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### Top-tier advisors and the market feedback dynamics in cross-border M&As<sup>★</sup>

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#### ABSTRACT

We provide evidence that the presence of top-tier advisors increases managers' propensity to withdraw from cross-border mergers and acquisitions (CBAs) with poor market returns around the announcement. This effect is stronger for private target acquisitions, in which information asymmetry is expected to be more pronounced, and smaller bidders, who are likely to lack the expertise required to process information themselves. This suggests that managers assisted by reputable investment banks consider negative market feedback in informationally challenging deals. Our results are robust to several endogeneity tests. We provide novel inferences about the informative role of stock markets in shaping advisory roles in respect of M&As.

#### 1. Introduction

The financial advisors in investment banks play an essential role in mergers and acquisitions (M&As): they utilize their information advantages and expertise to mitigate information asymmetry, identify appropriate targets, perform due diligence, and negotiate favorable terms to increase their clients' shareholder wealth (see, e.g., Bao & Edmans, 2011; Servaes & Zenner, 1996). Reputable investment banks ranked in top-tier league tables account for over half of the externally advised M&A transactions (Chemmanur & Fulghieri, 1994). To preserve their market shares and earn higher fees, top-tier financial advisors build their reputations by showing superior abilities and information processing (see, e.g., Fang, 2005; Golubov, Petmezas, & Travlos, 2012; Hunter & Jagtiani, 2003; McLaughlin, 1992; Rau, 2000; Servaes & Zenner, 1996).

In this paper, we examine a novel dimension of the role of top-tier financial advisors in optimizing global capital allocation decisions. We consider worldwide cross-border M&A deals, which are likely to be associated with higher levels of information asymmetry compared to domestic deals, and investigate whether the presence of top-tier

financial advisors affects managers' sensitivity to stock market feedback. Specifically, we examine whether the likelihood that a cross-border merger and acquisition (CBA) with poor stock market returns is withdrawn increases when the deal is advised by a top-tier investment bank.

The role of market feedback in influencing corporate actions is not to be underestimated. Anecdotally, on September 28, 2000, *The Wall Street Journal* reported that Remec Inc., a US manufacturer of equipment used in cellular-phone networks, was attempting to acquire Sweden's Allgon AB.  $^1$  The stock market reacted negatively to this acquisition attempt, with a drop of around 45% in Remec's stock price.  $^2$  Under pressure from the continuous decline in its stock price, Remec subsequently withdrew from the proposed transaction.

Prior empirical research supports the informative role of market feedback in optimizing capital allocation decisions during domestic M&As. More importantly, managers appear to extract information from market reaction regarding the announcement and apply that information to the final decision (see, e.g., Kau, Linck, & Rubin, 2008; Luo, 2005). However, there is little evidence on whether stock market feedback affects global capital allocation decisions, such as CBAs. Compared

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<sup>&</sup>lt;sup>1</sup> Remec offers to buy Allgon for as much as \$488 million. *The Wall Street Journal*, September 28, 2000.https://www.wsj.com/articles/SB970148563942296884

<sup>&</sup>lt;sup>2</sup> Remec withdraw its bid for a rival, Allgon. *The New York Times*, January 13, 2001.https://www.nytimes.com/2001/01/13/business/company-news-remec-withdraws-its-bid-for-arival-allgon.html

to domestic M&As, the different legal systems, regulatory landscapes, national cultures, accounting standards, and other country-specific aspects of CBAs could exacerbate the information asymmetry between bidders and targets (Alimov & Officer, 2017; Björkman, Stahl, & Vaara, 2007; Clougherty, 2005; Feito-Ruiz & Menéndez-Requejo, 2011; McCarthy & Aalbers, 2016). Erel, Liao, and Weisbach (2012), for example, argue that cross-border deals are associated with an additional set of frictions that can impede the success of these transactions.

Does the presence of a top-tier advisor increase the bidder managers' propensity to withdraw from a deal that is poorly received by the market? Answering this question is highly consequential when dealing with informationally challenging deals, such as CBAs. We hypothesize that the presence of a top-tier advisor in CBAs increases managers' propensity to consider negative market feedback and withdraw from the deal. Our argument relates to several strands of the literature. One strand refers to the superior role of top-tier advisors in acquisitions and their reputational concerns. The second is the literature on market feedback and its informational content, not only for managers, but also for well-informed financial intermediaries, such as top-tier investment banks. Another related literature strand is that regarding CBA capital allocation.

The ranking of a bank in league tables is a signal of its reputational capital, which, ultimately, determines its future income (see, e.g., Chemmanur & Fulghieri, 1994; Fang, 2005; Hunter & Jagtiani, 2003; Rau, 2000). Derrien and Dessaint (2018) find that the ranking of investment banks in league tables has a significant impact on M&A advisory business, as it indicates future deal contracts. McLaughlin (1990, 1992) reports that reputation concerns provide advisors with incentives to consider clients' interests, despite a compensation structure that favors deal completion regardless of transaction quality. Therefore, reputable bankers face two opposing objectives: on the one hand, they have an incentive to complete deals, even if they are of bad quality, to cash in the substantial fees they charge; and, on the other, they also have an incentive to consider market feedback and, consequently, to cancel a deal to preserve their reputational capital. This argument is similar to that in Fang (2005), in that investment banks are repeat players in the financial markets and their survival is tied to their reputation. Market feedback can reveal information neither managers nor their advisors have. Indeed, Chen, Goldstein, and Jiang (2007) empirically show that a stock price can contain private information that is new to managers, thus affecting their investment decisions. This confirms the findings of Luo (2005) that market reactions to an M&A announcement predict deal outcomes. Edmans, Goldstein, and Jiang (2012) show that there is a feedback loop between the trigger and anticipation effects in takeovers. They also argue that this simultaneous, two-way interaction between prices and corporate actions could become an impediment to takeovers.

This implies that managers and their advisors can learn new information from the market during an M&A even if their prior valuation of the deal was accurate. Golubov et al. (2012) show that top-tier advisors have a greater ability to identify more synergistic deals for bidders, especially those deals requiring higher skills sets. Therefore, we would expect that top-tier financial advisors have the ability to recognize new signals and incorporate information flow from the capital markets, especially for deals that are informationally challenging. If this is the case, we should observe more cancelled CBA deals assisted by top-tier advisors when market feedback sends a negative signal in terms of returns around the deal announcement.

Our analysis of a sample of 7994 global CBA deals announced from 1996 to 2018 supports the second conjecture. We find that the presence of top-tier financial advisors increases managers' propensity to consider market feedback as a valid signal and to cancel proposed CBAs with poor stock market returns. Addressing potential endogeneity is an identification challenge in our empirical analysis. Bidders advised by top-tier advisors or by non-top-tier advisors may differ in firm-level characteristics. Therefore, our results may be driven by such systematic differences. Moreover, the choice of top-tier advisors may not be random for

each deal. For instance, larger and wealthier bidders or those who had previously worked with top-tier advisors tend to hire top-tier advisors. Bidders also prefer top-tier financial advisors when purchasing public or large targets. In these cases, self-selection bias in respect of top-tier advisors may produce unreliable estimates. We adopt three econometric specifications to deal with the endogeneity concerns due to omitted variables and self-selection bias. First, we use linear probability models (LPMs) to capture the high dimensional fixed effects. Our result is consistently supported when we control for the time-varying differences among industries in terms of acquisition abandonment. Second, to estimate whether our results are driven by systematic differences in bidders' traits between treated and controlled bidders, we adopt a propensity score matching (PSM) approach. Third, we follow Fang (2005) and Golubov et al. (2012) and employ a variation of the Heckman two-stage approach (the treatment effects model) to control for the self-selection bias of advisor choice. Our baseline finding continues to hold in the PSM and Heckman specification tests.

In further analysis, our finding is more pronounced for CBAs involving private targets. Privately held firms are usually smaller, younger, riskier, and are, as such, less transparent than publicly listed companies (see, e.g., Koeplin, Sarin, & Shapiro, 2000; Maksimovic, Phillips, & Yang, 2013). Compared to public targets, there is greater information asymmetry among private targets, which makes it harder for bidders to evaluate the actual values of private targets (Officer, Poulsen, & Stegemoller, 2009). Further, our results are confirmed for smaller bidders, as they are more likely to face greater information asymmetry. Luo (2005) argues that smaller bidders lack the necessary expertise to process public information themselves because they have less managerial talent. As such, they are more likely to have to learn market information than the larger bidders.

As a robustness check, we also use a sample of 7324 US domestic deals conducted during 1996 and 2018 and find no significant effect of the presence of top-tier advisors on deal withdrawal, which confirms our assumption of information asymmetries and greater proximity between domestic merging partners.

Our paper presents a channel for linking the role of top-tier advisors, especially in informationally demanding deals such as CBAs, with stock market feedback. The presence of reputable and high-profile financial advisors facilitates the channelling of newly revealed information to managers and assists in making the difficult decision to cancel a deal. As such, we contribute to the literature on the effectiveness of top-tier financial advisors in M&As (see, e.g., Golubov et al., 2012; Hunter & Jagtiani, 2003; McLaughlin, 1992; Rau, 2000; Servaes & Zenner, 1996). For instance, Golubov et al. (2012) emphasize that top-tier advisors are proficient in detecting synergistic mergers, which add value to the bidders in public domestic deals. We enhance this research line by identifying the essential role of top-tier advisors in CBAs. Specifically, the presence of top-tier advisors adds value by withdrawing value-destroying CBA deals.

Our work also adds to the literature regarding the informative role of secondary markets (see, e.g., Abdallah & Abdallah, 2017; Chen, Harford, & Li, 2007; Chikh & Filbien, 2011; Kau et al., 2008; Liu & McConnell, 2013; Luo, 2005; Masulis, Wang, & Xie, 2007; Paul, 2007). Luo (2005) and Kau et al. (2008) show that managers of bidders are more likely to follow stock market signals and respond to negative market reactions to M&As by cancelling the deals. Further, more attention is required of the factors that affect managers' tendency to extract valuable information from stock markets, such as factors relating to board independence (Paul, 2007), divergence between insider voting and cash flow rights (Masulis, Wang, & Xie, 2009), CEO networks (Chikh & Filbien, 2011), media coverage (Liu & McConnell, 2013) and cross-listing in advanced economies (Abdallah & Abdallah, 2017). We add a new dimension in respect of CBAs and demonstrate that top-tier financial advisors increase managers' sensitivity to the information flows from capital markets in these types of economically relevant transactions.

Further, unlike the literature that focuses only on the US market, we

shed light on interesting information dynamics that govern a key contributor to capital movement across the global context. This is relevant, since the net value of worldwide CBAs experienced a large increase from USD 98 billion in 1990 to USD 816 billion in 2018 (UNCTAD, 2019). In light of the important implications of this international capital movement, recent empirical studies have examined the determinants of CBAs, such as exchange rates, relative stock market valuations, corporate governance, and cultural differences (see, e.g., Björkman et al., 2007; Erel, Jang, & Weisbach, 2015; Erel et al., 2012; Morosini, Shane, & Singh, 1998). We show that both advisory influence and market feedback are as relevant as these already established factors in influencing M&A outcomes on a global scale.

The remainder of this paper is organized as follows. Section 2 describes the sample and data. Section 3 discusses the empirical methodology, baseline results and endogeneity concerns. Section 4 verifies the robustness of the results based on an extension analysis of information asymmetry and alternative measures of key variables. Section 5 concludes the paper.

#### 2. Data description

#### 2.1. Sample selection

Our sample consists of worldwide CBAs announced between January 1, 1996 and December 31, 2018. These data are from the Thomson Financial SDC Mergers and Acquisitions Database. The start of the time period was selected due to the scarcity of financial advisor-related information in Thomson One Banker in the early 1990s. This start date is also adopted by studies that relate to ours (see, e.g., Golubov et al., 2012; Song, Wei, & Zhou, 2013). Table 1 shows the selection details of our final sample. We required bidders to attempt to own >50% of the target's equity and deal transaction values must be at least USD 1 million. We excluded leveraged buyouts, spin-offs, recapitalizations, selftenders, exchange offers, repurchases, minority stake purchases, and privatizations. As this study focuses on financial advisors, bidders were required to have information available about their financial advisors reported in Thomson One Banker. To acquire the financial and stock data of worldwide bidders from the DataStream database, bidders were also required to have DataStream codes in Thomson One Banker. Overall, 7994 CBA deals satisfy all the criteria; that is, 7476 completed deals (93.52%) and 518 cancelled deals (6.48%).

#### 2.2. Deal consummation

There are two types of transaction outcomes in our sample deals: completed and withdrawn. Our interest is in investigating whether a negative market reaction is a determinant of deal withdrawal by the bidder's managers. To capture this effect, we use a dummy variable, *Cancellation*, as the dependent variable, which takes 1 if the deal is withdrawn, and 0 otherwise. Table 1 indicates that 518 out of the 7994 sample deals were cancelled. This is also shown in Table 4, in which our variable, *Cancellation*, has a mean of 0.065, indicating that around 6.5% of the acquisition attempts in our sample were cancelled.

#### 2.3. Top-tier financial advisors

We follow Fang (2005) in providing a proxy for the reputation of investment banks by using a binary variable based on their market shares, whereby top-tier financial advisors belong to the banks with the largest market shares. The rationale is that market share captures a bank's brand name and goodwill; thus, the larger the market share, the higher the reputational damage if the bank engages in quality-cutting.<sup>3</sup>

Table 1
Sample of CBA deals.

