The Role of Top Tier M&A Advisors in Fire Sale Transactions

Abstract

We examine the role of merger and acquisition (M&A) advisors in fire sale transactions for the target firm. Despite the target firm's low bargaining position in fire sale transactions, we find that target firms secure higher premiums when they engage top-tier M&A advisors. The impact of top-tier advisors is more pronounced in financially constrained industries and in industries with higher asset liquidity. The presence of target firm's top-tier advisors also benefit the acquiring firm as they experience positive relative gains upon deal announcements. Further, we show that top-tier advisors charge lower fees, indicating their willingness to provide services at a lower cost during fire sales.

1. Introduction

Investment banks play a critical role as advisors in mergers and acquisitions (M&A), significantly affecting M&A outcomes (Chemmanur and Fulghieri 1994; Servaes and Zenner 1996; Allen et al. 2004). Even though the bulk of the evidence suggests that top tier M&A advisors are unable to help their acquirer clients to generate superior returns on the announcement of a takeover, there are a few notable exceptions. In particular, top-tier M&A advisors,¹ due to their established reputation and expertise, are documented to deliver superior services and are associated with improved deal outcomes for the bidder in public acquisitions (Golubov et al. 2012) and in transactions where the reputation of the bidder's advisor increases relative to that of the target (Kale et al. 2003).² While the influence of top-tier advisors has been examined in typical M&A settings, there is limited evidence on their role in distressed or fire-sale transactions. This constitutes a notable gap in the literature, as fire-sale transactions present a unique set of challenges that differ significantly from more conventional M&A deals.

Fire-sale transactions typically involve forced sale of assets by financially constrained firms, often at substantial losses for the sellers (Pulvino 1998; Campbell et al. 2011; Meier and Servaes 2019). The urgency of the seller's financial distress and reduced bargaining strength often result in discounted asset prices below market value (Shleifer and Vishny 1992; Oh 2018) and lower announcement-date returns for sellers (Meier and Servaes 2019), making them fundamentally different from regular M&A deals. Furthermore, fire sales impose externalities beyond transacting firms, negatively impacting broader financing and investing activities by increasing costs of debt for industry peers (Benmelech and Bergman 2011), reducing risk appetite among healthy banks

¹ Following existing research, we define top-tier advisors as the top 8 investment banks ranked based on the aggregated value of deals that they have advised during the sample period from 1982 to 2020.

² Majority of the literature find that top tier advisors are unable to help their acquirer clients to generate superior returns on the announcement of a takeover.

(Caballero and Simsek 2013), and contributing to market volatility. Given these adverse effects, it is crucial to understand whether M&A advisors, particularly top-tier investment banks are able to mitigate these adverse effects and improve deal outcomes for distressed sellers. Although Guo et al. (2020) show that top-tier advisors can help financially constrained acquirers to achieve better deal performance, it remains uncertain whether they can similarly benefit distressed sellers, given the imbalanced bargaining power between buyers and sellers in fire sales.

To address this gap in the literature, our study employs a comprehensive sample of dataset of M&A transactions encompassing 14,251 deals between 1982 and 2020 recorded by the SDC database. We identify 606 M&A transactions involving distressed sellers of which 433 (71.45%) involve advisor participation and 151 (17.81%) include top-tier advisors. We investigate how the presence of M&A advisors influences the acquisition premiums paid to target firms in fire-sale transactions. Specifically, we measure deal outcomes for targets by examining deal premiums paid by acquirers, calculated as the percentage by which the offer price per share exceeds the target firm's stock price 20 trading days prior to the announcement date (Guo et al. 2020). We employ premiums as our primary dependent variable, given that premiums are a common metrics for evaluating fire-sale outcomes (Pulvino 1998; Officer 2007; Dinc et al. 2017; Ang and Mauck 2011). Using Ordinary Least Squares (OLS) regression analyses, we examine the presence of target advisors, particularly top-tier advisors, and its interactions with the fire sales in predicting deal outcomes. The interaction between these two variables allows us to assess the joint effect of advisor involvement and fire-sale conditions on acquisition premiums.

Our empirical evidence shows that target firms engaging top-tier M&A advisors secure higher premiums in fire-sale transactions compared to those without advisors or with non-top-tier advisors. This finding remains robust after controlling for deal-specific, acquirer, and target

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characteristics. To address potential endogeneity concerns, given the possibility of selection bias arising from non-random decisions to hire M&A advisors, we employ several empirical methodologies, including entropy balancing, propensity score matching, and the Heckman twostage model. The consistency of our findings across these empirical methods confirms our finding that top-tier advisors play a significant role in enhancing deal outcomes for distressed sellers in fire-sale transactions.

To explore the boundary conditions of our findings, further cross-sectional analyses reveal that target firms facing financial constraints, as well as those operating within financially constrained industries, achieve higher premiums when engaging top-tier advisors. This is particularly salient as constrained targets rely more on advisors in the bargaining process, while constrained industries offer limited potential acquirers (Meier and Servaes 2019), making it more important for top-tier advisors to leverage their extensive networks to attract bidders from outside the target's industry to secure favorable deal outcomes. Consistent with Meier and Servaes (2019), our results show that greater asset liquidity in fire-sale transactions is associated with higher premiums for target firms engaging top-tier advisors, as more liquid assets are expected to attract greater competition from bidders from outside the target's industry.

We also explore the impact of top-tier advisors on the acquirer's relative gain (Ahern 2012), completion time, and transaction costs as proxied by advisory fees (Chemmanur and Fulghieri 1994). Our analysis shows that, when fire-sale targets engage top-tier advisors, the acquirers experience positive relative gains, which persist when the targets or their industries are financially constrained. This suggests that top-tier advisors not only improve outcomes for target firms but also help to create value for acquirers, possibly by facilitating negotiations or identifying synergies for the combined firms. However, we find no evidence that the involvement of top-tier advisors

accelerates deal completion, suggesting that their role in distressed transactions is more centered on improving financial outcomes rather than expediting the process. Finally, our results indicate that top-tier advisors tend to charge lower advisory fees, which helps to preserve liquidity for the distressed target. One explanation is that top-tier advisors may accept lower fees in fire sales to bolster their reputation for high-quality deal execution particularly for complex, distressed transactions consistent with the reputation-quality mechanism proposed by Chemmanur and Fulghieri (1994).

This study makes several important contributions to the existing literature. First, we contribute to the literature on fire sales by identifying top-tier advisors as a crucial strategy to mitigate the negative consequences typically associated with fire-sale transactions (Pulvino 1998; Shleifer and Vishny 1992). In light of prior evidence that fire sales often result in discounted pricing, substantial losses, and lower announcement-date returns for the distressed seller (Campbell et al. 2011; Oh 2018; Meier and Servaes 2019), as well as inflicting negative externalities on broader market participants, such as increased cost of capital and volatility (Benmelech and Bergman 2011; Caballero and Simsek 2013; Chernenko and Sunderam 2020), this study shows that top-tier M&A advisors can play a pivotal role in minimizing the adverse effects of fire-sale transactions.

Second, this study expands our understanding of the role of M&A advisors, particularly toptier advisors, by documenting their effectiveness in distressed sales beyond the traditional context of more conventional M&A transactions (Rau 2000; Kale et al. 2003; Golubov et al. 2012). Prior studies show that top-tier advisors possess superior expertise, and access to networks (Golubov et al. 2012; Yawson and Zhang 2021). We extend this investigation by examining whether the advantages of top-tier advisors persist in the exceptional circumstances of fire sales, showing that top-tier advisors can help distressed targets overcome their inherently disadvantageous bargaining position to achieve superior sale prices. Furthermore, acquirers also derive benefits from top-tier advisors' involvement, experiencing higher relative gains, suggesting that the benefits are not zerosum but value-creating for both targets and acquirers. We attribute this outcome to the ability of top-tier advisors in matching sellers with suitable bidders to maximize potential synergy.

Finally, our findings offer practical insights for executives Our findings show that distressed firms facing greater financial constraints or operating within financially constrained industries are more likely to benefit from hiring top-tier advisors in fire sale transactions. By identifying these conditions, our study provides guidance for shareholders and managers on engaging top-tier advisors as a strategy to enhance the financial outcomes in fire sales. This strategy is made more viable by top-tier advisors' willingness to accept lower advisory fees, which helps distressed sellers preserve liquidity. These insights are helpful for firms facing liquidity constraints, enabling them to navigate fire-sale situations to maximize deal outcomes while minimizing losses and transaction costs.

The remainder of the paper is organized as follows. Section 2 discusses the relevant literature and hypothesis development. Section 3 describes the research methodology and sample. Section 4 discusses the empirical results and Section 5 concludes.

2. Literature Review and Hypothesis Development

2.2 The Role of M&A Advisors

M&A advisors are essential in facilitating takeover transactions. M&A Advisors serve as intermediaries in identifying and matching suitable bidders and targets (Kale et al. 2003; Bowers and Miller 1990), advise on valuation and price-setting (Song et al. 2013), and advocate for their clients in the negotiation process (Golubov et al. 2012). While target advisors seek to secure higher

premiums for their client firms, acquirers' advisors strive for lower prices (Golubov et al. 2012; Graham et al. 2017; Chemmanur et al. 2019; Wang et al. 2022).

The literature distinguishes between different types of M&A advisors.³ Top-tier advisors, also known as reputable advisors, are a subset of advisors often identified by their position on the M&A advisory league table.⁴ Research evidence shows that top-tier advisors possess superior reputation associated with higher-quality services (Klein and Leffler 1981; Shapiro 1983; Allen 1984) and are expected to generate superior M&A outcomes (Kale et al. 2003; Golubov et al. 2012). However, empirical research on the impact of top-tier advisors on acquirers has produced mixed evidence. While some early studies report no significant benefit of hiring top-tier advisors for acquirers (Bowers and Miller 1990; Michel et al. 1991; Servaes and Zenner 1996), other studies suggest that top-tier advisors enhance acquirer returns (Kale et al. 2003; Golubov et al. 2012; Guo et al. 2020).⁵ Kale et al. (2003) suggest that earlier studies overlooked gains because the impact is negated when both targets and acquirers hire top-tier advisors. By measuring the relative reputation of advisors in tender offers, they find that acquirer gains increase when the acquirer's advisor is more reputable than the target's. Furthermore, Golubov et al. 2012 find that top tier advisors generate higher abnormal returns for their acquirer clients when they provide advice on public transactions. Additionally, top-tier advisors complete deals faster (Hunter and Jagtiani 2003; Walter et al. 2008; Golubov et al. 2012), increase completion rates (Rau 2000; Hunter and Jagtiani 2003; Kale et al.

³ Prior research has examined various advisor types, including industry-specialist advisors (Graham et al. 2017; Wang et al. 2022), boutique advisors (Song et al. 2013), advisors with prior relationships with targets (Chang et al. 2016), common advisors shared by targets and bidders (Agrawal et al. 2013), as well as advisors holding central positions in networks (Yawson and Zhang 2021) and advisor-level fixed effects (Bao and Edmans 2011;

Chemmanur et al. 2019; Sibilkov and McConnell 2014), which contribute to superior M&A success for acquirers. ⁴ Researchers have define top-tier advisors by various thresholds, such as the top five (Rau 2000), top fifteen (Hunter and Jagtiani 2003), or top eight (Golubov et al. 2012) investment banks based on the number or value of M&A transactions.

⁵ Kale et al. (2003) suggest that earlier studies overlooked gains because the impact is negated when both targets and acquirers hire top-tier advisors. By measuring the relative reputation of advisors in tender offers, they find that acquirer gains increase when the acquirer's advisor is more reputable than the target's.

2003; Lawrence et al. 2021), and charge premium fees for their expertise (McLaughlin 1992; Walter et al. 2008; Golubov et al. 2012).

Prior research has extensively focused on the role of top-tier advisors for acquirers, with limited evidence on the impact of top-tier advisors for targets. While target top-tier advisors are documented to enhance total wealth gain in M&A deals (Bowers and Miller 1990; Kale et al. 2003), their role, particularly when facing disadvantageous bargaining positions associated with distressed sales, remains under-explored, giving rise to a significant gap in the literature which this study seeks to address.

2.3 The Role of M&A Advisors in Fire Sales

Fire sales occur when distressed sellers facing liquidity or financial constraints are forced to sell their assets, often at discounted prices below their intrinsic value (Shleifer and Vishny 1992). Fire sales generally result in significant losses for sellers across both real (Pulvino 1998; Campbell et al. 2011) and financial assets (Coval and Stafford 2007; Ellul et al. 2011; Dinc et al. 2017), especially during bankruptcy proceedings (LoPucki and Doherty 2007; Eckbo and Thorburn 2008), with discounts ranging from 5% to 28% on assets such as real property and aircrafts (Pulvino 1998; Campbell et al. 2011).

This discounted pricing is primarily due to the seller's urgent need for liquidity and weakened bargaining power, leading to lower premiums paid by acquirers (Meier and Servaes 2019; Oh 2018). Consequently, acquirers tend to achieve higher announcement-date returns (by 2%) in fire sales compared with regular acquisitions, whereas fire-sale targets experience poorer announcement-rate returns which can amount to 5.5% lower than other deals (Meier and Servaes 2019), particularly when selling to industry outsiders (Oh 2018). The disadvantageous position of target firms is further exacerbated by potential industry-wide downturns, which further limit the

pool of potential bidders as industry peers may be facing similar market or economic conditions, forcing the targets to accept low offers from bidders outside of their industries (Shleifer and Vishny 1992; Oh 2018). Additionally, fire sales create negative externalities (Chernenko and Sunderam 2020), such as reduced creditor recovery rates (Acharya et al. 2007), decreased equity prices in emerging economies (Jotikasthira et al. 2012), decreased risk appetite of lenders (Caballero and Simsek 2013), and increased costs of debt for other industry participants (Benmelech and Bergman 2011). Given these challenges, how can distressed targets avoid the significant price discounts typical of fire sales?

