they fail to retain in the combined firm after deal completion, target CEOs usually receive a large compensation package including golden parachutes or bonuses (Jenter and Lewellen, 2015). Furthermore, the experience of guiding their firms through successful and friendly acquisitions would provide good evidence of their ability and valuable experience that enhances their future job prospects in the managerial labor market (Hartford, 2003). Lastly, external tournament incentives induce excessive risk-taking behaviors due to the option-like payoff structure, which increases target CEOs' risk appetite (Coles et al. 2020). It is known that selling firms potentially increase the CEO's risk of losing jobs, which might lead target CEOs with risk-aversion or risk-neutral to less actively engage in deal initiation. However, industry tournament incentives lead to target CEOs' preference for higher risk, resulting in a higher propensity of deal initiation. Therefore, we expect the likelihood of target deal initiation to be positively associated with the target CEOs' industry tournament incentives. We summarize our conjecture in the following hypothesis:

H_1: Target CEOs' industry tournament incentives increase the likelihood of target deal initiation.

2.2 The likelihood of target deal initiation in different domains of industry tournament incentives

If the likelihood of target deal initiation is associated with the CEO's managerial labor market incentives, we posit that the impact of industry tournament incentives would manifest itself more pronounced in domains where target firm CEOs have greater potential and chances to win the industry tournament prize, i.e. achieving upward gains, retaining favorable career positions, or reaping private benefits through selling their firms. We expect a stronger effect of

industry tournament incentives in the three distinct settings: target firms with young CEOs, with short-tenure CEOs, and with high-ability CEOs.

First, older CEOs would prefer not to move up to another firm to take challenges and have weaker career-enhancing motivations, hence they are less likely to be motivated by industry tournament incentives to initiate deals (Huang et al. 2019). Second, the effect of industry tournament prizes relies on target firm CEOs' tenure. Some literature argues that CEOs with longer tenure are beneficial to firm performance and considered to be more valuable (i.e., Kor and Mahoney, 2005), and long-tenured target CEOs are more likely to be retained after mergers (Wulf and Singh, 2011). Target CEOs who have short tenures are less likely to actively seek outside jobs due to a lack of proven performance records, while CEOs with long tenures are more likely to pursue industry tournament prizes with their accumulated performance record with the current company. As a result, target firm CEOs with long tenures tend to face greater incentives to actively initiate deals, relative to short tenures. Third, the industry tournament prize is achieved by winning the managerial labor market competition, which requires CEOs' superior ability and talents. More capable and talented target CEOs are more likely to be recognized by the managerial labor market and achieve industry tournament prizes through planning and guiding their firm sales. These target CEOs are also more likely to be promoted or retained in merged firms after acquisitions (Wulf and Singh, 2011). As a result, target CEOs with greater abilities potentially face greater industry tournament incentives and hence are more motivated to actively initiate deals. To summarize, these arguments lead to our following hypotheses:

H_{1a}: All else being equal, the positive relation between industry tournament incentives and target deal initiation is stronger for target firms with young CEOs.

H_{1b}: All else being equal, the positive relation between industry tournament incentives and target deal initiation is stronger for target firm CEOs with long tenures.

H_{1c}: All else being equal, the positive relation between industry tournament incentives and deal initiation is stronger for target firm CEOs with more talent.

2.3 Industry tournament incentives and target CEO retention

Target CEOs with industry tournament incentives tend to pursue higher compensation packages and are highly likely to actively offer their firms for sale before they go bankrupt when these target firms are financially constrained but still have good operating performance (Masulis and Simsir, 2018; Fidrmuc and Xia, 2019). By actively offering their firms for sale, we argue that target CEOs are more likely to be retained in the combined firms. We summarize our conjecture below:

H_2: Industry tournament incentives increase the likelihood of target CEO retention in the combined firms after target-initiated deals.

3. Data and Methodology

3.1 Deal sample

To construct the initial M&A deal sample, we extract all announced U.S. domestic M&A deals between 1997 and 2019 from the Thomson Financial SDC Mergers and Acquisitions Database. The sample starts in 1997 as SEC requires public firms to submit their filings in EDGAR from May 1996. We require the following section criteria: (i) both acquirer and target are publicly traded in the U.S. and not from the financial and utility industry (Standard Industrial Classification (SIC) codes 4900–4999 and 6000–6999, respectively); (ii) deal value exceeds $1 million and deal status is completed; (iii) acquirer firms must have less than 50% of target shares before the merger and control at least 50% of the target shares after transactions; (iv) deal type must be the "merger", "acquisition of majority interests", or "acquisition of assets". To obtain firm characteristics and stock price data, we match the SDC deal sample with the Compustat and Center for Research in Security Prices (CRSP). This yields a total sample of 1,842 deals.

To obtain target CEOs' compensation-relation variables, we identify available target CEOs in the EexcuComp. We require the data information which is used to calculate compensation-related variables of target CEOs is covered by the EexcuComp. This results in a sample of 547 deals.

To acquire deal initiation information, we search both acquirer and target filings in the EDGAR database. Following Fidrmuc and Xia (2019), we manually collect the initiation party and initiation date from the "Background of the Deal" or "Background of the Merger" sections of DEFM14A, PREM14A, SC14D9, TO-T, and S-4 filings. The background section describes the detailed negotiation and actions of merger firms during the takeover process. Normally, if a target firm intends to sell the firm, the firm's management will consider various strategic opportunities and alternatives and nominate an investment bank to act as its financial advisor in connection with the potential bidders. In this case, the target firm is actively engaging in the selling process prior to receiving any bidder offers. Therefore, we define a deal as target-initiated if the target firm decides to consider strategic alternatives and hire a financial advisor to contact potential buyers. We define a deal as bidder-initiated if a buyer approaches the target firm's management and conveys their interests in combination of firms, and then the target firm considers the offer and responds to the bidder. In some cases, target firms are approached by multiple bidders during the takeover process and eventually acquired by a third party which is not the initiating bidder. As these target firms do not consider the sale of the firm prior to bids, these deals are still classified as bidder-initiated acquisitions. However, our required filings are not available for all deals in the EDGAR database. In 33 cases, we fail to obtain the initiation data, and in 15 cases, we are unable to classify the initiation party. Lastly, during the period of 1997-2019, we can find the deal initiation information for 499 deals, of which 182 deals are target-initiated and 317 deals are bidder-initiated. This is comparable to Masulis and Simsir (2018), who documented that 35% of the U.S. M&A deals are targeted inititeaed in their sample.

Table 1 presents the sample distribution across years (Panel A) and target firms' Fama-French 30 industries (Panel B). Panel A shows the number of target-initiated and bidder-initiated deals in each announcement year. Target-initiated deals account for 36.5% of total deals and the remaining 63.5% are bidder-initiated deals, which is comparable to 35.4% of target-initiated deals and 64.6% of bidder-initiated deals reported in Masulis and Simsir (2018). Panel B shows target-initiated deals distribute across various industries, with the top five industries: Personal and Business, Business Equipment, Healthcare, Retail, and Petroleum and Natural, accounting for 63.7% of total target-initiated deals.

*****insert table 1 here*****

3.2 Industry tournament incentives measure

Following Coles *et al.* (2018), we measure the industry tournament incentives as the difference between the total compensation paid to the CEO and the total compensation to the second-highest paid CEO in the same Fama-French 30-Industry classification. CEO's total compensation is defined as the sum of base salary, bonus, the value of restricted stock grants, the Black-Scholes value of option grants, and other long-term incentive plans. Coles *et al*. (2018) recommend using the second-highest compensation in the industry to proxy for the maximal CEO pay since there might be possible outliers of the highest compensation in the industry which may be not representative for tournament winners. Therefore, we use the pay gap between the focal firm's CEO and the second-highest-paid CEO in the same FF30 industry as our first measure of ITI (*Indgap1*). The second ITI measure considers the common industry practice that firms often select industry peer firms of similar size as the performance benchmark for CEOs pay. As a result, we divide the sample into two groups based on whether net sales are above or below the industry median in each year (Coles *et al.* 2018) and define *Indgap2* as the pay gap between the focal firm's CEO and the second-highest-paid CEO in the firm's industry-size group. In line with Coles *et al.* (2018), we exclude CEOs with a negative pay gap in each

industry or in each size-based half industry group.[1] We follow Kubick and Lockhart (2020) to take a natural logarithm of ITI measures to normalize the distribution. For both ITI measures, target CEOs are considered to face stronger industry tournament incentives when pay gaps are larger. As shown in Figure 1, in our sample, the target firm CEO's industry pay gap peaks in years of 1999 and 2000, which is consistent with Coles *et al.* (2018).

3.3 Measures of other CEO performance incentives

To conduct the empirical tests, we include a battery of control variables informed by prior studies (e.g., Cole *et al.* 2018; Fidrmuc and Xia, 2019; Masulis and Simsir, 2018). First, we control for a set of target CEO-level characteristics and incentives including the internal pay gap between senior executives and the CEO (*Firmgap*), equity-based compensation incentives (*Delta*), option-based compensation incentives (*Vega*), target CEO ownership (*Ownership*), and CEO age (*Age*). Prior studies show that firm internal tournament incentives negatively affect acquisition performance (Hasan *et al.* 2020) and both CEO delta and vega effects influence the likelihood of acquisitions and merger outcomes (Hagendorff and Vallascas, 2011; Croci and Petmezas, 2015). Further, Yim (2013) finds that younger CEOs are more likely to make acquisitions. In line with Kini and Williams (2012), *Firmgap* is measured as the pay gap between CEO's total compensation and median vice president (VP) compensation. *Delta* (*Vega*) is the change in dollar value of CEO stock option for a 1% change in the stock price (volatility of stock returns) (Coles *et al.* 2006). Related to CEO incentives, Fidrmuc and Xia (2019) show that the target CEOs' ownership encourages target CEOs to actively initiate deals, and *Ownnership* is defined as the total fraction of shares outstanding owned by target CEOs at the end of the last fiscal year.

[1] If we define the pay gap as zero for those highest-paid CEOs in in each industry or in each size-based half industry group, our findings are intact.

3.4 Baseline specifications

Our empirical tests are divided into two parts. We begin our empirical analysis by examining the relation between the target CEO's industry tournament incentives and the likelihood of target deal initiation. To conduct this analysis, we estimate the following probit model including the lagged ITI measures and industry and year fixed effects:

$$Target\ Initiation = \alpha + \beta_1 Ln(Indgap_{t-1}) + \delta\ Controls_{t-1} + \varepsilon_t \quad (1)$$

, where $Target\ Initiation$ is the binary variable that equals one if the deal is classified as target-initiated, and zero for bidder-initiated. *Ln(Indgap)* is our main variable of interest that captures the effect of the target CEO's industry tournament incentives on the likelihood of target deal initiation, defined as in Section 3.2. For control variables, we include a set of target CEO characteristics and compensation-related variables (e.g., *Firmgap*, *Delta*, *Vega*, *Ownership*, and *Age*), target firm characteristics, and industry-level measures. The target firm characteristics include the firm size (*Size*), the market-to-book ratio (*M/B*), sales growth ratio (*Sale Growth*), the return-on-assets ratio *(ROA*), institutional ownership (*Instown*), the buy-and-hold abnormal returns for firms' stock over the past 12 months (*Past Ret*), and target firm's stock volatility (*Volatility*). Prior literature shows these firm characteristics and operating performance influence acquisition likelihood and merger outcomes (Hartford, 1999; Shleifer and Vishny, 2003; Edmans *et al.* 2012). We consider the financial distress and constraints of target firms. Masulis and Simsir (2018) suggest that target firms with financial constraints and weaknesses are motivated to initiate deals. To control for the target firm's financial distress and weakness, we use three proxies which include the target firms' leverage ratio *(Leverage*), the low Altman Z-score (*Low Z–score*), and *SA Index* (Hadlock and Pierce, 2010). Following Fidrmuc and Xia (2019), we also control for the target industry-specific measures: target industry competition (*HHI)* and industry similarity (*Ind Similarity*), and *M&A Activity*. In this study, all dollar values

are inflation-adjusted to 2008 dollars. Robust standard errors are clustered at the industry and year level. All variables' definitions can be found in the Appendix.