	Descriptions	Completed deals	Cancelled deals	Total
	The initial number of M&A deals from 01/01/1996 to 12/31/2018 from Thomson One Banker database:	761,095	23,788	784,883
1.	Only including deals for which bidders aim to control for >50% of the targets' shares.	584,818	18,317	603,135
2.	Only including deals whose transaction values are at least USD 1 million.	208,987	10,806	219,793
3.	After excluding leveraged buyouts, spin-offs, recapitalizations, self-tenders, exchange offers, repurchases, minority stake purchases, and privatizations.	187,386	9844	197,230
4.	Only including CBA deals, namely the deals for which the bidder's nation is different from the target's nation.	45,792	2515	48,307
5.	Only including CBA deals for which the bidders are only public firms, and the targets are either public, private, or subsidiary firms.	27,067	1564	28,631
6.	After excluding CBA deals for which bidder's or target's macro industry belongs to "government and agencies".	27,027	1558	28,585
7.	Only including CBA deals for which bidders have financial advisor information on the Thomson One Banker database.	8843	588	9431
8.	Only including CBA deals for which the bidders have a DataStream code on the Thomson One Banker database.	8623	566	9189
9.	After excluding CBA deals for which bidders have missing stock information or a local market index in DataStream.	7476	518	7994
	Final sample size:	7476	518	7994

Source: Thomson One Banker, SDC Platinum.

Thomson One Banker provides a worldwide financial advisor league table, in which advisors are ranked by transaction value (see Table 2). Following Fang (2005) and Golubov et al. (2012), the top eight advisors in this ranking are defined as top-tier financial advisors; those below the eighth position are defined as non-top-tier advisors.

To avoid the misclassification of top-tier advisors for each sample deal, we undertake the same treatment as Golubov et al. (2012) and Guo et al. (2018) in tracking acquisitions among financial advisors. For example, in 1998, Travelers Group purchased Salomon Brothers and merged with Citicorp in the same year, creating Citigroup. Therefore, the CBA deals advised by Citicorp prior to the merger with Travelers Group are defined as being advised by a non-top-tier investment bank, whereas the subsequent deals advised by Citigroup are defined as being advised by a top-tier investment bank. In addition, for deals that involve multiple financial advisors, we define a deal as being advised by top-tier advisors if it has at least one financial advisor in the top eight of the Thomson One Banker league table.

In Table 3, Panel A shows the CBA distribution per advisor type based on whether the target is public, private or a subsidiary. Our sample includes 7994 deals from 1996 to 2018. Top-tier advisors are

 $<sup>^3</sup>$  Recent studies also follow Fang (2005) in using this measure of financial advisor reputation (e.g., Golubov et al., 2012).

<sup>&</sup>lt;sup>4</sup> Derrien and Dessaint (2018) show the importance of league table rankings for investment banks and their influence on the M&A market.

**Table 2**Top-25 Worldwide financial advisor ranking by transaction value.

Rank	Financial Advisor	Deal Value (Million USD)	Market Share	Number of Deals
Top-Ti	er			
1	Goldman Sachs & Co	20,942,445.80	30.7	9720
2	Morgan Stanley	17,543,858.86	25.7	8818
3	JP Morgan	16,410,914.32	24.1	10,193
4	Bank of America	14,391,340.20	21.1	8501
	Merrill Lynch			
5	Citi	12,526,633.63	18.4	8098
6	Credit Suisse	10,673,241.70	15.7	8773
7	UBS	8,857,456.60	13.0	6986
8	Deutsche Bank	8,362,695.07	12.3	6322
Non-To	op-Tier			
9	Lazard	7,789,510.00	11.4	6122
10	Barclays	7,318,966.50	10.7	4060
11	Rothschild & Co	5,285,679.42	7.8	6855
12	BNP Paribas SA	3,108,015.57	4.6	1742
13	Evercore Partners	3,104,991.57	4.6	3252
14	Nomura	2,917,437.83	4.3	3996
15	Centerview Partners	2,747,715.83	4.0	402
	LLC			
16	HSBC Holdings PLC	2,052,468.01	3.0	2155
17	RBC Capital Markets	1,957,565.41	2.9	3149
18	Commerzbank AG	1,655,306.54	2.4	2474
19	NatWest Markets	1,649,888.43	2.4	1697
20	Macquarie Group	1,608,382.47	2.4	2684
21	Societe Generale	1,451,451.76	2.1	1745
22	Greenhill & Co, LLC	1,435,722.12	2.1	950
23	Houlihan Lokey	1,325,346.18	1.9	1217
24	Moelis & Co	1,323,852.97	1.9	4793
25	PJT Partners Inc	1,270,567.79	1.9	765

Source: Thomson Reuters.

This table shows the ranking of the top-25 worldwide investment banks in terms of transaction value (USD) for worldwide M&A deals from January 1996 to December 2018 based on data from Thomson One Banker, SDC Platinum. Advisors' market shares and number of deals are also shown here. Following Golubov et al. (2012) and Guo et al. (2018), equity carveout, exchange offers, and open market repurchases are excluded. The sum of market share exceeds 100% because of the allocation method adopted by Thomson One Banker. The default allocation method is full credit to each eligible advisor, meaning that if multiple advisors work on a deal, all of them will receive league table credit for that deal.

involved in 2592 deals, representing 32.42% of all the deals. The remaining 5402 (67.58%) deals are advised by non-top-tier advisors. The 232 deals representing 9% of all deals involving top-tier advisors are withdrawn; this rate is approximately 5% (286 deals) for the deals involving non-top-tier advisors. Top-tier advisor deals include 1026 (40%) public targets, 425 (16%) private ones, and 1141 (44%) subsidiaries, compared to non-top-tier advisor deals that involve 1290 (24%) public targets, 1867 (34%) private ones, and 2245 (42%) subsidiaries. In terms of deal distribution by industry (Panel B), 65% of all deals are concentrated in the healthcare, financial, industrial, materials, and high-technology sectors.

#### 2.4. Market reaction to deal announcement

We follow Golubov et al. (2012) in capturing market reactions to CBA deal attempts by using bidders' cumulative abnormal returns (CARs) around the announcement dates. For each bidder, we obtain the daily stock prices expressed in local currencies from DataStream and use international exchange rates to calculate the USD-denominated daily returns, similar to Levine, Lin, and Shen (2020). Therefore, daily return,  $R_{ijt}$ , for bidder i in nation j on day t is:

$$R_{ijt} = \frac{P_{ijt} \times Rate(\$/j)_t}{P_{ijt-1} \times Rate(\$/j)_{t-1}} - 1$$

$$\tag{1}$$

where  $P_{ijt}$  is the bidder i's share price in nation j's local currency on day t and  $Rate(\$/j)_t$  is the spot exchange rate (dollar/local currency) on day t.

Consistent with Bris and Cabolis (2008) and Levine et al. (2020), we use a two-factor model to estimate the expected daily returns as per Eq. 2. One factor is the local market index, which is the broadest stock market index in each nation's local market. The other factor is the MSCI world market index. Both are computed in USD.

$$E(R_{iit}) = \alpha_i + \beta_{1i} R_{Localit} + \beta_{2i} R_{MSCIt} + \varepsilon_{it}$$
(2)

where  $R_{Localjt}$  is the local market return for nation j on day t and  $R_{MSCIt}$  is the MSCI world market index on day t. We then calculate 3-day CARs using a 200-trading-day estimation window (-210,-11):

$$AR_{i} = R_{ijt} - E(R_{ijt}) = R_{ijt} - (\widehat{\alpha}_{i} + \widehat{\beta}_{1i}R_{Localjt} + \widehat{\beta}_{2i}R_{MSCIt})$$
(3)

$$CAR_{i(-1,1)} = \sum_{t=-1}^{1} AR_{it}$$
 (4)

Table 4 shows that CAR(-1,1) has an average value of 0.012, indicating that, on average, bidders experience a positive abnormal return after a CBA announcement. Table 5 puts in perspective the results of the univariate tests on the variation in CARs between deals advised by toptier investment banks (Top-Tier Advisor) and non-top-tier investment banks (Non-Top-Tier Advisor) in the entire sample (Panel A), the subsample of completed deals (Panel B), and the subsample of withdrawn deals (Panel C). Panels A to C show a consistent finding that the CBA deals advised by top-tier advisors experience lower announcement returns than the deals advised by non-top-tier advisors. This result is qualitatively similar to that in Golubov et al. (2012), who use a sample of domestic US M&A deals and a shorter period than ours. Panel C further documents that, for cancelled deals, the mean difference in CAR (-1,1) between the deals advised by top-tier and non-top-tier advisors reaches 0.024, which is significantly higher than that for the entire sample and for the subsample of completed deals. Moreover, only the mean CAR(-1,1) of withdrawn deals advised by top-tier advisors is negative (-0.005). These preliminary data analyses imply that, compared to non-top-tier advisors, top-tier advisors are more sensitive to market reactions and are more likely to withdraw from deals with poor market feedback. The figures in Table 5 for CAR(-2,2) yield similar inferences.

#### 2.5. Control variables

To isolate the influence of financial advisors and CARs on managers' decisions to withdraw a proposed CBA deal, we control key factors associated with the likelihood of abandoning acquisition attempts in prior studies. Following Chen, Harford, and Li (2007), Kau et al. (2008), Levine et al. (2020), Liu and McConnell (2013), Masulis et al. (2007) and Moeller, Schlingemann, and Stulz (2007), we control for bidders' traits, such as firm size, market-to-book, prior stock run-up, and stock volatility. Table 4 presents summary statistics. The mean (median) bidder Size in our sample is 14.531 (14.521). The clients of top-tier investment banks are substantially larger, at 15.954 (15.864), than those of non-toptier banks at 13.841 (13.740). Bidders' mean (median) Market-to-Book is 2.936 (2.014). Bidders advised by top-tier financial advisors have higher average Market-to-Book values at the 10% significance level. Regarding stock performance Run-up and Volatility, bidders exhibit a mean run-up of 0.130 and a mean volatility of 0.026. Bidders associated with top-tier banks appear to have significantly lower run-up and volatility than those with non-top-tier banks.

We then control some deal-specific characteristics, as presented in previous studies (e.g., Bates & Lemmon, 2003; Burch, 2001; Huang & Walkling, 1987; Jennings & Mazzeo, 1991; Kau et al., 2008; Liu & McConnell, 2013; Luo, 2005; Richardson, Yawson, & Zhang, 2017). The transaction value (*Deal Value*) has an average (median) of 5.107 (5.069). As expected, the deals advised by top-tier banks are significantly larger

**Table 3**Deal distribution.

Panel A: Deal distribution ac	cording to target's status
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	All Deals			Top-Tier A	Advisor Deals		Non-Top-Tier Advisor Deals		
_	All	Completed	Cancelled	All	Completed	Cancelled	All	Completed	Cancelled
Public Targets	2316	1992	324	1026	847	179	1290	1145	145
Private Targets	2292	2221	71	425	416	9	1867	1805	62
Subsidiary Targets	3386	3263	123	1141	1097	44	2245	2166	79
Γotal	7994	7476	518	2592	2360	232	5402	5116	286

	All Deals	•	Top-Tier Advisor Deals			Non-Top-T	ier Advisor Deals		
	All	Completed	Cancelled	All	Completed	Cancelled	All	Completed	Cancelled
Real Estate	210	200	10	76	72	4	134	128	6
Retail	234	222	12	68	63	5	166	159	7
Telecommunications	333	309	24	137	122	15	196	187	9
Media and Entertainment	348	325	23	115	100	15	233	225	8
Consumer Products and Services	527	503	24	142	132	10	385	371	14
Energy and Power	583	529	54	210	189	21	373	340	33
Consumer Staples	601	571	30	225	210	15	376	361	15
Healthcare	767	711	56	277	250	27	490	461	29
Financials	876	822	54	356	329	27	520	493	27
Industrials	1035	973	62	262	232	30	773	741	32
Materials	1151	1038	113	365	318	47	786	720	66
High Technology	1329	1273	56	359	343	16	970	930	40
Total	7994	7476	518	2592	2360	232	5402	5116	286

This table presents the deal distribution of the CBAs announced by worldwide public firms from 01/01/1996 to 31/12/2018 for the entire sample and for deals advised by top-tier and non-top-tier advisors. Panel A shows the number of all, completed, and cancelled deals advised by top-tier and non-top-tier advisors according to the target's listing status (private/public/subsidiary). Panel B reports the distribution of CBA deals for each sector in our sample.

than those advised by non-top-tier banks in terms of both the mean and median values at the 1% significance level. Bidders associated with toptier advisors have significantly more toehold ownership of the targets' shares (Toehold) than those with non-top-tier advisors. Further, the deals advised by top-tier investment banks appear to have more financial advisors (Log(Num. Advisors)). Defense deals (Defense dummy) represent only 1.3% of our sample. However, 2.2% of the deals advised by top-tier banks are defense deals, whereas only 0.9% of non-top-tier bank deals are defense transactions. Only 0.1% of all deals represent litigation deals (Litigation dummy), and our sample does not appear to differ between the two categories of advisors, at least based on this univariate comparison. Approximately 97.9% of the sample is composed of friendly deals (Friendly dummy), 13.7% are tender offers (Tender Offer dummy), and 3.6% are deals with termination fees (Termination Fee dummy). Around 22% of the transactions in our sample are financed or partially financed by bidders' common stocks (Stock dummy). The bidders advised by toptier banks appear to use stocks less frequently as payment. Only 0.8% of all deals include a lock-up of target shares (Lockup dummy), in which the potential bidder is granted an option to purchase shares at a fixed price.