We conjecture that top tier M&A advisors can assist distressed targets in securing good deal outcomes in fire sale transactions. Fire sale outcomes for targets constitute a unique setting for examining the efficacy of M&A advisors, as distressed targets face a disadvantageous bargaining position, which advisors' skills and expertise may help overcome. We propose that M&A advisors can potentially assist distressed target firms achieve more favorable sale prices through three key mechanisms: identifying potential buyers, bridging information asymmetry, and strengthening negotiation strategies.

First, identifying appropriate bidders is crucial in M&A transactions. Fire-sale targets often face limited options and may be forced to accept low offers in exchange for prompt and full payments, particularly in the absence of competitive bidding (Aktas et al. 2010). M&A advisors, leveraging their networks and expertise, can help targets identify the most suitable bidders by assessing both standalone and combined values (Kale et al. 2003). Further, in cases where industry-wide downturns limit the availability of bidders within the industry, advisors can expand the search to include non-industry-specific bidders, thereby broadening the pool of potential acquirers and improving the chances of favorable deal outcomes.

Second, advisors play an important role in mitigating information asymmetry, particularly when acquirers come from outside the target's industry. Cross-industry sales are common in fire sales, which are often triggered by industry-specific liquidity shocks (Shleifer and Vishny 1992), meaning that potential bidders within that industry who are typically best positioned to assess the fair values of distressed assets often face liquidity constraints, forcing the targets to sell to an acquirer from outside the industry. These industry-outsiders may lack the specialized knowledge to accurately value the distressed assets, leading to lower offer prices (Dow and Han 2018). M&A advisors can bridge the information gap by providing information and helping cross-industry acquirers better understand the fair value of the distressed targets (Servaes and Zenner 1996), which helps in securing fair price for the transaction.

Third, M&A advisors bring superior negotiation skills by advocating for their distressed clients. Fire-sale targets often have limited bargaining power due to their urgent need for liquidity, forcing them to accept discounted prices, particularly when intangible assets are involved (Masulis et al. 2023). Target advisors, however, can employ their negotiation skills and experience to secure higher offers by emphasizing the fair value of the assets and the potential benefits for acquirers, such as synergies and cost reductions.⁶ Given these factors, we expect that M&A advisors can help fire-sale targets achieve better deal outcomes, as indicated by higher deal premiums. Accordingly, we specify our first hypothesis as follows:

H1: Target firms in fire sales receive premiums when advisors are hired.

Our second hypothesis focuses on the role of top-tier advisors in fire sale transactions. Given that top-tier advisors are reputed to provide higher-quality services (Klein and Leffler 1981; Shapiro 1983; Allen 1984) and improve M&A outcomes for acquirers in conventional M&A

⁶ Even when acquirers also hire advisors, the target's intrinsic value remains unchanged, which we would expect target advisors to articulate to the acquirers during the negotiation process.

transactions (Kale et al. 2003; Golubov et al. 2012), we expect top-tier advisors engaged by target firms to achieve better outcomes than non-top-tier advisors in fire sales. Following prior research, we define top-tier advisors as the top eight investment banks ranked by the aggregated value of M&A deals they have advised (Chemmanur and Fulghieri 1994; Golubov et al. 2012).

In the context of fire sales, we expect the benefits associated with top-tier advisors to be magnified by the distressed nature of the transactions. First, top-tier advisors possess extensive experience and broader client base, which have been developed over years of advising clients across multiple sectors, enabling them to identify potential bidders more effectively through their wide-ranging industry connections. Second, top-tier advisors possess greater expertise in handling complex transactions and have stronger negotiation skills, supported by the resources and insights accumulated from past transactions. Third, as fire sales often involve non-specialist bidders from outside the target's industry, top-tier advisors' broad-based experience in dealing with cross-industry transactions equip them to communicate more effectively and bridge the information asymmetry between targets and bidders. Consequently, we expect target firms advised by top-tier M&A advisors to secure higher premiums compared to those advised by non-top-tier advisors.

H2: Target firms in fire sales receive higher premiums when top-tier advisors are hired compared to non-top-tier advisors.

3. Sample and Data Collection

3.1 Sample Selection

We initially collect data on all completed M&A transactions recorded in the Securities Data Company (SDC) database between 1982 and 2020, as information on distressed acquisitions (i.e., fire sales) became available in 1982. Our sample selection follows Moeller et al. (2004) and Golubov et al. (2012) by applying the following criteria First, we exclude transactions where the target is not a U.S. public firm. Second, we limit the sample to unconditional and completed deals. Third, we exclude self-tenders, repurchases, recapitalizations, buybacks, equity carve-outs, spinoffs, and split-offs. Fourth, we include only transactions where the acquirer owns less than 50% of the target pre-acquisition. Fifth, we remove transactions with values below \$10 million (Song et al. 2013). Lastly, we require the target's share price and accounting data to be available from CRSP and Compustat, respectively. After applying these criteria, our final sample comprises 14,251 transactions, as shown in Table 1.

3.2 Fire Sales

We define fire sale transactions using the framework established by Meier and Servaes (2019). A transaction is classified as a fire sale if any of the following conditions are met: (1) the target firm was in bankruptcy proceedings at the time of the deal announcement, or initiated such proceedings during the transaction; (2) the transaction was a part of the target's liquidation plan; or (3) the transaction was pursued for the purpose of debt restructuring.⁷ Using these criteria, we create a binary independent variable, *Fire Sale*, which equals one if the transaction meets any of these conditions, and zero otherwise.

3.3 Target Advisors

We use two empirical measures of target advisors. First, we define *Advisors* as a binary variable, which equals one if the target firm engaged any advisor for the M&A transaction, and zero otherwise, to examine H1. Second, to investigate the impact of top-tier advisors (H2), we define *Top-tier* as a binary variable, which is assigned one if the target firm engaged one of the top eight

⁷ Debt restructuring is identified based on criteria from SDC, where one or more of the following conditions are met: (i) the company has publicly confirmed the retention of a restructuring advisor, has filed for bankruptcy/receivership protection, has publicly confirmed plans to restructure its debt, or has gone into default or has missed a coupon payment, (ii) an S&P/Moody issuer, issue, or probability of default rating of CCC+/Caa1 or below either before or in reaction to the announcement of the restructuring plan, (iii) a debt-for-debt exchange offers where debt holders will exchange their bonds at a discount, or (iv) a credit facility or debt security carries a yield of at least 1,000 bps over US Treasuries.

M&A advisors, as ranked by the league table each year over the period 1982 and 2020 based on,⁸ and zero otherwise (Golubov et al. 2012).

3.4 Measurement of Fire Sale Outcomes

We measure the outcome of fire-sale transactions using deal premiums, a well-established proxy for transaction success for target firms (Ang and Mauck 2011; Dinc et al. 2017; Officer 2007). We calculate *Target Premium20* as the ratio of the offer price to the target's stock price 20 trading days prior to the deal announcement (Dinc et al. 2017; Oh 2018; Guo et al. 2020). In cases where the offer price is not directly reported, we calculate it by dividing the total deal value by the number of shares acquired (which we calculate by multiplying the total number of shares outstanding with the percentage of shares acquired):

$$Target \ Premium 20 = \left(\frac{Offer \ price \ per \ share}{Target \ stock \ price \ 20 \ trading \ days \ before \ the \ announcement} - 1\right)$$
(1)

This measure captures the price paid to the target relative to its value before market anticipation of the sale (Dinc et al. 2017; Oh 2018; Guo et al. 2020). For robustness, we follow Song et al. (2013) and compute an alternative measure, *Target Premium43*, based on target stock prices measured 43 days prior to deal announcements. Given the unique nature of fire sales, we focus on target premiums as it better reflects the immediate liquidity received by target shareholders to meet debt obligations,⁹ providing the most informative and meaningful measure of deal success for fire-sale transactions (Officer 2007; Dinc et al. 2017).

3.5 Regression model

⁸ The top eight advisors ranked by total deal value are Goldman Sachs & Co, Morgan Stanley, JP Morgan, BofA Securities Inc, Citi, Credit Suisse, Barclays (formerly Lehman Brothers), and Lazard. These banks are the same as those identified in the earlier study, although their rankings differ slightly (Golubov et al. 2012). This suggests that the quality and reputation of these advisors have remained relatively stable over time.

⁹ In contrast, market reactions (i.e., announcement-date stock returns) may be distorted in fire-sale transactions due to uncertainty about the firm's future viability.

To investigate the relation between M&A advisors and fire-sale outcomes, we estimate the following regression model.

 $Target Premium = \alpha + \beta_{1}Advisor * Fire Sale|Toptier * Fire Sale_{i} + \beta_{2} Advisors|Toptier_{i} + \beta_{3}Fire Sale_{i} + \beta_{4}Stock_{i,} + \beta_{5}Hostile_{i} + \beta_{6}Cross Industry_{i} + \beta_{7}Competition_{i} + \beta_{8}Tender Offer_{i} + \beta_{9}Toehold_{i} + \beta_{10}Ln(Deal Value)_{i} + \beta_{11}Relative Size_{i} + \beta_{12}Acquirer MB_{i} + \beta_{13}Acquirer Advisors_{i} + \beta_{14}Target MB_{i} + \beta_{15}Target ROE_{i} + \beta_{16}Target Sales Growth_{i} + \beta_{17}Target DE_{i} + \beta_{18}Post2000_{i} + \varepsilon_{i}$ (2)

The key independent variable is the interaction term between the presence of advisors (measured by two alternative proxies: Advisors which captures all M&A advisors and Top-tier which captures top-tier M&A advisors) and fire-sale transactions (Fire Sale). The interaction term allows us to examine the joint effect of advisor engagement and fire-sale transactions on deal outcomes. We also include a comprehensive set of control variables to account for deal, target, and acquirer characteristics, following prior studies (Kale et al. 2003; Golubov et al. 2012; Song et al. 2013; Meier and Servaes 2019). Specifically, *Stock* is a binary variable set to one if at least 50% of the deal consideration involves the acquirer's equity, and zero otherwise. *Hostile* and Tender Offer are binary variables set to one if the acquisition is classified as a hostile takeover or a tender offer, respectively, and zero otherwise. Cross Industry is a binary variable which equals one if the target and bidder do not share the same 4-digit SIC code. Competition is a binary variable set to one if multiple bidders are present and zero otherwise and it is expected to be positively linked to premiums, as multiple bidders typically lead to higher bids. *Toehold* is a binary variable that equals one if the acquirer had at least 5% ownership in the target firm preacquisition and zero otherwise. *Relative Size* is calculated as the ratio of deal value to the market value of the acquirer. Ln(Deal Value) captures the natural logarithm of the total consideration paid, excluding fees and expenses (Meier and Servaes 2019). Asset Acquisition is a binary

variable set to one if the transaction involves acquisitions of assets or units, and zero otherwise. *Equity Only* and *Cash Only* are binary variables set to one for acquisitions using pure equity or pure cash as the method of payment, respectively, and zero otherwise (Meier and Servaes 2019).

Among target- and acquirer-specific controls, *Target M/B* (*Acquirer M/B*) is computed as the target's (acquirer's) ratio of the market value of equity to the book value of equity. *Target Tobin's Q* (*Acquirer Tobin's Q*) represent the market value scaled by book value of assets for the target (acquirer) firms. *Target Leverage (Acquirer Leverage)* capture the market leverage of the respective firms, calculated as (book assets minus book equity) divided by market value. *Target EBITDA/Assets (Acquirer EBITDA/Assets)* measure operating performance, computed as EBITDA scaled by book value of assets. *Ln(Acquirer AT)* captures the natural logarithm of the acquirer's total assets, measured as the book value of all assets. *Acquirer Advisors* is a binary variable that equals one if the acquirer engages an investment bank as advisor in the transaction, and zero otherwise, to account for the acquirer's bargaining power. We further control for the target's performance (*ROE*) growth (*Target Sales Growth*), and debt-to-equity ratio (*DE*) (Song et al. 2013). Lastly, *Post2000* is a binary variable that equals one for deals announced after 2000, accounting for the growing role of advisors since 2000 (Song et al. 2013).

3.6 Sample Statistics

Table 1 presents a detailed breakdown of our sample of 14,251 M&A transactions from 1982–2020, of which 606 are fire-sale transactions. Fire-sale activities peaked in the late 1980s, early 1990s, and early 2000s, consistent with the trends observed by Meier and Servaes (2019). Other significant increases are also observed post-2008, with 59 fire-sale events in 2009, and in 2020 (with 65 fire sales), likely due to the global financial crisis and COVID-19 pandemic, respectively. The involvement of advisors in fire-sale transactions has grown since 2000, with 433 (71.45%) of

606 fire sales involving advisors, and 151 involving top-tier advisors, meaning that approximately 1 in 4 (24.92%) advisors are top-tier. Among all 14,251 sample transactions, 12,141 had stock price data available for the targets, including 331 fire sales.

