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The Information Provision in the Corporate Acquisition Process: Why Target Firms Obtain Multiple Fairness Opinions

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ABSTRACT: Using a hand-collected dataset for takeovers from 1996 to 2013, I examine why some target firms obtain a second fairness opinion and the associated wealth effects of doing so. I find that multiple opinions are more likely to be used in deals in which management/investment bank conflicts of interest are high—e.g., buyouts and stapled financing deals. In addition, the use of a second opinion has a significantly positive impact on target shareholders' wealth in these two types of deals. Fairness opinion valuation predominantly relies on accounting data, and the benefit of seeking a second opinion increases with a firm's earnings quality. Collectively, the results suggest that a second opinion is used to facilitate transactions.

JEL Classifications: G34; G24; J33.

Keywords: mergers and acquisitions (M&As); fairness opinions; target returns; buyouts; stapled financing; earnings quality.

I. INTRODUCTION

This study investigates the causes and effects of a target firm's decision to use multiple fairness opinions in a takeover transaction. As part of the takeover process, a target board of directors often seeks a fairness opinion from an investment bank in its consideration of the proposed transaction. The purpose of seeking fairness opinions is to obtain an objective independent assessment of the value of the target firm in relation to the deal value. The question of how equity exchange values are determined is essential because these exchange values directly affect the gains to target shareholders.

Fairness opinions are a ubiquitous feature of takeover transactions. Cain and Denis (2013) report that "[v]irtually all target firms utilize at least one fairness opinion in negotiated mergers." Despite the unified action of obtaining fairness opinions by target firms, no consensus has been reached regarding whether fairness opinions in general add value to transactions, much less how a second opinion affects transaction outcomes. Proponents argue that fairness opinions benefit transactions by imposing impartial external constraints on equity values through independent valuations (e.g., DeAngelo 1990). Critics claim that fairness opinions are biased and uninformative because of a lack of objectivity when management and investment banks face conflicts of interest (e.g., Bebchuk and Kahan 1989).

Fairness opinions are under greater scrutiny when provided in transactions in which the perceived management/investment bank conflicts of interest are high. A typical situation resulting in high management conflicts is management/leveraged buyouts. In buyout deals, target management is often aligned with the buyer and, as such, its interests are likely to diverge from those of shareholders. In buyout deals, managers have a fiduciary duty to negotiate the highest price possible for their shareholders, offset by their incentives as purchasers to pay the lowest price possible. Although a fairness opinion is frequently used as a device to address the conflicts of interest in buyout deals, the opinion itself is closely scrutinized and criticized by shareholders

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Supplemental material can be accessed by clicking the link in Appendix B.

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in those situations. Shaw (1990) argues that the conflicts of interest arising in the interaction between management and bankers seriously impedes the integrity of the opinion rendered in buyout deals.

Investment banks' conflicts of interest derive mainly from the investment banks' fee structure. Bebchuk and Kahan (1989) argue that investment banks are inherently conflicted due to their compensation structure, in which advisory fees are contingent on deal completion. Cain and Denis (2013) report that about 80 percent of fairness opinion advisors receive fees that are contingent on merger completion. This contingent fee structure creates incentives for investment banks to help execute deals by rubber-stamping management proposals.

Stapled financing deals, a fairly recent financial contracting innovation introduced in 2001 (Povel and Singh 2010), further complicate the conflicts of interest faced by investment banks. In a stapled financing deal, target advisors (i.e., investment banks) also provide financing to potential bidders so that all bidders have access to financing. The motivation behind a stapled financing arrangement is to create a competitive auction process. However, because the investment bank usually plays a central role in conducting the auction process, including selecting potential bidders, inviting selected bidders into subsequent rounds of bidding, and ultimately recommending the final (i.e., the best) bidder to the target board, conflicts of interest can arise because the investment bank may favor a bidder likely to use stapled financing even if that bidder does not offer the highest price. In such a scenario, receiving a financing fee could compromise the independence of the advisor, as well as the fairness opinion rendered by that same advisor.[1]

Due to the high conflicts of interest discussed above, regulators, practitioners, and academics propose that target firms seek second fairness opinions. Shaw (1990) suggests that in buyout deals, an independent committee should consider hiring a second investment bank to review the opinion. Povel and Singh (2010) note that in practice, target firms have started to split the lending and advisory functions between two independent investment banks because of the obvious conflicts of interest. Anecdotal evidence also suggests that in recent years, increasing numbers of target firms have obtained second opinions (Davis and Berman 2005). In this paper, I am among the first to provide empirical evidence on why some target firms choose to seek a second opinion and how this choice affects deal outcomes.

Using a large hand-collected sample of U.S. deals over the period 1996–2013, I first show a significant increase in the use of multiple opinions by target firms, rising from 5.6 percent in the first three years (1996 to 1998) of the sample period to 16.2 percent in the last three (2011–2013). A cross-sectional analysis on the determinants of a second opinion decision suggests that a second opinion is much more likely to be used in buyout and stapled financing deals. In addition, hostile deals are more likely to have multiple opinions, and deal size is also significantly positively related to a decision to seek a second opinion. These results suggest that a second opinion is more likely to be used when perceived conflicts of interest are high and when deals are more complex.