4. Empirical Results

4.1 Univariate analysis

Table 2 presents a comparison of target CEOs' characteristics, firm characteristics, deal characteristics, and industry shocks between target- and bidder-initiated deals in our sample. We winsorize all continuous variables at the 1st and 99th percentiles to avoid any bias caused by outliers. Panel A of Table 2 focuses on a set of target CEO characteristics and compensation-related variables. We note that target CEOs of target-initiated deals have stronger industry tournament incentives relative to bidder-initiated deals and the mean difference for *Ln(Indgap1)* is significant at the conventional level. Consistent with Fidrmuc and Xia (2019), we find that target CEOs of target-initiated deals have significantly higher ownership relative to bidder-initiated deals, compared to those of bidder-initiated deals, and the mean difference is significant at the 10% level. This supports the argument that target CEOs' incentives matter for the M&A negotiation process. The average target CEO's age is about 55 years old, which is similar to Jenter and Lewellen (2015) in both target- and bidder-initiated deals.

Panel B of Table 2 focuses on the firm characteristics and shows that targets in target-initiated deals have significantly lower institutional ownership and smaller size as in Fidrmuc and Xia (2019). All other firm characteristics are similar for targets in target- and bidder-initiated deals. Panel C in Table 2 shows that target-initiated deals are less likely to be tender offers and more likely to offer stock payment. Target- and bidder-initiated deals have similar industry competition, industry similarity, and M&A activities (Masulis and Simsir, 2018).

*****insert table 2 here*****

4.2 Industry tournament incentives and deal initiation

We first examine the relation between target CEOs' ITI and target deal initiation. Table 3 presents the result of probit regression for Equation (1). Coefficients of marginal effects are reported. Columns 1 and 2 report the result based on the first ITI measure (*Ln(Indgap1)*), while Columns 3 and 4 report results based on the second ITI measure (*Ln(Indgap2)*).

For all specifications, the coefficients of ITI measures are positive and significant at least the 10% or 5% level, suggesting that target CEOs with higher industry tournament incentives increase the probability of target initiation. This result is consistent with our hypothesis H_1. Turning to the economic significance, a one-standard-deviation increase in *Ln(Indgap1)* in column 2 and *Ln(Indgap2)* in column 4 increases the probability of target-initiated deals by 3.5% and 2.1%, respectively. For other variables, results are generally consistent with prior literature. For instance, consistent with Fidrmuc and Xia (2019), we find that target CEOs with higher ownership are motivated to initiate deals. Also, columns 2 and 4 show that both coefficients of *Low Z-score* and *SA Index* are positive and insignificant, indicating that target-initiated firms are not financially distressed.

Overall, results in Table 3 provide the supporting evidence for our hypothesis H_1, suggesting that the external tournament incentives increase the likelihood of target CEOs initiating deals. Consequently, target CEOs' ITI is an important driver for decisions in the deal initiation.

*****insert table 3 here*****

4.3 Two-stage IV model

One might be concerned that endogenous problems may confound our prior findings on the impact of CEOs' industry tournament incentives on target deal initiation. Although the previous probit model uses lagged compensation-related variables and controls for a set of important variables to alleviate the endogeneity concerns, one empirical challenge is that ITI measures

are potentially endogenously determined by the CEO compensation of focal firms. Since the CEO pay policy is widely influenced by many factors including other CEOs, firms, and industry characteristics, which may be potentially related to deal initiation decisions. To avoid producing biased regression results and mitigate endogenous concerns, we attempt to address this potential issue using various techniques.

First, we estimate Equation (1) using the two-stage IV Probit model. In our setting, the IV Probit model first estimates the OLS regression of ITI measures using an instrument variable and then estimates the probit regression of target deal initiation by using the predicted value of ITI measures. Following Coles *et al.* (2018), we define the instrument variable as the sum of the total compensation of all other CEOs in the same industry, excluding the highest-paid CEOs (*Totcomp*).We also take a natural logarithm of *Totcomp* to normalize the distribution. The rationale for this instrument is that industry total CEO compensation indicates the ability to pay. The higher the industry's ability to pay executives, the higher the maximum compensation received by CEOs in the industry, and the greater the pay gap for other CEOs in the industry. We expect that this instrument satisfies the exclusion restriction as the target firm's decision to imitate deals would not be directly influenced by the sum of CEOs' compensation in the industry. As a result, we believe the instrument, *Ln(Totcomp),* could affect the likelihood of initiating deals only through its effect on the industry tournament incentives measure.

Table 4 presents the results of the two-stage IV Probit model. The dependent variable is the natural logarithm of the ITI measures in the first stage (Column 1, 3, 5,7), while the dependent variable is *Target Initiation* in the second stage (Column 2, 4, 6, 8). In the first stage, all columns show that the instrument variable, *Ln(Totcomp)*, is positively related to the industry tournament incentives measures (both *Ln*(*Indgap1)* and *Ln*(*Indgap2)*), and coefficients are significant at the 1% level. The First-stage F-tests are also significant at the 1% level, indicating this instrument satisfies the relevance conditions. Moreover, Kleibergen-Paap LM tests and

Anderson-Rubin F-tests show that the instrument is relevant and not weakly identified[2]. The estimated coefficients on other control variables are similar to those reported by Coles *et al.* (2018). We further test the IV independence assumption by using the approach of Kedagni and Mourifie (2020). This approach is used to test the validity of instruments by employing a sample splitting procedure and an inference method for intersection bounds. We split the sample at the 20th, 40th, 60th, and 80th percentiles of the dependent variable, respectively. In this test, the null hypothesis is that instruments meet the independence assumption, if the lower bound of the confidence interval is positive, then the null hypothesis (independence assumption) is rejected. Results are reported in Panel B and show lower bounds of confidence intervals for Ln(Totcomp) are all negative. Thus, the null hypothesis fails to reject, indicating our IV meets the independence assumption and supports its validity. Collectively, these tests show that this instrument is valid, which is consistent with prior findings (Coles et al. 2018; Huang et al. 2019). Collectively, these tests show that this instrument is valid, which is consistent with prior findings (Coles *et al.* 2018; Huang *et al*. 2019).

The second-stage results reported in Columns 2 and 4 of Table 4 show that the coefficients of instrumented *Ln*(*Indgap1)* are both positive and significant at the 5% level, whiles Columns 6 and 8 show that coefficients of instrumented *Ln*(*Indgap2)* are significantly positive at the 1 % level. This indicates that our baseline results are robust with the instrumental variable approach. The economic significance is also large. For instance, Column 4 shows that a one-standard-deviation increase in instrumented *Ln(Indgap1)* increases the probability of target initiation by 34%, which is more than nearly 10 times the probit estimations in Column 2 of Table 3. Collectively, the results in Table 4 further confirm hypothesis H_1 that the external tournament incentives of target CEOs increase the likelihood of initiating deals.

*****insert table 4 here*****

[2] Because the model is just identified, the overidentification test is not allowed.

4.4 CEO and industry characteristics and the effect of industry tournament incentives on target initiation

Next, we investigate the cross-sectional variations in the effect of industry tournament incentives of CEOs on the likelihood of target-initiated deals. If the managerial labor market incentives affect the target initiation decisions, it is expected that the effect of industry tournament incentives would be more pronounced when target CEOs have more potential and chances to win the industry tournament prize. Specifically, we posit that the likelihood of target-initiated deals driven by industry tournament incentives is increased (i) when target CEOs are young, (ii) when target CEOs have long tenures, (iii) when target CEOs have high abilities, and (iv) when target firms operate in industries with more CEPs, greater mobility and industry homogeneity. To examine these predictions, we divide the sample into two subsamples based on the sample median of target CEOs' age, tenures, and ability measures, and industry . Following Tan (2021), we define the target firm's CEO ability as the industry-adjusted ROA. Then we separately estimate the second-stage IV Probit model for each subsample.

Table 5 reports the results for the effect of these target CEOs- and industry-related characteristics to win the industry tournament prize on the likelihood of deal initiation. The key explanatory variable is the instrumented *Ln(Indgap1)* (*Ln(Indgap2*)) in Panel A/C (B/D), and first-stage coefficients are not reported for brevity. Consistent with our hypothesis, we find that the subsample of target CEOs with a higher probability to win the industry tournament prize increases the probability of target deal initiation. For instance, the coefficient of the instrumented *Ln(Indgap1)* is 0.515 and significant at the 5% level for young CEOs while it is insignificant for old CEOs. This evidence supports our hypothesis that the positive relation between industry tournament incentives and target deal initiation is stronger for target firms with young CEOs than those with old CEOs. Similarly, we find that the coefficients of instrumented *Ln(Indgap1)* are significantly positive when target CEOs have long tenures and

high ability, but insignificant for target CEOs with short tenures and low ability. This also supports our argument that the target CEOs are more likely to engage in deal initiation when they face a greater chance to win the industry tournament prize. Panel B repeats the above subsample analysis using the second ITI's measure *Ln(Indgap2)* and the results are not changed.

Overall, results in Table 5 further support our argument that target firms whose CEOs have stronger industry tournament incentives are more likely to initiate deals, especially when target CEOs are younger and more talented, and have longer tenures.

*****insert table 5 here*****

4.5 Target CEOs' retention and post-transaction compensation changes

In this section, we test hypothesis H_2 that industry tournament incentives increase the likelihood of target CEOs' retention in the combined firms after target-initiated acquisitions. This prediction is important, given that the upward mobility in the managerial labor market and career development are the main motivation for target CEOs' external tournament incentives (Coles *et al.* 2018; Graham *et al.* 2005). To examine this hypothesis, we estimate Equation (2) with a probit model:

$$CEO\ Retention = \alpha + \beta_1 Ln(Indgap_{t-1}) + \beta_2 Target\ Initiation + \beta_3 Ln(Indgap_{t-1}) * Target\ Initiation + \delta\ Controls_{t-1} + \varepsilon_t \quad (2)$$

where *CEO Retention* is a dummy variable, which equals 1 if the target CEOs obtain a significant position in combined firms, and zero otherwise. The interest here is the coefficient of the interaction term *Ln(Indgap)*Target Initiation*. We include a set of control variables to control for other incentives, firm fundamentals, and deal characteristics, which could affect the likelihood of target CEOs being retained after mergers. For target CEO and firm characteristics, we include *Firmgap*, *Vega*, *Delta*, *Ownership*, *Age*, *Size*, *Leverage*, *M/B*, and *ROA*. Following Wulf and Singh (2011), we control for deal characteristics including whether the deal is classified as a tender offer (*Tender*), methods of payment (*Stock Deal*), and the deal relative

size (*Relative Size*). Both year and industry fixed effects are included in the model, and standard errors are two-way clustered by the firm and industry levels.

Columns 1 and 2 in Table 6 show that coefficients of the *Target Initiation* are both negative but only statistically significant in column 2 (at the 10% level), indicating that target-initiated deals have a negative effect on the probability of target CEOs being retained in merged firms. However, when looking at the interaction term (*Ln(Indgap1)*Target Initiation*), the coefficients become positive and significant at the 5% level in both columns 1 and 2. It suggests that target CEOs' industry tournament incentives mitigate the negative effect of target imitation on the probability that target CEOs obtain a prestigious position in the merged firm. Relative to target CEOs with low ITI in target-initiated deals, target CEOs with high ITI are more likely to be retained in the combined firms. This finding is consistent with our hypothesis H_2. When changing to the second ITI measure, columns 3 and 4 show that our results continue to hold.

*****insert table 6 here*****

Next, we estimate Equation (2) with a two-stage IV Probit model to account for potential endogenous issues of ITI measures. As discussed in section 4.3, ITI measures might be endogenous variables and thus the interaction term (*Ln(Indgap)*Target Initiation*) could be endogenous as well. To address this potential concern, we use *Ln(Totcomp)* as the instrument for *Ln(Indgap)* and *Ln(Totcomp)*)**Target Initiation* as the instrument for *Ln(Indgap)*Target Initiation*. Specifically, we estimate the first-stage regressions for two endogenous variables. Then we estimate the second-stage probit model using the predicted value of *Ln(Indgap)* and *Ln(Indgap)*Target Initiation* from instruments. For brevity, we only report the second-stage results from the two-stage IV Probit model.

Table 7 reports the results and shows that for all specifications, coefficients of the interaction term between ITI measures and *Target Initiation* are positive and significantly at least the 5% level, providing evidence that industry tournament incentives increase the

likelihood of target CEOs' retention in the combined firms after target-initiated acquisitions. Moreover, the instrument tests in all columns suggest that the instrument variables are collectively valid and relevant. Taken together, results in Table 7 confirm the baseline findings of target CEOs' retention in target-initiated deals are robust after addressing potential endogenous issues. Furthermore, bidder firms are more likely to retain target CEOs with higher ITIs in target-initiated acquisitions, which supports the managerial labor market incentive-based explanation for target deal initiation.