[Insert Table 1 approximately here]

Table 2 reports summary statistics for all variables. All continuous variables are winsorized at the 1% level. In Table 3, the correlation matrix reveal that no pairwise correlation coefficient between independent variables exceeding 0.7 in our baseline regressions, indicating that multicollinearity is not a significant concern in the regression analysis.

[Insert Table 2 approximately here] [Insert Table 3 approximately here]

4. Empirical Results

4.1 Baseline Results

This section presents the baseline results from the OLS regressions examining the predictive power of advisors on deal premiums in fire-sale transactions. Table 4 reports the results from estimating Equation (2) to predict target premiums (*Target Premium20*).¹⁰ The independent variable of interest is the interaction term between advisors represented by two alternative measures which capture every M&A advisor employed (*Advisors*) and top-tier advisors (*Top-tier*) and the nature of the transaction (*Fire Sale*). The analyses utilize four models with different sample selections, all controlling for year and target industry fixed effects based on 4-digit SIC code.

In Column (1), the regression utilizes *Advisors* as the independent variable (which captures both top-tier and non-top-tier advisors) and is estimated using the full sample, to compare transactions

¹⁰ As a robustness test, we also re-estimate the regression analysis using an alternative measure of target premiums, *Target Premium43*, which is calculated using the target's stock price 43 trading days prior to the deal announcement. The results are consistent with those from the baseline analysis.

with advisors with those with no advisors. The coefficient of *Advisors*Fire Sale* is not statistically significant, offering no evidence in support of H1 that target advisors generally improve outcomes of fire-sale transactions.

In contrast, Columns (2)-(4) focus only on top-tier advisors (Top-tier). Specifically, Column (2) utilizes a subsample consisting of transactions with top-tier advisors and those with no advisors (excluding transactions with non-top-tier advisors), in order to compare deals with top-tier advisors against those with no advisors. The coefficient of the interaction term *Top-tier*Fire Sale* is positive (3.048) and significant (p<0.05), indicating that fire-sale targets with top-tier advisors received substantially higher premiums by an average of 304.8 percentage points compared with deals with no advisors. In Column (3), we exclude transactions with no advisors and compare top-tier advisors with non-top-tier advisors. The coefficient of the interaction term Top-tier*Fire Sale remains positive and significant (3.472, p < 0.01), indicating that top-tier advisors are associated with significantly higher fire-sale premiums than non-top-tier advisors, both economically and statistically. In Column (4), we again utilize the full sample to compare deals with top-tier advisors against those with non-top-tier advisors and no advisors. Consistent with Columns (2) and (3), the results show that transactions soliciting the advice of top-tier M&A advisors outperform by an average increase of 3.338 in premiums compared to other deals advised by non-top-tier advisors and deals with no M&/a advisors ($p \le 0.01$). These results provide strong support of H2 by demonstrating that the engagement of top-tier advisors is linked to significantly improved deal outcomes in fire-sale transactions.

Overall, while our baseline results do not support H1, showing no evidence of benefits from hiring general advisors in fire sales, we find evidence in support of H2 on the value added role of top-tier advisors. Top-tier advisors generate higher premiums in fire-sale transactions, which we

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attribute to their superior skills in identifying suitable bidders, deal negotiations, and reducing information asymmetry to secure better sale prices for distressed targets.

[Insert Table 4 approximately here]

4.2 Selection Bias

Since the decision to hire M&A advisors is nonrandom, it may be endogenously determined by target firm characteristics, thereby giving rise to potential selection bias that may lead to biased results when estimating the impact of M&A advisors on target premiums. To address this potential self-selection bias, we employ three empirical methods, entropy balancing, propensity score matching, and Heckman two-step procedure.

4.2.1 Propensity Score Matching and Entropy Balancing

We conduct propensity score matching and entropy balancing to ensure comparability between treatment and control groups. First, we estimate the propensity score by running a logistic regression to predict the probability of hiring advisors (or top-tier advisors) based on target firm characteristics, including *Target M/B*, *Target ROE*, *Target Sales Growth*, *Target DE*, *Target Tobin's Q*, *Target leverage*, and *Target EBITDA/assets*. We re-estimate the baseline regressions in Equation (2) using the propensity-score-matched samples.

Table 5 reports the results from the propensity score matching analysis for all advisors in Column (1) and for top-tier advisors in Column (3). While the interaction term *Advisors*Fire Sale* in Column (1) remains statistically insignificant, the coefficient of *Top-tier*Fire Sale* in Column (3) is positive and significant (3.161, p<0.01). These findings suggest that fire sale deals advised by top-tier advisors consistently outperform other fire sale deals, whereas hiring advisors generally provides no distinguishable benefits, after controlling for selection bias in the empirical set up.

We also employ entropy balancing to deal with potential selection bias. Entropy balancing utilizes covariates (target firm characteristics) to reweights the control group (transactions without advisors) with the treatment group (transactions with advisors or top-tier advisors), thus reducing selection bias without altering the sample size. We conduct entropy balancing between the treatment and control samples using *Target M/B*, *Target ROE*, *Target Sales Growth*, and *Target DE* as covariates. We repeat the entropy balancing process using alternative treatment and control samples with advisors.

The results from the entropy balancing analysis are presented in Table 6, Column (2) for all advisors and Columns (4)–(6) for top-tier advisors. For all advisors, the coefficient of *Advisors*Fire Sale* remains positive but statistically insignificant. For top-tier advisors, the interaction term *Top-tier*Fire Sale* is consistently positive and significant (p<0.01) across Columns (4), (5), and (6), with coefficients of 3.092, 3.460, and 3.314, respectively. These results further support H2 by demonstrating that top-tier advisors consistently achieve superior transaction outcomes for fire-sale targets, whether in comparison with deals with non-top-tier advisors, no advisors, or both. The evidence from both propensity score matching and entropy balancing analyses supports our baseline findings and confirms the value of engaging top-tier advisors in fire-sale targetons.

[Insert Table 5 approximately here]

4.2.2 Heckman Two-Step Procedure

We formally address the potential selection bias in estimating the impact of top-tier advisors on fire-sale premiums by employing a Heckman two-step procedure to account for the nonrandom selection of top-tier advisors, which may be influenced by firm and deal characteristics such as the financial health of the target or the urgency of the sale. The Heckman procedure corrects for this bias by modelling the selection process. In the first stage, we estimate a probit model to predict the probability of hiring top-tier advisors, utilizing an instrumental variable (IV) based on the frequency of past engagements with top-tier advisors in the five years preceding the M&A transaction. Our IV, Scope, is defined in accordance with the methodology of Golubov et al. (2012): *Scope* is assigned a value of 1 if the target has employed a top-tier investment bank for any of the following three types of transactions; equity issue, bond issue, or acquisition in the five years prior to the deal; it is assigned a value of 2 if a top-tier investment bank has been engaged for two of these three types of transactions in the past five years, and 3 if a top-tier investment bank has been engaged in all three types of transactions in the preceding five-year period. If no top-tier investment bank has been engaged during this period, Scope equals 0. We expect the target's scope of past engagement with top-tier advisors to affect its likelihood to hire a top-tier advisor in the current M&A transaction, satisfying the relevance criterion for a valid IV. Further, there is no reason to expect the target's prior experience with top-tier advisors to be linked with the deal premium in the current transaction, consistent with the exclusion restriction, making Scope a valid instrument for the Heckman selection model. The second step of the Heckman procedure involves reestimating our baseline regression in Equation (2), adjusted by incorporating the Inverse Mills Ratio (Lambda) derived from the first-stage model.

Table 6 reports the results from Heckman two-step procedure. Column (1) presents the results from the first-stage probit model, which estimates the probability of engaging top-tier advisors. The coefficient of the IV, *Scope*, is positive and statistically significant (p<0.01), indicating a significant correlation between prior engagements with top-tier advisors and the likelihood of hiring one for the current transaction. Column (2) presents the regression results estimating target premiums by including Lambda to control for potential selection bias. The coefficient of Lambda

is negative and significant (p<0.10), confirming the presence of selection bias in the target's decision to hire top-tier advisors. Nevertheless, after controlling for selection bias in the second-stage model, the interaction term *Top-tier*Fire Sale* remains positive and significant with a coefficient of 3.357 (p<0.01). This result indicates that, once selection bias is accounted for, top-tier advisors continue to exhibit a statistically and economically significant and positive effect on premiums for target firms in fire sales, further confirming our baseline findings in support of H2.

[Insert Table 6 approximately here]

4.3 Cross-sectional Analyses

In this section, we explore the cross-sectional differences to provide further evidence on the circumstances under which top-tier M&A advisors can help target firms secure higher premiums. While distressed firms often sell at discounted prices, deal outcomes can depend on not only their financial health but also the financial conditions of their industries. We examine how the financial constraints of target firms and their industries, as well as the asset liquidity within those industries, affect the effectiveness of advisors. By analyzing these factors as boundary conditions, we aim to provide insights into how M&A advisors can assist their target clients to achieve better outcomes in fire-sale transactions.

4.3.1 Financial Constraints and Target Premiums

Distressed firms often resort to fire sales to meet urgent liquidity needs. In such cases, top-tier M&A advisors may help sellers improve their disadvantageous bargaining position, potentially securing higher premiums. However, the impact of a firm's financial constraint on the advisors' effectiveness is open to debate. While financially constrained firms are more motivated to secure cash, the urgency to sell might lead them to accept lower offers, thereby weakening the advisors' ability to secure higher premiums.

To investigate this moderating role, we measure the financial health of target firms using the Kaplan-Zingales (KZ) Index, a widely used measure for financial constraint (Guo et al. 2020; Meier and Servaes 2019). The KZ Index is calculated at the firm level as follows:

$$KZ \ index_{it} = -1.001909 \left(\frac{Cash \ Flow_{it}}{PPE_{it-1}}\right) + 0.2826389 \ Q_{it} + 3.139193 \ Leverage_{it}$$
$$- 39.3678 \ (Dividend_{it}/PPE_{it}) - 1.314759 \ (Cash_{it} \ / \ PPE_{it-1})$$

where Cash $Flow_{it} / PPE_{it-1}$ represents the firm's cash flow (IB + DP in Compustat) over lagged capital (PPENT), Q_{it} represents Tobin's Q ((AT+PRCC×CSHO–CEQ-TXDB)/AT), *Leverage_{it}* is the leverage ratio ((DLTT + DLC)/(DLTT + DLC + SEQ)); Dividend_{it} / PPE_{it} represents dividends (DVC + DVP) over lagged capital (PPENT), and *Cash*_{it} / *PPE*_{it-1} represents cash (CHE) over lagged capital (PPENT). A higher value in the KZ Index indicates greater financial distress (Kaplan and Zingales 1997).

Table 7 presents the regression results using an interaction variable to capture the combined effect of the *KZ Index, Fire Sale* and *Advisors* on target premiums, in addition to including *KZ Index* as an independent variable. Column (1) examines the role of all advisors (*Advisors*) while Columns (2)–(4) examine top-tier advisors, using the same variations in sample selection methodology as our baseline results in Table 4. While the interaction term involving *Advisors* is not statistically significant in Column (1), the interaction term *Top-tier*Fire Sale*KZ* is positive and significant across Columns (2)–(4) (p<0.05 or better), with coefficients of 2.260, 2.500 and 2.433 respectively. These results indicate that top-tier advisors achieve higher premiums in fire sales when the sellers face greater financial distress. These results support our expectation under

H2 that top-tier advisors are able to assist financially constrained firms achieve higher premiums in fire sales.¹¹

[Insert Table 7 approximately here]

We next examine how the financial health of the target's industry affects the effectiveness of target advisors in fire sales. In such transactions, the financial condition of the target's industry plays an important role, because industry peers often constitute potential suitable buyers of the target's assets. However, if the target's industry is financially constrained, firms within that industry would have limited capacity to bid for the target's assets, increasing the difficulty of finding suitable buyers and potentially hampering deal premiums. Top-tier advisors can play a critical role by leveraging their extensive networks to identify potential bidders outside the targets' industry. Top-tier advisors are uniquely positioned to facilitate deals with cross-industry buyers that might otherwise be unattainable due to constraints within the target's own industry.

To capture the financial health of the target's industry, we use the industry-level KZ Index (*Ind.KZ*), which is calculated as the average KZ Index for firms within the same industry, excluding the target firms, following Meier and Servaes (2019). We interact this industry KZ Index with advisors and fire-sale variables to assess how the financial health of the target's industry influences the effectiveness of advisors in securing higher premiums for fire-sale transactions.¹²

Table 8 presents the results from the regression analyses, using the same variety of sample selection methods as Table 4. In Column (1), the interaction term *Advisors*Fire Sale*Ind.KZ* is

¹¹ As a robustness test, we employ an alternative binary measure of financial constraint by converting the KZ Index into a binary variable based on a median split of its value among the sample: *KZ Dummy* equals one if the *KZ Index* of an observation is above the sample median and zero otherwise. We re-estimate the regressions in Table 7 using this binary variable, *KZ Dummy*, instead of *KZ Index*. In untabulated results, the economic magnitude and statistical significance of the key variables remain consistent with those reported in Table 7, further confirming our findings. ¹² As a robustness test, we also employ a binary measure of industry financial constraint by median split: *Ind.KZ Dummy* equals one if *Ind.KZ* is above the sample median and zero otherwise. We re-estimate the regressions in Table 8 using *Ind.KZ Dummy* in lieu of *Ind.KZ*. In untabulated results, the regression results remain consistent with those in Table 8 and confirm our findings.

not significant; in Columns (2) through (4), the coefficient of *Top-tier*Fire Sale*Ind.KZ* is positive and significant (with values of 2.340, 2.389, and 2.356, respectively, p<0.01), indicating that toptier advisors can help fire-sale targets secure premiums that are substantially higher when their industries are financially constrained, in comparison with deals with no advisors, non-top-tier advisors, or either non-top-tier or no advisors.