To investigate how the choice of using multiple opinions affects deal outcomes, I examine target firms' price reactions around the merger announcement date. The ordinary least squares (OLS) regression results suggest that the use of multiple opinions does not harm shareholders' wealth once I control for firm and deal characteristics. I also employ a two-stage least squares (2SLS) regression analysis in an effort to control for potential endogeneity caused by the endogenous decision to seek a second opinion. Two-stage regressions require a valid instrumental variable that affects the outcome variable only through its effect on the choice variable. My instrument used in the 2SLS is the concurrent demand for multiple opinions.[2] The 2SLS results again find no evidence that the use of a second opinion destroys shareholders' wealth. In fact, the 2SLS results are positive and statistically significant. However, one should interpret the 2SLS results with caution because they rely heavily on the instrument variable, which can be imperfect.

To further investigate how the use of multiple opinions affects target shareholders' wealth in situations in which the potential for conflicts of interest is high, I examine the impact of using multiple opinions on target announcement returns in buyout and stapled financing deals. The results show significantly positive wealth effects associated with the use of a second opinion in both buyout and stapled financing deals. These results suggest that seeking a second opinion is beneficial to target shareholders' wealth in deals with high conflicts of interest, consistent with DeAngelo (1990), who suggests that a second opinion can facilitate a transaction by resolving disagreement among stockholders over the exchange value, especially in situations in which the level of disagreement is high. DeAngelo (1990) shows that a target's stock price is an inadequate measure of its acquisition value, and that the inability to rely on capital markets to value a transaction generates disagreement among stockholders. DeAngelo (1990) argues that fairness opinion valuations that mainly rely on accounting numbers impose impartial external constraints on equity exchange values. An additional independent valuation from a second advisor helps ensure that these values are perceived as fair by shareholders and facilitates transactions.

[1] In addition to management/leverage buyout transactions and stapled financing deals, other types of transactions involve a public bidder or a private strategic bidder. In these transactions, the perceived conflicts of interest are relatively lower because the management is usually independent of the buyer.

[2] See Section IV for detailed discussion on the construction of the instrumental variable.

To further explore how fairness opinion valuation utilizes accounting information, I collect detailed information on the valuation methods disclosed in proxy documents for 64 transactions with multiple opinions announced in the last five years of the sample period, for a total of 476 valuation analyses. The most commonly used valuation methods by both fairness opinion providers are public company multiple analysis, precedent transaction analysis, and discounted cash flow analysis. A detailed inspection of each method reveals that valuation techniques employed in fairness opinions predominantly rely on accounting information, especially accounting earnings. Additional analyses suggest that the benefits of seeking a second opinion increase with a target firm's earnings quality. These results support the argument in DeAngelo (1990) that "[t]he role of accounting information in equity valuation (and corporate governance) is broader than previously thought."

Finally, I conduct subperiod analyses in the pre- and post-Sarbanes-Oxley Act (SOX) periods. Although SOX does not explicitly regulate investment banks in providing fairness opinions, it increases the scrutiny of such opinions and increases firms' need for independent opinion providers by emphasizing more on conflicts of interest (Kisgen, Qian, and Song 2009). The results on subperiod analyses suggest that the positive wealth effects associated with the use of a second opinion in buyout deals are concentrated in the post-SOX period, suggesting that SOX is effective in emphasizing independent valuation and investment bank conflicts.

This paper makes several contributions to the accounting and finance literatures. While the question of whether and how a target board should rely on a second fairness opinion in mergers and acquisitions (M&As) has been hotly debated among practitioners, lawyers, and regulators, academic attention has been scant. One exception is Kisgen et al. (2009), who investigate the determinants, but not the consequences, of a target's decision to seek multiple opinions. More importantly, Kisgen et al. (2009) exclude private bidders in their analysis and, thus, omit situations in which a second opinion would be most necessary. This paper is the first to study the wealth effects (i.e., the consequences) associated with a target's use of multiple fairness opinions by examining the target firm's price reaction around merger announcements. The tests of price reactions shed light on the ongoing debate of whether a second opinion sought by a target board is used to benefit managers or to benefit shareholders. Vice Chancellor of the Delaware Court of Chancery Leo Strine states that a second opinion protects management and investment banks, but does little to benefit target shareholders.[3] The empirical evidence provided in this paper suggests that the use of a second opinion does benefit target shareholders, especially in situations with high conflicts of interest.[4]

Prior studies investigating fairness opinions generally focus on whether a target firm obtains a single opinion (as opposed to obtaining no opinion at all) and rely on data from the Securities Data Corporation (SDC) (e.g., Bowers 2002; Bowers and Latham 2006; Makhija and Narayanan 2007). These studies report evidence consistent with a target board of directors obtaining fairness opinions as a way to entrench management. However, as pointed out by Kisgen et al. (2009), SDC reports incomplete information on fairness opinions and, in fact, the use of fairness opinions is a ubiquitous feature of takeover transactions. Thus, accepting the entrenchment conclusion based on incomplete data may be questionable.[5] Results reported in this paper suggest that a second opinion is mainly used to facilitate transactions as opposed to entrench management.