*****insert table 7 here*****

Next, we report the impact test of the compensation change for target firms' CEOs after selling firms on their industry tournament incentives. As presented in table 8, for target-initiated deals, on average, CEO with greater ITI realize greater compensation improvement in the three years after selling their firms. This evidence also echos our conjecture that target CEOs' external industry incentives motives them to actively sell the firm in order to achieve better career development and private benefits.

*****insert table 8 here*****

4.6 Transaction premia and shareholder gains

We further examine the effect of the CEO's industry tournament incentives on M&A transaction premia and shareholder gains to both parties of the deal. When the deal was initiated by target firms, we find a negative effect of CEO's ITI on deal premia; as a result, target shareholder suffer a greater loss. However, this negative relation to CEO's ITI is reversed when the deal was initiated by bidder firms or third parties. Meanwhile, there is no systematic effect of target firm CEO's ITI on the wealth effects of acquiring firms.

*****insert table 9 here*****

For robustness, we further split the sample by payment method. We find that the reported effect of the target CEO's industry tournament incentives on M&A transaction premia and

shareholder gains is mainly driven by deals with stock payment, not by deals with full cash payment.

*****insert table 10 here*****

4.7 Other robustness tests

Some issues may confound our results. First, someone may concern that ITI measures are correlated with governance factors. To alleviate this concern, we estimate the baseline models by controlling additional governance variables, including firm-level governance quality (*G-index*) and CEO-chair duality. *G-index* of Gompers *et al.* (2003) reflects the number of anti-takeover provisions and CEO-chair duality is a dummy variable that equals one if the target CEO is also the chairman of the board. Our main findings remain intact after including these governance controls. Second, we include additional target CEOs characteristics which could affect the probability of target CEOs winning the industry tournament prize. Specifically, we consider whether target CEOs are the founder and target CEOs' managerial abilities. To measure target CEOs' general ability, we use managerial scores developed by Demerjian *et al.* (2012). Our results continue to hold.

Furthermore, we conduct the robustness check for the main analysis using the FF48 industry classification to compute *Indgap1* and *Indgap2*. Finally, we examine the robustness of our main results are robust to an alternative instrument of ITI. Following Huang *et al.* (2019) and Coles *et al.* (2018), we use the total number of target CEOs in the same industry as the instrument for ITI measures. These robustness test results with alternative industry classifications and instruments show our main findings persist.

5. Summary and Conclusions

In this paper, we examine the relation between industry tournament incentives and target-deal initiation. We propose that the managerial labor market with tournament-like progression can incentivize managers to actively offer their firms for sale. By doing so, target firm CEOs

with stronger industry tournament incentives are able to reap potential upward gains from winning the industry tournament prize and gain job retention in the combined firms. Using a sample of 499 U.S. domestic M&A deals with publicly listed target firms announced between 1997 and 2019, we document a greater likelihood of deal initiation for target firms whose CEOs face stronger industry tournament incentives. This evidence is more pronounced when CEOs are younger and more talented and have longer tenures, and when target firms are in induries with greater number of CEOs, greater mobility and industry homogenerity. Collectively, these results suggest target firm CEOs are motivated to actively sell their firms when they have greater industry tournament incentives. Furthermore, our results show that target firm CEOs with stronger industry tournament incentives in target-initiated deals have a greater chance to retain positions in the combined firms after deal completion, and realize more substantial compensation improvement.

This study provides additional support to studies on M&A deal initiation, particularly the target deal initiation (Masulis, and Simsir, 2018; Fidrmuc and Xia, 2019), by highlighting that industry tournament incentives of top management, as a type of managerial motivation, is an important driver of takeover. As an external promotion-based incentive, industry tournament incentives differ from intra-firm tournament incentives, and other CEO incentives such as risk-taking incentives (vega) and alignment-of-interest incentives (delta), which are beyond the control of boards and internal governance structure. Our research also adds to studies on industry tournament incentives by providing evidence that industry tournament incentives can play a substantial role in the context of M&As, apart from influencing corporate policies, strategies, and performance suggested by extant literature on CEO ITIs (e.g., Coles *et al*. 2018; Huang *et al*. 2019; Nguyen and Zhao, 2021; Kubick and Lockhart, 2021).

Our paper has important implications in real business practice by drawing attention to the role of ITIs in corporate takeover activities. Our study suggests that boards should consider the

pay practices of industry peer firms when formulating top management incentive mechanisms and internal governance structures that are under their control to influence managerial behavior. It is also worth for firms and boards to pay attention to their industry peers' executive compensation when developing strategies for corporate takeover activities or designing corporate antitakeover devices to guard firms against attacks from the market for corporate control.

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Appendix: Varaiable definitions

Variable	Definition	Source
1-day Offer Premium	The ratio of the initially offered price per share over the price per share of the target 1 day before the announcement date.	SDC;CRSP
1-week Offer Premium	The ratio of the initially offered price per share over the price per share of the target 1 week before the announcement date.	SDC;CRSP
Acquisition Premium	The cumulative abnormal return to the target during the bid period from 42 trading days before deal announcement to the date of deal completion, following Schwert (1996).	SDC;CRSP
BHAR(1,12)	The bidder firm's buy-and-hold abnormal returns for the period of 12 months after deal completion. Following Hirshleifer et al. (2009), the benchmark portfolio is calculated by using a five-by-five size and book-to-market matched portfolio based on the market capitalization at the end of June and book value of equity for the last fiscal year-end divided by the market value of equity in the last December.	SDC;CRSP
BHAR(1,24)	The bidder firm's buy-and-hold abnormal returns for the period of 24 months after deal completion. Following Hirshleifer et al. (2009), the benchmark portfolio is calculated by using a five-by-five size and book-to-market matched portfolio based on the market capitalization at the end of June and book value of equity for the last fiscal year-end divided by the market value of equity in the last December.	SDC;CRSP
Bidder CAR (–1,+1)	The market model adjusted abnormal returns to the bidder over (-1, +1) window surrounding the deal announcement. We use the CRSP value-weighted index returns as the benchmark over the period starting 253 trading days and ending 42 trading days prior to the deal announcement date.	SDC;CRSP
CEO Ability	The difference between firm–year ROA and industry-year ROA.	Compustat
CEO Age	The age of the CEO at the end of fiscal year t–1.	ExecuComp
CEO Ownership	The total fraction of shares outstanding owned by the CEO at the end of fiscal year t–1.	TIF
CEO Retention	A dummy variable equals 1 if the target CEO obtains a significant position in combined firms, and zero otherwise.	ExecuComp
Combined CAR (–1,+1)	The value-weighted average of *CARs* of the bidder and target. The weights are based on the market value of equity of the bidder and target five days prior to the deal announcement date.	SDC;CRSP
Delta	The change in dollar value of CEO stock option for a 1% change in the stock price.	ExecuComp
Firmgap	The pay gap between CEO's total compensation and the median vice president (VP) compensation at the end of fiscal year t–1.	ExecuComp
HHI	Herfindahl–Hirschman index based on TNIC-3 industry developed by Hoberg and Phillips (2016).	Hoberg-Phillips Data Library
Ind Similarity	The paired firm similarity score for all peer firms based on the TNIC-industry developed by Hoberg and Phillips (2016).	Hoberg-Phillips Data Library
Indgap1	The difference between the total compensation paid to the CEO and the total compensation to the second-highest-paid CEO in the same Fama-French 30-Industry classification at the end of fiscal year t–1.	ExecuComp
Indgap2	The difference between the total compensation paid to the CEO and the total compensation to the second-highest-paid CEO in the same Fama-French 30-Industry classification and size group at the end of fiscal year t–1.	ExecuComp
Instown	The total fraction of shares outstanding owned by institutional blockholders at the end of fiscal year t–1.	TIF
Leverage	The ratio of long-term debt plus short-term debt divided by the book value of total assets at the end of fiscal year t–1.	Compustat
Low Z-score	A dummy variable equals 1 if the z-score is lower than 1.81, and zero otherwise. Z-score is calculated as 1.2 * working capital/total assets + 1.4 * retained earnings/total assets + 3.3 * EBIT/total assets + 0.6 * market capitalization/book value of debt + 0.999 * total sales/total assets.	Compustat
M&A Activity	The total number of firms with a takeover in the same first three-digit SIC code as the sample firm over one year just before the initiation date divided by the total number of firms in the same first three-digit SIC code in Compustat.	Compustat; SDC
M/B	The ratio of market value of assets divided by book value of assets, where the market value of assets is estimated as the book value of assets plus the difference between market and book value of equity, measured at the end of fiscal year t–1.	Compustat
Past Ret	The buy-and-hold abnormal returns for firms' stock over the past 12 months where the benchmark return is the CRSP value-weighted index.	CRSP
Relative Size	The ratio of deal size reported from SDC to the acquirer firms' total assets at the end of fiscal year t–1.	SDC
ROA	EBIT divided by the total assets at the end of fiscal year t–1.	Compustat
SA Index	Following Hadlock and Pierce (2010), SA Index = $-0.737 \times (\text{Size}) + 0.043 \times (\text{Size}^2) - 0.04 \times (\text{Age})$, where size is the natural log of book value of assets (inflation adjusted to 2008 dollars) and age is the number of years the firm has been on Compustat with a non-missing stock price.	Compustat

(Continued on next page)

Appendix (continued)

Variable	Definition	Source
Sale Growth	The sales in fiscal year t divided by sales of fiscal year t–1.	Compustat
Ln(Total Assets)	The natural logarithm of *Total Assets* at the end of fiscal year t–1.	Compustat
Stock Deal	A dummy variable equals one if the deal is fully paid in stock, and zero otherwise.	SDC
Target CAR (–1,+1)	The market model adjusted abnormal returns to the target over (–1, +1) window surrounding the deal announcement. We use the CRSP value-weighted index returns as the benchmark over the period starting 253 trading days and ending 42 trading days prior to the deal announcement date.	SDC;CRSP
Target Initiation	A dummy variable equals one if the deal is initiated by the target firm, and zero when the deal is initiated by the final acquirer or a third party.	EDGAR; SDC
Tender	A dummy variable equals one if the deal is the tender offer, and zero otherwise	SDC
Tenure	The difference between year t and the year in which the CEO is appointed from ExecuComp.	ExecuComp
Totcomp	The sum of total compensation of all other CEOs in the same industry classification, except for the highest-paid CEO.	ExecuComp
Vega	The change in dollar value of CEO stock option for a 1% change in the annualized standard deviation of stock returns at the end of fiscal year t–1.	ExecuComp
Volatility	The standard deviation of the firm's daily stock returns in the last one year.	CRSP

Figure 1: Industry tournament incentives of target firms' CEOs during sample period

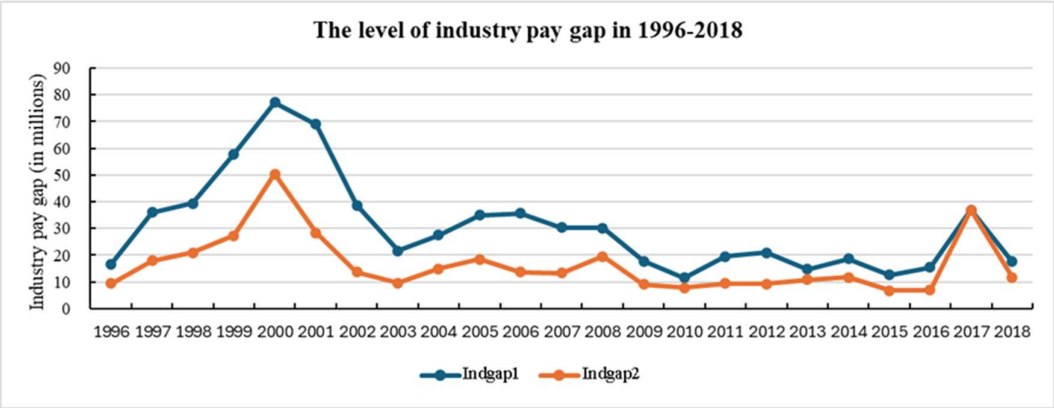


Figure 2: The impact of industry tournament incentives on the likelihood of target initiation during sample period