This finding supports our expectation that top-tier advisors play a more important role when the targets' industries face financial difficulties. Their extensive networks spanning across different industries, built through experience and past client, enable top-tier advisors to identify potential bidders outside the distressed industry, thereby mitigating the negative effects of industry-specific constraints. Additionally, by reducing information asymmetry between bidders from outside the target's industry and the target firms, top-tier advisors facilitate better-informed bids, which are more likely to reflect the realistic value of the fire-sale assets. As a result, target firms are able to secure significantly higher premiums with the aid of top-tier advisors, even when operating in a financially constrained industry.

[Insert Table 8 approximately here]

4.3.2 Industry Asset Liquidity and Target Premiums

We next investigate how asset liquidity within the target's industry affects the effectiveness of advisors in fire sales. Schlingemann et al. (2002) document that firms within industries with more liquid asset are more likely to divest segments of their business. Distressed assets from industries with greater liquidity which increases their redeployability and marketability are expected to attract more bidders, providing advisors with greater bargaining leverage to negotiate for higher prices, even when firms are undergoing bankruptcy, liquidation, or debt restructuring. Consistent with this expectation, Meier and Servaes (2019) find that higher liquidity in the target's asset market can reduce acquirer returns in fire sales. Therefore, we expect asset liquidity in the target's industry to increase the ability of top-tier advisors to secure higher premiums in fire sales.

To measure asset liquidity within the target's industry, we follow the method employed by Schlingemann et al. (2002). We collect data on all completed and unconditional M&A transactions (excluding repurchases, self-tenders, recapitalizations, buybacks, spinoffs, equity carveouts, and split-offs) within each industry (classified using the 3-digit SIC code) and calculate the liquidity index (*Liquidity*) as the sum of deal values for all transactions announced within an industry in a given year, divided by the total book value of assets for all firms in that industry-year.¹³ We interact *Liquidity* with advisors and fire-sale variables in our regressions.

As reported in Table 9, the interaction term *Advisors*Fire Sale*Liquidity* is not statistically significant in Column (1), suggesting that general advisors do not improve premiums in fire-sale transactions, even when the target's industry has more liquid assets. However, in Columns (2)–(4), the interaction term *Top-tier*Fire Sale*Liquidity* is positive and significant, with coefficients of 2.546 (p<0.05), 2.901 (p<0.01), and 2.789 (p<0.01), respectively. These results suggest that top-tier advisors are able to secure significantly higher premiums for target firms in fire-sale transactions when the industry exhibits higher asset liquidity. These findings support our expectation that top-tier advisors are particularly effective in industries with higher asset liquidity, as more redeployable and marketable assets can increase top-tier advisors' ability to identify a wider range of bidders in their extensive networks, thereby increasing competition for the assets to secure higher prices.

[Insert Table 9 approximately here]

¹³ To ease the readability of the coefficients, we adjust the scale of the liquidity index by multiplying it by 10.

4.4 Additional Analyses

4.4.1 Relative Gain

In fire-sale transactions, the target versus acquirer's relative gain constitutes another measure of deal outcome. Firms that engage in fire sales are perceived negatively by investors and market participants. Therefore, measuring relative gain allows us to capture the difference in abnormal returns experienced by the target and acquirer. Following Ahern (2012) and Meier and Servaes (2019), we calculate target relative gain as follows:

$$Relative \ Gain = \frac{Target \ abnormal \ returns \ -Acquirer \ abnormal \ returns \ (dollar \ value)}{MVT \ +MVA}$$
(3)

Relative gain is computed using the 3-day abnormal returns surrounding the deal announcement and the market values of both the target (MVT) and acquirer (MVA) 20 trading days before the announcement date. Market value is computed as the firm's book assets minus book equity plus market value of equity. Abnormal returns are calculated as the cumulative residuals based on market returns over a 200-day period, starting 205 days before the deal announcement, estimated using the CRSP equally weighted market index. This measure represents both the target's and acquirer's relative gain from the acquisition which allows for comparison of the relative success of the transaction for both parties. We estimate the following OLS regression model to predict *Relative Gain*, while controlling for acquirer, target, and deal characteristics:

Relative Gain_i = $\alpha + \beta_1 Advisors * Fire Sale_i | Toptier_i * Fire Sale_i + \beta_2 Advisors | Toptier_i + \beta_3 Fire Sale_i + \beta_4 Asset Acquisition_i + \beta_5 Tender Offer_i + \beta_6 Hostile deals_i + \beta_7 Equity Only_i + \beta_8 Cash Only_i + \beta_9 Competition_i + \beta_{10} Relative size_i + \beta_{11} Ln(Deal Value)_i + \beta_{12} Target Tobins' Q_i + \beta_{13} Target Leverage_i + \beta_{14} Target EBITDA/Assets_i + \beta_{15} Acquirer Advisors_i + \beta_{16} Ln(Acquirer AT)_i + \beta_{17} Acquirer Tobin's Q_i + \beta_{18} Acquiror Leverage_i + \beta_{19} Acquirer EBITDA/Assets_i + \epsilon_i$ (4)

Following Meier and Servaes (2019), we include additional controls for deal characteristics using binary variables indicating asset acquisitions (*Asset Acquisition*), equity-only (*Equity Only*), and cash-only transactions (*Cash Only*), as well as acquirer and target characteristics such as book value of assets, Tobin's Q calculated as the market value over book value of assets (*Tobin's Q*), debt-to-equity ratio (*Leverage*), and income (*EBITDA/assets*). We estimate the regression in Equation (4) to explore whether advisors, particularly top-tier advisors, can help targets obtain a higher relative gain.

Table 10 reports the regression results, with Column (1) focusing on general advisors and Columns (2)–(4) on top-tier advisors. The coefficient of *Advisors*Fire Sale* is negative but not significant in Column (1), while the coefficient of *Top-tier*Fire Sale* is consistently negative and significant across Columns (2) through (4) (p < 0.05). These results suggest that when target firms engage top-tier advisors in fire sales, acquirers tend to achieve a higher gain relative to the target's, compared to deals with non-top-tier or no advisors. This finding provides valuable insights into the role of top-tier advisors in fire sales, by demonstrating that top-tier advisors not only help secure higher premiums for targets but also enable acquirers to benefit by securing higher relative gain from the acquisition. We attribute this positive effect to top-tier advisors' superior ability to identify suitable matches between potential acquirers and the distressed targets, consequently, such purchases of fire-sale assets are viewed positively by the markets as beneficial to the acquirers while preventing the target firm's losses arising from bankruptcy, liquidation, or restructuring proceedings.

[Insert Table 10 approximately here]

4.4.2 Completion Time

We next examine advisors' role in determining time to completion in M&A transactions by reestimating Equation (4). The dependent variable, *Time to Completion*, is calculated as the number of calendar days between the announcement date and resolution date (Golubov et al. 2012). Prior research shows that top-tier advisors engaged by acquirers can help achieve faster deal completion (Hunter and Jagtiani 2003), likely due to their superior resources, skills, and capabilities (Walter et al. 2008; Golubov et al. 2012). Nevertheless, the efficacy of targets' top-tier advisors in expediting M&A transactions, particularly fire sales, has never been examined. One view is that distressed sellers' urgent needs for liquidity to meet their debt obligations prompt top-tier advisors to complete deals faster; a competing view is that top-tier advisors may prioritize higher premiums over faster sales, thus not expediting transactions.

Table 11 reports the results from the four OLS regressions predicting time to completion using the sample constructions as discussed in Table 4. Column (1) compares fire-sale completion time involving any advisors to those without advisors, while Columns (2)–(4) focus on the impact of top-tier advisors relative to non-top-tier advisors, deals with no advisors, and those with either non-top-tier or no advisors.

The results indicate that, overall, neither top-tier advisors or general advisors significantly reduce the completion time of fire-sale transactions. Specifically, the coefficients of the interaction term *Top-tier*Fire Sale* (as well as *Advisors*Fire Sale*) are insignificant across all models, suggesting that top-tier advisors do not accelerate the completion of fire sales. This is consistent with the findings by Guo et al. (2020), which suggests that acquirers' top-tier advisors take longer to complete deals when the acquirers are under financial constraints, possibly due to the more complex nature of the deals. Among the control variables, larger deals (*Ln(Deal Value*)) and

hostile takeovers (*Hostile*) are both associated with significantly longer completion time (p<0.01), whereas cash-only deals are linked to faster deal completion (p<0.01). Overall, our findings suggest that while top-tier advisors play a potent role in securing higher premiums for targets, their involvement does not necessarily expedite the completion of fire-sale transactions. The complexity of fire-sale deals may limit the ability of top-tier advisors to accelerate the process, which may be further complicated by the financial distress of the target firms.

[Insert Table 11 approximately here]

4.4.3 Advisory Fees

This section explores the relationship between the involvement of top-tier advisors and advisory fees in fire-sale transactions. Advisory fees constitute a main source of revenue for investment banks. Prior research has examined the relationship between advisory fees and advisor reputation in standard M&A transactions. According to the reputational capital mechanism, top-tier advisors are expected to charge higher fees due to the superior quality of their services. This has been confirmed by empirical evidence (Kale et al. 2003; Golubov et al. 2012). In the context of fire-sale transactions, we expect that, while target firms often face liquidity needs and may not prioritize hiring top-tier advisors, those that do may still incur higher advisory fees, despite the pressure for cost-effective solutions.

We estimate the following OLS regression model to predict total advisory fee charged by the advisors (*Advisory Fees*), while controlling for deal characteristics and acquirers' engagement of advisors or top-tier advisors:

 $Advisory Fee_{i} = \alpha + \beta_{1}Toptier_{i} * Fire Sale_{i} + \beta_{2}Toptier_{i} + \beta_{3}Fire Sale_{i} + \beta_{4}Asset Acquisition_{i} + \beta_{5}Tender Offer_{i} + \beta_{6}Hostile_{i} + \beta_{7}Equity Only_{i} + \beta_{8}Cash Only_{i} + \beta_{9}Competition_{i} + \beta_{10}Relative Size_{i} + \beta_{11}Ln(Deal Value)_{i} + \beta_{12}Acquirer Advisors|Acquirer Toptier_{i} + \varepsilon_{i}$ (5)

Table 12 reports the results. The dependent variable is the total advisory fee paid by the target, expressed as a percentage of deal value. This analysis is conducted using three alternative models: Column (1) controls for only deal characteristics, Column (2) adds an additional control for the acquirers' engagement of advisors, while Column (3) includes the additional control for top-tier advisors engaged by the acquirers.

The results in Table 12 consistently show a negative relationship between top-tier advisors and advisory fees in fire-sale transactions. The coefficients of both *Top-tier* and *Fire Sale* are positive and significant across all three models (p<0.01), indicating that top-tier advisors in general command higher fees for better services, consistent with prior evidence (McLaughlin 1992; Hunter and Jagtiani 2003; Walter et al. 2008; Golubov et al. 2012), while fire sales usually lead to higher advisory fees, likely due to their complex nature. Nevertheless, the coefficient for the interaction term *Top-tier*Fire Sale* is negative and significant (p<0.01) across all three models, indicating that target firms involved in fire-sale transactions and advised by top-tier investment banks tend to pay comparatively lower advisory fees. This evidence suggests that, despite the expected premium for top-tier advisory services, the urgency and distressed nature of fire sales may lead top-tier advisors to accept reduced fees, possibly due to prior relationships with the target or desire to maintain their reputation by demonstrating their ability to secure the deal in complex fire-sale transactions.

The evidence from Table 12 suggests that top-tier advisors are willing to accept lower fees, as investment banks may not prioritize fees as the primary benefit in fire-sale transactions. One possible explanation is the pre-existing relationships between advisors and target firms, where target firms may have previously engaged top-tier advisors for other corporate activities over past years. To empirically investigate this explanation, we compare the proportion of target firms with prior relationships with top-tier advisors, which hire top-tier versus non-top-tier advisors for the current fire-sale transaction: 78% of the target firms hiring top-tier advisors for their fire-sale transactions have a history of working with top-tier advisors in the past, while only 46% of target firms hiring non-top-tier advisors have previously engaged top-tier advisors in the past five years. This suggests that target firms with a prior history of engaging top-tier advisors are more likely to hire them again when facing the prospect of financial distress and fire sales. Consequently, top-tier advisors may be more inclined to accept lower fees in these deals due to the ongoing relationship and the potential for future business.

[Insert Table 12 approximately here]

4.5 Robustness Tests

We conduct several robustness tests to examine the sensitivity of our results to different variable definitions, model specifications, and sample selection methods.

4.5.1 Alternative Measure of Target Premium

In our first robustness test, we employ an alternative measure of target premiums to assess whether the relationship between advisors and target premiums in fire sales holds under different variable definitions. We employ an alternative measure of the target premiums (*Target Premium43*) calculated as the offer price per share at the announcement over the target's share price 43 trading days before the deal announcement (rather than 20 days as captured in our baseline model). In Table 13, the results across all models remain consistent with our baseline findings in Table 4. Specifically, we observe that the interaction between top-tier advisors and fire-sale transactions is positive and statistically significant across Columns (2)-(4), with coefficients ranging from 2.071 to 3.003 (p<0.05 or better). These results confirm that top-tier advisors significantly contribute to higher target premiums in fire-sale transactions.