This study also extends DeAngelo's (1986, 1990) suggestion that accounting numbers can serve as market valuation substitutes in takeover transactions because the target stock price is an inadequate measure of its acquisition value. DeAngelo (1990) inspects four investment banks' working papers and finds that investment banks' valuation techniques make extensive use of accounting data. The author acknowledges that the ability to generalize from these four working papers is limited. My analysis of valuation methods for multiple-opinion transactions in the last five years of the sample period confirms that investment banks indeed predominantly rely on accounting numbers. In addition, the finding that the benefits of seeking multiple opinions increase with a target firm's earnings quality provides further evidence that the informativeness of fairness opinion valuations depends on the quality of the accounting data.

Finally, this paper contributes to the small, but growing, literature on stapled financing, which has only recently been studied in academic work. Boone and Mulherin (2008) are among the earliest to study the relation between stapled financing and takeover competition. Povel and Singh (2010) develop a theoretical model that argues that stapled financing intensifies bidding competition by subsidizing weak bidders. Aslan and Kumar (2017) report empirical evidence consistent with the predictions in Povel and Singh (2010). In contrast, I focus on the role of multiple fairness opinions in stapled financing deals.

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[3] See *In re Toys "R" Us, Inc. S'holder Litig.*, 877 A. 2d 975, 1006 n. 46 (Del. Ch. 2005).

[4] Prior studies examining the wealth effects of fairness opinions used by *bidders* include Kisgen et al. (2009), Chen and Sami (2006), and Frye and Wang (2010), among others. These studies generally find a negative relation between bidder returns and bidder use of fairness opinions. However, Cain and Denis (2013) point out a potentially severe sample selection bias in those studies because the use of fairness opinions by bidders is typically unobservable unless bidders issue more than 20 percent new equity to finance the deal. By focusing on bidders that issue more than 20 percent new equity, Liu (2018) reports no negative wealth effects associated with the use of fairness opinions by bidders.

[5] See Table IA1 in the Online Appendix for more discussion on the potential bias introduced in fairness opinion analysis when solely relying on fairness opinion data from SDC (see Appendix B for the link to the downloadable file).

My findings suggest that in stapled financing deals, a second fairness opinion benefits target shareholders by facilitating the transaction.

II. INSTITUTIONAL BACKGROUND

The Use of a Fairness Opinion

In M&As, a target board of directors often seeks a fairness opinion from an investment bank when considering a proposed transaction. The stated purpose of the opinion is to provide an objective independent assessment of the value of the target firm in relation to the deal value. Normally, a range of potential values of the target firm is provided in the opinion, together with the analytical methods used in deriving the price range. The three most commonly used methods are discounted cash flow (DCF) analysis, public company multiple analysis, and precedent transaction analysis. Fairness opinions are requested by the target board, but then usually are conveyed to shareholders in merger/tender offer documents. After comparing the offer price with the price ranges derived from various analytical methods, investment banks state whether the price received in the transaction is fair from a financial point of view to target shareholders.

Although the ubiquitous use of fairness opinions can be traced back to the 1970s, the need for a fairness opinion was not recognized by the Delaware courts as part of the corporate control transaction process until the Court issued its decision in *Van Gorkom* in 1985.[6] The Court held that the target board of directors breached their fiduciary duty of care in making an informed judgment in approving the merger. The use of a fairness opinion is emphasized in the *Van Gorkom* decision, in which one of the principal bases for the Court's holding was the failure of the board in its decision-making process to obtain an independent financial analysis regarding the intrinsic value of the target firm. One implication of the *Van Gorkom* (1985) decision is that the target board, as part of its duty of care in a corporate control transaction, was now obligated to duly inform itself regarding its corporation's sale value through a well-prepared financial analysis (Davidoff 2006).

The Concerns of Management Conflicts and the Use of a Second Opinion

In the post-*Van Gorkom* period, fairness opinions are widely used as a way to help the target board make informed decisions. However, critics have questioned their efficacy and usefulness, especially in transactions in which perceived conflicts of interest are high. Management buyouts or going-private transactions are typical situations in which significant management conflicts of interest can arise. Conflicts of interest in management buyouts or going-private transactions are widely believed to result in the unfair treatment of public stockholders (H. DeAngelo, L. DeAngelo, and Rice 1984). DeAngelo et al. (1984) argue that although management owes a fiduciary duty to the public shareholders to negotiate fair value for their shares, management, as the purchaser of those shares, has a countervailing incentive to minimize the compensation paid. This belief that management conflicts induce unfair treatment of public shareholders generates public disagreement on the deal price, widespread headlines, and shareholder lawsuits.