Consistent with previous studies (e.g., Erel et al., 2012; Kerr, Sadka, & Sadka, 2020; Levine et al., 2020), we further include an array of country and country-pair control variables in our regressions. Approximately 35.1% of bidders have the same primary language (Same Language) as their targets, 39.3% have the same primary religion (Same Religion) as the targets, and 45.6% have the same legal origin (Same Rule of Law) as the targets. Moreover, the mean (median) geographic distance between bidders and targets (Log(Geographic Distance)) is 8.595 (8.716). The average bidder market liquidity (Bidder Market Liquidity) is 0.001. In addition, the bidders advised by top-tier advisors are, on average, from more economically developed countries (Log(GDP/Capita)) and have a larger population size (Log(Population)) but a lower GDP growth rate (GDP Growth), and so do their targets. The bidders advised by top-tier banks typically come from nations with higher investment environment scores (Investment), but lower local law and order (Law Order),

level of corruption (*Corruption*), and politics (*Politics*) scores. Detailed definitions of the variables are shown in Table A1 in Appendix A.

#### 3. Empirical results and discussion

#### 3.1. Top-tier advisors and market feedback in CBAs

We examine whether top-tier advisors affect managers' propensity to cancel proposed CBA deals when receiving poor market feedback. The probit model we estimate is as follows:

$$\begin{aligned} \textit{Cancellation}_{i}(1/0) &= \alpha + \beta_{1} \textit{CAR}_{i} + \beta_{2} \textit{Top-Tier Advisor}_{i} + \beta_{3} \textit{CAR}_{i} \\ &\times \textit{Top-Tier Advisor}_{i} + \theta X_{i} + \mu_{j} + \mu_{c} + \mu_{t} + \varepsilon_{i}, \end{aligned} \tag{5}$$

where *Cancellation* is a dummy variable that takes 1 if the status of deal i is "withdrawn," and 0 otherwise, and *CAR* is the 3-day CAR. *Top-Tier Advisor* is a dummy variable that takes 1 if the deal is advised by at least one top-tier financial advisor, and 0 otherwise.  $X_i$  is a vector representing the bidder-, deal-, and country-level control variables. Our model also includes industry fixed effects,  $\mu_b$ , and country fixed effects,  $\mu_c$ , to alleviate the possible effect of unobserved heterogeneity at the industry and country levels. Further, we control for time fixed effects,  $\mu_b$  to capture economy-wide shocks that could affect deal outcome.

Table 6 reports our baseline empirical results. Columns (1) to (4) explore the impact of announcement returns on the likelihood of withdrawing a CBA attempt without controlling for the *Top-Tier Advisor* variable. The marginal effects of CAR(-1,1) are consistently negative and significant at the 5% level. In Columns (5) to (8), we rerun the same estimations as in Columns (1) to (4), controlling for the effect of *Top-Tier Advisor* on the likelihood of abandoning CBA attempts. CAR(-1,1) is always negative and significant when we control for the characteristics of bidders, deals and countries in Columns (6), (7) and (8), respectively. To gain an idea of the economic significance of this inverse relationship, in Column (8), for example, the marginal effect of CAR(-1,1) on CBA withdrawal likelihood is -0.0398 and implies that a one standard

Table 4
Summary statistics.

	All				Top-Ti	er Advisor(	a)	Non-To	p-Tier Adv	ricor(h)	Differences (	(a)-(p)
	N	3.6	34-4:	CD	N					- ' '		
	IN	Mean	Median	SD	IN	Mean	Median	N	Mean	Median	p-value (Mean)	p-value (Median)
Size	7705	14.531	14.521	2.607	2515	15.954	15.864	5190	13.841	13.740	0.000	0.000
Market-to-Book	7653	2.936	2.014		2497	3.034	2.058	5156	2.888	1.991	0.000	0.000
				3.356								
Run-up	7994	0.130	0.035	0.505	2592	0.099	0.041	5402	0.146	0.029	0.000	0.166
Volatility	7994	0.026	0.021	0.016	2592	0.022	0.019	5402	0.027	0.022	0.000	0.000
Deal-level Characterist	ics											
Cancellation	7994	0.065	_	0.246	2592	0.090	_	5402	0.053	_	0.000	_
CAR(-1,1)	7994	0.012	0.004	0.068	2592	0.006	0.002	5402	0.015	0.005	0.000	0.000
Num Prior Times TA	7994	0.266	0.000	0.738	2592	0.518	0.000	5402	0.145	0.000	0.000	0.000
Public Target	7994	0.290	_	0.454	2592	0.396	_	5402	0.239	_	0.000	_
Private Target	7994	0.287	_	0.452	2592	0.164	_	5402	0.346	_	0.000	_
Subsidiary Target	7994	0.424		0.494	2592	0.104	_	5402	0.416		0.037	
Deal Value	7994	5.107	5.069	1.859	2592	6.397	6.330	5402	4.488	- 4.454	0.000	0.000
Toehold	7994 7994	4.988	0.000	1.859	2592 2592	6.144	0.000	5402 5402	4.488	0.000	0.000	0.000
Log(Num Advisors)	7994	0.803	0.693	0.218	2592	0.889	0.693	5402	0.762	0.693	0.000	0.000
Defense dummy	7994	0.013	-	0.113	2592	0.022	-	5402	0.009	-	0.000	-
Litigation dummy	7994	0.001	-	0.037	2592	0.002	-	5402	0.001	-	0.356	-
Friendly dummy	7994	0.979	-	0.144	2592	0.966	_	5402	0.985	-	0.000	-
Tender Offer dummy	7994	0.137	-	0.344	2592	0.165	-	5402	0.123	-	0.000	-
Termination Fee dummy	7994	0.036	-	0.187	2592	0.062	-	5402	0.024	-	0.000	-
Stock dummy	7994	0.220	_	0.414	2592	0.208	_	5402	0.226	_	0.074	_
Lockup dummy	7994	0.008	_	0.086	2592	0.011	_	5402	0.006	_	0.008	_
Country-level Controls												
Same Language	7994	0.351	-	0.477	2592	0.329	-	5402	0.362	-	0.003	-
Same Religion	7994	0.393	-	0.488	2592	0.391	-	5402	0.394	-	0.828	-
Same Rule of Law	7994	0.456	-	0.498	2592	0.434	-	5402	0.467	-	0.005	-
Log(Geographic Distance)	7992	8.595	8.716	0.538	2591	8.576	8.670	5401	8.604	8.727	0.030	0.209
Bidder Market Liquidity	7863	0.001	0.001	0.001	2557	0.001	0.001	5306	0.001	0.001	0.000	0.004
Log(Bidder GDP/ Capita)	7895	10.346	10.522	0.704	2562	10.400	10.566	5333	10.320	10.501	0.000	0.000
Log(Target GDP/ Capita)	7867	10.168	10.457	0.949	2555	10.261	10.556	5312	10.123	10.434	0.000	0.000
Bidder GDP Growth	7895	2.792	2.788	2.265	2562	2.641	2.564	5333	2.864	2.855	0.000	0.000
Target GDP Growth	7865	2.963	2.855	2.480	2554	2.806	2.788	5311	3.038	2.861	0.000	0.000
Log(Bidder Population)	7895	17.845	17.910	1.443	2562	17.944	17.947	5333	17.797	17.895	0.000	0.000
Log(Target Population)	7886	17.821	17.914	1.627	2558	17.880	17.947	5328	17.793	17.904	0.026	0.000
Bidder Investment	7977	10.785	11.500	1.504	2580	10.851	11.500	5397	10.754	11.083	0.007	0.000
Target Investment	7853	10.502	11.000	1.757	2560	10.697	11.500	5293	10.408	11.000	0.000	0.000
Bidder Law Order	7977	5.252	5.000	0.826	2580	5.182	5.000	5397	5.285	5.500	0.000	0.000
Target Law Order	7853	5.084	5.000	1.002	2560	5.067	5.000	5293	5.092	5.000	0.286	0.014
Bidder Corruption	7977	4.223	4.500	0.958	2580	4.209	4.500	5397	4.230	4.500	0.344	0.014
	7854				2560		4.083	5294	4.230			0.000
Target Corruption		4.075	4.000	1.061		4.117				4.000	0.016	0.079
Bidder Politics Target Politics	7977 7854	5.336 5.154	6.000 6.000	0.893	2580	5.265 5.138	6.000 6.000	5397 5294	5.369	6.000	0.000	/
				1.094	2560				5.162	6.000	0.375	/

This table presents descriptive statistics for all variables in terms of the bidder, deal, and country-level characteristics for both the entire sample and the subsamples (top-tier and non-top-tier advisors). The statistical tests for the differences in the means and equality of medians for each characteristic and for deals advised by top-tier versus non-top-tier advisors are also reported. Please refer to Appendix A for an accurate description of all variables.

deviation decrease in CAR(-1,1) increases the likelihood of deal cancellation by 0.27 ( $-0.0398 \times 0.068$ ) percentage points; this corresponds to a 4.2% (-0.0027/0.065) increase relative to the average unconditional probability of being cancelled. This suggests that managers are sensitive to stock market prices when making CBA decisions and that the poorer the market reaction, the higher the likelihood of deal

withdrawal. This result is consistent with the notion that the high informativeness of stock prices sends useful signals to managers in assessing the odds of the success of a deal. Managers tend to follow stock market signals when making M&A investments (see, e.g., Kau et al., 2008; Liu & McConnell, 2013; Luo, 2005). However, the *Top-Tier Advisor* variable is always positive and significant in all estimations, indicating that the presence of reputable investment bankers increases the likelihood of deal cancellation.

Columns (9) to (12) show how top-tier financial advisors affect managers' propensity to cancel proposed CBA deals that obtain poor announcement returns. To capture this combined effect, we add an

 $<sup>^{5}</sup>$  0.068 is the standard deviation of CAR(-1,1); 0.065 is the sample mean of *Cancellation*, which is the unconditional withdrawal rate for our sample deals. Please see Table 4 for greater detail.

**Table 5**Univariate analysis.

Panel A: All D	Deals		
	Top-Tier Advisor(a)	Non-Top-Tier Advisor(b)	Mean difference in CAR: (a)-(b)
CAR(-1,1)	0.006	0.015	-0.009***
	(2592)	(5402)	
CAR(-2,2)	0.007	0.016	-0.009***
	(2592)	(5402)	
Panel B: Com	pleted Deals		
	Top-Tier	Non-Top-Tier	Mean difference in
	Advisor(a)	Advisor(b)	CAR: (a)-(b)
CAR(-1,1)	0.007	0.014	-0.007***
	(2360)	(5116)	
CAR(-2,2)	0.009	0.016	-0.007***
	(2360)	(5116)	
Panel C: Cano	elled Deals		
	Top-Tier	Non-Top-Tier	Mean difference in
	Advisor(a)	Advisor(b)	CAR: (a)-(b)
CAR(-1,1)	-0.005	0.019	-0.024***
	(232)	(286)	
CAR(-2,2)	-0.010	0.012	-0.022***
	(232)	(286)	

This table shows the univariate test for CARs for the entire sample (Panel A), the subsample of completed CBAs (Panel B), and the subsample of cancelled CBAs (Panel C). CAR is measured by 3-day and 5-day cumulative abnormal return, respectively. We report the CARs means for the deals advised by top-tier and non-top-tier advisors, as well as the difference between the means and its significance. The number of deals is shown between parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

interaction term between *Top-Tier Advisor* and CAR(-1,1) in Column (9) and include bidder-, deal- and country-level controls in Columns (10), (11) and (12), respectively. The effect of CAR(-1,1) is negative but becomes insignificant. The marginal effects of the interaction term, CAR  $(-1,1) \times Top$ -Tier Advisor, are negative and significant at the 5% level without controls in Columns (9) and when we control for bidder traits in Column (10). When we add more controls for deal and country characteristics in Columns (11) and (12), respectively, the effect is still negative at the 10% level of statistical significance. With regard to the economic significance of the interaction terms, taking Column (12) as an example, a one standard deviation decrease in CAR(-1,1) is associated with a 0.61 ( $-0.0892 \times 0.068$ ) percentage points increase in cancellation likelihood for deals advised by top-tier financial advisors; that is, an increase of 9.4% (-0.0061/0.065) relative to the unconditional probability of CBA cancellation. Overall, this indicates that, compared to deals assisted by non-top-tier advisors, the deals advised upon by top-tier investment banks are more sensitive to stock market feedback. This result supports our assumptions and suggests that top-tier advisors increase managers' propensity to withdraw from CBAs that obtain negative market reactions. This can be interpreted based on the complexity of CBAs and the high information asymmetry associated with them. Financial advisors and managers may learn more from market feedback during the M&A for such deals and adapt their priors. Moreover, the literature shows that national cultures, language, legal systems and environments, among other factors, are additional barriers to such deals (see, e.g., Alimov & Officer, 2017; Björkman et al., 2007; Clougherty, 2005; Feito-Ruiz & Menéndez-Requejo, 2011; McCarthy & Aalbers, 2016).

Roll (1986) documents that managers infected by hubris overstate the benefits of M&As and overpay for target firms. Our results suggest that the presence of top-tier financial advisors might inhibit managers' hubris. To maintain reputational capital and succeed in CBA activities, top-tier advisors might prefer to obtain complementary information

from market participants to assess the expected value of CBA deals and, thus, avoid losses due to overestimating the expected synergies.

The control variables capturing bidder traits show that deals associated with larger bidder size and higher run-ups are less likely to be withdrawn (Table 6, Columns (3), (4), (7), (8), (11) and (12)), whereas stock volatility increases the likelihood of deal withdrawal. The characteristics that might capture deal complexity indicate that the higher complexity proxied by deal value, the friendly dummy, and stock payment is in line with Servaes and Zenner (1996), who associate deal complexity with hostile takeovers, acquisitions with stock payment, and large transactions. They argue that, for a hostile acquisition, the bidder needs to avoid takeover defenses, convince shareholders and the board of directors of the appropriateness of the bid, and the bidder might have to improve the terms of the bid during the bargaining process. Most of the country controls in Columns (4), (8) and (12) are not significant. It is worth noting that the main effects maintain their statistical significance after controlling for country-related factors (see Column (12)).