[Insert Table 13 approximately here]

4.5.2 Alternative Model Specification: Acquirers' Top-tier Advisors

Next, we test the robustness of our baseline results by using an alternative model specification that controls for the *acquirer's* engagement of top-tier advisors (*Acquirer Top-tier*), which equals one if the acquirer is advised by a top-tier investment bank and zero otherwise, in lieu of the existing control variable *Acquirer Advisors* in the baseline regressions. In untabulated results, the economic magnitude and statistical significance of the key variables remain substantively similar to those reported in Table 4, suggesting that our conclusions are not sensitive to the choice of control variable for the acquirers' advisors. This further reinforces the robustness of our findings, by confirming that the impact of target advisors on fire-sale premiums persists regardless of the acquirers' advisor quality.

4.5.3 Subsample Analysis Excluding Asset Purchases

In a further robustness check, we exclude fire-sale transactions involving asset acquisitions. These transactions, where the acquirer purchases specific assets of the distressed target firm, may behave differently from company purchases, where the acquirer purchases the entire target firm. The number of observations drops from 3064 to 3049, indicating that only few fire-sale transactions involve asset purchases. This exclusion does not change the overall findings. The interaction term *Top-tier*Fire Sale* is consistently positive and statistically significant, with coefficients of 3.044, 3.512, and 3.287, respectively (p<0.05 or better). These results indicate that the superior performance of top-tier advisors in enhancing target premiums is not driven by asset acquisitions.

4.5.4 Alternative Sample Selection by Adjusting Deal Size Threshold

Finally, we adjust the threshold for minimum deal size from \$10 million to \$5 million, expanding the sample to include smaller transactions. In the untabulated results estimated using this alternative sample, the relationship between top-tier advisors and target premiums remains consistent. The positive and significant interaction between top-tier advisors and fire-sale transactions continues to hold, confirming the robustness of our findings across different deal size thresholds. This indicates that the effect of top-tier advisors on target premiums is not driven by larger transactions alone.

5. Conclusion

Firms undergoing fire sales often face significant financial distress, which typically result in selling assets at a discount, leading to potential losses for investors. This study explores an important yet under-examined strategy that can help distressed firms preserve their value: hiring top-tier advisors in fire-sale transactions. Our evidence demonstrates that top-tier advisors play a significant role in helping the target firm to secure higher premiums, which not only outperform deals with no advisors, but also significantly outperforming non-top-tier advisors. We attribute the more successful deal outcomes to top-tier advisors' extensive industry networks, ability to reduce information asymmetry, and superior negotiation skills. The value added role of top-tier advisors is particularly pronounced when the target firm or its industry faces financial constraint, or when the target's industry experiences greater asset liquidity. These factors suggest that the involvement of top-tier advisors is especially beneficial in distressed situations, where their expertise and networks can make a substantial difference in the final sale price.

In addition to benefiting the target firms, we find that acquirers can also experience greater relative gain when top-tier advisors are involved, indicating that these advisors not only secure higher target premiums but also contribute to creating value for the acquirers. Interestingly, while top-tier advisors achieve significantly higher premiums for target firms, our investigation into completion time finds no evidence that top-tier advisors can expedite fire-sale transactions. However, we find that top-tier advisors are willing to accept lower advisory fees in fire-sale transactions, which we attribute it to established relationships with the target firms.

This study contributes to the existing literature on M&A advisors and fire sales by highlighting the important role of top-tier advisors in fire-sale transactions. Our evidence provides valuable insights into how distressed firms can preserve their value and limit losses by strategically engaging top-tier advisors, as an alternative to resorting to selling at a substantial discount. For investors and managers of distressed firms, our findings offer practical implications: even in challenging financial conditions, the strategic hiring of top-tier advisors can significantly improve the outcomes of fire-sale transactions. Rather than accepting steep discounts in fire sales, managers can leverage the expertise and networks of top-tier advisors to negotiate better terms and secure higher premiums. The viability of this strategy is further enhanced by top-tier advisors' willingness to accept lower fees in fire-sale transactions, making it possible for cash-strapped targets to procure the much-needed expertise and quality services. Overall, our results suggest a potent strategy for firms facing financial distress, demonstrating that careful selection of advisors is a critical factor in successfully navigating the fire-sale process.

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Table 1 Number of Transactions by Year and Advisors

This table provides a breakdown of the sample observations by year and transaction type. It includes all completed acquisitions listed in the SDC database that were announced between 1982 and 2020, as detailed in Section 3.1. All variables are defined in Appendix A.

Year	Total	Number of	Number of	Number of	Number of	Top-tier
	Number of	Fire-sale	Transactions	Fire-sale	Transactions	Advisors in
	Transactions	Transactions	with	Transactions	with Top-tier	Fire-sales
			Advisors	with	Advisors	
				Advisors		
1982	148	0	65	0	15	0
1983	264	0	84	0	28	0
1984	338	0	123	0	33	0
1985	363	14	202	5	71	1
1986	405	8	219	2	81	0
1987	434	7	233	5	65	1
1988	479	8	264	3	73	0
1989	504	18	253	9	72	2
1990	337	6	117	0	36	0
1991	300	23	120	7	41	4
1992	309	23	144	11	42	2
1993	350	9	174	2	43	0
1994	462	4	258	2	64	1
1995	579	4	298	2	86	2
1996	692	4	353	1	92	0
1997	749	0	464	0	152	0
1998	757	1	514	1	175	1
1999	734	1	530	1	185	0
2000	595	1	396	1	161	1
2001	427	4	333	3	121	1
2002	290	16	214	12	74	4
2003	339	17	255	15	74	7
2004	282	19	232	15	82	5
2005	344	14	254	12	112	6
2006	352	4	283	4	120	2
2007	376	7	294	7	143	4
2008	307	11	182	6	74	3
2009	306	59	209	53	90	26
2010	260	26	227	20	92	9
2011	235	38	205	24	81	10
2012	229	21	189	16	75	4
2013	198	18	169	16	71	7
2014	204	15	176	13	62	2
2015	221	17	189	15	82	5
2016	248	48	219	33	94	12
2017	231	35	184	22	72	5
2018	220	20	188	17	72	5
2019	183	21	168	19	73	4
2020	200	65	168	59	67	15
Total	14,251	606	9,149	433	3,246	151

Table 2 Descriptive Statistics

This table presents sample statistics for the acquisitions dataset obtained from the SDC database, covering the years 1982–2020. All variables are defined in Appendix A. Accounting and market capitalization data are from the last fiscal year-end prior to the transaction announcement. *Target Premium20* and *Target Premium43* are calculated as the offer price per share at the announcement divided by the share price 20 and 43 trading days prior to the announcement, respectively, minus one. These variables are winsorized at the 1% levels.

Variables	Ν	Mean	Median	Std. Dev.	Min	Max
Target Premium20	10278	0.301	0.261	1.191	-2.847	7.668
Target Premium43	10256	0.297	0.286	1.157	-2.949	6.762
Advisors	14251	0.642	1	0.479	0	1
Top-tier	14251	0.228	0	0.419	0	1
Fire Sale	14251	0.043	0	0.202	0	1
Stock	14251	0.664	1	0.472	0	1
Hostile	14251	0.011	0	0.103	0	1
Cross Industry	14251	0.527	1	0.499	0	1
Competition	14251	0.037	0	0.188	0	1
Tender Offer	14251	0.133	0	0.340	0	1
Asset Acquisition	14251	0.025	0	0.155	0	1
Equity Only	14251	0.166	0	0.372	0	1
Cash Only	14251	0.338	0	0.473	0	1
Toehold	14251	0.077	0	0.266	0	1
Deal Value (\$'m)	11475	1074.252	127.5	4640.738	10	164746.860
Relative Size	4447	0.291	0.096	0.588	0	4.479
Post2000	14251	0.424	0	0.494	0	1
Target M/B	9425	3.164	1.793	4.792	0.205	35.901
Target ROE	9009	-0.067	0.062	0.437	-2.114	0.713
Target Sales Growth	10048	0.241	0.800	0.781	-0.742	5.752
Target D/E	11085	3.989	1.483	6.432	0.056	41.507
Target Tobin's Q	9425	1.774	1.294	1.432	0.579	9.599
Target Leverage	9425	0.425	0.106	0.264	0.012	0.964
Target EBITDA/Assets	10287	0.038	0.094	0.238	-1.244	0.389
Acquirer Advisors	14251	0.446	0	0.497	0	1
Acquirer M/B	4907	4.005	2.430	5.334	0.461	39.343
Acquirer AT	6789	15158.707	2259.864	39447.526	1.581	270634
Acquirer Tobin's Q	4907	2.191	1.571	1.868	0.715	12.273
Acquirer Leverage	4907	0.374	0.329	0.245	0.016	0.934
Acquirer EBITDA/Assets	5131	0.092	0.120	0.189	-0.910	0.387

Table 3 Correlation of Matrix

This table presents the correlations of all variables. The sample consists of acquisitions involving all U.S. public targets announced between January 1, 1982 and December 31, 2020. All variables are defined in Appendix A. All accounting indicators are winsorized at the lower and upper 1% levels.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1) Target Premium20	1.000																
(2) Target Premium43	0.810	1.000															
(3) Target Relative Gain	0.054	0.022	1.000														
(4) Time to Completion	-0.088	-0.077	0.058	1.000													
(5) Advisory Fees	0.028	0.019	-0.073	-0.143	1.000												
(6) Advisors	0.015	0.022	0.020	0.004	0.027	1.000											
(7) Top-tier	-0.078	-0.068	0.064	0.093	-0.120	0.021	1.000										
(8) Fire Sale	-0.023	-0.008	-0.035	0.053	0.062	0.001	-0.037	1.000									
(9) Stock	0.020	0.018	0.010	0.060	-0.074	-0.001	0.002	0.003	1.000								
(10) Hostile	0.051	0.044	0.110	0.035	-0.039	0.003	0.084	-0.006	0.009	1.000							
(11) Cross Industry	0.056	0.039	0.013	-0.069	0.024	-0.042	-0.083	0.041	-0.007	0.001	1.000						
(12) Competition	0.048	0.065	0.028	0.087	-0.040	0.006	0.032	0.049	0.015	0.221	0.022	1.000					
(13) Tender Offer	0.123	0.115	-0.029	-0.306	0.096	0.014	-0.007	0.038	-0.045	0.202	0.058	0.151	1.000				
(14) Asset Acquisition	-0.010	-0.019	-0.029	0.067	0.065	0.001	0.004	0.407	0.002	-0.005	0.020	-0.008	-0.020	1.000			
(15) Equity Only	-0.020	-0.020	0.039	0.087	-0.034	0.017	-0.077	-0.029	0.044	-0.069	0.002	-0.099	-0.379	-0.024	1.000		
(16) Cash Only	0.090	0.079	-0.130	-0.271	0.175	-0.033	-0.017	0.028	-0.050	0.046	0.058	0.052	0.451	-0.024	-0.502	1.000	
(17) Toehold	-0.022	-0.034	-0.022	0.102	-0.023	0.005	-0.029	-0.009	-0.119	0.124	-0.004	0.032	0.076	-0.007	-0.032	0.040	1.000
(18) Ln(Deal Value)	-0.115	-0.096	0.092	0.196	-0.436	0.033	0.497	-0.018	0.071	0.049	-0.173	0.092	-0.071	-0.026	-0.095	-0.078	-0.063
(19) Relative Size	-0.042	-0.046	0.260	0.157	-0.124	0.015	0.073	0.010	0.034	0.091	-0.049	0.131	-0.087	-0.014	0.067	-0.228	-0.054
(20) Post2000	-0.051	-0.045	-0.028	-0.055	0.143	0.022	0.185	-0.039	0.042	-0.122	-0.123	-0.051	-0.035	0.002	-0.205	0.172	-0.063
(21) Target M/B	-0.020	-0.025	0.008	-0.044	0.014	0.005	0.057	-0.015	-0.011	-0.045	-0.031	-0.030	-0.039	-0.004	0.073	-0.001	-0.054
(22) Target ROE	-0.113	-0.116	0.037	0.067	-0.303	-0.014	0.097	0.013	0.005	0.055	0.028	0.048	-0.026	0.001	-0.042	-0.026	-0.019
(23) Target Sales Growth	-0.066	-0.075	-0.039	-0.039	0.002	0.007	-0.050	-0.023	-0.117	-0.024	0.002	-0.055	-0.032	-0.020	0.115	-0.061	0.016
(24) Target D/E	-0.043	-0.048	-0.019	0.112	0.021	0.011	0.064	-0.010	0.006	-0.015	-0.010	-0.012	-0.065	-0.015	-0.029	-0.084	-0.013
(25) Target Tobin's Q	0.006	0.004	0.027	-0.118	-0.052	-0.003	0.009	-0.009	-0.040	-0.052	-0.032	-0.042	-0.038	0.010	0.140	0.023	-0.054
(26) Target Leverage	0.020	0.011	0.007	0.238	0.006	0.026	0.050	0.009	0.019	0.058	-0.023	0.053	-0.018	-0.036	-0.118	-0.139	0.068
(27) Target EBITDA/Assets	-0.149	-0.156	0.028	0.056	-0.335	-0.025	0.098	0.028	0.017	0.060	0.049	0.058	-0.017	0.021	-0.046	-0.026	-0.034
(28) Acquirer Advisors	-0.132	-0.128	0.130	0.079	-0.088	0.050	0.222	-0.016	0.039	0.070	-0.058	0.048	-0.014	0.016	0.056	-0.155	-0.033
(29) Acquirer M/B	0.065	0.052	-0.011	-0.024	-0.050	0.004	0.020	-0.013	-0.005	-0.044	0.005	-0.050	-0.055	0.006	0.149	-0.050	-0.007
(30) Ln(Acquirer AT)	-0.005	0.011	-0.158	0.027	-0.180	0.013	0.322	-0.016	-0.017	-0.017	-0.054	0.020	0.081	-0.028	-0.272	0.240	0.011
(31) Acquirer Tobin's Q	0.099	0.092	-0.009	-0.099	-0.029	-0.006	-0.046	-0.012	0.014	-0.063	0.007	-0.064	-0.067	0.026	0.220	-0.073	-0.077
(32) Acquirer Leverage	-0.090	-0.081	0.005	0.213	-0.078	0.028	0.070	0.007	-0.004	0.118	0.024	0.091	0.040	-0.036	-0.173	0.003	0.119
(33) Acquirer EBITDA/Assets	0.008	0.018	-0.109	-0.072	-0.154	-0.015	0.051	0.014	0.018	0.010	-0.004	0.008	0.118	0.013	-0.100	0.125	-0.038