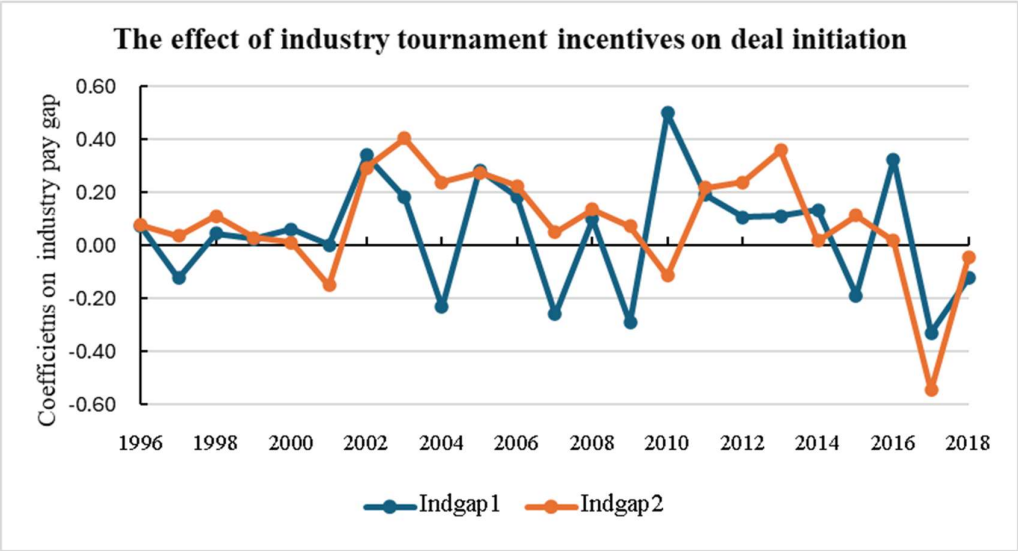


Table 1: Sample description

This table reports the sample distribution across years (Panel A) and Fama-French 30 industries (Panel B) for M&A deals initiated by target firms and bidder firms. We draw our sample from the SDC database using the screening criteria discussed in Section 3.1. The M&A sample covers deals announced between 1997 and 2019. We define a deal as "target initiated" if the initiation party recorded in filings of EDGAR database is the target firm. We define a deal as "bidder initiated" if the initiation party recorded in filings of EDGAR database is the final acquiring firm or a third party.

Panel A: *Frequency of deals by year*

Year	Target-initiated deals	Bidder-initiated deals	Total deals
	(1)	(2)	(3)
1997	16	24	40
1998	20	19	39
1999	15	24	39
2000	15	23	38
2001	8	12	20
2002	2	7	9
2003	3	8	11
2004	8	11	19
2005	8	18	26
2006	5	17	22
2007	5	20	25
2008	2	11	13
2009	8	13	21
2010	6	12	18
2011	5	7	12
2012	4	13	17
2013	8	8	16
2014	5	14	19
2015	13	16	29
2016	5	16	21
2017	6	9	15
2018	6	7	13
2019	9	8	17
Total	182	317	499

Panel B: *Frequency by Fama and French (1997) industries*

Industry	Target-initiated deals	Bidder initiated deals	Total deals
	(1)	(2)	(3)
Personal and Business	35	46	81
Business Equipment	32	78	110
Healthcare	20	48	68
Retail	16	14	30
Petroleum and Natural	13	25	38
Other	66	172	238
Total	182	317	499

Table 2: Summary statistics

This table reports the summary statistics of the variables employed in this study. We draw our sample from the SDC database using the screening criteria discussed in Section 3.1. The M&A sample covers deals announced between 1997 and 2019. We define a deal as "target initiated" if the initiation party recorded in filings of EDGAR database is the target firm. We define a deal as "bidder initiated" if the initiation party recorded in filings of EDGAR database is the final acquiring firm or a third party. All variables are defined in the Appendix. All continuous variables are winsorized at 1st and 99th percentiles, and all dollar-value variables are inflation adjusted and expressed in 2008 dollars. The differences in means are tested using the *t*-test allowing for unequal variance. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	All deals		Target-initiated deals (T)		Bidder-initiated deals (B)		Mean difference
	N	Mean	N	Mean	N	Mean	(T–B)
Panel A: Target CEO characteristics							
Indgap1 ($M)	470	30.732	169	30.925	301	30.623	0.302
Ln (Indgap1)	470	2.887	169	3.036	301	2.803	0.233*
Indgap2 ($M)	459	16.508	168	16.946	291	15.749	1.197
Ln (Indgap2)	459	1.864	168	2.039	291	1.763	0.276
Delta ($M)	463	0.371	165	0.377	298	0.367	0.010
Vega ($M)	463	0.105	165	0.102	298	0.108	–0.006
Firmgap ($M)	470	3.353	169	3.133	301	3.477	–0.344
CEO Ownership	469	0.820	169	1.177	300	0.620	0.557*
CEO Age	469	55.328	168	55.060	301	55.478	–0.418
CEO Tenure	468	6.378	169	6.379	299	6.378	0.001
CEO Ability	465	–0.001	168	–0.001	297	0.000	–0.001
CEO Retention	470	0.093	169	0.094	301	0.093	0.001
Panel B: Target firm characteristics							
Total Assets ($M)	468	3,633	169	3,369	299	3,782	–413*
M/B	468	2.115	169	2.131	299	2.105	0.026
ROA	465	0.125	168	0.121	297	0.127	–0.006
Sale Growth	470	0.131	169	0.124	301	0.135	–0.011
Leverage	465	0.209	167	0.163	298	0.172	–0.009
Low Z-score	470	0.162	169	0.148	301	0.169	–0.021
SA Index	469	–3.682	169	–3.632	300	–3.712	0.080
Instown	466	0.761	167	0.717	299	0.786	–0.069***
Past Ret	470	0.031	169	0.064	301	0.013	0.051
Volatility	470	0.029	169	0.029	301	0.028	0.001
Panel C: Industry characteristics							
HHI	467	0.225	168	0.229	299	0.222	0.007
Ind Similarity	467	4.141	168	3.913	299	4.269	–0.356
M&A Activity	470	0.110	169	0.110	301	0.111	–0.001
Totcomp ($M)	470	591.777	169	578.944	301	598.983	20.039
Panel D: Deal Characteristics							
Relative Size	469	2.564	169	2.579	300	2.555	0.024
Tender	470	0.211	169	0.148	301	0.246	–0.098***
Stock Deal	470	0.228	169	0.290	301	0.193	0.097**
Panel E: Merger performance							
1-day Offer Premium	465	0.285	167	0.268	298	0.295	–0.027
1-week Offer Premium	465	0.325	167	0.310	298	0.335	–0.025
Acquisition Premium	468	0.308	169	0.260	299	0.336	–0.076**
Target CAR (–1,+1)	469	0.219	169	0.200	300	0.231	–0.030
Bidder CAR (–1,+1)	469	–0.019	169	–0.017	300	–0.022	0.005
Combined CAR(–1,+1)	469	0.019	169	0.021	300	0.019	0.001
BHAR(1,12)	458	–0.017	163	–0.027	295	–0.011	–0.016
BHAR(1,24)	440	–0.019	156	–0.018	284	–0.021	0.003

Table 3: The impact of industry tournament incentives on the likelihood of target initiation (Probit model)

This table reports the results from probit regressions of the the likelihood of target initiation on industry tournament incentives of target CEOs. The sample covers deals announced between 1997 and 2019. *Target Initiation* is the dependent variable, and *Ln(Indgap1)* (*Ln(Indgap2)*) is the key explanatory variable of interest in columns (1) and (2) (columns (3) and (4)). We define *Target Initiation* as being equal to one if the deal is initiated by the target firm, and zero otherwise (i.e., when the deal is initiated by the final acquirer or a third party). *Ln(Indgap1)* (*Ln(Indgap2)*) is the natural logarithm of *Indgap1* (*Indgap2*), which is the difference between the total compensation paid to the CEO and the total compensation to the second-highest-paid CEO in the same Fama-French 30-Industry (Fama-French 30-Industry and size group). In columns (1) and (3), we control for various compensation-related incentives of target firms' CEOs and their charactristics. In columns (2) and (4), we further control for other target firm characteristics and target industry characteristics. Industry and year effects are included in all specifications. All variables are defined in the Appendix. All continuous variables are winsorized at 1st and 99th percentiles, and all dollar-value variables are inflation adjusted and expressed in 2008 dollars. Robust standard errors are doubled clustered at the industry and year level. Coefficients of marginal effects are reported. The *t*-statistics are reported in the parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent variable: *Target Initiation*			
Explanatory variables	(1)	(2)	(3)	(4)
Ln(Indgap1)	0.0312*	0.0346**		
	(1.956)	(1.968)		
Ln(Indgap2)			0.0180**	0.0212**
			(2.052)	(2.396)
Ln(Delta)	0.0098	0.0002	0.0077	–0.0023
	(0.430)	(0.006)	(0.332)	(–0.076)
Ln(Vega)	–0.0160	–0.0196	–0.0216	–0.0189
	(–0.842)	(–1.033)	(–1.175)	(–1.006)
Ln(Firmgap)	–0.0085	0.0141	–0.0010	0.0260
	(–0.353)	(0.506)	(–0.041)	(0.930)
CEO Ownership	0.0259***	0.0234**	0.0265**	0.0228**
	(2.798)	(2.331)	(2.493)	(2.012)
Ln(CEO Age)	–0.2345	–0.2389	–0.2527	–0.2563
	(–1.148)	(–1.128)	(–1.214)	(–1.191)
Ln(Total Assets)		0.0096		–0.0063
		(0.283)		(–0.186)
M/B		0.0260		0.0359
		(1.039)		(1.424)
ROA		–0.5017		–0.5003
		(–1.644)		(–1.639)
Sale Growth		–0.0802		–0.0359
		(–0.706)		(–0.313)
Leverage		–0.2358		–0.2654
		(–1.307)		(–1.438)
SA Index		0.0755		0.0723
		(1.296)		(1.230)
Low Z-score		0.0492		0.0464
		(0.648)		(0.607)
Instown		–0.0785		–0.0797
		(–0.508)		(–0.506)
Past Ret		0.0261		0.0268
		(0.516)		(0.532)
Volatility		–5.0172*		–4.8532*
		(–1.740)		(–1.755)
HHI		0.0500		0.0151
		(0.374)		(0.111)
Ind Similarity		–0.0012		–0.0021
		(–0.167)		(–0.295)
M&A Activity		–0.1868		–0.1626
		(–1.185)		(–0.999)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Pseudo R^2	0.132	0.161	0.133	0.163
N	385	375	378	369

Table 4: The impact of industry tournament incentives on the likelihood of target initiation (IV model)

This table reports the results from IV probit regressions of the likelihood of target initiation on industry tournament incentives of target CEOs. The sample covers deals announced between 1997 and 2019. Panel A reports the estimates of both first stage (columns (1), (3), (5), and (7)) and second stage (columns (2), (4), (6), and (8)) of IV probit regressions. The dependent variable of first stage regressions is *Ln(Indgap1)* (*Ln(Indgap2)*) in columns (1) and (3) (columns (5) and (7)), and the dependent variable of second stage regressions is *Target Initiation*. We define *Target Initiation* as being equal to one if the deal is initiated by the target firm, and zero otherwise (i.e., when the deal is initiated by the final acquirer or a third party). *Ln(Indgap1)* (*Ln(Indgap2)*) is the natural logarithm of *Indgap1* (*Indgap2*), which is the difference between the total compensation paid to the CEO and the total compensation to the second-highest-paid CEO in the same Fama-French 30-Industry (Fama-French 30-Industry and size group). The instrument for *Ln(Indgap1)* and *Ln(Indgap2)* is *Ln(Totcomp)* in first stage regressions. *Totcomp* is the sum of total compensation of all other CEOs in the same industry classification, except for the highest-paid CEO, following Coles et al. (2018). The statisctis of endogeneity, relevance, and overidentification test are reported at the bottom of panel A. Panel B reports the independence assumption test results of instrument variable. All variables are defined in the Appendix. All continuous variables are winsorized at 1st and 99th percentiles, and all dollar-value variables are inflation adjusted and expressed in 2008 dollars. Robust standard errors are doubled clustered at the industry and year level. Coefficients of marginal effects are reported. The *t*-statistics are reported in the parentheses. *, **, and *** indicate significance at the 10%, 5% and 1% level, respectively.