#### 3.2. Endogeneity concerns

#### 3.2.1. Linear probability model and high-dimensional fixed effects

In terms of the probit model being impractical for controlling for high-dimensional fixed effects, we further employ LPMs estimated by ordinary least squares (OLS) to capture the higher dimensional fixed effects. Table 7 documents the empirical results. Columns (1) to (4) reestimate Columns (3) to (4) and (11) to (12) in the baseline regressions presented in Table 6, using OLS models and controlling for year, industry and bidder's country fixed effects. The negative and significant coefficients of  $CAR(-1,1) \times Top\text{-Tier Advisor}$  in the LPMs likewise support our findings in Table 6 that top-tier advisors increase managers' propensity to withdraw from CBAs that receive poor market reactions. Further, to control for the time-varying differences among industries in acquisition abandonment, we control for the interacted fixed effect between year and industry in Column (5). The result is consistently supported.

In addition, to control fully for the geography of the deal and avoid erroneously attributing potential geographical differences in the withdrawal-to-market-reaction sensitivity to advisor reputation, we control for the country-pair (bidder-target) fixed effect rather than the bidder's country fixed effect in Columns (6) and (7). Column (6) considers the year, industry and country-pair (bidder-target) fixed effects. Column (7) captures the interacted fixed effect between year and industry, and country-pair (bidder-target) fixed effects. Consistent with our results in Table 6, the coefficients of  $CAR(-1,1) \times Top-Tier\ Advisor$  are negative and significant, suggesting that the presence of top-tier advisors increases managers' propensity to withdraw from CBAs with poor market returns around the deal announcement.

#### 3.2.2. Propensity score matching

A potential concern is that our results may be driven by systematic differences in observable firm-level characteristics between bidders advised by top-tier advisors and those by non-top-tier advisors. To mitigate such endogenous matching issues, we use the widely accepted PSM method (Rosenbaum & Rubin, 1983). We identify bidders advised by top-tier advisors as the treatment group because bidders advised by non-top-tier advisors make up the majority of our sample. During the matching procedure, we calculate the propensity scores through all the observable bidders' traits in this study (i.e., Size, Market-to-Book, Run-up, and Volatility) and year, industry, and country fixed effects using the logit model. Then, we match each treated bidder to a control bidder based on the nearest propensity score and exclude all the observations that do not meet the common support conditions.

Table 8 reports the PSM results. Panel A shows insignificant differences in the covariates for the treated and control groups (the *p*-values of the mean differences in bidders' traits are larger than 0.1). In Panel B, we rerun our baseline regressions as Eq. 5 using the propensity score

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**Table 6**Propensity to cancel deals: top-tier advisor and market feedback for CBAs.

Dependent variable: Cancellation	(0/1)											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
CAR(-1,1)	-0.0540**	-0.0677***	-0.0406**	-0.0413**	-0.0385	-0.0618***	-0.0387**	-0.0398**	0.0132	-0.0101	-0.0119	-0.0103
	(0.0254)	(0.0231)	(0.0164)	(0.0176)	(0.0242)	(0.0220)	(0.0164)	(0.0178)	(0.0332)	(0.0309)	(0.0233)	(0.0246)
Top-Tier Advisor					0.0311***	0.0353***	0.0121***	0.0134***	0.0318***	0.0356***	0.0124***	0.0137***
1					(0.0058)	(0.0053)	(0.0046)	(0.0044)	(0.0057)	(0.0053)	(0.0046)	(0.0043)
$CAR(-1,1) \times Top-Tier Advisor$					(,	<b>(</b> ,	<b>(</b> ,	(,	-0.1600**	-0.1551**	-0.0814*	-0.0892*
( -,-, op									(0.0744)	(0.0655)	(0.0467)	(0.0471)
Size		0.0038***	-0.0048***	-0.0042***		0.0006	-0.0053***	-0.0047***	(010, 11)	0.0007	-0.0051***	-0.0046***
		(0.0011)	(0.0009)	(0.0009)		(0.0010)	(0.0010)	(0.0010)		(0.0010)	(0.0010)	(0.0010)
Market-to-Book		0.0012	0.0003	0.0004		0.0008	0.0002	0.0003		0.0008	0.0002	0.0003
Will Ref to Book		(0.0009)	(0.0008)	(0.0008)		(0.0009)	(0.0008)	(0.0008)		(0.0009)	(0.0002)	(0.0008)
Run-up		-0.0029	-0.0075**	-0.0069**		-0.0033	-0.0073**	-0.0067**		-0.0031	-0.0071**	-0.0065**
Kuii-up		(0.0038)	(0.0034)	(0.0031)		(0.0036)	(0.0034)	(0.0031)		(0.0036)	(0.0034)	(0.0031)
Volatility		0.8970***	0.7142***	0.6865***		0.8663***	0.7060***	0.6781***		0.8543***	0.6999***	0.6702***
volatility		(0.2123)	(0.1516)	(0.1472)		(0.2077)	(0.1525)	(0.1481)		(0.2039)	(0.1521)	(0.1468)
Deal Value		(0.2123)	0.0141***	0.0139***		(0.2077)	0.0131***	0.0127***		(0.2039)	0.0129***	0.0126***
Dear value												
m 1 11			(0.0015)	(0.0014)			(0.0013)	(0.0013)			(0.0013)	(0.0013)
Toehold			0.0001	0.0001			0.0001	0.0001			0.0001	0.0001
			(0.0001)	(0.0001)			(0.0001)	(0.0001)			(0.0001)	(0.0001)
Log(Num Advisors)			-0.0158	-0.0140			-0.0190	-0.0178			-0.0189	-0.0176
			(0.0118)	(0.0121)			(0.0116)	(0.0119)			(0.0118)	(0.0120)
Defense dummy			0.0195	0.0189			0.0191	0.0183			0.0185	0.0176
			(0.0272)	(0.0280)			(0.0270)	(0.0280)			(0.0269)	(0.0278)
Litigation dummy			0.0227	0.0276			0.0234	0.0286			0.0226	0.0276
			(0.0418)	(0.0428)			(0.0409)	(0.0417)			(0.0409)	(0.0417)
Friendly dummy			-0.1408***	-0.1326***			-0.1400***	-0.1316***			-0.1400***	-0.1315***
			(0.0090)	(0.0085)			(0.0088)	(0.0084)			(0.0088)	(0.0083)
Tender Offer dummy			0.0048	0.0044			0.0054	0.0049			0.0053	0.0048
			(0.0050)	(0.0045)			(0.0049)	(0.0044)			(0.0050)	(0.0044)
Termination Fee dummy			0.0245***	0.0288***			0.0244***	0.0288***			0.0247***	0.0291***
			(0.0073)	(0.0071)			(0.0075)	(0.0072)			(0.0075)	(0.0072)
Stock dummy			0.0199***	0.0179***			0.0199***	0.0178***			0.0199***	0.0178***
•			(0.0065)	(0.0068)			(0.0065)	(0.0068)			(0.0065)	(0.0068)
Lockup dummy			-0.0488	-0.0621			-0.0490	-0.0624			-0.0488	-0.0626
1 2			(0.0457)	(0.0444)			(0.0455)	(0.0444)			(0.0458)	(0.0447)
Country Controls	NO	NO	NO	YES	NO	NO	NO	YES	NO	NO	NO	YES
Constant	0.0521***	0.0493***	0.0357***	0.0338***	0.0504***	0.0473***	0.0353***	0.0334***	0.0503***	0.0472***	0.0353***	0.0333***
-	(0.0008)	(0.0010)	(0.0013)	(0.0013)	(0.0008)	(0.0010)	(0.0012)	(0.0013)	(0.0008)	(0.0010)	(0.0012)	(0.0012)
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
SEs. Clustered	Country	Country	Country	Country	Country	Country	Country	Country	Country	Country	Country	Country
Pseudo R <sup>2</sup>	0.0785	0.0897	0.2262	0.2386	0.0878	0.1010	0.2278	0.2407	0.0891	0.1024	0.2284	0.2414
					7994							
Observations	7994	7651	7651	7311	7994	7651	7651	7311	7994	7651	7651	7311

This table shows the effects of top-tier advisors on the propensity to cancel proposed CBA deals using the probit models. The dependent variable is *Cancellation* and equals 1 if the deal is cancelled, and 0 otherwise. The estimations are based on Eq. 5. Columns (1) to (4) examine whether the announcement returns affect the likelihood of abandoning CBA attempts. Columns (5) to (8) explore the relationship between the likelihood of abandoning acquisition attempts and announcement returns, as well as the selection of top-tier advisors, respectively. Columns (9) to (12) examine the interaction effects of top-tier advisors and announcement returns on managers' propensity to cancel deals. All models control for year, industry, and country fixed effects, and standard errors are clustered at the country level. This table reports the marginal effects. The robust standard errors are shown between parentheses. Detailed variable definitions are shown in Table A1 in Appendix A. \*\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

**Table 7**Propensity to cancel deals: linear probability model and high-dimensional fixed effects.

Dependent variable: Cancellation (0	0/1)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CAR(-1,1)	-0.0686**	-0.0706**	-0.0131	-0.0121	0.0048	-0.0318	-0.0069
	(0.0279)	(0.0298)	(0.0351)	(0.0378)	(0.0569)	(0.0349)	(0.0510)
Top-Tier Advisor			0.0142**	0.0159**	0.0116*	0.0164**	0.0106*
			(0.0068)	(0.0065)	(0.0059)	(0.0071)	(0.0057)
$CAR(-1,1) \times Top$ -Tier Advisor			-0.1902**	-0.2013**	-0.1753*	-0.1957**	-0.1651*
			(0.0794)	(0.0825)	(0.0958)	(0.0803)	(0.0877)
Size	-0.0048***	-0.0043***	-0.0052***	-0.0047***	-0.0041**	-0.0058***	-0.0059***
	(0.0014)	(0.0014)	(0.0014)	(0.0015)	(0.0016)	(0.0017)	(0.0018)
Market-to-Book	0.0006	0.0007	0.0006	0.0007	0.0006	0.0004	0.0003
	(0.0012)	(0.0012)	(0.0012)	(0.0012)	(0.0009)	(0.0012)	(0.0009)
Run-up	-0.0097	-0.0092	-0.0093	-0.0088	-0.0072	-0.0109*	-0.0083
	(0.0062)	(0.0060)	(0.0062)	(0.0059)	(0.0056)	(0.0057)	(0.0060)
Volatility	1.0870**	1.0872**	1.0708**	1.0703**	1.2018***	1.0485**	1.1916***
	(0.4312)	(0.4335)	(0.4282)	(0.4298)	(0.3938)	(0.4081)	(0.3677)
Deal Value	0.0168***	0.0171***	0.0155***	0.0158***	0.0155***	0.0173***	0.0182***
	(0.0023)	(0.0025)	(0.0023)	(0.0025)	(0.0026)	(0.0026)	(0.0025)
Toehold	0.0001	0.0001	0.0001	0.0001	0.0002	0.0000	0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
Log(Num Advisors)	-0.0207	-0.0183	-0.0238	-0.0219	-0.0226	-0.0236	-0.0221
	(0.0202)	(0.0213)	(0.0203)	(0.0214)	(0.0187)	(0.0212)	(0.0188)
Defense dummy	0.0971	0.0934	0.0959	0.0918	0.1080	0.1247	0.1420
•	(0.0977)	(0.1043)	(0.0969)	(0.1034)	(0.0899)	(0.1067)	(0.0973)
Litigation dummy	0.0318	0.0470	0.0319	0.0474	0.0305	0.0999	0.0945
	(0.1032)	(0.1049)	(0.1031)	(0.1049)	(0.1160)	(0.1046)	(0.1146)
Friendly dummy	-0.5252***	-0.5191***	-0.5251***	-0.5187***	-0.5061***	-0.5098***	-0.4948***
	(0.0391)	(0.0407)	(0.0392)	(0.0408)	(0.0411)	(0.0457)	(0.0445)
Tender Offer dummy	-0.0028	-0.0040	-0.0024	-0.0036	-0.0035	-0.0046	-0.0027
•	(0.0071)	(0.0066)	(0.0071)	(0.0066)	(0.0076)	(0.0076)	(0.0081)
Termination Fee dummy	0.0514**	0.0566**	0.0522**	0.0573**	0.0557**	0.0568**	0.0543***
•	(0.0214)	(0.0227)	(0.0219)	(0.0232)	(0.0214)	(0.0223)	(0.0188)
Stock dummy	0.0368***	0.0346***	0.0367***	0.0344***	0.0384***	0.0325***	0.0355***
•	(0.0100)	(0.0106)	(0.0100)	(0.0106)	(0.0123)	(0.0105)	(0.0122)
Lockup dummy	-0.1320	-0.1425	-0.1328	-0.1434	-0.1881**	-0.1649	-0.2109**
	(0.1202)	(0.1168)	(0.1196)	(0.1160)	(0.0908)	(0.1194)	(0.1021)
Country Controls	NO	YES	NO	YES	YES	YES	YES
Constant	0.5471***	1.0142	0.5565***	1.0622	1.4308	0.9143	-1.5080
	(0.0594)	(1.9234)	(0.0583)	(1.9746)	(2.0924)	(3.0054)	(2.9519)
Year FE	YES	YES	YES	YES	NO	YES	NO
Industry FE	YES	YES	YES	YES	NO	YES	NO
Country FE	YES	YES	YES	YES	YES	NO	NO
Country-Pair FE	NO	NO	NO	NO	NO	YES	YES
Year×Industry FE	NO	NO	NO	NO	YES	NO	YES
SEs. Clustered	Country						
R <sup>2</sup>	0.1726	0.1786	0.1736	0.1797	0.2659	0.2490	0.3400
Observations	7651	7311	7651	7311	7094	6908	6680

This table shows the effect of top-tier advisors on the propensity to cancel proposed CBA deals using the OLS models and higher dimensional fixed effect models. The dependent variable is *Cancellation* and equals 1 if the deal is cancelled and 0 otherwise. Columns (1) to (4) rerun the Columns (3)–(4) and (11)–(12) in baseline regressions using the linear OLS models and control for the year, industry, and bidder's country fixed effects. In Column (5), we control for the interacted fixed effect between year and industry, and bidder's country fixed effects. Column (6) considers the year, industry, and country-pair (bidder-target) fixed effects. Column (7) captures the interacted fixed effect between year and industry, and country-pair (bidder-target) fixed effects. In all models, standard errors are clustered at the country level. This table reports coefficients and brackets are robust standard errors. Detailed variable definitions are shown in Table A1 in Appendix A. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

matched sample. The negative and significant (at the 5% level) coefficients in  $CAR(-1,1) \times Top$ -Tier Advisor consistently support our findings in Table 6. This implies that the positive relationship between the presence of top-tier advisors and the withdrawal likelihood of CBAs with poor market reactions is robust after controlling for covariate balance.