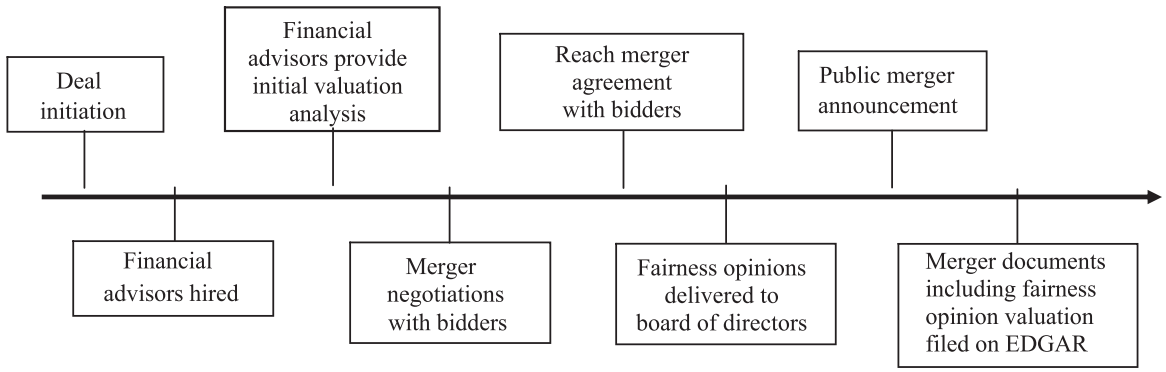
To mitigate management conflicts in going-private transactions, the U.S. Securities and Exchange Commission (SEC) proposed requiring that two independent advisors evaluate the consideration offered and determine its fairness (DeAngelo et al. 1984). Although the requirement of two independent valuations was never adopted, the potential use of a second opinion has been recognized by regulators and academics. Shaw (1990) suggests that in buyout deals, an independent committee should consider hiring a second investment bank to review the opinion. DeAngelo (1990) argues that disagreement on the deal price can make a transaction fail even if the transaction will increase value, because stockholders' cooperation is required to complete the transaction. Thus, in buyout deals, an additional independent valuation from a second advisor can help ensure that these values are perceived as fair and, therefore, will facilitate transactions.

The Concerns of Investment Bank Conflicts of Interests and the Use of a Second Opinion

Investment banks have also been under scrutiny over conflicts of interest, which derive from investment banks' fee structure and the nature of their relationships with firms. Bebchuk and Kahan (1989) argue that investment banks are inherently conflicted due to their compensation structure, in which advisory fees are contingent on deal completion. Thus, investment banks have a strong incentive to render a fairness opinion that will facilitate the completion of a deal, but may not reflect a true assessment of the deal. Cain and Denis (2013) report that about 80 percent of fairness opinion advisors receive fees that are contingent on merger completion. Thus, any unfair verdicts might jeopardize a substantial portion of their investment banking fees.

[6] DeAngelo (1990) reports that 95 percent of the target firms obtained fairness opinions in a sample of 64 buyout deals. Davidoff (2006) reports that prior to 1985, fairness opinions were rarely mentioned in Delaware jurisprudence.

FIGURE 1
The Timeline of a Typical U.S. Merger Deal



This figure illustrates the timeline of fairness opinions and the merger negotiation process in the United States.

Investment banks' incentive problems become even more severe in stapled financing deals. Stapled financing is a loan commitment prearranged by the target firm through an investment bank (i.e., its financial advisor). The winning bidder has the option, but not the obligation, to accept this loan commitment. Stapled financing is a fairly recent financial contracting innovation; introduced in 2001, it played a significant role during the leveraged buyout boom of 2005–2007 (Povel and Singh 2010; Aslan and Kumar 2017). The main motivation for a target board to adopt stapled financing is that it ensures the availability of financing for all potential bidders, which should, in theory, create a competitive auction process. However, conflicts arise because the investment bank collects both an advising fee from the target and a financing fee from the bidder. In addition to precipitating conflicts inherent in the contingent advising fee structure, an investment bank may favor a bidder likely to use the stapled financing offer even if their bid is not the highest on offer, because the resulting deal will generate both advising and financing fees. Not surprisingly, fairness opinions provided by investment banks that provide stapled financing generate high levels of controversy and shareholder litigations.[7]

To avoid potential conflicts of interest faced by investment banks, a second independent fairness opinion is often viewed as a good step. In a *Wall Street Journal* article, Davis and Berman (2005) report that "Wall Street firms are requiring or recommending second opinions in certain transactions in which they have heightened incentives to see a deal go through." As of 2005, both Goldman Sachs and Credit Suisse have recommended that target firms obtain a second, separate opinion when the bank represents the target and provides stapled financing options to potential bidders (Davis and Berman 2005). Carlsson-Sweeny (2010) points out that many banks now have internal policies that do not allow them to be the only bank giving a fairness opinion if they are also providing a stapled financing service. In those situations, the target board is advised to retain an independent financial advisor who is not part of the stapled financing to furnish a second fairness opinion.