	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)
(18) Ln(Deal Value)	1.000															
(19) Relative Size	0.181	1.000														
(20) Post2000	0.334	-0.069	1.000													
(21) Target M/B	0.168	-0.013	0.071	1.000												
(22) Target ROE	0.257	0.074	-0.070	-0.269	1.000											
(23) Target Sales Growth	-0.046	-0.011	-0.115	0.146	-0.052	1.000										
(24) Target D/E	0.066	-0.001	0.057	0.458	-0.190	-0.063	1.000									
(25) Target Tobin's Q	0.183	-0.008	0.046	0.670	-0.100	0.248	-0.119	1.000								
(26) Target Leverage	-0.019	0.046	-0.048	-0.259	-0.023	-0.153	0.452	-0.582	1.000							
(27) Target EBITDA/Assets	0.249	0.082	-0.113	-0.141	0.728	-0.118	-0.012	-0.119	0.079	1.000						
(28) Acquirer Advisors	0.327	0.216	0.063	0.046	0.074	0.025	0.008	0.055	0.028	0.098	1.000					
(29) Acquirer M/B	0.110	0.003	0.036	0.181	-0.019	0.137	-0.039	0.283	-0.217	-0.071	0.004	1.000				
(30) Ln(Acquirer AT)	0.622	-0.389	0.357	0.091	0.131	-0.058	0.067	0.075	0.030	0.089	-0.025	-0.023	1.000			
(31) Acquirer Tobin's Q	0.022	-0.033	-0.061	0.228	-0.056	0.196	-0.127	0.422	-0.391	-0.104	-0.027	0.682	-0.146	1.000		
(32) Acquirer Leverage	0.089	-0.010	-0.019	-0.185	0.136	-0.116	0.210	-0.343	0.543	0.155	0.078	-0.299	0.246	-0.623	1.000	
(33) Acquirer EBITDA/Assets	0.129	-0.131	-0.094	0.034	0.216	-0.024	-0.020	0.064	-0.089	0.307	-0.067	0.044	0.213	0.136	-0.178	1.000

Table 4 Target Advisors and Fire-Sale Premiums

This table reports the results of OLS regression models estimating the impact of advisors on target premiums in fire sales. The dependent variable is *Target Premium20*, calculated as the offer price per share at announcement over the share price 20 trading days prior to announcement, minus one. The target premium is winsorized at the upper and lower 1% levels. All variables are defined in Appendix A. In Column (1), the regression uses the full sample, where *Advisors* is a binary variable equal to one if the target has engaged an advisor and zero otherwise. In Columns (2)–(4), *Top-tier* is a binary variable that equals one if the target has engaged a top-tier advisor and zero otherwise. Column (2) includes transactions with either top-tier advisors or no advisors; Column (3) examines all transactions with advisors to compare top-tier advisors with non-top-tier advisors or no advisors. *Year FE* denotes year fixed effects, and *Target industry FE* refers to fixed effects for the target's industry, defined at the 4-digit SIC code level. The symbols ***, ** and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Advisors	Top-tier Advisors	Top-tier Advisors	Top-tier Advisors
	vs. No Advisors	vs. No Advisors	vs. Non-top-tier Advisors	vs. Non-top-tier & No Advisors
	Target Premium20	Target Premium20	Target Premium20	Target Premium20
	(1)	(2)	(3)	(4)
Advisors*Fire Sale	0.237			
	(0.779)			
Top-tier*Fire Sale		3.048**	3.472***	3.338***
		(0.014)	(0.000)	(0.000)
Advisors	0.051			
	(0.395)			
Top-tier		-0.009	-0.056*	-0.041
		(0.915)	(0.061)	(0.227)
Fire Sale	0.336	0.250	-0.169	-0.017
	(0.665)	(0.786)	(0.592)	(0.958)
Stock	-0.090	-0.106	-0.343***	-0.068
	(0.137)	(0.201)	(0.000)	(0.187)
Hostile	0.068	-0.001	0.065	0.077
	(0.544)	(0.996)	(0.511)	(0.489)
Cross Industry	0.094***	0.095	0.062*	0.094***
	(0.009)	(0.115)	(0.060)	(0.008)
Competition	0.139**	0.035	0.136**	0.139**
1	(0.036)	(0.753)	(0.018)	(0.035)
Tender Offer	0.067*	0.180***	0.051	0.068*
	(0.074)	(0.007)	(0.122)	(0.069)
Toehold	-0.096	-0.060	-0.094	-0.097
	(0.122)	(0.545)	(0.114)	(0.115)
Ln(Deal Value)	0.012	0.003	0.015	0.020*
	(0.280)	(0.866)	(0.159)	(0.091)
Relative Size	0.048*	0.053	-0.014	0.041
	(0.073)	(0.152)	(0.670)	(0.119)
Acquirer M/B	0.007**	0.015***	0.006**	0.007**
reduiter the P	(0.014)	(0.001)	(0.019)	(0.012)
Acquirer Advisors	-0.063*	0.042	-0.059*	-0.055

	(0.098)	(0.555)	(0.091)	(0.144)
Target M/B	-0.019***	-0.017***	-0.015***	-0.019***
	(0.000)	(0.005)	(0.000)	(0.000)
Target ROE	-0.263***	-0.360***	-0.188***	-0.269***
	(0.000)	(0.000)	(0.000)	(0.000)
Target Sales Growth	-0.040*	-0.045	-0.040**	-0.041*
	(0.072)	(0.275)	(0.049)	(0.065)
Target DE	0.009**	0.007	0.008*	0.010**
	(0.033)	(0.292)	(0.065)	(0.028)
Post2000	0.534**	0.417	0.298	0.416
	(0.044)	(0.273)	(0.292)	(0.118)
Constant	-0.181	-0.311	0.710	-0.217
	(0.702)	(0.585)	(0.155)	(0.646)
Year FE	Yes	Yes	Yes	Yes
Target industry FE	Yes	Yes	Yes	Yes
Observations	3064	1562	2669	3064
Adjusted R ²	0.070	0.064	0.139	0.076

Table 5 Propensity Score Matching and Entropy Balancing Analysis

This table reports the results from propensity score matching and entropy balancing regressions using target advisors to estimate premiums in fire sales. The analysis is divided into two main parts: the involvement of general advisors (Columns 1-2) and the involvement of top-tier advisors (Columns 3-6). For advisor involvement, Column (1) applies PSM where the treatment group consists of transactions with target advisors compared to those without advisors. Column (2) uses entropy balancing for the same comparison, with *Target M/B*, *Target ROE*, *Target Sales Growth*, and *Target DE* as covariates for weighting. For top-tier advisor involvement, Column (3) employs PSM, while Columns (4)-(6) use entropy balancing. These columns analyze different comparison groups: Column (4) compares top-tier advisors versus no advisors, Column (5) compares top-tier versus non-top-tier advisors, and Column (6) compares top-tier advisors versus both non-top-tier advisors and no advisors. For PSM in Columns (1) and (3), the covariates used for weighting include *Target M/B*, *Target ROE*, *Target EBITDA/assets*. Columns (4)-(6) use the same covariates for weighting as Column (2). The symbols ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

	Involvemen	t of Advisors		Involvement of	Top-tier Advisors	
	PSM	Entropy Balancing	PSM	Entropy Balancing	Entropy Balancing	Entropy Balancing
	Advisors vs. No Advisors	Advisors vs. No Advisors	Involvement of Top-tier Advisors	Top-tier Advisors vs. No Advisors	Top-tier Advisors vs. Non-top-tier Advisors	Top-tier Advisors vs. Non-top-tier Advisors & No Advisors
	Target Premium20	Target Premium20	Target Premium20	Target Premium20	Target Premium20	Target Premium20
	(1)	(2)	(3)	(4)	(5)	(6)
Advisors*Fire Sale	0.269	0.100				
	(0.766)	(0.862)				
Top-tier*Fire Sale			3.161*** (0.000)	3.092*** (0.000)	3.460*** (0.000)	3.314*** (0.000)
Advisors	-0.101	0.008				
	(0.174)	(0.931)				
Top-tier			-0.094**	0.188	-0.049*	-0.014
			(0.014)	(0.141)	(0.062)	(0.653)
Fire Sale	0.487	0.476***	0.099	0.137	-0.127	-0.037
	(0.552)	(0.008)	(0.794)	(0.441)	(0.151)	(0.676)
Stock	0.149*	-0.002	-0.185***	-0.299*	-0.446**	-0.154
	(0.057)	(0.988)	(0.003)	(0.060)	(0.016)	(0.146)
Hostile	0.130	0.074	-0.015	-0.013	0.022	0.035
	(0.379)	(0.299)	(0.899)	(0.916)	(0.803)	(0.668)
Cross Industry	0.067	0.114**	0.079*	0.085	0.063*	0.084**
	(0.173)	(0.016)	(0.056)	(0.132)	(0.091)	(0.028)

Competition	0.194**	0.145*	0.127*	0.006	0.072	0.081
	(0.039)	(0.070)	(0.082)	(0.926)	(0.193)	(0.140)
Tender Offer	0.097*	0.067*	0.098**	0.157***	0.099***	0.104***
	(0.070)	(0.063)	(0.021)	(0.000)	(0.000)	(0.000)
Toehold	-0.100	-0.076	-0.073	-0.108	-0.105*	-0.097*
	(0.221)	(0.252)	(0.314)	(0.159)	(0.069)	(0.059)
Ln(Deal Value)	0.016	0.013	0.017	-0.011	0.006	0.004
	(0.312)	(0.258)	(0.208)	(0.528)	(0.631)	(0.732)
Relative Size	0.068**	0.071	0.012	0.026	-0.023	0.011
	(0.036)	(0.285)	(0.701)	(0.598)	(0.372)	(0.800)
Acquirer M/B	0.008*	0.008***	0.010***	0.013**	0.009**	0.010***
	(0.076)	(0.008)	(0.002)	(0.012)	(0.013)	(0.005)
Acquirer Advisors	-0.107**	-0.064	0.087*	0.059	-0.009	0.002
	(0.036)	(0.232)	(0.056)	(0.391)	(0.824)	(0.961)
Target M/B	-0.021***	-0.019***	-0.019***	-0.012**	-0.011***	-0.013***
	(0.000)	(0.000)	(0.000)	(0.015)	(0.007)	(0.000)
Target ROE	-0.283***	-0.296***	-0.264***	-0.230***	-0.187***	-0.229***
	(0.000)	(0.000)	(0.000)	(0.002)	(0.000)	(0.000)
Target Sales Growth	-0.035	-0.037	-0.047	-0.047	-0.046**	-0.041*
	(0.213)	(0.169)	(0.110)	(0.166)	(0.049)	(0.056)
Target DE	0.015***	0.009	0.009*	0.002	0.004	0.004
	(0.009)	(0.213)	(0.080)	(0.623)	(0.282)	(0.335)
Post2000	0.472	0.567*	0.554**	0.454	0.232	0.413
	(0.250)	(0.098)	(0.035)	(0.315)	(0.530)	(0.300)
Constant	-0.932	-0.607	-0.195	0.254	0.906***	0.239
	(0.138)	(0.146)	(0.642)	(0.352)	(0.000)	(0.284)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Target industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1849	3064	1886	1562	2669	3064
<u>R²</u>	0.336	0.242	0.299	0.324	0.307	0.255

Table 6 Heckman Selection Model

This table presents the results of the Heckman two-step procedure. Column (1) shows the first stage, testing the probability of selecting a top-tier advisor. Column (2) presents the second stage, featuring a regression model that tests the relationship between the interaction variable (*Top-tier* * *Fire Sale*) and the target premium. The dependent variable is *Target Premium20*, calculated as the offer price per share at announcement over the share price 20 trading days before announcement, minus one, and winsorized at the upper and lower 1% levels. All variables, including the instrument variable, are defined in Appendix A. The symbols ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