#### 3.2.3. Self-selection bias

As our focus is on top-tier financial advisors, we follow the literature convention by dividing the sample into deals advised by top-tier advisors and those by non-top-tier advisors. A potential concern is that the selection of a top-tier advisor for each deal may not be random (Fang, 2005; Golubov et al., 2012). Specifically, the endogeneity comes from the bidder-advisor matching that arises from the correlation between advisor selection and observed or unobserved bidder- and/or deal-level characteristics. For example, the larger and more profitable bidders or

those who previously cooperated with top-tier advisors are more likely to employ top-tier advisors. Bidders tend to employ top-tier financial advisors when acquiring relatively large firms or public firms. In these cases, a self-selection problem may occur and generate unreliable estimates, as discussed by Heckman (1979).

We address this self-selection issue by employing a variation of the Heckman two-stage approach: the treatment effects model. In the first stage, we regress *Top-Tier Advisor* on an instrument. In the spirit of Fang (2005) and Golubov et al. (2012), we use the number of times that a bidder employed top-tier advisors in the five years prior to the announcement year, (*Num Prior Times TA*), as an identification restriction. This variable captures the extent to which bidders used the services of top-tier financial advisors in the past, which can affect the selection of top-tier advisors but not the M&A outcomes. This logic is supported by the evidence that the presence of existing relationships significantly increases the likelihood of banks winning future business from the same

(6)

**Table 8**Propensity to cancel deals: propensity score matching approach.

Panel A: Diagnostic statistic-difference in means of bidders' traits							
Variables	Treated	Control	% Bias	t-stat.	p- value		
Size	15.116	15.214	-4.6	-0.990	0.322		
Market-to-Book	2.890	3.125	-6.6	-1.430	0.153		
Run-up	0.117	0.121	-0.8	-0.180	0.859		
Volatility	0.024	0.024	1.3	0.300	0.767		

Panel B: Regressions with the propensity score matched sample							
Dependent variable	: Cancellation (0/1)						
	(1)	(2)					
CAP( 1.1)	0.2628**	0.2860***					

Dependent variable: Cancellation (0/1)							
	(1)	(2)					
CAR(-1,1)	0.2628**	0.2869***					
	(0.1325)	(0.1095)					
Top-Tier Advisor	0.0113	0.0123					
•	(0.0113)	(0.0122)					
$CAR(-1,1) \times Top-Tier$	-0.4155**	-0.4611**					
Advisor							
	(0.1878)	(0.1835)					
Size	-0.0070	-0.0048					
	(0.0047)	(0.0045)					
Market-to-Book	0.0007	0.0004					
	(0.0013)	(0.0012)					
Run-up	-0.0363***	-0.0388***					
•	(0.0138)	(0.0123)					
Volatility	1.0925*	1.3131**					
-	(0.5726)	(0.6189)					
Deal Value	0.0182***	0.0180***					
	(0.0058)	(0.0057)					
Toehold	0.0006	0.0005					
	(0.0005)	(0.0004)					
Log(Num Advisors)	-0.0146	-0.0251					
	(0.0232)	(0.0251)					
Defense dummy	-0.0546	-0.0603					
	(0.0872)	(0.0811)					
Friendly dummy	-0.2495***	-0.2577***					
	(0.0304)	(0.0324)					
Tender Offer dummy	0.0109	0.0145					
	(0.0119)	(0.0099)					
Termination Fee dummy	0.0373	0.0330					
	(0.0366)	(0.0344)					
Stock dummy	0.0455***	0.0506***					
	(0.0145)	(0.0172)					
Lockup dummy	0.0262	0.0042					
	(0.1075)	(0.1075)					
Country Controls	NO	YES					
Constant	0.0808***	0.0807***					
	(0.0008)	(0.0011)					
Year FE	YES	YES					
Industry FE	YES	YES					
Country FE	YES	YES					
SEs. Clustered	Country	Country					
Pseudo R <sup>2</sup>	0.3363	0.3818					
Observations	1437	1395					

This table reports the estimation results using the propensity score matched sample. Panel A tabulates the diagnostic statistic-difference in observable bidders' traits between treatment and control groups. Panel B illustrates the regression results using the matched sample. During the matching procedure, we calculate the propensity scores through all the firm-level financial control variables in this study (e.g., Size, Market-to-Book, Run-up, and Volatility) and year, industry, and country fixed effects using the logit model. Additionally, we match each treated firm to a control firm. All models control for year, industry and country fixed effects, and standard errors are clustered at the country level. This table reports marginal effects and brackets are robust standard errors. Detailed variable definitions are shown in Table A1 in Appendix A. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

clients (see, e.g., Bharath, Dahiya, Saunders, & Srinivasan, 2007; Drucker & Puri, 2005; Ljungqvist, Marston, & Wilhelm, 2006; Yasuda, 2005). In the second stage, we control for the inverse Mills ratio (Lambda,  $\lambda$ ) obtained in the first stage and rerun our main regression.

First-stage estimation:

$$\textit{Top-Tier Advisor}_i = \alpha + \beta_1 \textit{Num Prior Times } \textit{TA}_i + \theta \textit{X}_i + \mu_i + \mu_c + \mu_t + \varepsilon_i,$$

#### Second-stage estimation:

$$\begin{aligned} \textit{Cancellation}_{i}(1/0) &= \alpha + \beta_{1} \textit{CAR}_{i} + \beta_{2} \textit{Top-Tier Advisor}_{i} + \beta_{3} \textit{CAR}_{i} \\ &\times \textit{Top-Tier Advisor}_{i} + \beta_{4} \lambda + \theta X_{i} + \mu_{j} + \mu_{c} + \mu_{t} + \varepsilon_{i}, \end{aligned} \tag{7}$$

Table 9 shows the results of our Heckman self-selection specifications. In the first stage, in Column (1), the positive and significant (at the 1% level) marginal effect of *Num Prior Times TA* on *Cancellation* indicates that prior dealings with top-tier advisors for CBAs increase the

Table 9
Propensity to cancel deals: self-selection bias.

	First Stage	Second Stage		
Dependent variable:	Top-Tier Advisor (0/1)	Cancellation (0/1)		
	(1)	(2)		
Num Prior Times TA	0.0321***			
	(0.0096)			
CAR(-1,1)		-0.0147		
		(0.0310)		
Top-Tier Advisor		0.0582*		
		(0.0313)		
$CAR(-1,1) \times Top$ -Tier Advisor		-0.1131*		
		(0.0604)		
Lambda		-0.0243		
		(0.0189)		
Size	0.0320***	-0.0074***		
	(0.0048)	(0.0014)		
Market-to-Book	0.0058***	0.0002		
	(0.0015)	(0.0011)		
Run-up	-0.0071	-0.0077*		
	(0.0087)	(0.0040)		
Volatility	-0.3566	0.8288***		
	(0.6338)	(0.1958)		
Deal Value	0.0777***	0.0125***		
	(0.0040)	(0.0037)		
Toehold	0.0013***	0.0000		
	(0.0003)	(0.0002)		
Log(Num Advisors)	0.2327***	-0.0329		
	(0.0249)	(0.0215)		
Defense dummy	-0.0162	0.0229		
	(0.0632)	(0.0355)		
Litigation dummy	-0.1404	0.0386		
	(0.1178)	(0.0540)		
Friendly dummy	0.0098	-0.1684***		
	(0.0293)	(0.0107)		
Tender Offer dummy	-0.0342***	0.0080		
	(0.0119)	(0.0059)		
Termination Fee dummy	-0.0048	0.0379***		
	(0.0228)	(0.0094)		
Stock dummy	0.0056	0.0228***		
	(0.0114)	(0.0083)		
Lockup dummy	0.1125	-0.0844		
	(0.0775)	(0.0585)		
Country Controls	YES	YES		
Constant	0.3264***	0.0632***		
	(0.0002)	(0.0003)		
Year FE	YES	YES		
Industry FE	YES	YES		
Country FE	YES	YES		
Observations	7311	7311		

This table shows the results after addressing the self-selection bias of top-tier advisors. Using the treatment effects model, we first regress the *Top-Tier Advisor* on the instrument, *Num Prior Times TA*, and obtain the inverse Mills ratio as per Eq. 6. In the second stage, we control for the inverse Mills ratio (*Lambda*,  $\lambda$ ) and rerun our main regression as per Eq. 7. All models control for year, industry, and country fixed effects, and standard errors are clustered at the country level. This table reports marginal effects, and the robust standard errors are shown between parentheses. Detailed variable definitions are shown in Table A1 in Appendix A. \*\*\* p < 0.01, \*\*\* p < 0.05, \*\* p < 0.1.

probability of hiring a top-tier advisor. That is, the more times bidders employed top-tier advisors in previous deals, the higher the likelihood that they will choose top-tier advisors in the current acquisition attempt. In the second stage, in Column (2), we add the inverse Mills ratio,  $Lambda\ (\lambda)$ , obtained in the first stage as an additional regressor to correct the estimates that may be influenced by self-selection bias. The negative and significant marginal effect (at the 10% level) of  $CAR(-1,1) \times Top-Tier\ Advisor\$ supports our findings in Table 6, suggesting that top-tier advisors increase managers' propensity to cancel CBAs that obtained poor market feedback.

#### 4. Robustness

#### 4.1. Extension analysis of information asymmetry

#### 4.1.1. Private versus public target

Our main finding is that the presence of top-tier financial advisors increases managers' inclination to infer valuable information from the

stock markets in making CBA decisions. This is consistent with the view that the parties involved may realize that their knowledge is limited regarding such informationally challenging deals and that stock prices convey information that is relevant to optimizing capital allocation. Prior studies suggest that a higher information asymmetry leads to greater valuation uncertainty, which increases the potential risks of overpaying for a "lemon" in M&As (see, e.g., Hansen, 1987; Luypaert & Van Caneghem, 2017; Martin, 1996; Officer et al., 2009). If information asymmetry hinders the bidder's ability to value foreign targets accurately and if top-tier advisors recognize the importance of market signals in mitigating such asymmetry, we would expect the effect of top-tier financial advisors on the stock information learning process to be more pronounced for informationally challenging deals. Private target acquisitions are a paradigmatic case of such transactions. Public firms are subject to stricter monitoring and governance mechanisms, which decreases opacity and, consequently, reduces the information asymmetry in the acquisition process. Therefore, compared to public targets, private targets exhibit greater information asymmetry concerning their