Panel A: IV probit regressions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	First stage *Ln(Indgap1)*	Second stage *Target Initiation*	First stage *Ln(Indgap1)*	Second stage *Target Initiation*	First stage *Ln(Indgap2)*	Second stage *Target Initiation*	First stage *Ln(Indgap2)*	Second stage *Target Initiation*
Predicted Ln(Indgap1)		0.3489**		0.3390**				
		(2.175)		(2.160)				
Predicted Ln(Indgap2)						0.3034***		0.3179***
						(3.397)		(3.095)
Ln(Delta)	–0.0032	0.0183	–0.0899	0.0130	0.0392	–0.0021	0.0074	–0.0188
	(–0.074)	(0.267)	(–1.144)	(0.141)	(0.373)	(–0.033)	(0.045)	(–0.206)
Ln(Vega)	–0.0039	–0.0428	0.0117	–0.0601	0.0933	–0.0738	–0.0838	–0.0257
	(–0.088)	(–0.708)	(0.297)	(–0.979)	(1.106)	(–1.428)	(–1.068)	(–0.430)
Ln(Firmgap)	–0.2575***	0.0433	–0.3704***	0.1321	–0.3417**	0.0856	–0.5621***	0.2149**
	(–3.572)	(0.526)	(–2.995)	(1.345)	(–2.019)	(1.158)	(–3.222)	(2.399)
CEO Ownership	–0.0344**	0.0866***	–0.0099	0.0752**	–0.0632*	0.0826***	0.0019	0.0617*
	(–2.154)	(3.225)	(–0.676)	(2.419)	(–1.681)	(3.112)	(0.052)	(1.864)
Ln (CEO Age)	0.0507	–0.6697	–0.0754	–0.7074	0.9000	–0.8134	–0.4023	–0.5584
	(0.136)	(–1.063)	(–0.227)	(–1.056)	(1.024)	(–1.392)	(–0.638)	(–0.861)
Ln(Size)			0.1619	–0.0135			0.6095***	–0.1782
			(1.442)	(–0.125)			(3.291)	(–1.491)
M/B			0.0051	0.0769			–0.4378**	0.2090**
			(0.130)	(1.024)			(–2.487)	(2.315)
ROA			0.5763	–1.7004*			1.5047	–1.7750*
			(0.892)	(–1.793)			(1.065)	(–1.958)
Sale Growth			–0.1422	–0.1983			–2.1524**	0.4845
			(–1.017)	(–0.546)			(–2.118)	(1.025)

(Continued on next page)

Table 4 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	First stage	Second stage	First stage	Second stage	First stage	Second stage	First stage	Second stage
	Ln(Indgap1)	*Target Initiation*	*Ln(Indgap1)*	*Target Initiation*	*Ln(Indgap2)*	*Target Initiation*	*Ln(Indgap2)*	*Target Initiation*
Leverage			–0.6274	–0.5665			–0.0568	–0.6933
			(–1.514)	(–0.976)			(–0.060)	(–1.185)
SA Index			–0.2391	0.2751			–0.3143	0.2586
			(–1.288)	(1.458)			(–1.252)	(1.502)
Low Z-score			0.3150*	0.0679			0.0568	0.1042
			(1.676)	(0.268)			(0.175)	(0.451)
Instown			0.8872*	–0.4784			0.3562	–0.3292
			(1.791)	(–0.947)			(0.510)	(–0.710)
Past Ret			0.0250	0.0803			–0.0285	0.0869
			(0.235)	(0.507)			(–0.066)	(0.478)
Volatility			22.6966***	–21.5048**			13.0942	–17.1124**
			(2.818)	(–2.161)			(0.785)	(–2.123)
HHI			0.0723	0.1289			0.1807	–0.0238
			(0.234)	(0.316)			(0.352)	(–0.066)
Ind Similarity			–0.0065	–0.0033			0.0180	–0.0119
			(–0.462)	(–0.154)			(0.543)	(–0.590)
M&A Activity			0.4101**	–0.6994			–1.0838	–0.1812
			(1.992)	(–1.467)			(–0.545)	(–0.241)
Ln(Totcomp) IV	1.2809***		1.2849***		1.2164***		1.2643***	
	(4.543)		(5.551)		(3.706)		(4.904)	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R2	0.124		0.171		0.033		0.125	
N	385	385	375	375	378	378	369	369
First-stage F-test: *p*-value	0.00***		0.00***		0.00***		0.00***	
Kleibergen-Paap LM statistic	14.72***		12.99***		9.66***		8.54***	
Anderson-Rubin *F*-statistics	5.73**		4.91**		5.72**		4.97**	

Panel B: IV independence assumption test

	10%	5%	1%
p20	[-0.481, inf)	[–0.515, inf)	[–0.587, inf)
p40	[–0.867, inf)	[–0.894, inf)	[–0.951, inf)
p60	[–0.753, inf)	[–0.781, inf)	[–0.837, inf)
p80	[–0.536, inf)	[–0.560, inf)	[–0.611, inf)

Table 5: The effect of industry tournament incentives on the probability of target initiation: cross-sectional variations of CEO and industry characteristics (IV model)

The table reports results from IV probit regressions (second stage only) of the likelihood of target initiation on industry tournament incentives for subsamples based on target firms' CEO characteristics (panels A and B) and target firms' industry characteristics (panels C and D) that affect the probability of winning industry tournament incentives. The sample covers deals announced between 1997 and 2019. The dependent variable is *Target Initiation* in all columns. In panels A and C (panels B and D), the key explanatory variable is *Ln(Indgap1)* (*Ln(Indgap2)*). We define *Target Initiation* as being equal to one if the deal is initiated by the target firm, and zero otherwise (i.e., when the deal is initiated by the final acquirer or a third party). *Ln(Indgap1)* (*Ln(Indgap2)*) is the natural logarithm of *Indgap1* (*Indgap2*), which is the difference between the total compensation paid to the CEO and the total compensation to the second-highest-paid CEO in the same Fama-French 30-Industry (Fama-French 30-Industry and size group). The instrument for *Ln(Indgap1)* and *Ln(Indgap2)* is *Ln(Totcomp). Totcomp* is the sum of total compensation of all other CEOs in the same industry classification, except for the highest-paid CEO, following Coles et al. (2018). Panels A and B present the second stage results for subsamples of target firms with young and old CEOs defined based on the median age of target CEOs (columns (1) and (2)), with long- and short-tenure CEOs defined based on the median tenure of target CEOs (columns (3) and (4)), and with high- and low-ability CEOs defined based on the median industry-adjusted ROA of target for the enture sample (columns (5) and (6)). Panels C and D present the second stage results for subsamples of target firms in industries with high- and low- number of CEOs (columns (1) and (2)), mobility (columns (3) and (4)) and homogeneity (columns (5) and (6)). All variables are defined in the Appendix. All continuous variables are winsorized at 1st and 99th percentiles, and all dollar-value variables are inflation adjusted and expressed in 2008 dollars. Robust standard errors are doubled clustered at the industry and year level. Coefficients of marginal effects are reported. The *t*-statistics are reported in the parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Panel A: *Ln(Indgap1)* instrumented cross-sectional variations of the effect of industry tournament incentives by target firms' CEO characteristics

	Dependent variable: *Target Initiation*					
	(1)	(2)	(3)	(4)	(5)	(6)
Explanatory variables	Young CEOs	Old CEOs	Long-tenure CEOs	Short-tenure CEOs	High-ability CEOs	Low-ability CEOs
Predicted Ln(Indgap1)	0.5154**	0.0958	0.5392***	0.3115	1.1437***	0.3147
	(2.195)	(0.417)	(2.690)	(0.854)	(3.304)	(1.122)
Ln(Delta)	0.2552	–0.0485	–0.0611	–0.4323**	0.2820	–0.1173
	(1.289)	(–0.279)	(–0.420)	(–2.182)	(0.927)	(–0.799)
Ln(Vega)	–0.3137**	–0.0309	–0.0317	0.0340	–0.1413	–0.0193
	(–2.537)	(–0.247)	(–0.259)	(0.310)	(–0.705)	(–0.208)
Ln(Firmgap)	–0.1015	0.1730	–0.0950	0.3814**	–0.1534	0.2045
	(–0.583)	(1.152)	(–0.625)	(2.421)	(–0.830)	(1.045)
CEO Ownership	0.1784***	0.0724	0.0531	–0.0223	0.2063	0.0118
	(2.735)	(1.416)	(1.539)	(–0.177)	(1.497)	(0.292)
Ln(CEO Age)			–3.2412**	0.1081	–2.3941*	–0.4990
			(–2.532)	(0.110)	(–1.885)	(–0.511)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
N	146	186	158	178	106	232

(Continued on next page)

Table 5 (continued)

Panel B: *Ln(Indgap2)* instrumented cross-sectional variations of the effect of industry tournament incentives by target firms' CEO characteristics

	Dependent variable: *Target Initiation*					
	(1)	(2)	(3)	(4)	(5)	(6)
Explanatory variables	Young CEOs	Old CEOs	Long-tenure CEOs	Short-tenure CEOs	High-ability CEOs	Low-ability CEOs
Predicted Ln(Indgap2)	0.4409***	0.0877	0.4706***	0.4067	0.7597***	0.2781
	(4.238)	(0.443)	(6.787)	(1.337)	(2.683)	(1.167)
Ln(Delta)	0.1231	–0.0570	–0.0687	–0.2974	0.1790	–0.2152*
	(0.517)	(–0.324)	(–0.389)	(–1.295)	(0.627)	(–1.666)
Ln(Vega)	–0.2570*	–0.0184	0.0391	0.0316	0.1550	0.0185
	(–1.729)	(–0.141)	(0.470)	(0.279)	(0.489)	(0.196)
Ln(Firmgap)	0.3508	0.1579	0.1565	0.4813***	–0.0985	0.2491
	(1.607)	(1.025)	(0.905)	(3.222)	(–0.501)	(1.322)
CEO Ownership	0.1633**	0.0722	0.0368	–0.0677	0.1405**	–0.0423
	(2.378)	(1.442)	(1.182)	(–0.602)	(2.074)	(–0.690)
Ln(CEO Age)			–1.8562	0.0907	–1.3650	–0.0940
			(–1.117)	(0.108)	(–1.004)	(–0.099)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
N	142	185	156	173	108	230

(Continued on next page)

Table 5 (continued)

Panel C: *Ln(Indgap1)* instrumented cross-sectional variations of the effect of industry tournament incentives by target industry characteristics

	Dependent variable: *Target Initiation*					
	(1)	(2)	(3)	(4)	(5)	(6)
Explanatory variables	High ind # CEOs	Low ind # CEOs	High ind mobility	Low ind mobility	High ind homogeneity	Low ind homogeneity
Predicted Ln(Indgap1)	–0.2282	0.6498***	–0.2626	0.8568***	0.7012**	–0.2043
	(–0.560)	(2.705)	(–0.610)	(3.376)	(2.511)	(–0.501)
Ln(Delta)	0.0838	–0.0978	0.0573	–0.2033	–0.3077	0.1047
	(0.512)	(–0.444)	(0.421)	(–0.764)	(–1.242)	(0.691)
Ln(Vega)	–0.0139	–0.0671	–0.1003	–0.1083	–0.0394	–0.0899
	(–0.111)	(–0.602)	(–1.001)	(–0.929)	(–0.317)	(–0.869)
Ln(Firmgap)	–0.0058	0.2764	–0.0106	0.4997**	0.1769	0.0687
	(–0.038)	(0.903)	(–0.077)	(2.042)	(0.544)	(0.467)
CEO Ownership	0.0803*	0.1826	0.0807**	0.2735	0.2731	0.0950**
	(1.844)	(1.217)	(1.999)	(0.940)	(1.117)	(2.064)
Ln(CEO Age)	–0.0468	–1.4005	0.2420	–1.2265	–0.9167	–0.0809
	(–0.040)	(–1.141)	(0.209)	(–1.046)	(–0.781)	(–0.072)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
N	190	164	188	155	159	199

(Continued on next page)

Table 5 (continued)

Panel D: *Ln(Indgap2)* instrumented cross-sectional variations of the effect of industry tournament incentives by target industry characteristics