	1st stage	2nd stage
	Involvement of	Target
	Top-tier Advisors	Premium20
	(1)	(2)
Scope	0.294***	
-	(0.000)	
Top-tier*Fire Sale		3.357***
		(0.000)
Stock	0.030	-0.632***
	(0.805)	(0.000)
Hostile	0.848***	-0.124
	(0.000)	(0.324)
Cross Industry	-0.079	0.068
	(0.307)	(0.153)
Competition	-0.202	0.007
	(0.155)	(0.927)
Tender Offer	-0.132*	0.170***
	(0.086)	(0.000)
Toehold	0.000	-0.146*
	(0.998)	(0.074)
Ln(Deal Value)	0.462***	-0.057*
	(0.000)	(0.088)
Relative Size	-0.112*	-0.013
	(0.090)	(0.750)
Acquirer M/B	-0.002	0.011***
	(0.703)	(0.001)
Acquirer Advisors	0.288***	0.040
	(0.000)	(0.517)
Target M/B	-0.016*	-0.006
	(0.070)	(0.263)
Target ROE	-0.206**	-0.153**
	(0.023)	(0.011)
Target Sales Growth	-0.104**	-0.051
	(0.034)	(0.111)
Target DE	0.006	0.000
	(0.515)	(0.986)
Post2000	0.518	0.107
	(0.322)	(0.860)
Lambda		-0.202*
		(0.077)
Constant	-3.777***	1.769**
	(0.002)	(0.023)

Year FE	Yes	Yes
Target industry FE	Yes	Yes
Observations	1,167	1,167
chi2		717.024

Table 7 Cross-sectional Analysis: Moderating Role of Target Financial Health

This table presents the results of OLS regression models estimating how the interaction between advisors and target firms' financial health affects target premiums in fire sales. The dependent variable is *Target Premium20*, calculated as the offer price per share at announcement over the share price 20 trading days before announcement, minus one, and winsorized at the upper and lower 1% levels. Column (1) examines the interaction between general advisor involvement and target financial health, comparing deals with advisors to those without. Columns (2)-(4) analyze top-tier advisor involvement with different comparison groups: Column (2) compares top-tier advisors versus no advisors, Column (3) compares top-tier versus non-top-tier advisors, and Column (4) compares top-tier advisors versus both non-top-tier advisors and no advisors. The KZ Index (Kaplan-Zingales index) measures target firms' financial constraints and is defined in Appendix A. *Advisors*Fire Sale*KZ* and *Top-tier*Fire Sale*KZ* represent three-way interactions between advisor involvement, fire sale status, and the KZ Index. All control variables are included but not reported for brevity. The symbols ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Advisors vs. No	Top-tier Advisors	Top-tier Advisors	Top-tier Advisors
	Advisors	vs. No Advisors	vs. Non-top- tier Advisors	vs. Non-top-tier & No Advisors
	Target Premium20	Target Premium20	Target Premium20	Target Premium20
	(1)	(2)	(3)	(4)
Advisors*Fire Sale*KZ	0.005 (0.242)			
Top-tier*Fire Sale*KZ		2.260**	2.500***	2.433***
		(0.012)	(0.000)	(0.000)
Advisors	0.065			
	(0.295)			
Top-tier		0.002	-0.061*	-0.050
		(0.981)	(0.052)	(0.155)
Fire Sale	0.671**	0.211	-0.177	-0.050
	(0.039)	(0.820)	(0.580)	(0.876)
KZ index	-0.000	-0.000	-0.000	-0.000
	(0.551)	(0.997)	(0.283)	(0.582)
Controls	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Target industry FE	Yes	Yes	Yes	Yes
Observations	2819	1420	2469	2819
Adjusted R ²	0.105	0.051	0.134	0.112

Table 8 Cross-sectional Analysis: Moderating Role of Target Industry Financial Health

This table presents the results of OLS regression models estimating the effects of advisors and target industries' financial health on target premiums in fire sales. The dependent variable is *Target Premium20*, calculated as the offer price per share at announcement over the share price 20 trading days before announcement, minus one, and winsorized at the upper and lower 1% levels. Column (1) examines the interaction between general advisor involvement and industry financial health, comparing deals with advisors to those without. Columns (2)-(4) analyze top-tier advisor involvement with different comparison groups: Column (2) compares top-tier advisors versus no advisors, Column (3) compares top-tier versus non-top-tier advisors, and Column (4) compares top-tier advisors versus both non-top-tier advisors and no advisors. *Ind.KZ* is the mean Kaplan-Zingales index of firms in the target's 3-digit SIC code industry in the transaction year. *Advisors*Fire Sale*Ind.KZ* and *Top-tier*Fire Sale*Ind.KZ* represent three-way interactions between advisor involvement, fire sale status, and industry-level KZ index. All control variables are included but not reported for brevity. The symbols ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Advisors	Top-tier	Top-tier	Top-tier
	vs. No	Advisors	Advisors	Advisors
	Advisors	vs. No	vs. Non-top-	vs. Non-top-tier
		Advisors	tier Advisors	& No Advisors
	Target	Target	Target	Target
	Premium20	Premium20	Premium20	Premium20
	(1)	(2)	(3)	(4)
Advisors*Fire Sale*Ind.KZ	0.405			
	(0.154)			
Top-tier*Fire Sale*Ind.KZ		2.340***	2.389***	2.356***
		(0.004)	(0.000)	(0.000)
Advisors	-0.063			
	(0.313)			
Top-tier		-0.136	-0.055*	-0.055
		(0.126)	(0.074)	(0.132)
Fire Sale	0.601	0.348	-0.049	0.074
	(0.130)	(0.708)	(0.906)	(0.850)
Ind.KZ	-0.000	-0.001	-0.000	-0.000
	(0.133)	(0.149)	(0.247)	(0.117)
Controls	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Target industry FE	Yes	Yes	Yes	Yes
Observations	2560	1281	2223	2560
Adjusted R ²	0.096	0.092	0.168	0.104

Table 9 Cross-sectional Analysis: Moderating Role of Target Industry Liquidity Index

This table presents the results of OLS regression models estimating the effects of advisors and the liquidity of corporate assets within the target industry on target premiums in fire sales. The dependent variable is *Target Premium20*, calculated as the offer price per share at announcement over the share price 20 trading days before announcement, minus one, and winsorized at the upper and lower 1% levels. Column (1) examines the interaction between general advisor involvement and industry liquidity, comparing deals with advisors to those without. Columns (2)-(4) analyze top-tier advisor involvement with different comparison groups: Column (2) compares top-tier advisors versus no advisors, Column (3) compares top-tier versus non-top-tier advisors, and Column (4) compares top-tier advisors versus both non-top-tier advisors and no advisors. *Liquidity Index* measures the value of all U.S. M&A transactions in the target's 3-digit SIC code industry divided by the book value of assets in that industry in the announcement year. The index is multiplied by 10 to facilitate coefficient interpretation. *Advisors*Fire Sale*Liquidity* and *Top-tier*Fire Sale*Liquidity* represent three-way interactions between advisor involvement, fire sale status, and the Liquidity Index. All control variables are included but not reported for brevity. The symbols ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Advisors	Top-tier	Top-tier	Top-tier
	vs. No	Advisors	Advisors	Advisors
	Advisors	vs. No	vs. Non-top-	vs. Non-top-tier
		Advisors	tier Advisors	& No Advisors
	Target	Target	Target	Target
	Premium20	Premium20	Premium20	Premium20
	(1)	(2)	(3)	(4)
Advisors*Fire Sale*Liquidity	-0.156			
	(0.584)			
Top-tier*Fire Sale*Liquidity		2.546**	2.901***	2.789***
		(0.014)	(0.000)	(0.000)
Advisors	0.052			
	(0.384)			
Top-tier		-0.008	-0.055*	-0.041
		(0.927)	(0.062)	(0.230)
Fire Sale	0.743	0.251	-0.170	-0.017
	(0.123)	(0.786)	(0.591)	(0.958)
Liquidity Index	-0.000	-0.000	-0.000	-0.000
	(0.627)	(0.751)	(0.554)	(0.640)
Controls	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Target industry FE	Yes	Yes	Yes	Yes
Observations	3050	1557	2657	3050
Adjusted R ²	0.061	0.064	0.125	0.068

Table 10 Target Advisors and Relative Gain

This table presents the results of OLS regression models estimating the effects of advisors on target relative gains in fire sales. The dependent variable, *Target Relative Gains*, is calculated as (Target abnormal dollar gain - Acquirer abnormal dollar gain)/(MVT + MVA), where the dollar gains are computed using 3-day abnormal returns around the acquisition announcement. The market values for the target (MVT) and acquirer (MVA) are measured 20 trading days before announcement. Column (1) examines the impact of general advisor involvement, comparing deals with advisors to those without. Columns (2)-(4) analyze top-tier advisor involvement with different comparison groups: Column (2) compares top-tier advisors versus no advisors, Column (3) compares top-tier versus non-top-tier advisors, and Column (4) compares top-tier advisors versus both non-top-tier advisors and no advisors. All control variables are defined in Appendix A. The regression model follows Equation (4). The symbols ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

	Advisors vs. No Advisors	Top-tier Advisors vs. No Advisors	Top-tier Advisors vs. Non-top-tier Advisors	Top-tier Advisors vs. Non-top-tier & No Advisors
	Target Relative	Target Relative	Target Relative	Target Relative
	Gain	Gain	Gain	Gain
	(1)	(2)	(3)	(4)
Advisors*Fire Sale	-0.030			
	(0.582)			
Top-tier*Fire Sale		-0.241**	-0.216**	-0.212**
		(0.010)	(0.025)	(0.020)
Advisors	0.015***			
	(0.007)			
Top-tier		0.019**	0.003	0.006
		(0.018)	(0.471)	(0.130)
Fire Sale	-0.017	-0.002	-0.008	-0.015
	(0.693)	(0.969)	(0.848)	(0.601)
Asset Acquisition	0.001	0.028	-0.045	-0.005
	(0.978)	(0.433)	(0.231)	(0.862)
Tender Offer	-0.009*	-0.007	-0.003	-0.007
	(0.068)	(0.320)	(0.502)	(0.113)
Hostile	0.051***	0.046***	0.052***	0.050***
	(0.000)	(0.005)	(0.000)	(0.000)
Equity Only	-0.004	-0.004	-0.004	-0.003
	(0.353)	(0.514)	(0.447)	(0.469)
Cash Only	-0.008*	-0.008	-0.010*	-0.008*
	(0.067)	(0.218)	(0.067)	(0.082)
Competition	-0.006	0.002	-0.006	-0.005
	(0.443)	(0.856)	(0.493)	(0.505)
Relative Size	0.010**	0.007	0.022***	0.009**
	(0.012)	(0.156)	(0.000)	(0.031)
Ln(Deal Value)	0.011***	0.010***	0.012***	0.011***
	(0.000)	(0.000)	(0.000)	(0.000)
Target Tobin's Q	-0.001	-0.002	-0.001	-0.002
	(0.278)	(0.375)	(0.566)	(0.238)
Target Leverage	-0.015	-0.004	-0.011	-0.015
-	(0.173)	(0.791)	(0.359)	(0.161)
Target EBITDA/Assets	-0.017*	-0.006	-0.024**	-0.017*

	(0.064)	(0.658)	(0.021)	(0.055)
Acquirer Advisors	0.007	0.005	0.003	0.009*
	(0.137)	(0.507)	(0.624)	(0.057)
Ln(Acquirer AT)	-0.010***	-0.010***	-0.011***	-0.011***
	(0.000)	(0.000)	(0.000)	(0.000)
Acquirer Tobin's Q	-0.002*	-0.002	-0.001	-0.003**
	(0.058)	(0.273)	(0.300)	(0.031)
Acquirer Leverage	0.034***	0.029	0.034**	0.033***
	(0.006)	(0.102)	(0.022)	(0.009)
Acquirer	-0.005	0.007	-0.022	-0.003
EBITDA/Assets				
	(0.733)	(0.741)	(0.201)	(0.857)
Constant	0.018	0.013	0.008	0.024
	(0.782)	(0.838)	(0.929)	(0.709)
Year FE	Yes	Yes	Yes	Yes
Target industry FE	Yes	Yes	Yes	Yes
Observations	3124	1592	2645	3124
Adjusted R ²	0.105	0.167	0.097	0.105

Table 11 Target Advisors and Time to Completion

This table presents the results of OLS regression models estimating the effects of advisors on total completion time in fire sales. The dependent variable, *Time to Complete*, measures the number of calendar days between the announcement date and resolution date, winsorized at the upper and lower 1% levels. In this table, Column (1) examines the impact of general advisor involvement, comparing deals with advisors to those without. Columns (2)-(4) analyze top-tier advisor involvement with different comparison groups: Column (2) compares top-tier advisors versus no advisors, Column (3) compares top-tier versus non-top-tier advisors, and Column (4) compares top-tier advisors versus both non-top-tier advisors and no advisors. The regression model adheres to Equation (4). The symbols ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