**Table 10**Propensity to cancel deals: information asymmetry (private vs. public target).

Dependent variable: Cancellation (0/	•						
	Public Target			Private Target			
	(1)	(2)	(3)	(4)	(5)	(6)	
CAR(-1,1)	-0.0459	-0.0544	-0.0159	0.0404	0.0223	0.0533	
	(0.1431)	(0.1257)	(0.1338)	(0.0776)	(0.0762)	(0.0775)	
Top-Tier Advisor	0.0598***	0.0333***	0.0343***	-0.0076	-0.0043	-0.0017	
	(0.0105)	(0.0114)	(0.0117)	(0.0100)	(0.0123)	(0.0111)	
$CAR(-1,1) \times Top$ -Tier Advisor	-0.1517	-0.0520	-0.1313	-0.3171**	-0.3045***	-0.3010***	
	(0.1767)	(0.1432)	(0.1493)	(0.1331)	(0.1006)	(0.1095)	
Size		-0.0202***	-0.0191***		-0.0022	-0.0033	
		(0.0037)	(0.0034)		(0.0022)	(0.0021)	
Market-to-Book		-0.0020	-0.0019		0.0003	0.0004	
		(0.0020)	(0.0021)		(0.0007)	(0.0006)	
Run-up		0.0027	0.0030		-0.0048	-0.0017	
•		(0.0137)	(0.0141)		(0.0079)	(0.0066)	
Volatility		0.4789	0.3692		0.7426***	0.6381***	
		(0.7269)	(0.7733)		(0.1357)	(0.1444)	
Deal Value		0.0290***	0.0294***		0.0067**	0.0086**	
		(0.0060)	(0.0060)		(0.0034)	(0.0035)	
Toehold		-0.0000	-0.0002		-0.0000	-0.0001	
		(0.0004)	(0.0004)		(0.0004)	(0.0003)	
Log(Num Advisors)		-0.0529*	-0.0488		0.0113	0.0001	
Eog(Ivani ravisors)		(0.0319)	(0.0334)		(0.0200)	(0.0172)	
Defense dummy		0.0657	0.0657		(0.0200)	(0.01/2)	
Defense duminy		(0.0472)	(0.0438)		_	_	
Litigation dummy		0.0890	0.0906		_	_	
Litigation duffinly		(0.0815)	(0.0852)		-	_	
Enion dles desarrass		, ,	, ,		-	_	
Friendly dummy		-0.2665***	-0.2537***		_	_	
m 1 0% 1		(0.0183)	(0.0199)		-	_	
Tender Offer dummy		-0.0601***	-0.0674***		-	-	
		(0.0111)	(0.0114)		-	-	
Termination Fee dummy		-0.0123	-0.0026		0.0448	0.0512	
		(0.0206)	(0.0229)		(0.0346)	(0.0315)	
Stock dummy		0.0164	0.0114		0.0270***	0.0269***	
		(0.0244)	(0.0270)		(0.0089)	(0.0100)	
Lockup dummy		-0.1599*	-0.1868**		-	-	
		(0.0911)	(0.0920)		-	-	
Country Controls	NO	NO	YES	NO	NO	YES	
Constant	0.1416***	0.1403***	0.1413***	0.0377***	0.0364***	0.0364***	
	(0.0004)	(0.0005)	(0.0005)	(0.0003)	(0.0005)	(0.0004)	
Year FE	YES	YES	YES	YES	YES	YES	
Industry FE	YES	YES	YES	YES	YES	YES	
Country FE	YES	YES	YES	YES	YES	YES	
SEs. Clustered	Country	Country	Country	Country	Country	Country	
Pseudo R <sup>2</sup>	0.0698	0.2285	0.2367	0.2399	0.3299	0.3798	
Observations	2290	2196	2108	1876	1685	1610	

This table shows the effect of top-tier advisors on the propensity to cancel proposed CBA deals classified by *Public Target* and *Private Target*. The dependent variable is *Cancellation*, and equals 1 if the deal is cancelled, and 0 otherwise. All models control for year, industry, and country fixed effects, and standard errors are clustered at the country level. This table reports marginal effects, and the robust standard errors are shown between parentheses. Detailed variable definitions are shown in Table A1 in Appendix A. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

actual value (see, e.g., Koeplin et al., 2000; Maksimovic et al., 2013; Officer et al., 2009). We thus divide our sample into two subsamples: *Public Target* and *Private Target* deals.

From Table 10, it is clear that the marginal effects of  $CAR(-1,1) \times Top$ -Tier Advisor are significant for private target deals only, which supports our prediction that top-tier advisors increase managers' propensity to cancel CBAs with poor market returns for which the targets present more opacity, which leads to higher information asymmetry. Managers face more valuation uncertainty when targeting private firms. To avoid reputational capital losses and eliminate potential uncertainties and risks during the CBA process, top-tier advisors value the information flowing from stock markets when assessing private target acquisitions. That is, top-tier advisors increase managers' propensity to consider the information conveyed by the market. This view is consistent with Luo (2005) in that insiders undergo a learning process during a merger. Our study shows that the assistance of top-tier advisors is key for managers to learn and process market information feedback.

#### 4.1.2. Small versus large bidders

Luo (2005) argues that "small bidders have less expertise and fewer resources to process public information on themselves" (p. 1958). He shows that small bidders are more likely to learn from the market than larger ones. Accordingly, firm size may affect managers' sensitivity to stock price market reactions in making CBA decisions. In particular, the managers of small bidders who can afford investment banker services may be more inclined to follow stock market signals in cancelling informationally challenging CBA deals with negative stock market reactions. Here, we investigate whether firm size has a moderating effect on the relationship between the presence of top-tier financial advisors and stock market information learning in making decisions about deal completion. We divide our sample into two subsamples: Large Bidder Size (deals in which the bidders' size is above the industry median) and Small Bidder Size (deals in which the bidders' size is less than the industry median).

Table 11 shows that the marginal effects of  $CAR(-1,1) \times Top$ -Tier Advisor are only significant for the subsample of small-sized bidders. This indicates that top-tier advisors increase managers' propensity to

Table 11
Propensity to cancel deals: information asymmetry (small bidder vs. large bidder).

Dependent variable: Cancellation (0/	(1)					
	Large Bidder Siz	e		Small Bidder Size		
	(1)	(2)	(3)	(4)	(5)	(6)
CAR(-1,1)	-0.0445	-0.0231	0.0227	0.0142	-0.0222	-0.0242
	(0.0809)	(0.0534)	(0.0482)	(0.0479)	(0.0357)	(0.0378)
Top-Tier Advisor	0.0415***	0.0201**	0.0186**	0.0330***	0.0075	0.0160*
•	(0.0075)	(0.0088)	(0.0095)	(0.0121)	(0.0094)	(0.0095)
$CAR(-1,1) \times Top-Tier Advisor$	-0.0773	-0.0394	-0.0856	-0.2687***	-0.1901**	-0.2346**
_	(0.1020)	(0.0744)	(0.0725)	(0.1036)	(0.0903)	(0.0898)
Market-to-Book		0.0013	0.0017		0.0006	0.0005
		(0.0012)	(0.0011)		(0.0010)	(0.0011)
Run-up		-0.0155	-0.0124		-0.0078*	-0.0076**
•		(0.0097)	(0.0097)		(0.0042)	(0.0038)
Volatility		0.1166	0.0746		1.2062***	1.1509***
		(0.3019)	(0.3088)		(0.1737)	(0.1562)
Deal Value		0.0140***	0.0157***		0.0138***	0.0131***
		(0.0024)	(0.0023)		(0.0020)	(0.0017)
Toehold		0.0001	0.0001		-0.0000	-0.0000
		(0.0002)	(0.0002)		(0.0003)	(0.0003)
Log(Num Advisors)		-0.0107	-0.0147		-0.0475**	-0.0488**
208(114111 114110010)		(0.0202)	(0.0208)		(0.0242)	(0.0246)
Defense dummy		0.0123	0.0086		0.1384***	0.1330***
		(0.0371)	(0.0402)		(0.0486)	(0.0497)
Litigation dummy		0.0524	0.0586		_	_
8,		(0.0598)	(0.0595)		_	_
Friendly dummy		-0.1659***	-0.1545***		-0.2010***	-0.2061**
Trendry dummy		(0.0116)	(0.0124)		(0.0211)	(0.0211)
Tender Offer dummy		-0.0027	-0.0016		0.0210*	0.0180
Tender oner dummy		(0.0088)	(0.0087)		(0.0118)	(0.0111)
Termination Fee dummy		0.0140	0.0294		0.0582***	0.0615***
remination ree duminy		(0.0219)	(0.0188)		(0.0154)	(0.013)
Stock dummy		0.0320**	0.0246		0.0291***	0.0271***
Stock dulling		(0.0150)	(0.0151)		(0.0078)	(0.0078)
Lockup dummy		-0.0591	-0.0444		-0.1734***	-0.2201**
Lockup dulinity		(0.0651)	(0.0653)		(0.0603)	(0.0567)
Country Controls	NO	NO	YES	NO	NO	YES
Constant	0.0680***	0.0652***	0.0645***	0.0637***	0.0645***	0.0649***
Colistant						
Year FE	(0.0003) YES	(0.0003) YES	(0.0004) YES	(0.0002) YES	(0.0004) YES	(0.0004) YES
	YES YES	YES	YES	YES	YES	YES
Industry FE	YES YES	YES	YES	YES	YES YES	YES YES
Country FE						
SEs. Clustered Pseudo R <sup>2</sup>	Country	Country	Country	Country	Country	Country
	0.0759	0.2259	0.2428	0.1024	0.2459	0.2685
Observations	4086	3798	3651	3761	3710	3533

This table shows the effect of top-tier advisors on the propensity to cancel proposed CBA deals classified according to bidder size. Large Bidder Size (represents the deals for which the bidders' size is above the industry median) and Small Bidder Size (are the deals for which bidders' size is below the industry median). The dependent variable is Cancellation, and equals 1 if the deal is cancelled, and 0 otherwise. All models control for year, industry, and country fixed effects, and standard errors are clustered at the country level. This table reports marginal effects, and the robust standard errors are shown between parentheses. Detailed variable definitions are shown in Table A1 in Appendix A. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

cancel CBAs with poor market feedback only when bidders are relatively small. This result can be explained by the notion that small bidders face more information asymmetry and, typically, have less managerial talent. Therefore, the managers of small firms advised by top-tier investment banks are more likely to learn from the market when making corporate decisions.

#### 4.2. US domestic deals as a benchmark

As emphasized earlier in the paper, there are many differences between CBAs and domestic deals, such as the legal systems, national cultures and accounting standards involved. For instance, Erel et al. (2012) argue that cross-border deals are associated with more types of friction, which can hinder their completion. As such, CBAs should be more informationally challenging than domestic deals. Our previous results confirm the hypothesis that the bidders in CBA deals are more likely to withdraw from acquisition attempts if the market feedback is negative when they are assisted by top-tier advisors. This indicates that

the managers supported by top-tier advisors extract information from market reactions in informationally challenging deals (i.e., CBAs), which should not be the case for deals with lower information asymmetry, such as domestic transactions. Acknowledging the differences between CBAs and domestic deals, we run a robustness check by constructing a US domestic sample of M&A deals and adjust our specifications to the domestic setting, which, by definition, does not incorporate country-related covariates.

Using the same sample selection criteria as for the CBA sample, we obtain a sample of 7324 US domestic deals from 1996 to 2018. We adopt CAR computation using the market model, which utilizes abnormal returns defined according to the capital asset pricing model (CAPM). Consistent with the calculation of CARs in our main regression, the estimation window is over 200 trading days, from t=-210 to t=-11, with an event window of (-1,1).

Table 12 confirms the findings of Luo (2005) and Kau et al. (2008) in that domestic bidders withdraw from acquisition attempts when the market sends a negative signal. In all the columns, CAR(-1,1) is

**Table 12**Propensity to cancel deals: top-tier advisor and market feedback for US domestic deals.

Dependent variable: Cancellation	1 (0/1)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CAR(-1,1)	-0.1716***	-0.1859***	-0.1084***	-0.1691***	-0.1846***	-0.1085***	-0.1714***	-0.1933***	-0.1082***
	(0.0265)	(0.0277)	(0.0250)	(0.0267)	(0.0276)	(0.0249)	(0.0316)	(0.0311)	(0.0256)
Top-Tier Advisor				0.0104**	0.0145***	0.0010	0.0105**	0.0147***	0.0009
				(0.0052)	(0.0047)	(0.0047)	(0.0052)	(0.0046)	(0.0048)
$CAR(-1,1) \times Top$ -Tier Advisor							0.0068	0.0258	-0.0010
							(0.0641)	(0.0566)	(0.0481)
Size		-0.0008	-0.0098***		-0.0022	-0.0099***		-0.0022	-0.0099***
		(0.0023)	(0.0028)		(0.0023)	(0.0028)		(0.0023)	(0.0028)
Market-to-Book		0.0000*	0.0000		0.0000*	0.0000		0.0000*	0.0000
		(0.0000)	(0.0000)		(0.0000)	(0.0000)		(0.0000)	(0.0000)
Run-up		-0.0313***	-0.0352***		-0.0315***	-0.0352***		-0.0316***	-0.0352***
		(0.0054)	(0.0059)		(0.0054)	(0.0059)		(0.0054)	(0.0059)
Volatility		0.3799	0.2650		0.3650	0.2641		0.3669	0.2640
		(0.3001)	(0.2738)		(0.2953)	(0.2736)		(0.2943)	(0.2722)
Deal Value			0.0118***			0.0117***			0.0117***
			(0.0028)			(0.0029)			(0.0029)
Toehold			-			-			-
			-			-			-
Log(Num Advisors)			0.0119			0.0116			0.0116
			(0.0182)			(0.0186)			(0.0186)
Defense dummy			0.0232			0.0231			0.0231
			(0.0145)			(0.0145)			(0.0145)
Litigation dummy			0.0483***			0.0484***			0.0484***
			(0.0170)			(0.0171)			(0.0171)
Friendly dummy			-0.2359***			-0.2360***			-0.2360***
			(0.0123)			(0.0124)			(0.0124)
Tender Offer dummy			-0.0215			-0.0215			-0.0215
			(0.0150)			(0.0150)			(0.0150)
Termination Fee dummy			0.0104**			0.0105**			0.0105**
			(0.0052)			(0.0052)			(0.0052)
Stock dummy			0.0243***			0.0243***			0.0243***
			(0.0054)			(0.0054)			(0.0054)
Lockup dummy			-0.0257			-0.0257			-0.0257
			(0.0202)			(0.0202)			(0.0202)
Constant	0.0590***	0.0590***	0.0589***	0.0590***	0.0590***	0.0589***	0.0590***	0.0590***	0.0589***
	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0002)	(0.0003)	(0.0002)	(0.0002)	(0.0003)
Year FE	YES								
Industry FE	YES								
Country FE	YES								
SEs. Clustered	Country								
Pseudo R <sup>2</sup>	0.0553	0.0656	0.2580	0.0562	0.0672	0.2580	0.0562	0.0672	0.2580
Observations	7324	7287	7287	7324	7287	7287	7324	7287	7287

This table shows the effect of top-tier advisors on the propensity to cancel proposed US domestic deals. The dependent variable is *Cancellation*, and equals 1 if the deal is cancelled, and 0 otherwise. Columns (1) to (3) examine whether the announcement returns affect the likelihood of abandoning domestic acquisition attempts. Columns (4) to (6) explore the relationship between the likelihood of abandoning acquisition attempts and announcement returns, as well as the selection of top-tier advisors, respectively. Columns (7) to (9) examine the interaction effects of top-tier advisors and announcement returns on managers' propensity to cancel deals. All models control for year and industry fixed effects, and standard errors are clustered at the industry level. This table reports the marginal effects. The robust standard errors are shown between parentheses. Detailed variable definitions are shown in Table A1 in Appendix A. \*\*\*\* p < 0.01, \*\*\* p < 0.05, \*\* p < 0.1.