Although seeking a second opinion may be beneficial to shareholders, doing so is not without costs. Firms incur various direct and indirect costs associated with obtaining a second opinion.[8] In equilibrium, managers should behave rationally and make decisions based on the cost-benefit trade-offs. If managers act for the best interest of shareholders, then we expect that the stock market reaction to the use of a second opinion will be non-negative, because managers only seek a second opinion when the expected benefits justify their costs. On the other hand, as argued by Vice Chancellor Leo Strine, if managerial opportunism drives this decision, then the stock market reaction should be significantly negative.

Figure 1 illustrates a typical timeline of a merger negotiation process and fairness opinions. As documented in Boone and Mulherin (2007), there is an active private sales process in which several steps and a few rounds of private negotiations occur

[7] For example, in the *Del Monte* decision in 2011, the court found that the financial advisor sought authorization from the company regarding a buy-side financing only after working with a private equity firm to develop financing. Ultimately, the court approved an $89.4 million settlement to resolve the claims in this case based on the improper management of the merger. See *In re Del Monte Foods Co. S'holders Litig*., 25 A. 3d 813 (Del. Ch. 2011). Transcript of Record at 1, *Del Monte,* No. 6027-VCL (Del. Ch. December 1, 2011). This decision potentially contributed to the sharp decrease of stapled financing deals in 2012 and 2013.

[8] Please see the subsection "The Use of Multiple Opinions and Conflicts of Interest" for more discussion on direct and indirect costs of seeking fairness opinions.

TABLE 1

Sample Selection

Data Selection Criteria	Data Source	Number of Obs.
M&A between 1996 and 2013 and deal value $\geq$ 20 million	SDC	44,414
Form of the deal: Mergers and acquisitions	SDC	12,768
Deal status: Complete, withdrawal	SDC	12,421
Percent of shares sought $\geq$ 50	SDC	11,840
Public targets	SDC	6,572
Target share price one day prior to announcement $\geq$ \$5	SDC	4,949
Target returns available on CRSP	CRSP	3,958
Exclude deals without SEC filings available on EDGAR website	SEC filings	3,353
Exclude deals with the same targets announced in previous 12 months	SDC	3,203
At least one fairness opinion on the target side	SEC filings	3,144

This table describes the formation process of the sample to be used in the empirical study. I draw deals from the 1996 to 2013 time period. I require that target firms be public firms and that deal status be either completed or withdrawn. I also require that the deal value reported by SDC be \$20 or more and that the form of the deal be either merger or acquisition. I further require that bidders seek to purchase 50 percent or more of target ownership. I merge SDC with CRSP to get the target price and return data around merger announcements. I drop deals without return information on a CRSP target stock price of less than \$5 the day prior to the public announcement date. I further exclude deals in which the merger documents are not available on the EDGAR. Finally, I keep the initial announcement of the target if there are multiple announcements made for the same target (by different bidders) within a year.

prior to the public announcement of a merger. Financial advisors are usually hired early in this process, although they might not be retained at the exact same time.[9] These advisors typically provide valuation estimates throughout the entire process, while formal written opinions are provided to the target board just one or two days prior to the public announcement of the merger. The written opinions are then disclosed in proxy statements through electronic filings on the SEC Electronic Data Gathering, Analysis, and Retrieval website (EDGAR) a few weeks after the public announcement. The Online Appendix provides an example of the use of a second opinion in a buyout deal and an example of a stapled financing deal using multiple opinions.[10]

III. DATA, SAMPLE SELECTION, AND SUMMARY STATISTICS

The Sample Formation, Distribution, and Summary Statistics

I begin with all SDC M&A deals announced between January 1, 1996 and December 31, 2013, since, as of May 6, 1996, all public domestic companies were required to make their filings on the SEC EDGAR website. Table 1 describes the steps taken to form the final sample of 3,144 deals involving public targets with a stock price of at least \$5 prior to the public announcement date.[11] I hand-collect information on fairness opinions and stapled financing from merger documents because SDC reports inaccurate information on these two variables.[12]

[9] The example provided in the Online Appendix shows that the first advisor, J.P. Morgan, was hired on August 29, 2012 and the second advisor, Evercore, was engaged on January 8, 2013. This deal was initiated eight months prior to its public announcement. Because of management conflicts of interest (i.e., CEO participation in the transaction), a special committee was formed about two months after the deal initiation. The special committee retained J.P. Morgan and Evercore as its financial advisors; both delivered fairness opinions. See Boone and Mulherin (2017) for more discussion on special committees.

[10] The Online Appendix illustrates that the target board engaged Jefferies & Company as its financial advisor to help with the sale of the firm. During the sale process, on behalf of the company, Jefferies contacted more than 100 potential buyers, including the final winning bidder, Fertitta. Later in the process, Jefferies informed the company that Fertitta was having difficulty securing financing for the transaction. After weighing the potential benefits and costs of stapled financing, the company board approved Jefferies as a provider of financing to Fertitta. Shortly thereafter, KeyBanc Capital Markets was engaged as an independent advisor and provided a second fairness opinion.