	Dependent variable: *Target Initiation*					
	(1)	(2)	(3)	(4)	(5)	(6)
Explanatory variables	High ind # CEOs	Low ind # CEOs	High ind mobility	Low ind mobility	High ind homogeneity	Low ind homogeneity
Predicted Ln(Indgap2)	–0.4317	0.4204***	–0.3987	0.4194***	0.4092***	–0.2891
	(–0.761)	(5.957)	(–0.940)	(6.110)	(5.688)	(–0.706)
Ln(Firmgap)	–0.1012	0.3910***	–0.1632	0.4906***	0.3710**	–0.0428
	(–0.371)	(2.775)	(–0.633)	(2.864)	(2.493)	(–0.158)
Ln(Vega)	–0.1280	–0.0334	–0.1408*	–0.0156	–0.0274	–0.1533
	(–0.719)	(–0.464)	(–1.741)	(–0.170)	(–0.370)	(–1.420)
Ln(Delta)	0.2105	0.1051	0.1527	0.1065	0.0488	0.1895
	(0.815)	(0.819)	(1.054)	(0.543)	(0.257)	(1.085)
CEO Ownership	0.0276	–0.0522	0.0267	–0.2241	–0.1206	0.0572
	(0.247)	(–0.462)	(0.309)	(–1.105)	(–0.658)	(0.721)
Ln(CEO Age)	–0.2540	–0.2471	0.0123	–0.4899	–0.4493	–0.3394
	(–0.276)	(–0.290)	(0.014)	(–0.550)	(–0.475)	(–0.364)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
N	189	159	188	149	154	198

Table 6: The likelihood of target CEO retention and industry tournament incentives (Probit model)

The table reports the results from probit regressions of target CEO retention likelihhood after target-initiated acquisitions. The sample covers deals announced between 1997 and 2019. The dependent variable is *CEO Retention* which equals one if the target CEO obtains an executive position in combined firms, and zero otherwise. We define *Target Initiation* as being equal to one if the deal is initiated by the target firm, and zero otherwise (i.e., when the deal is initiated by the final acquirer or a third party). *Ln(Indgap1)* (*Ln(Indgap2)*) is the natural logarithm of *Indgap1* (*Indgap2*), which is the difference between the total compensation paid to the CEO and the total compensation to the second-highest-paid CEO in the same Fama-French 30-Industry (Fama-French 30-Industry and size group). All variables are defined in the Appendix. All continuous variables are winsorized at 1st and 99th percentiles, and all dollar-value variables are inflation adjusted and expressed in 2008 dollars. Robust standard errors are doubled clustered at the industry and year level. Coefficients of marginal effects are reported. The *t*-statistics are reported in the parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependant variable: *CEO Retention*			
Explanatory variables	(1)	(2)	(3)	(4)
*Ln(Indgap1)*Target Initiation*	0.0890**	0.1073**		
	(1.985)	(2.548)		
*Ln(Indgap2)*Target Initiation*			0.0495	0.0609*
			(1.339)	(1.692)
Ln(Indgap1)	–0.0455**	–0.0482***		
	(–2.257)	(–3.154)		
Ln(Indgap2)			0.0028	0.0055
			(0.244)	(0.474)
Target Initiation	–0.1983	–0.2559*	–0.0355	–0.0715
	(–1.266)	(–1.779)	(–0.328)	(–0.700)
Ln(Firmgap)	0.0149	–0.0006	0.0272	0.0157
	(0.592)	(–0.024)	(1.146)	(0.613)
Ln(Vega)	–0.0040	–0.0085	–0.0076	–0.0101
	(–0.235)	(–0.478)	(–0.481)	(–0.602)
Ln(Delta)	0.0531**	0.0041	0.0479**	0.0087
	(2.341)	(0.165)	(2.010)	(0.322)
CEO Ownership	–0.0370*	–0.0317*	–0.0342*	–0.0348*
	(–1.808)	(–1.786)	(–1.757)	(–1.929)
Ln(CEO Age)	–0.1083	–0.1948	–0.0605	–0.1139
	(–0.583)	(–1.056)	(–0.323)	(–0.602)
Ln (Total Assets)		(–0.043)		0.0257
		0.0441		(0.930)
Leverage		(1.585)		0.3178*
		0.3084**		(1.959)
M/B		(1.969)		0.0288
		0.0211		(1.342)
ROA		(0.999)		0.2729
		0.1567		(1.004)
Tender		–0.1161***		–0.1356***
		(–2.858)		(–3.474)
Stock Deal		0.1542***		0.1396***
		(2.849)		(2.610)
Ln(Relative Size)		–0.0026		–0.0245
		(–0.264)		(–0.438)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Pseudo R^2	0.259	0.366	0.250	0.359
N	221	215	213	207

Table 7: The likelihood of target CEO retention and industry tournament incentives (IV Model)

The table reports results from IV probit regressions (second stage only) of target CEOs retention after target-initiated acquisitions. The sample covers deals announced between 1997 and 2019. The dependent variable is a dummy variable, *CEO Retention*, which equals one if the target CEO obtains a significant position in combined firms, and zero otherwise. We define *Target Initiation* as being equal to one if the deal is initiated by the target firm, and zero otherwise (i.e., when the deal is initiated by the final acquirer or a third party). *Ln(Indgap1)* (*Ln(Indgap2)*) is the natural logarithm of *Indgap1* (*Indgap2*), which is the difference between the total compensation paid to the CEO and the total compensation to the second-highest-paid CEO in the same Fama-French 30-Industry (Fama-French 30-Industry and size group). The instrument for *Indgap1* and *Indgap2* is *Totcomp* which is the sum of total compensation of all other CEOs in the same industry classification, except for the highest-paid CEO, following Coles et al. (2018). The instrument for *Ln(Indgap1)*Target Initiation* and *Ln(Indgap2)*Target Initiation* is *Ln(Totcomp)*Target Initiation.* All variables are defined in the Appendix. All continuous variables are winsorized at 1st and 99th percentiles, and all dollar-value variables are inflation adjusted and expressed in 2008 dollars. Robust standard errors are doubled clustered at the industry and year level. Coefficients of marginal effects are reported. The *t*-statistics are reported in the parentheses. *, **, and *** indicate significance at the 10%, 5% and 1% level, respectively.

	Dependant variable: *CEO Retention*			
Explanatory variables	(1)	(2)	(3)	(4)
*Predicted Ln(Indgap1)*Target Initiation*	0.7234**	0.9017***		
	(2.202)	(2.766)		
*Predicted Ln(Indgap2)*Target Initiation*			0.8687***	0.9683***
			(3.148)	(2.905)
Predicted Ln(Indgap1)	0.1628	0.0121		
	(0.366)	(0.031)		
Predicted Ln(Indgap2)			–0.2276	–0.2627
			(–0.880)	(–1.061)
Target Initiation	-–1.9343*	–2.4791**	–1.5479**	–1.8472**
	(–1.749)	(–2.166)	(–2.094)	(–2.043)
Ln(Firmgap)	0.2333*	0.1124	0.1090	0.0555
	(1.714)	(0.599)	(0.679)	(0.293)
Ln(Vega)	–0.0009	0.0124	–0.0252	–0.0339
	(–0.009)	(0.105)	(–0.288)	(–0.441)
Ln(Delta)	0.1868	0.0660	0.1778	0.1243
	(1.594)	(0.387)	(1.334)	(0.953)
CEO Ownership	–0.1012	–0.0836	–0.1306	–0.0850
	(–1.077)	(–0.709)	(–1.241)	(–0.833)
Ln(CEO Age)	–0.4116	–1.2094	0.0834	–0.4714
	(–0.472)	(–1.270)	(0.096)	(–0.534)
Ln (Total Assets)		0.2303		0.0497
		(1.276)		(0.348)
Leverage		1.3027		0.9206
		(1.531)		(1.023)
M/B		0.1951		0.1006
		(1.352)		(0.479)
ROA		–1.0218		0.8082
		(–0.708)		(0.469)
Tender		–0.2625		–0.4692
		(–0.614)		(–1.438)
Stock Deal		1.0264***		0.6216
		(2.913)		(1.248)
Ln(Relative Size)		–0.3750		–0.3640
		(–0.980)		(–1.216)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
R^2	0.153	0.188	0.112	0.127
N	229	224	218	213

Table 8: Post-transaction compensation change for target CEOs and industry tournament incentives (IV model)

The table reports results from IV probit regressions (second stage only) of the compensation change for target firms' CEOs after selling firms on their industry tournament incentives for target-initiated deals. The sample covers deals announced between 1997 and 2019. The dependent variable, post-transaction compensation change of target firms' CEOs, is measured as the differece in their pay (*ΔPay*) in panels A and B, and in their total compensation package (Δ*Ln(TotComp)*) in panels C and D, during three years after deal completion, i.e., T+1 (column (1)), T+2 (column (2)), and T+3 (column (3)). Column (4) (3-year Mean) reports the average compensation change of target firms' CEOs during the three-year period after deal completion. We define *Target Initiation* as being equal to one if the deal is initiated by the target firm, and zero otherwise (i.e., when the deal is initiated by the final acquirer or a third party). *Ln(Indgap1)* (*Ln(Indgap2)*) is the natural logarithm of *Indgap1* (*Indgap2*), which is the difference between the total compensation paid to the CEO and the total compensation to the second-highest-paid CEO in the same Fama-French 30-Industry (Fama-French 30-Industry and size group). The instrument for *Indgap1* and *Indgap2* is *Totcomp* which is the sum of total compensation of all other CEOs in the same industry classification, except for the highest-paid CEO, following Coles et al. (2018). The instrument for *Ln(Indgap1)*Target Initiation* and *Ln(Indgap2)*Target Initiation* is *Ln(Totcomp)*Target Initiation.* All variables are defined in the Appendix. All continuous variables are winsorized at 1st and 99th percentiles, and all dollar-value variables are inflation adjusted and expressed in 2008 dollars. Robust standard errors are doubled clustered at the industry and year level. Coefficients of marginal effects are reported. The *t*-statistics are reported in the parentheses. *, **, and *** indicate significance at the 10%, 5% and 1% level, respectively.

Panel A: The effect of industry tournament incentives (*Ln(Indgap1),* instrumented) on post-MA pay change

	Dependent variable: *ΔPay*			
	(1)	(2)	(3)	(4)
Explanatory variables	T+1	T+2	T+3	3-year Mean
Ln(Indgap1)	–0.1643***	–0.1587**	–0.1446**	–0.1025
	(–2.654)	(–1.996)	(–2.340)	(–1.620)
*ln(Indgap1)*Target Initiation*	0.3927*	0.5479***	0.5078**	0.4944***
	(1.896)	(2.947)	(2.481)	(2.617)
Target Initiation	–1.2456*	-1.8718***	-1.5808***	-1.5886***
	(–1.952)	(-3.278)	(-2.673)	(-2.817)
Tender	-0.0650	-0.0787	-0.0042	0.0024
	(-0.735)	(-1.241)	(-0.054)	(0.033)
Stock Deal	0.1716*	0.4582***	0.2048**	0.2319***
	(1.696)	(4.253)	(2.499)	(2.584)
Ln(Relative Size)	-0.3446*	-0.2929**	0.0950	0.0057
	(-1.933)	(-2.280)	(0.871)	(0.057)
Ln(Size)	-0.0485	-0.0988**	-0.0538*	-0.0609**
	(-1.397)	(-2.346)	(-1.778)	(-2.030)
Leverage	0.3682	0.6052**	-0.0843	0.0429
	(1.280)	(2.567)	(-0.389)	(0.227)
M/B	0.2446***	0.2069***	-0.0878*	0.0913*
	(2.782)	(2.672)	(-1.654)	(1.648)
ROA	1.3144**	1.0613*	0.9101*	0.0903
	(2.518)	(1.655)	(1.743)	(0.179)
Constant	0.6732**	1.5437***	1.7760***	1.2006***
	(2.007)	(3.037)	(5.218)	(3.410)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
R^2	0.684	0.641	0.567	0.434
Observations	79	79	87	105

(Continued on next page)

Table 8 (continued)

Panel B: The effect of industry tournament incentives (*Ln(Indgap2),* instrumented) on post-MA pay change