	Advisors vs. No Advisors	Top-tier Advisors vs. No Advisors	Top-tier Advisors vs. Non-top-tier Advisors	Top-tier Advisors vs. Non-top-tier & No Advisors
	Time to Completion (1)	Time to Completion (2)	Time to Completion (3)	Time to Completion (4)
Advisors*Fire Sale	66.715 (0.204)			
Top-tier*Fire Sale		66.040 (0.556)	-1.356 (0.988)	30.312 (0.752)
Advisors	26.982*** (0.000)			
Top-tier		3.140 (0.700)	-2.804 (0.445)	-0.213 (0.957)
Fire Sale	-72.495* (0.079)	-69.825 (0.132)	-10.913 (0.735)	-37.466 (0.161)
Asset Acquisition	-0.441 (0.983)	-27.375 (0.401)	16.585 (0.487)	0.823
Tender Offer	-47.657***	-44.017***	-47.887***	-46.489***
Hostile	54.334***	67.860***	43.351***	53.726***
Equity Only	5.526	8.936 (0.168)	4.207	7.235*
Cash Only	-16.692***	-12.110**	-18.875***	-15.652***
Competition	31.418***	9.448	31.318***	32.478***
Relative Size	-2.379	-7.336	2.459	-5.378
Ln(Deal Value)	(0.000)	(0.184) 21.523***	(0.003) 12.377***	15.862***
Target Tobin's Q	-1.642	-3.733*	(0.000) -1.882	-2.101
Target Leverage	(0.199) 32.638***	(0.059) 39.513***	(0.157) 41.522***	(0.101) 30.575***
Target EBITDA/Assets	(0.000) -24.118*** (0.002)	(0.007) -35.215*** (0.005)	(0.000) -14.070* (0.097)	(0.001) -26.753*** (0.001)

Acquirer Advisors	-8.149*	-8.884	-8.702**	-3.424
	(0.054)	(0.232)	(0.045)	(0.410)
Ln(Acquirer AT)	-6.607***	-8.109***	-4.653***	-7.356***
	(0.000)	(0.000)	(0.001)	(0.000)
Acquirer Tobin's Q	-1.644	-2.218	-0.048	-2.094*
	(0.140)	(0.186)	(0.968)	(0.061)
Acquirer Leverage	54.949***	34.424**	66.217***	50.636***
	(0.000)	(0.039)	(0.000)	(0.000)
Acquirer EBITDA/Assets	33.300**	44.703**	13.501	35.144***
	(0.012)	(0.034)	(0.348)	(0.009)
Constant	63.925***	54.029***	77.012***	80.487***
	(0.000)	(0.000)	(0.000)	(0.000)
Year FE	Yes	Yes	Yes	Yes
Target industry FE	Yes	Yes	Yes	Yes
Observations	3224	1637	2724	3454
Adjusted R ²	0.081	0.047	0.074	0.143

Table 12 Top-tier Advisors and Advisory Fees

This table presents the results of OLS regression models estimating the effects of target top-tier advisors on advisory fees in fire sales. The dependent variable is *Advisory Fees* are fees paid by the target, expressed as a percentage of the deal value from Thomson Financial SDC, and winsorized at the upper and lower 1% levels. Column (1) includes deal characteristics only, while Column (2) includes both deal characteristics and acquirer advisors. Column (3) includes both deal characteristics and acquirer top-tier advisors. The symbols ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

	Advisory Fees	Advisory Fees	Advisory Fees
	(1)	(2)	(3)
Top-tier*Fire Sale	-2.244***	-2.273***	-2.297***
	(0.008)	(0.007)	(0.006)
Top-tier	0.265***	0.260***	0.257***
	(0.000)	(0.000)	(0.000)
Fire Sale	1.730***	1.745***	1.744***
	(0.000)	(0.000)	(0.000)
Asset Acquisition	0.487	0.443	0.442
	(0.393)	(0.436)	(0.436)
Tender Offer	0.018	0.010	0.019
	(0.648)	(0.806)	(0.640)
Hostile	-0.199*	-0.210*	-0.176
	(0.091)	(0.075)	(0.135)
Equity Only	0.033	0.029	0.033
	(0.371)	(0.429)	(0.363)
Cash Only	0.276***	0.285***	0.274***
	(0.000)	(0.000)	(0.000)
Competition	0.028	0.029	0.031
	(0.681)	(0.666)	(0.651)
Relative Size	-0.079**	-0.092***	-0.072**
	(0.021)	(0.008)	(0.034)
Ln(Deal Value)	-0.231***	-0.239***	-0.254***
	(0.000)	(0.000)	(0.000)
Acquirer Advisors		0.118***	
		(0.003)	
Acquirer Top-tier			0.174***
			(0.000)
Constant	2.205***	2.165***	2.267***
	(0.000)	(0.000)	(0.000)
Observations	2695	2695	2695
Adjusted R ²	0.227	0.230	0.235

Table 13 Robustness Test using Alternative Measure Target Premiums43

This table reports the results of OLS regression models estimating the impact of advisors on target premiums in fire sales. The dependent variable is *Target Premium43*, calculated as the offer price per share at announcement over the share price 43 trading days prior to announcement, minus one. The target premium is winsorized at the upper and lower 1% levels. All control variables follow Equation (2) and are defined in Appendix A. In Column (1), the regression uses the full sample, where *Advisors* is a binary variable equal to one if the target has engaged an advisor and zero otherwise. In Columns (2)–(4), *Top-tier* is a binary variable that equals one if the target has engaged a top-tier advisor and zero otherwise. Column (2) includes transactions with either top-tier advisors or no advisors; Column (3) examines all transactions with advisors to compare top-tier advisors with non-top-tier advisors; and Column (4) uses the full sample to compare deals with top-tier advisors against those with either non-top-tier advisors or no advisors. *Year FE* denotes year fixed effects, and *Target industry FE* refers to fixed effects for the target's industry, defined at the 4-digit SIC code level. The symbols ***, ** and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Advisors	Top-tier Advisors	Top-tier Advisors	Top-tier Advisors
	vs. No Advisors	vs. No Advisors	vs. Non-top- tier Advisors	vs. Non-top-tier & No Advisors
	Target Premium43	Target Premium43	Target Premium43	Target Premium43
	(1)	(2)	(3)	(4)
Advisors*Fire Sale	-0.367			
	(0.667)			
Top-tier*Fire Sale		2.071*	3.003***	2.789***
		(0.090)	(0.000)	(0.001)
Advisors	0.130**			
	(0.036)			
Top-tier		0.018	-0.072**	-0.053
		(0.834)	(0.023)	(0.130)
Fire Sale	0.834	0.726	-0.161	0.062
	(0.288)	(0.427)	(0.629)	(0.851)
Controls	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Target industry FE	Yes	Yes	Yes	Yes
Observations	3038	1550	2649	3038
Adjusted R ²	0.067	0.058	0.112	0.070

Variable	Definition	Reference
Dependent variables		
Target Premium20	Target Premium20 is calculated as the transaction share price at the announcement over the share price 20 trading days before the announcement, minus one. For deals where the offer price is not directly available, we use the total deal value divided by the percentage acquired and the number of shares outstanding to calculate the transaction share prices. It is winsorized at the upper and lower 1% levels.	(Dinc et al. 2017)
Target Premium43	Target Premium43 is calculated as the offer price per share at the announcement over the share price 43 trading days before the announcement, minus one. For deals where the offer price is not directly available, we use the total deal value divided by the percentage acquired and the number of shares outstanding to calculate the transaction share prices. It is winsorized at the upper and lower 1% levels.	(Song et al. 2013)
Time to Completion	Time to complete is the number of calendar days between the announcement date and the resolution date. It is winsorized at the upper and lower 1% levels.	(Golubov et al. 2012)
Advisory Fees	Advisory Fees are fees paid by the target as a percentage of deal value from Thomson Financial SDC. It is winsorized at the upper and lower 1% levels.	
Target Relative Gain	A measure calculated as (Target abnormal dollar gain–Acquirer abnormal dollar gain) / (MVT +MVA). The abnormal dollar gains are based on 3-day abnormal returns surrounding the acquisition announcement, while the market values of the target (MVT) and acquirer (MVA) are evaluated 20 trading days prior to the announcement date.	(Ahern 2012)
Independent variables		
Explanation variables		
Advisors (1/0)	A dummy variable equals one if an investment bank advises the target, and zero otherwise.	
Top-tier (1/0)	A dummy variable equals one if a top-8 investment bank advises for the target, and zero otherwise.	(Golubov et al. 2012)
Fire Sale (1/0)	A dummy variable equals one if there are fire sales, and zero otherwise.	(Meier and Servaes 2019)
KZ Index	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	(Guo et al. 2020)
KZ Dummy	A dummy variable equals one if the KZ Index is above the sample median, and zero otherwise.	
Ind.KZ	The mean Kaplan-Zingales (KZ) index of firms within the target's 3-digit SIC code industry for the year of the transaction.	

Appendix A: Variable Definitions

Liquidity Index	Liquidity index is the value of all U.S. M&A transactions in the target's 3-digit SIC code industry over the book value of assets in that industry in the year of the announcement.	(Meier and Servaes 2019)
Instrument variables		
Scope	It takes the value of one if, in the 5 years prior to the deal, the target employed a top-tier investment bank at least once for an equity issue, a bond issue, or an acquisition. It takes the value of two if a top-tier bank was employed for two of the three types of transactions, and the value of three if, in all three types of transactions, a top-tier investment bank was employed. The scope variable takes the value of zero if a top-tier bank was never employed for any of these corporate transactions in the 5-year period prior to the deal announcement	(Golubov et al. 2012)
Control variables		
Acquirer Advisors (1/0)	A dummy variable equals one if an investment bank advises the acquirer, and zero otherwise.	
Acquirer Top-tier	A dummy variable equals one if a top-8 investment bank advises for the acquirer, and zero otherwise.	(Golubov et al. 2012)
Stock (1/0)	A dummy variable equals to one for deals with at least 50% of the consideration in acquirer's equity, and zero otherwise.	(Song et al. 2013)
Hostile (1/0)	A dummy variable equals one if the deal is hostile, and zero otherwise.	(Song et al. 2013)
Cross Industry (1/0)	A dummy variable equals one if the acquirer and target are in different industries, and zero otherwise.	(Song et al. 2013)
Competition (1/0)	A dummy variable equals one if the deal has more than one bidder, and zero otherwise.	(Song et al. 2013)
Tender Offer (1/0)	A dummy variable equals one if the acquisition is a tender offer, and zero otherwise.	(Meier and Servaes 2019)
Asset Acquisition (1/0)	A dummy variable that equals one if there are acquisitions of assets or units, and zero otherwise.	(Meier and Servaes 2019)
Equity Only (1/0)	A dummy variable equals one for the acquisition using pure equity, and zero otherwise.	(Meier and Servaes 2019)
Cash Only (1/0)	A dummy variable equals one for the acquisition using pure cash, and zero otherwise.	(Meier and Servaes 2019)
Toehold (1/0)	A dummy variable equals one if acquirer had at least 5% ownership in the target firm prior to the acquisition, and zero otherwise.	(Ismail 2010)
Ln(Deal Value)	Ln(Deal Value) is the natural log of the deal value.	(Song et al. 2013)
Relative Size	Relative Size is calculated as the deal value over the market value of the acquirer, where market value is defined as (book assets minus book equity plus market equity). It is winsorized at the upper and lower 1% levels.	(Meier and Servaes 2019)
Target M/B	Target M/B is defined as the ratio of the market value of equity relative to the book value of equity of the target for the prior fiscal year (COMPUSTAT items 24*25/60). It is winsorized at the upper and lower 1% levels.	(Song et al. 2013)
Target ROE	Target ROE is measured as the ratio of earnings to average equity of target for the prior fiscal year (COMPUSTAT items $20/[(60+60(t-1))/2])$). It is winsorized at the upper and lower 1% levels.	(Song et al. 2013)

Target Sales Growth	Target Sales Growth is measured as the proportional change in sales of target over the prior fiscal year. It is winsorized at the upper and lower 1% levels.	(Song et al. 2013)
Target D/E	Target D/E is measured as the ratio of debt to equity of the target for the prior fiscal year (COMPUSTAT items 5/60). It is winsorized at the upper and lower 1% levels.	(Song et al. 2013)
Target MCAP	Target MCAP is the target's market value of equity. It is winsorized at the upper and lower 1% levels.	(Meier and Servaes 2019)
Target Tobin's Q	Target Tobin's Q is the market value of the target scaled by its book value of assets. It is winsorized at the upper and lower 1% levels.	(Meier and Servaes 2019)
Target Leverage	Target Leverage is the market leverage of the target, where the numerator is book assets minus book equity and where the denominator is the market value of the target. It is winsorized at the upper and lower 1% levels.	(Meier and Servaes 2019)
Target EBITDA/Assets	Target EBITDA/Assets is the target's EBITDA scaled by its book value of assets. It is winsorized at the upper and lower 1% levels.	
Acquirer M/B	Acquirer M/B is defined as the ratio of the market value of equity relative to the book value of equity of the acquirer for the prior fiscal year (COMPUSTAT items 24*25/60). It is winsorized at the upper and lower 1% levels.	(Song et al. 2013)
Acquirer MCAP	Acquirer MCAP is the acquirer's market value of equity. It is winsorized at the upper and lower 1% levels.	(Meier and Servaes 2019)
Acquirer Tobin's Q	Acquirer Tobin's Q is the market value of the acquirer scaled by its book value of assets. It is winsorized at the upper and lower 1% levels.	(Meier and Servaes 2019)
Acquirer Leverage	Acquirer Leverage is the market leverage of the acquirer, where the numerator is book assets minus book equity and where the denominator is the market value of the acquirer. It is winsorized at the upper and lower 1% levels.	(Meier and Servaes 2019)
Acquirer EBITDA/Assets	Acquirer EBITDA/Assets is the acquirer's EBITDA scaled by its book value of assets. It is winsorized at the upper and lower 1% levels.	(Meier and Servaes 2019)
Post2000 (1/0)	"Post2000" is a dummy that equals one if the deal is announced after 2000, and zero otherwise. It is winsorized at the upper and lower 1% levels.	(Song et al. 2013)