[11] Removing target firms with a stock price lower than \$5 ensures that the results are not driven by market microstructure effects such as bid-ask bias in announcement returns (Ball, Kothari, and Shanken 1995; Boone and Mulherin 2008). Also, I only keep the initial announcement of the target if there are multiple announcements made for the same target (by different bidders) within a year. SDC treats these announcements with the same target as different observations. However, after the initial announcement, the target price already reflects some merger information; thus, the deal premiums for later announcements are biased. Finally, I exclude target firms that did not obtain any opinions to focus on comparing the effects of obtaining a single versus multiple opinions.

[12] During my sample period, SDC reports one stapled financing deal, while I identify 49 such deals through merger documents. The number is similar compared to that of Aslan and Kumar (2017), who report 45 stapled financing deals during 2002–2011. The Online Appendix provides more discussion on potential bias using SDC fairness opinion data.

TABLE 2

Sample Distribution

Panel A: Sample Distribution by Year and Structure of Fairness Opinions

Year	Frequency	%	1FO	% 1FO	MFO	% MFO
1996	218	6.9	206	94.5	12	5.5
1997	339	10.8	322	95.0	17	5.0
1998	298	9.5	279	93.6	19	6.4
1999	382	12.2	361	94.5	21	5.5
2000	268	8.5	252	94.0	16	6.0
2001	168	5.3	160	95.2	8	4.8
2002	86	2.7	78	90.7	8	9.3
2003	120	3.8	107	89.2	13	10.8
2004	152	4.8	137	90.1	15	9.9
2005	160	5.1	131	81.9	29	18.1
2006	207	6.6	172	83.1	35	16.9
2007	209	6.6	181	86.6	28	13.4
2008	91	2.9	84	92.3	7	7.7
2009	65	2.1	55	84.6	10	15.4
2010	97	3.1	83	85.6	14	14.4
2011	63	2.0	49	77.8	14	22.2
2012	114	3.6	97	85.1	17	14.9
2013	107	3.4	92	86.0	15	14.0
Total	3,144	100.0	2,846	90.5	298	9.5

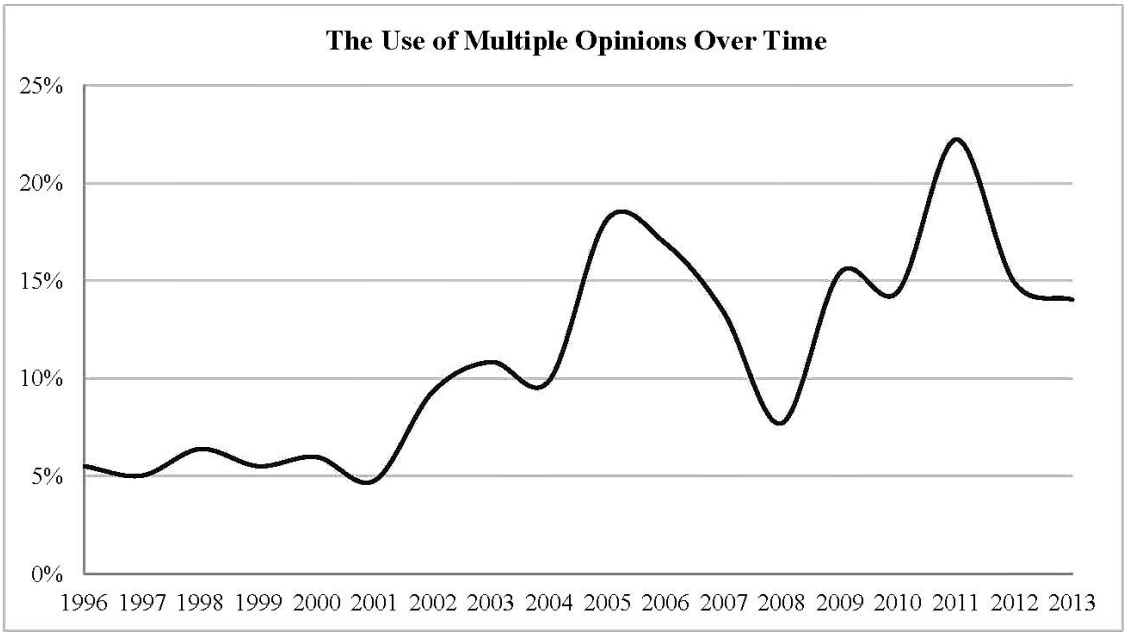
Panel B: Use of Multiple Fairness Opinions by Industry

Rank	Industry	Frequency	MFO	%_MFO
1	Banking	628	33	5.3
2	Business Services	469	36	7.7
3	Financial Trading	200	18	9.0
4	Electronic Equipment	170	16	9.4
5	Pharmaceutical Products	124	18	14.5
6	Computers	114	4	3.5
7	Petroleum and Natural Gas	112	22	19.6
8	Retail	109	12	11.0
9	Telecommunication	106	23	21.7
10	Medical Equipment	98	8	8.2
11	Insurance	93	10	10.8
12	Utilities	88	12	13.6
13	Health Care	78	9	11.5
14	Wholesale	72	10	13.9
15	Restaurants, Hotels, Motels	72	10	13.9

This table reports sample distribution by year (Panel A) and industry (Panel B) for the sample period of 1996 to 2013. Observations are placed in the year of announcement. In Panel A, data are reported for the full sample and for different structures of fairness opinions: 1FO indicates that the target side obtained only one fairness opinion, and MFO indicates that the target side obtained multiple fairness opinions. In Panel B, data are reported by industry based on Fama and French's (1997) 48-industry classification.