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Table 13
Propensity to cancel deals: top-tier advisor and market feedback in CBAs: 5-Day CARs.

Dependent variable: Cancellation	(0/1)											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
CAR(-2,2)	-0.1087***	-0.1174***	-0.0866***	-0.0927***	-0.0957***	-0.1115***	-0.0847***	-0.0913***	-0.0504	-0.0600*	-0.0556*	-0.0820
	(0.0269)	(0.0274)	(0.0231)	(0.0228)	(0.0261)	(0.0265)	(0.0230)	(0.0228)	(0.0333)	(0.0341)	(0.0306)	(0.0520)
Top-Tier Advisor					0.0341***	0.0401***	0.0148***	0.0170***	0.0343***	0.0399***	0.0149***	0.0222**
-					(0.0066)	(0.0060)	(0.0057)	(0.0056)	(0.0065)	(0.0060)	(0.0057)	(0.0105)
$CAR(-2,2) \times Top-Tier Advisor$									-0.1436**	-0.1613**	-0.0931*	-0.1164*
1									(0.0700)	(0.0647)	(0.0547)	(0.0690)
Size		0.0040***	-0.0062***	-0.0057***		0.0005	-0.0068***	-0.0063***	, ,	0.0006	-0.0066***	-0.0080***
		(0.0012)	(0.0012)	(0.0013)		(0.0011)	(0.0013)	(0.0013)		(0.0011)	(0.0013)	(0.0030)
Market-to-Book		0.0014	0.0003	0.0006		0.0010	0.0002	0.0004		0.0010	0.0002	0.0006
		(0.0010)	(0.0010)	(0.0010)		(0.0010)	(0.0010)	(0.0010)		(0.0010)	(0.0010)	(0.0013)
Run-up		-0.0042	-0.0102**	-0.0098**		-0.0048	-0.0100**	-0.0096**		-0.0045	-0.0098**	-0.0121*
run up		(0.0043)	(0.0042)	(0.0041)		(0.0042)	(0.0042)	(0.0040)		(0.0042)	(0.0043)	(0.0072)
Volatility		1.0003***	0.8863***	0.8766***		0.9879***	0.8827***	0.8743***		0.9809***	0.8779***	1.1274***
volatinty		(0.2463)	(0.1973)	(0.1929)		(0.2457)	(0.2008)	(0.1966)		(0.2410)	(0.1997)	(0.3725)
Deal Value		(0.2403)	0.0176***	0.0177***		(0.2437)	0.0164***	0.0164***		(0.2410)	0.0162***	0.0211***
Dear value			(0.0019)	(0.0019)			(0.0018)	(0.0019)			(0.0018)	(0.0067)
Toehold			0.0019)	0.0001			0.0018)	0.0001			0.0002	0.0007)
Toenoid												
I (NI A desire)			(0.0002)	(0.0002)			(0.0002)	(0.0002)			(0.0002)	(0.0002)
Log(Num Advisors)			-0.0199	-0.0183			-0.0240*	-0.0233			-0.0236	-0.0297
D. C			(0.0146)	(0.0154)			(0.0145)	(0.0153)			(0.0146)	(0.0222)
Defense dummy			0.0242	0.0243			0.0239	0.0237			0.0234	0.0302
			(0.0333)	(0.0353)			(0.0333)	(0.0357)			(0.0331)	(0.0478)
Litigation dummy			0.0255	0.0325			0.0266	0.0341			0.0242	0.0410
			(0.0510)	(0.0538)			(0.0503)	(0.0528)			(0.0493)	(0.0655)
Friendly dummy			-0.1736***	-0.1682***			-0.1739***	-0.1684***			-0.1736***	-0.2185***
			(0.0107)	(0.0109)			(0.0106)	(0.0107)			(0.0106)	(0.0652)
Tender Offer dummy			0.0055	0.0051			0.0063	0.0058			0.0061	0.0074
			(0.0062)	(0.0057)			(0.0061)	(0.0056)			(0.0061)	(0.0073)
Termination Fee dummy			0.0301***	0.0364***			0.0302***	0.0368***			0.0305***	0.0483**
			(0.0094)	(0.0093)			(0.0096)	(0.0096)			(0.0096)	(0.0193)
Stock dummy			0.0243***	0.0224***			0.0244***	0.0224**			0.0244***	0.0291**
			(0.0081)	(0.0086)			(0.0081)	(0.0087)			(0.0080)	(0.0137)
Lockup dummy			-0.0618	-0.0806			-0.0625	-0.0817			-0.0625	-0.1066
			(0.0560)	(0.0561)			(0.0561)	(0.0565)			(0.0563)	(0.0824)
Country Controls	NO	NO	NO	YES	NO	NO	NO	YES	NO	NO	NO	YES
Constant	0.0648***	0.0635***	0.0635***	0.0635***	0.0647***	0.0635***	0.0635***	0.0636***	0.0647***	0.0635***	0.0635***	0.0966***
	(0.0002)	(0.0003)	(0.0003)	(0.0004)	(0.0002)	(0.0002)	(0.0003)	(0.0004)	(0.0002)	(0.0002)	(0.0003)	(0.0282)
Year FE	YES	YES	YES	YES	YES							
Industry FE	YES	YES	YES	YES	YES							
Country FE	YES	YES	YES	YES	YES							
SEs. Clustered	Country	Country	Country	Country	Country							
Pseudo R <sup>2</sup>	0.0806	0.0920	0.2280	0.2406	0.0896	0.1032	0.2295	0.2426	0.0906	0.1046	0.2301	0.2432
Observations	7994	7651	7651	7311	7994	7651	7651	7311	7994	7651	7651	7311
JUSEI VALIOIIS	7994	/031	/031	/311	/ 994	/001	/031	/311	7994	/031	/021	/311

This table shows the effect of top-tier advisors on the propensity to cancel proposed CBA deals using 5-day CAR(-2,2). The dependent variable is Cancellation, and equals 1 if the deal is cancelled, and 0 otherwise. The estimations are based on Eq. 5. Columns (1) to (4) examine whether the announcement returns affect the likelihood of abandoning CBA attempts. Columns (5) to (8) explore the relationship between the likelihood of abandoning acquisition attempts and announcement returns, as well as the selection of top-tier advisors, respectively. Columns (9) to (12) examine the interaction effects of top-tier advisors and announcement returns on managers' propensity to cancel deals. All models control for year, industry, and country fixed effects, and standard errors are clustered at the country level. This table reports the marginal effects. The robust standard errors are shown between parentheses. Detailed variable definitions are shown in Table A1 in Appendix A. \*\*\*\* p < 0.01, \*\*\* p < 0.05, \*\* p < 0.1.

**Table 14** Alternative measures of advisor reputation.

Panel A: 3-day CARs Dependent variable: Cancellation (0/1) Alternative Classifications Alternative Continuous Measures Top-10 Advisor(0/1) Top-5 Advisor(0/1) Advisor Transaction Value Advisor Market Share Advisor Deal Number (1) (2) (3) (4) (5) 0.0203 0.0184 0.0206 0.0201 CAR(-1,1) 0.0138 (0.0269) (0.0277)(0.0281)(0.0281)(0.0281)Advisor Reputation 0.0076 0.0132\* 0.0038 0.0032 0.0042 (0.0072)(0.0066)(0.0026)(0.0023)(0.0030) $CAR(-1,1) \times Advisor Reputation$ -0.1983\*\* -0.1570\*\* -0.0580\*\* -0.0510\*\* -0.0664\*\* (0.0933)(0.0754)(0.0279)(0.0245)(0.0328)-0.0046\*\*\* -0.0049\*\*\* -0.0048\*\*\* -0.0048\*\*\* -0.0048\*\*\* Size (0.0018) (0.0018) (0.0018) (0.0018) (0.0018)Market-to-Book 0.0007 0.0006 0.0006 0.0006 0.0006 (0.0008)(8000.0)(0.0008)(0.0008)(0.0008)-0.0096\* -0.0096\* -0.0097 -0.0097\* -0.0097\* Run-up (0.0056) (0.0056) (0.0056) (0.0056) (0.0056) 1.1219\*\*\* Volatility 1.1266\*\* 1.1269\*\* 1.1265\*\* 1.1273\*\* (0.2327)(0.2327) (0.2328)(0.2327)(0.2328)Deal Value 0.0168\*\*\* 0.0161\*\*\* 0.0164\*\*\* 0.0164\*\*\* 0.0164\*\*\* (0.0021) (0.0022)(0.0022)(0.0022)(0.0022)Toehold 0.0001 0.0001 0.0001 0.0001 0.0001 (0.0002)(0.0002)(0.0002)(0.0002)(0.0002)Log(Num Advisors) -0.0189 -0.0203-0.0196 -0.0195-0.0194(0.0134)(0.0133)(0.0134)(0.0134)(0.0133)Defense dummy 0.0913\*\* 0.0919\*\* 0.0921\*\* 0.0922\*\* 0.0921\*\* (0.0367)(0.0367)(0.0367)(0.0367)(0.0367)Litigation dummy 0.0165 0.0176 0.0172 0.0172 0.0175 (0.0687)(0.0687)(0.0687)(0.0687)(0.0687)Friendly dummy -0.5200\*\*\* -0.5204\*\*\* -0.5201\*\*\* -0.5200\*\*\* -0.5201\* (0.0198) (0.0198)(0.0198)(0.0198)(0.0198)Tender Offer dummy -0.0038 -0.0036 -0.0036 -0.0036 -0.0035 (0.0084)(0.0084)(0.0084)(0.0084)(0.0084)0.0587\*\*\* 0.0588\*\*\* 0.0588\*\*\* 0.0588\*\*\* 0.0589\*\*\* Termination Fee dummy (0.0146)(0.0146)(0.0146)(0.0146)(0.0146)Stock dummy 0.0372\*\*\* 0.0370\*\*\* 0.0369\*\*\* 0.0369\*\* 0.0369\*\* (0.0074)(0.0074)(0.0074)(0.0074)(0.0074)Lockup dummy -0.1334\*\*\* -0.1370\*\*\* -0.1363\*\*\* -0.1363\*\*\* -0.1364\*\*\* (0.0482)(0.0482)(0.0482)(0.0482)(0.0482)Country Controls YES YES YES YES YES 0.5499\*\*\* 0.5563\*\*\* 0.5566\*\*\* 0.5563\*\*\* 0.5561\*\*\* Constant (0.1240)(0.1240)(0.1242)(0.1242)(0.1242)Year FE YES YES YES YES YES Industry FE YES Country FE 0.1611 0.1614 0.1612 0.1612 0.1612 Observations 7311 7311 7311 7311 7311

Dom of	ъ.	r 4	CADa
Panel	B:	5-day	CARS

Dependent	variable:	Cancellation	(0/1)

	Alternative	Classifications	Alter	Alternative Continuous Measures			
	Top-5 Advisor(0/1)	Top-10 Advisor(0/1)	Advisor Transaction Value	Advisor Market Share	Advisor Deal Number		
	(1)	(2)	(3)	(4)	(5)		
CAR(-2,2)	-0.0351	-0.0306	-0.0283	-0.0281	-0.0289		
	(0.0232)	(0.0239)	(0.0242)	(0.0243)	(0.0243)		
Advisor Reputation	0.0083	0.0143**	0.0040	0.0034	0.0045		
	(0.0072)	(0.0066)	(0.0026)	(0.0023)	(0.0031)		
$CAR(-2,2) \times Advisor Reputation$	-0.1794**	-0.1445**	-0.0552**	-0.0483**	-0.0621**		
	(0.0837)	(0.0669)	(0.0248)	(0.0218)	(0.0291)		
Size	-0.0045**	-0.0049**	-0.0048**	-0.0048**	-0.0048**		
	(0.0019)	(0.0019)	(0.0019)	(0.0019)	(0.0019)		
Market-to-Book	0.0007	0.0006	0.0007	0.0007	0.0007		
	(0.0008)	(0.0008)	(0.0008)	(0.0008)	(0.0008)		
Run-up	-0.0094*	-0.0094*	-0.0094*	-0.0094*	-0.0094*		
	(0.0057)	(0.0057)	(0.0057)	(0.0057)	(0.0057)		
Volatility	1.0727***	1.0733***	1.0771***	1.0771***	1.0780***		
	(0.2420)	(0.2420)	(0.2420)	(0.2420)	(0.2420)		
Deal Value	0.0168***	0.0161***	0.0164***	0.0164***	0.0164***		
	(0.0022)	(0.0022)	(0.0022)	(0.0022)	(0.0022)		
Гoehold	0.0001	0.0001	0.0001	0.0001	0.0001		
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)		

(continued on next page)

Table 14 (continued)

Panel	A٠	3-day	CARs
1 diller	41.	J-uay	GHIG

Dependent	variable	Cancellation	(0/1)
Dependent	variable.	Cancenation	(0/1)