	Dependent variable: *ΔPay*			
	(1)	(2)	(3)	(4)
Explanatory variables	T+1	T+2	T+3	3-year Mean
Ln(Indgap2)	-0.0792***	-0.0816**	-0.0590**	-0.0391
	(-3.102)	(-2.139)	(-1.960)	(-1.230)
*Ln(Indgap2)*Target Initiation*	0.0519	0.2769*	0.4055**	0.3971**
	(0.318)	(1.807)	(2.277)	(2.327)
Target Initiation	-0.0227	-0.6382	-0.9639**	-1.0060**
	(-0.053)	(-1.455)	(-2.186)	(-2.390)
Tender	-0.0659	-0.0582	0.0332	-0.0028
	(-0.720)	(-0.824)	(0.327)	(-0.034)
Stock Deal	0.2466***	0.5388***	0.3578***	0.3107***
	(2.660)	(6.750)	(3.178)	(3.088)
Ln(Relative Size)	-0.4769***	-0.5312***	-0.1390	-0.0875
	(-2.851)	(-4.474)	(-1.074)	(-0.748)
Ln(Size)	0.0136	-0.0695**	-0.0174	-0.0562
	(0.302)	(-2.358)	(-0.360)	(-1.300)
Leverage	0.3942	0.7347***	-0.4288*	-0.0870
	(1.427)	(3.939)	(-1.804)	(-0.428)
M/B	0.2709***	0.3004***	-0.0137	0.1202**
	(3.503)	(5.170)	(-0.214)	(2.100)
ROA	1.1222**	1.2751***	1.0343**	0.0392
	(2.103)	(2.704)	(2.416)	(0.092)
Constant	-0.0913	0.8586**	1.4083***	1.0918**
	(-0.209)	(2.250)	(2.734)	(2.195)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
R^2	0.709	0.725	0.536	0.346
Observations	79	79	87	105

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Table 8 (continued)

Panel C: The effect of industry tournament incentives (*Ln(Indgap1),* instrumented) on post-MA compensation change

	Dependent variable: Δ*Ln(TotComp)*			
	(1)	(2)	(3)	(4)
Explanatory variables	T+1	T+2	T+3	3-year Mean
Ln(Indgap1)	-0.5340	-0.4120	-0.6931	-0.3019
	(-1.017)	(-0.589)	(-1.482)	(-0.638)
*ln(Indgap1)*Target Initiation*	1.5508	2.8774**	2.8638**	2.7658**
	(1.207)	(2.032)	(2.298)	(2.113)
Target Initiation	-4.8037	-9.8467**	-8.3631**	-8.4735**
	(-1.159)	(-2.260)	(-2.291)	(-2.118)
Tender	0.8135	0.3926	-0.1062	0.4884
	(1.360)	(0.686)	(-0.185)	(0.872)
Stock Deal	1.5186**	3.0191***	1.1791**	1.7646***
	(2.310)	(4.262)	(2.054)	(2.970)
Ln(Relative Size)	-1.9256**	-1.9685**	1.2698**	0.4165
	(-2.025)	(-1.997)	(2.187)	(0.615)
Ln(Size)	0.2153	-0.3474	0.0329	0.0622
	(1.013)	(-0.949)	(0.120)	(0.234)
Leverage	1.8798	3.6948*	0.6747	0.3330
	(1.061)	(1.853)	(0.488)	(0.239)
M/B	1.8029***	1.4723**	-0.5331	0.7003**
	(4.114)	(2.418)	(-1.617)	(1.964)
ROA	4.1030	4.0031	3.7558	-0.4929
	(0.982)	(0.805)	(1.029)	(-0.134)
Before3ymean	0.1272	0.3165**	-0.0233	0.1001
	(1.107)	(2.040)	(-0.182)	(0.834)
Constant	5.3532**	11.5598***	11.5560***	9.2696***
	(2.429)	(2.812)	(3.491)	(2.883)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
R^2	0.785	0.712	0.606	0.534
Observations	79	79	87	105

(Continued on next page)

Table 8 (continued)

Panel D: The effect of industry tournament incentives (*Ln(Indgap2),* instrumented) on post-MA compensation change

	Dependent variable: Δ*Ln(TotComp)*			
	(1)	(2)	(3)	(4)
Explanatory variables	T+1	T+2	T+3	3-year Mean
Ln(Indgap2)	-0.2876	-0.2755	-0.2833	-0.0947
	(-1.178)	(-0.818)	(-1.258)	(-0.416)
*Ln(Indgap2)*Target Initiation*	0.4585	2.5400**	2.5080**	2.7196**
	(0.441)	(2.118)	(2.226)	(2.269)
Target Initiation	-0.6556	-6.4346**	-5.4955**	-6.6233**
	(-0.225)	(-1.984)	(-1.991)	(-2.235)
Tender	0.7151	0.1999	0.0395	0.2952
	(1.192)	(0.341)	(0.055)	(0.460)
Stock Deal	1.8385***	3.6955***	2.0617**	2.2413***
	(3.408)	(5.013)	(2.483)	(2.915)
Ln(Relative Size)	-2.4886***	-3.0383**	0.0342	0.0735
	(-2.691)	(-2.254)	(0.036)	(0.094)
Ln(Size)	0.3830	-0.4619	0.1554	-0.0858
	(1.167)	(-1.594)	(0.496)	(-0.272)
Leverage	1.9752	3.9993*	-1.2836	-0.4742
	(1.114)	(1.800)	(-0.828)	(-0.320)
M/B	1.9176***	1.8908***	-0.1177	0.8352**
	(5.030)	(2.752)	(-0.245)	(2.034)
ROA	3.8788	5.5989	4.3923	-0.6105
	(1.056)	(1.252)	(1.315)	(-0.188)
Before3ymean	0.1820	0.4318***	-0.0022	0.1353
	(1.628)	(2.749)	(-0.015)	(1.011)
Constant	2.8522	11.0068***	10.4917***	10.8956***
	(0.944)	(3.519)	(2.888)	(3.015)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
R^2	0.833	0.758	0.588	0.437
Observations	79	79	87	105

Table 9: Regressions of deal premia and announcement abnormal returns to targets and bidders firms

This table reports cross-sectional OLS regression results of market reactions to target and bidder firms in the target-initiated deals with industry tournament incenitves. The sample covers deals announced between 1997 and 2019. The dependent variables are the *1-day Offer Premium*, *1-week Offer Premium*, *Acquisition Premium*, *Target CAR(-1,+1), Bidder CAR(-1,+1)*, *Combined CAR (-1,+1)*, *Bidder BHAR(1,12)*, and *Bidder BHAR(1,24)* in Columns 1 to 8, respectively. 1-day (1-week) *Offer Premium* is defined as the ratio of the initially offered price per share over the price per share of the target 1 day (1 week) before the announcement date. *Acquisition Premium* is defined as the cumulative abnormal return to the target during the bid period from 42 trading days before deal announcement to the date of deal completion, following Schwert (1996). *Target CAR (-1,+1)* is measured by using the market model adjusted abnormal returns to the target over (-1, +1) window surrounding the deal announcement. Specifically, we use the CRSP value-weighted index returns as the benchmark over the period starting 253 trading days and ending 42 trading days prior to the deal announcement date. *Bidder CAR(-1,+1)* is three-day CARs of bidder firms. *Combined CAR (-1,+1)* is the value-weighted average of *CARs* of the bidder and target. The weights are based on the market value of equity of the bidder and target five days prior to the deal announcement date. The buy-and-hold abnormal returns (*Bidder BHARs*) of bidder firms are measured over a period of 12 months and 24 months after the deal completion, following Hirshleifer *et al.* (2009). We define *Target Initiation* as being equal to one if the deal is initiated by the target firm, and zero otherwise. *High Indgap1* (*Indgap2*) equals one if *Indgap1* (*Indgap2*) is in the top quintile of sample firms, and zero otherwise. All variables are defined in the Appendix. All continuous variables are winsorized at 1st and 99th percentiles, and all dollar-value variables are inflation adjusted and expressed in 2008 dollars. Robust standard errors are clustered at the deal level. The *t* statistics are reported in the parentheses. *, **, and *** indicate significance at the 10%, 5% and 1% level, respectively.

Panel A: Industry tournament incentives measure: *Indgap1*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	1-day Offer Premium	1-week offer Premium	Acquisition Premium	Target CAR (–1,+1)	Bidder CAR (–1,+1)	Combined CAR (–1,+1)	Bidder BHAR (1,12)	Bidder BHAR (1,24)
Target Initiation	–0.0123	–0.0216	–0.0246	–0.0158	0.0010	–0.0000	–0.0095	–0.0428
	(–0.435)	(–0.709)	(–0.469)	(–0.709)	(0.104)	(–0.001)	(–0.192)	(–0.503)
High Indgap1	0.2110***	0.1537**	0.1390*	0.1380**	0.0094	0.0162	0.0206	0.0978
	(2.652)	(1.972)	(1.737)	(2.390)	(0.482)	(0.847)	(0.189)	(0.474)
*High Indgap1*Target Initiation*	–0.3293***	–0.2644***	–0.2239*	–0.1761**	0.0516*	0.0055	0.0076	0.0269
	(–3.692)	(–2.873)	(–1.786)	(–2.414)	(1.734)	(0.204)	(0.032)	(0.085)
Ln(Firmgap)	0.0331**	0.0330**	0.0450*	0.0298***	0.0110**	0.0121***	0.0102	0.0697
	(2.243)	(2.147)	(1.698)	(2.641)	(2.114)	(2.776)	(0.366)	(1.476)
Ln(Vega)	–0.0073	–0.0100	0.0231	0.0047	0.0020	0.0028	–0.0106	–0.0142
	(–0.630)	(–0.924)	(1.461)	(0.587)	(0.563)	(1.018)	(–0.600)	(–0.440)
Ln(Delta)	–0.0146	–0.0170	–0.0381	–0.0053	–0.0040	–0.0042	–0.0047	–0.0203
	(–0.829)	(–0.905)	(–1.449)	(–0.450)	(–0.760)	(–0.923)	(–0.187)	(–0.458)
CEO Ownership	–0.0016	–0.0031	–0.0057	–0.0041	0.0006	0.0012	0.0077	0.0193*
	(–0.279)	(–0.577)	(–0.836)	(–1.098)	(0.362)	(0.818)	(1.160)	(1.730)
Ln(CEO Age)	–0.0636	–0.0495	–0.1525	–0.0861	–0.0187	–0.0184	–0.2302	–0.5141
	(–0.655)	(–0.472)	(–0.886)	(–1.021)	(–0.597)	(–0.690)	(–1.263)	(–1.266)
Ln (Total Assets)	–0.0219	–0.0203	–0.0668**	–0.0486***	–0.0154***	–0.0163***	–0.0218	–0.0547
	(–1.332)	(–1.163)	(–2.310)	(–4.051)	(–2.804)	(–3.148)	(–0.732)	(–1.149)
Leverage	0.0120	–0.0037	0.0796	–0.0116	–0.0398	–0.0310	–0.1722	0.0776
	(0.130)	(–0.037)	(0.540)	(–0.157)	(–1.515)	(–1.329)	(–1.159)	(0.347)
M/B	–0.0477***	–0.0326*	–0.0182	–0.0302**	–0.0041	–0.0018	0.0563	0.0871
	(–2.726)	(–1.661)	(–0.581)	(–2.075)	(–0.694)	(–0.358)	(1.451)	(1.287)
ROA	0.0924	–0.1224	0.2588	–0.0082	0.0175	0.0601	–0.2140	–1.0382
	(0.586)	(–0.598)	(0.981)	(–0.061)	(0.405)	(1.465)	(–0.697)	(–1.637)

Table 9 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	1-day Offer Premium	1-week offer Premium	Acquisition Premium	Target CAR (–1,+1)	Bidder CAR (–1,+1)	Combined CAR (–1,+1)	BHAR (1,12)	BHAR (1,24)
Past Ret	0.0049	0.0250	–0.1535***	–0.0038	0.0060	0.0150*	–0.0883*	–0.1057
	(0.175)	(0.904)	(–3.320)	(–0.172)	(0.645)	(1.812)	(–1.709)	(–1.388)
Volatility	4.2835**	4.2345**	2.6940	1.2511	–1.8183***	–1.4928***	–3.5190	–10.2726**
	(2.577)	(2.440)	(0.946)	(0.978)	(–3.821)	(–3.715)	(–1.270)	(–2.547)
SA Index	–0.0278	–0.0265	–0.0644	–0.0416*	0.0150	–0.0005	–0.0524	0.1000
	(–0.967)	(–0.869)	(–1.393)	(–1.844)	(1.452)	(–0.052)	(–0.989)	(1.274)
Low Z-score	0.1498***	0.1252**	0.0128	0.0613**	0.0037	0.0225**	–0.0746	–0.1369
	(3.371)	(2.527)	(0.181)	(1.979)	(0.307)	(2.063)	(–0.953)	(–1.120)
Tender	0.0354	0.0226	0.0841	0.0548*	–0.0061	–0.0147	–0.0895	–0.0777
	(0.978)	(0.606)	(1.414)	(1.794)	(–0.546)	(–1.522)	(–1.572)	(–0.835)
Stock Deal	–0.0682**	–0.0952***	0.0454	–0.0584**	–0.0164	–0.0215**	0.0546	0.1370
	(–2.178)	(–2.775)	(0.766)	(–2.513)	(–1.455)	(–2.083)	(0.896)	(1.348)
Ln(Relative Size)	0.1088***	0.0735*	0.0135	0.0733**	0.0170	0.0106	–0.1037	–0.0947
	(2.962)	(1.711)	(0.219)	(2.477)	(1.505)	(1.042)	(–1.618)	(–0.798)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjsuted R^2	0.192	0.163	0.154	0.188	0.147	0.161	0.015	0.051
N	386	386	388	389	389	389	378	365