Table 2 presents the temporal distribution of my sample. Consistent with prior studies that document merger waves for publicly traded targets in the late 1990s (e.g., Andrade, Mitchell, and Stafford 2001), Panel A reports that transactions cluster in the first half of the sample period, with two-thirds of transactions in the sample announced over the 1996–2003 period. The last column of Panel A reports the percentage of multiple fairness opinions by year. Results indicate an increasing use of multiple opinions over time. Figure 2 illustrates the pattern of the use of multiple opinions over time. Figure 3 displays the pattern of buyout deals and stapled financing deals over time. The patterns revealed in Figures 2 and 3 are very similar: During 2005–2007, the percentage of deals using multiple opinions is high, coinciding with a high percentage of buyout deals and stapled

FIGURE 2
Target Firms' Use of Multiple Fairness Opinions Over Time



This figure displays the percentage of the use of multiple fairness opinions on the target side by year over the sample period of 1996 to 2013. For each year, the percentage is computed by using the number of deals with multiple fairness opinions on the target side divided by the total number of deals in that year. Observations are placed in the year of announcement.

financing deals during the same period; the percentage of deals seeking multiple opinions decreases during the financial crisis, coinciding with low percentages of buyout deals and stapled financing deals during that period. These patterns provide initial evidence suggesting that a second opinion is more likely to be used in buyout and stapled financing deals.

Panel B of Table 2 reports the sample distribution and the use of multiple opinions by industries. The top five industries are banking, business services, financial trading, electronic equipment, and pharmaceutical products. A wide variation is also observed in the use of multiple opinions by industries, with over 20 percent in the telecommunications industry using them, while less than 4 percent do so in the computer industry.

Table 3 reports attributes of the sample firms. Panel A presents summary statistics for the full sample. Definitions of all variables are provided in Appendix A. Consistent with prior research, such as Boone and Mulherin (2007) and Andrade et al. (2001), on average, target firms gain 21 percent over a five-day window of (−2, +2), 24 percent over a 21-day window of (−10, +10), and 32 percent over the longest event window of (−63, +126).[13] The mean (median) deal value is $1.9 ($0.41) billion. About 38 percent of the deals are diversifying. Only 3 percent of the deals are classified as hostile, 4 percent of the deals have bidders with a toehold, and 4 percent of the deals face competitive bidders, consistent with Liu and Mulherin (2018), who report that public competing bids have declined dramatically since 1990. About 8 percent of the deals start as a rumor, 36 percent of the deals are financed by cash, and 17 percent are tender offers. Six percent of the deals are withdrawn.[14] Sixteen percent of the bidders are private bidders, with 9 percent of the deals being buyouts. The average Tobin's Q is 1.89 and the average ROA is 1 percent.

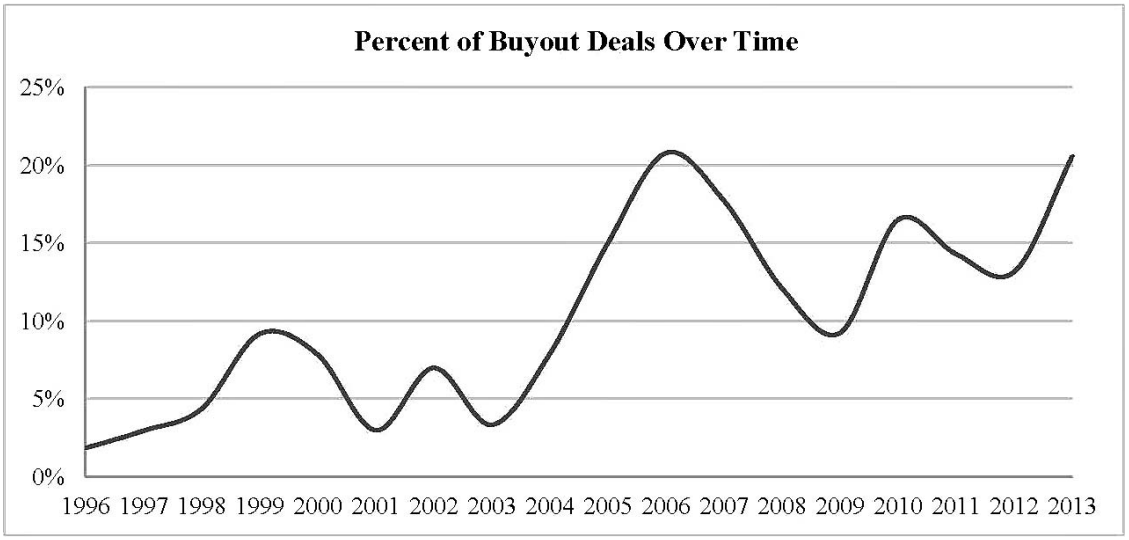
Panel B of Table 3 reports summary statistics for different fairness opinion structures. The simple average comparison indicates that deals with multiple opinions have lower *CAR* over all three event windows. The return difference ranges from 4 percent to 8 percent depending on the event windows, and is statistically significant at the 1 percent level. However, Panel B also shows that, on average, deals with multiple opinions are significantly larger. The median transaction value of deals with