	Alternative Classificat	ions	Alternative Continuous Meas	ures	
	Top-5 Advisor(0/1)	Top-10 Advisor(0/1)	Advisor Transaction Value	Advisor Market Share	Advisor Deal Number
Log(Num Advisors)	-0.0204	-0.0218	-0.0210	-0.0209	-0.0208
	(0.0135)	(0.0134)	(0.0135)	(0.0135)	(0.0134)
Defense dummy	0.0912**	0.0920**	0.0921**	0.0922**	0.0921**
	(0.0368)	(0.0367)	(0.0368)	(0.0368)	(0.0368)
Litigation dummy	0.0443	0.0453	0.0446	0.0447	0.0453
	(0.0688)	(0.0688)	(0.0688)	(0.0688)	(0.0688)
Friendly dummy	-0.5185***	-0.5183***	-0.5180***	-0.5180***	-0.5180***
	(0.0199)	(0.0199)	(0.0199)	(0.0199)	(0.0199)
Tender Offer dummy	-0.0041	-0.0039	-0.0039	-0.0039	-0.0038
	(0.0084)	(0.0084)	(0.0084)	(0.0084)	(0.0084)
Termination Fee dummy	0.0571***	0.0572***	0.0573***	0.0573***	0.0573***
	(0.0147)	(0.0146)	(0.0146)	(0.0146)	(0.0146)
Stock dummy	0.0348***	0.0345***	0.0344***	0.0344***	0.0344***
-	(0.0075)	(0.0075)	(0.0075)	(0.0075)	(0.0075)
Lockup dummy	-0.1431***	-0.1472***	-0.1464***	-0.1465***	-0.1467***
	(0.0483)	(0.0483)	(0.0483)	(0.0483)	(0.0483)
Country Controls	YES	YES	YES	YES	YES
Constant	0.9820	1.0268	1.0077	1.0079	1.0072
	(1.8399)	(1.8399)	(1.8399)	(1.8399)	(1.8399)
Year FE	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES
$R^2$	0.1794	0.1798	0.1796	0.1795	0.1795
Observations	7311	7311	7311	7311	7311

This table uses several alternative measures of top-tier advisors to rerun our baseline regression models. Panel A uses the 3-day CARs to measure the market reaction, while Panel B alternatively uses the 5-day CARs. For both Panel A and Panel B, the dependent variable is *Cancellation* and equals 1 if the deal is cancelled, and 0 otherwise. The estimations are based on Eq. 5. Following Golubov et al. (2012), in Columns (1)–(2), we reclassify top-tier advisors as *Top-5 Advisor* and *Top-10 Advisor*, which are dummy variables that equal 1 if the deal is advised by at least one top-5 or top-10 financial advisor on the Thomson One Banker league table, respectively, 0 otherwise. From Columns (3) to (5), we use three continuous measures to identify advisor reputation: 1) *Advisor Transaction Value*: the natural logarithm of the total transaction values for worldwide M&A deals advised by the advisor; 2) *Advisor Market Share*: the natural logarithm of the total market shares for worldwide M&A deals advised by the advisor; and 3) *Advisor Deal Number*: the natural logarithm of the total deal numbers for worldwide M&A deals advised by the advisors, in this case, we use the highest *Advisor Transaction Value*, *Advisor Market Share*, and *Advisor Deal Number* among the advisors. This table reports the marginal effects. The robust standard errors are shown between parentheses. Detailed variable definitions are shown in Table A1 in Appendix A. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

negatively related to deal cancellation. However, the interaction term,  $CAR(-1,1) \times Top$ -Tier Advisor, is statistically insignificant, confirming there is no significant effect of the presence of top-tier advisors on domestic deal withdrawal. This result is consistent with our prediction that there is less information asymmetry and more proximity between domestic bidders and their targets for domestic deals than is the case for CBAs. Golubov et al. (2012) show that top-tier advisors add value to bidders for public domestic deals, and our results contribute to the literature stream by identifying the crucial role of top-tier advisors in CBAs. Specifically, the presence of top-tier advisors adds value by withdrawing from value-destroying deals.

#### 4.3. Five-day CARs

As a robustness check of the main results in Table 6, we consider the corresponding 5-day CARs instead of 3-day CARs. Table 13 reports the results, which support our findings that the presence of top-tier financial advisors increases managers' propensity to consider market feedback in withdrawing from a proposed CBA with poor market returns.

#### 4.4. Alternative measures of advisor reputation

There is a robustness question concerning the definition of top-tier financial advisors. We construct two arrays of measures that alternatively define advisor reputation. First, we follow Golubov et al. (2012) and Guo et al. (2018) by performing robustness analysis using top-5 (*Top-5 Advisor*) and top-10 (*Top-10 Advisor*) cut-offs. *Top-5 Advisor* and *Top-10 Advisor* are dummy variables that equal 1 if the deal is advised by

at least one top-5 or top-10 financial advisor on the Thomson One Banker league table, respectively, and 0 otherwise. Second, we construct three continuous variables to identify advisor reputation based on the total transaction values, total market shares, and total deal numbers for worldwide M&A deals advised by an advisor. For each deal, *Advisor Transaction Value* is the natural logarithm of the total transaction values for worldwide M&A deals advised by an advisor, *Advisor Market Share* is defined as the natural logarithm of the total market shares, and *Advisor Deal Number* is the natural logarithm of the total number of deals for worldwide M&A deals advised by an advisor. A deal may be advised upon by several advisors, in which case we use the highest *Advisor Transaction Value*, *Advisor Market Share*, and *Advisor Deal Number* among those advisors.

Table 14 presents the empirical results. In Panel A, market reaction is measured by the 3-day CARs. Columns (1) and (2) reclassify top-tier advisors using *Top-5 Advisor* and *Top-10 Advisor*, respectively. In Columns (3) to (5), advisor reputation is measured by *Advisor Transaction Value*, *Advisor Market Share*, and *Advisor Deal Number*, respectively. The estimated coefficients on the interaction term,  $CAR(-1,1) \times Advisor$  *Reputation*, are significant and negative, which is very similar to those reported in our baseline findings using the top-8 cut-off in terms of both signs and significance levels. We also perform robustness analysis using the 5-day CARs in Panel B and obtain consistent results. Collectively, these findings are aligned with our main findings that the presence of highly reputable financial advisors increases managers' propensity to withdraw from CBAs with poor market returns around the deal announcement.

#### 5. Conclusion

Our key contribution is providing robust empirical evidence that toptier financial advisors increase managers' propensity to consider negative market feedback to CBAs in cancelling a deal. Our study is in line with both the research on the informative role of markets and on top-tier advisors' assistance in incorporating market input and guiding managers' decision making. As proposed by Luo (2005) and Kau et al. (2008), corporate executives rely on stock markets to infer relevant information to optimize M&A decisions. Our paper thus confirms the information role of market feedback in highly information-demanding

deals, such as CBAs.

In addition, in their role as M&A experts, top-tier investment banks recognize they have limited information regarding CBAs and value the essential role of information flows from capital markets to make informed decisions. This is even more the case when the target is a private firm, or the bidder is small in size. Further, our findings show no significant effects of top-tier advisors on acquisition abandonment in domestic deals, in which information asymmetries are less severe compared to CBAs. Overall, our paper emphasizes the informative role of stock markets and reveals the role of advisor reputation in global capital allocation.

#### Appendix A

**Table A1**Variable definitions.

Variable	Description	Data Source
Panel A: Dependent va	riable	
Cancellation	Dummy variable that equals 1 if the status of the acquisition attempt is "Withdrawn", 0 otherwise.	SDC
Panel B: Independent	variables	
CAR(-1,1)	3-day cumulative abnormal return based on the two-factor model of World MSCI market index and Local market index with a 200-day estimated window ( $-210$ to $-11$ ). $CAR(-2,2)$ refers the 5-day CARs.	DataStream and SDC
Top-Tier Advisor	Dummy variable that equals 1 if the deal is advised by at least one top-8 financial advisor on the Thomson One Banker league table, 0 otherwise.	SDC
Top-5 Advisor	Dummy variable that equals 1 if the deal is advised by at least one top-5 financial advisor on the Thomson One Banker league table, 0 otherwise.	SDC
Top-10 Advisor	Dummy variable that equals 1 if the deal is advised by at least one top-10 financial advisor on the Thomson One Banker league table, 0 otherwise.	SDC
Advisor Transaction Value	Natural logarithm of the total transaction values for worldwide M&A deals advised by the advisor.	SDC
Advisor Market Share	Natural logarithm of the total market shares for worldwide M&A deals advised by the advisor.	SDC
Advisor Deal Number	Natural logarithm of the total deal numbers for worldwide M&A deals advised by the advisor.	SDC
Public Target	Dummy variable that equals 1 if the target is a public firm, 0 otherwise.	SDC
Private Target	Dummy variable that equals 1 if the target is a private firm, 0 otherwise.	SDC
Subsidiary Target	Dummy variable that equals 1 if the target is a subsidiary firm, 0 otherwise.	SDC
Num Prior Times TA	Number of times that the bidder employed top-tier advisors in the 5 years prior to the announcement year.	SDC
Panel C: Firm-level con	ntrol variables	
Size	Natural logarithm of bidders' total assets.	DataStream
Market-to-Book	Market value to book value of bidders.	DataStream
Run-up	Bidders' pre-announcement stock price run-up, calculated by bidders' market-adjusted buy-and-hold abnormal return over 200 days ( $-210$ to $-11$ ) using the World MSCI market index as the benchmark.	DataStream and SDC
Volatility	Standard deviation of bidders' pre-announcement stock returns over 200 days ( $-210$ to $-11$ ).	DataStream and SDC
Panel D: Deal-level cor	ntrol variables	
Deal Value	Natural logarithm of deal transaction value.	SDC
Toehold	Bidders' "toehold" ownership of the targets' shares.	SDC
Log(Num Advisors)	Log (1+ the numbers of bidder's advisors).	SDC
Defense dummy	Dummy variable that equals 1 for the acquisition attempts in which the target firm undertakes defensive tactics to fend off the acquisition attempt, 0 otherwise.	SDC
Litigation dummy	Dummy variable that equals 1 for the acquisition attempts in which there exists initiation of litigation regarding the proposed acquisition, 0 otherwise.	SDC
Friendly dummy	Dummy variable that equals 1 for acquisition attempts in which the "attitude" of the proposed acquisition is neither hostile nor unsolicited, 0 otherwise.	SDC
Tender Offer dummy	Dummy variable that equals 1 for acquisition attempts structured as a tender offer, 0 otherwise.	SDC
Termination Fee dummy	Dummy variable that equals 1 for acquisition attempts that include termination fees that the potential bidder must pay to the target if the transaction is abandoned, 0 otherwise.	SDC
Stock dummy	Dummy variable that equals 1 for acquisition attempts financed or partially financed by the bidder's common stock, 0 otherwise.	SDC
Lockup dummy	Dummy variable that equals 1 for acquisition attempts including a lockup of target shares in which the potential bidder is granted an option to purchase shares at a fixed price even if a competing offer emerges, 0 otherwise.	SDC
		(continued on next page)

(continued on next page)

#### Table A1 (continued)

Variable	Description	Data Source	
Panel E: Country-level control variables			
Same Language	Dummy variable that equals 1 if bidders' and targets' primary language (English, Spanish, or Others) are the same, 0 otherwise.	CIA World Factbook	
Same Religion	Dummy variable that equals 1 if bidders' and targets' primary religion (Protestant, Catholic, Muslim, Buddhist or Others) are the same, 0 otherwise.	CIA World Factbook	
Same Rule of Law	Dummy variable that equals 1 if bidders' and targets' legal origin (Common law, Civil/French, Civil/ German, or Civil/Scandinavian) are the same, 0 otherwise.	(La Porta et al., 2008)	
Log(Geographic Distance)	Log(Great Circle Distance). The standard formula to measure Great Circle Distance is: $3963.00 \times arcos$ [sin (latitude1) $\times$ sin(latitude2) $+$ cos (latitude1) $\times$ cos (latitude2) $\times$ cos (longitude2 $-$ longitude1)], where latitude and longitude are the longitudes and latitudes of the capital cities of the bidder and the target country locations, respectively.	Maps of World	
Bidder Market Liquidity	Market turnover by value divided by GDP.	DataStream and World Bank Development Indicator	
Log(Bidder GDP/ Capita)	Logarithm of the bidder's annual GDP divided by its population.	World Bank Development Indicator	
Log(Target GDP/ Capita)	Logarithm of the target's annual GDP divided by its population.	World Bank Development Indicator	
Bidder GDP Growth	The annual growth rate of bidder's GDP.	World Bank Development Indicator	
Target GDP Growth	The annual growth rate of target's GDP.	World Bank Development Indicator	
Log(Bidder Population)	Logarithm of bidder's population.	World Bank Development Indicator	
Log(Target Population)	Logarithm of target's population.	World Bank Development Indicator	
Bidder Investment	The investment score of bidders.	International Country Risk Guide (ICRG)	
Target Investment	The investment score of targets.	International Country Risk Guide (ICRG)	
Bidder Law Order	The Law and Order score of bidders.	International Country Risk Guide (ICRG)	
Target Law Order	The Law and Order score of targets.	International Country Risk Guide (ICRG)	
Bidder Corruption	The Corruption score of bidders.	International Country Risk Guide (ICRG)	
Target Corruption	The Corruption score of targets.	International Country Risk Guide (ICRG)	
Bidder Politics	The Politics score of bidders.	International Country Risk Guide (ICRG)	
Target Politics	The Politics score of targets.	International Country Risk Guide (ICRG)	

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