Panel B: Industry tournament incentives measure: *Indgap2*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	1-day Offer Premium	1-week offer Premium	Acquisition Premium	Target CAR (–1,+1)	Bidder CAR (–1,+1)	Combined CAR (–1,+1)	BHAR (1,12)	BHAR (1,24)
Target Initiation	–0.0185	–0.0187	–0.0190	–0.0166	–0.0001	–0.0010	–0.0144	–0.0496
	(–0.668)	(–0.628)	(–0.368)	(–0.750)	(–0.015)	(–0.123)	(–0.296)	(–0.593)
High Indgap2	0.1359**	0.1243*	0.1034	0.0878*	0.0098	0.0179	0.0209	–0.2342*
	(2.122)	(1.830)	(1.375)	(1.904)	(0.524)	(0.895)	(0.161)	(–1.748)
*High Indgap2*Target Initiation*	–0.3178***	–0.3700***	–0.3640**	–0.2309**	0.0401	0.0032	0.0558	0.0570
	(–2.680)	(–3.203)	(–2.149)	(–2.540)	(1.370)	(0.103)	(0.267)	(0.238)
Ln(Firmgap)	0.0250*	0.0270*	0.0392	0.0240**	0.0102**	0.0115***	0.0097	0.0573
	(1.844)	(1.909)	(1.511)	(2.268)	(2.036)	(2.711)	(0.343)	(1.282)
Ln(Vega)	–0.0096	–0.0120	0.0212	0.0031	0.0019	0.0026	–0.0108	–0.0119
	(–0.809)	(–1.115)	(1.349)	(0.385)	(0.528)	(0.929)	(–0.610)	(–0.375)
Ln(Delta)	–0.0124	–0.0155	–0.0372	–0.0040	–0.0034	–0.0036	–0.0041	–0.0248
	(–0.703)	(–0.852)	(–1.408)	(–0.355)	(–0.664)	(–0.808)	(–0.162)	(–0.566)
CEO Ownership	0.0003	–0.0014	–0.0042	–0.0029	0.0004	0.0013	0.0078	0.0190*
	(0.062)	(–0.280)	(–0.599)	(–0.839)	(0.252)	(0.810)	(1.173)	(1.713)

(Continued on next page)

Table 9 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	1-day	1-week	Acquisition	Target CAR	Bidder CAR	Combined CAR	BHAR	BHAR
	Offer Premium	offer Premium	Premium	(–1,+1)	(–1,+1)	(–1,+1)	(1,12)	(1,24)
Ln(CEO Age)	–0.0716	–0.0659	–0.1661	–0.0894	–0.0122	–0.0151	–0.2217	–0.5224
	(–0.745)	(–0.641)	(–0.963)	(–1.059)	(–0.382)	(–0.556)	(–1.224)	(–1.297)
Ln(Size)	–0.0241	–0.0207	–0.0663**	–0.0497***	–0.0167***	–0.0172***	–0.0235	–0.0494
	(–1.523)	(–1.236)	(–2.382)	(–4.340)	(–3.018)	(–3.258)	(–0.795)	(–1.039)
Leverage	0.0350	0.0132	0.0941	0.0026	–0.0398	–0.0295	–0.1701	0.0885
	(0.356)	(0.130)	(0.653)	(0.034)	(–1.561)	(–1.274)	(–1.151)	(0.410)
M/B	–0.0547***	–0.0399**	–0.0250	–0.0347**	–0.0031	–0.0016	0.0575	0.0847
	(–3.151)	(–2.073)	(–0.803)	(–2.424)	(–0.523)	(–0.310)	(1.501)	(1.260)
ROA	0.0380	–0.1633	0.2263	–0.0383	0.0191	0.0571	–0.2196	–1.0153
	(0.254)	(–0.822)	(0.887)	(–0.296)	(0.443)	(1.447)	(–0.716)	(–1.608)
Past Ret	0.0167	0.0341	–0.1460***	0.0037	0.0074	0.0160*	–0.0873*	–0.0931
	(0.612)	(1.282)	(–3.233)	(0.169)	(0.807)	(1.951)	(–1.731)	(–1.261)
Volatility	4.3393***	4.2540**	2.6471	1.2466	–1.7701***	–1.4657***	–3.4757	–10.4934***
	(2.609)	(2.485)	(0.940)	(0.983)	(–3.714)	(–3.676)	(–1.251)	(–2.594)
SA Index	–0.0301	–0.0313	–0.0695	–0.0432*	0.0172	0.0008	–0.0491	0.0892
	(–1.078)	(–1.062)	(–1.527)	(–1.921)	(1.636)	(0.082)	(–0.921)	(1.129)
Low Z-score	0.1466***	0.1264***	0.0158	0.0603*	0.0017	0.0210*	–0.0787	–0.1223
	(3.329)	(2.627)	(0.231)	(1.954)	(0.143)	(1.896)	(–1.012)	(–1.000)
Tender	0.0465	0.0313	0.0918	0.0617**	–0.0063	–0.0141	–0.0888	–0.0769
	(1.271)	(0.852)	(1.548)	(2.017)	(–0.561)	(–1.453)	(–1.586)	(–0.827)
Stock Deal	–0.0643**	–0.0920***	0.0492	–0.0559**	–0.0179	–0.0221**	0.0535	0.1436
	(–2.107)	(–2.768)	(0.840)	(–2.492)	(–1.596)	(–2.134)	(0.885)	(1.384)
Ln(Relative Size)	0.1157***	0.0806*	0.0185	0.0764***	0.0160	0.0107	–0.1036	–0.1139
	(3.273)	(1.941)	(0.305)	(2.656)	(1.398)	(1.049)	(–1.612)	(–0.975)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjsuted R^2	0.181	0.175	0.160	0.186	0.148	0.162	0.016	0.058
N	386	386	388	389	389	389	378	365

Table 10: Regressions of deal premia and announcement abnormal returns to targets and bidders firms: payment method

This table reports cross-sectional OLS regression results of market reactions to target and bidder firms in the target-initiated deals with industry tournament incenitves across the subsamples of stock versus non-stock deals. The sample covers deals announced between 1997 and 2019. Stock deal equals one if the M&A deal is paid purely by stock. The dependent variables are *1-day Offer Premium*, *1-week Offer Premium*, *Acquisition Premium*, *Target CAR(-1,+1), Bidder CAR(-1,+1)*, *Combined CAR (-1,+1)*, *Bidder BHAR(1,12* , and *Bidder BHAR(1,24).* We define *Target Initiation* as being equal to one if the deal is initiated by the target firm, and zero otherwise (i.e., when the deal is initiated by the final acquirer or a third party). *High Indgap1* (*Indgap2*) equals one if *Indgap1* (*Indgap2*) is in the top quintile of sample firms, and zero otherwise. All variables are defined in Appendix. All continuous variables are winsorized at 1st and 99th percentiles, and all dollar-value variables are inflation adjusted and expressed in 2008 dollars. Robust standard errors are clustered at the deal level. The *t* statistics are reported in the parentheses. *, **, and *** indicate significance at the 10%, 5% and 1% level, respectively.

Panel A: Target performance and Indgap1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0
	1-day Offer Premium	1-day Offer Premium	1-week offer Premium	1-week offer Premium	Acquisition Premium	Acquisition Premium	Target CAR (–1,1)	Target CAR (–1,1)
Target Initiation	–0.1226*	0.0088	–0.1197	–0.0080	–0.2406	0.0217	–0.0408	–0.0190
	(–1.705)	(0.258)	(–1.557)	(–0.229)	(–1.322)	(0.391)	(–0.939)	(–0.728)
High Indgap1	–0.0178	0.2926***	–0.0234	0.2350**	–0.0586	0.2238***	–0.0196	0.1731**
	(–0.145)	(3.058)	(–0.172)	(2.552)	(–0.176)	(2.796)	(–0.227)	(2.387)
*High Indgap1*Target Initiation*	–0.1840	–0.4319***	–0.2107	–0.3404***	0.0765	–0.3498**	–0.0234	–0.2386**
	(–1.317)	(–3.959)	(–1.112)	(–2.860)	(0.142)	(–2.199)	(–0.165)	(–2.327)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjsuted R^2	0.167	0.247	0.117	0.190	–0.131	0.210	0.232	0.209
N	91	295	91	295	91	297	91	298

Panel B: Bidder performance and Indgap1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0
	Bidder CAR (–1,1)	Bidder CAR (–1,1)	Combined CAR (–1,1)	Combined CAR (–1,1)	BHAR (1,12)	BHAR (1,12)	BHAR (1,24)	BHAR (1,24)
Target Initiation	0.0175	–0.0095	0.0158	–0.0065	–0.0382	–0.0088	0.0539	0.0018
	(0.700)	(–0.868)	(0.760)	(–0.686)	(–0.221)	(–0.167)	(0.193)	(0.023)
High Indgap1	–0.0502	0.0338*	–0.0500	0.0372*	0.2141	–0.1154	0.7513	–0.2214
	(–0.911)	(1.688)	(–0.874)	(1.739)	(0.663)	(–1.087)	(1.543)	(–1.534)
*High Indgap1*Target Initiation*	0.1446*	0.0272	0.0823	–0.0154	0.6941	–0.0353	0.7151	–0.0014
	(1.717)	(0.916)	(0.934)	(–0.519)	(1.546)	(–0.167)	(0.845)	(–0.005)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjsuted R^2	0.297	0.144	0.200	0.148	-0.100	0.031	0.210	0.072
N	91	298	91	298	85	293	82	283

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Table 10 (continued)

Panel C: Target performance and Indgap2

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0
	1-day Offer Premium	1-day Offer Premium	1-week offer Premium	1-week offer Premium	Acquisition Premium	Acquisition Premium	Target CAR (–1,1)	Target CAR (–1,1)
Target Initiation	–0.1025	–0.0085	–0.1009	–0.0136	–0.1985	0.0127	–0.0244	–0.0249
	(–1.520)	(–0.256)	(–1.306)	(–0.400)	(–1.066)	(0.230)	(–0.522)	(–0.974)
High Indgap2	0.0625	0.1704**	0.0385	0.1784**	0.1366	0.1072	0.0718	0.1020*
	(0.365)	(2.387)	(0.271)	(2.313)	(0.501)	(1.632)	(0.896)	(1.913)
*High Indgap2*Target Initiation*	–0.2294	–0.3419**	–0.2204	–0.4062***	–0.3675	–0.2985	–0.1517	–0.2359*
	(–0.951)	(–2.231)	(–1.207)	(–2.766)	(–0.967)	(–1.488)	(–1.604)	(–1.890)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjsuted R^2	0.181	0.211	0.124	0.188	-0.117	0.202	0.258	0.195
N	91	295	91	295	91	297	91	298

Panel D: Bidder performance and Indgap2

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0	Stock Deal=1	Stock Deal=0
	Bidder CAR (–1,1)	Bidder CAR (–1,1)	Combined CAR (–1,1)	Combined CAR (–1,1)	BHAR (1,12)	BHAR (1,12)	BHAR (1,24)	BHAR (1,24)
Target Initiation	0.0125	–0.0140	0.0117	–0.0097	–0.0555	–0.0002	0.0201	0.0332
	(0.496)	(–1.271)	(0.536)	(–1.055)	(–0.320)	(–0.004)	(0.074)	(0.435)
High Indgap2	–0.0242	0.0215	–0.0267	0.0448**	0.1757	–0.0944	–0.4913	–0.0961
	(–0.523)	(0.918)	(–0.612)	(2.344)	(0.518)	(–0.781)	(–1.147)	(–0.641)
*High Indgap2*Target Initiation*	0.1338**	0.0416	0.1102*	–0.0162	0.1536	0.0152	–0.3682	–0.2254
	(2.150)	(1.143)	(1.974)	(–0.391)	(0.275)	(0.086)	(–0.292)	(–0.834)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjsuted R^2	0.308	0.146	0.216	0.156	-0.132	0.029	0.175	0.073
N	91	298	91	298	85	293	82	283