[13] Target cumulative abnormal returns (*CAR*) are net of market returns. Market index is the CRSP value-weighted index, and day 0 is the public merger announcement date. The longer event windows are motivated by the lengthy negotiation process illustrated in Figure 1, and are designed to capture the well-documented pre-announcement price run-up effect and the post-announcement mark-up effect (e.g., Schwert 1996, 2000; Boone and Mulherin 2007; Mulherin and Simsir 2015).

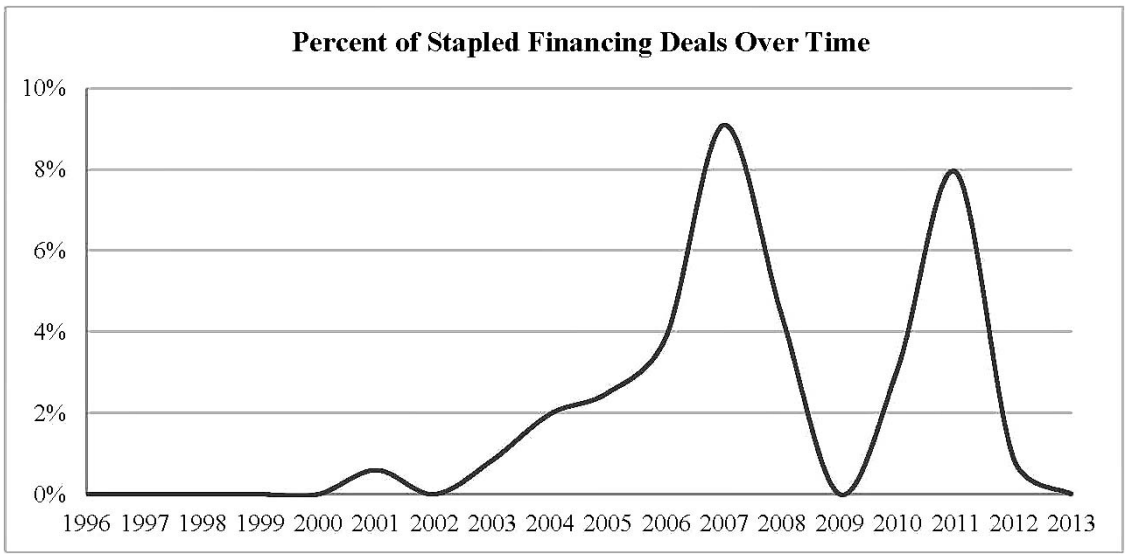
[14] The withdrawn percentage is lower relative to the literature mainly because some withdrawn deals without available merger documents are excluded.

FIGURE 3
The Percent of Buyout and Stapled Financing Deals Over Time

Panel A: Percent of Buyout Deals Over Time



Panel B: Percent of Stapled Financing Deals Over Time



This figure displays the percentage of buyout/stapled financing deals over the sample period of 1996 to 2013. For each year, the percentage is computed by using the number of buyout/stapled financing deals divided by the total number of deals in that year. Observations are placed in the year of announcement.

multiple opinions is almost five times the median value of deals with a single opinion. Prior literature shows that deal/target size is negatively related to *CAR* (Officer 2003). Thus, the simple mean comparison without controlling for deal and firm characteristics is minimally informative. In addition, results indicate that deals with multiple opinions are more likely to involve private bidders. Twenty-eight percent of multiple-opinion deals involve private bidders, versus only 15 percent of single-opinion deals. The difference is 13 percent, statistically significant at the 1 percent level. The observed difference is likely driven by buyout deals, as discussed in Section II. Indeed, when investigating the percent of buyouts instead of all private bidders, I find that the difference is mainly driven by buyout deals, with 8 percent of buyouts in the single-opinion group and 21

TABLE 3

Summary Statistics

Panel A: Summary Statistics for the Full Sample

Variable	Mean	Median	25th Pctl	75th Pctl	n	Std. Dev.
CAR (−2, +2)	0.21	0.19	0.08	0.31	3,144	0.21
CAR (−10, +10)	0.24	0.21	0.10	0.36	3,144	0.24
CAR (−63, +126)	0.32	0.29	0.12	0.49	3,144	0.36
MFO	0.09	0.00	0.00	0.00	3,144	0.29
Deal Value	1,905.73	418.56	146.57	1,384.11	3,144	6,163.74
Diversifying	0.38	0.00	0.00	1.00	3,144	0.49
Compete	0.04	0.00	0.00	0.00	3,144	0.20
Hostile	0.03	0.00	0.00	0.00	3,144	0.16
Rumor	0.08	0.00	0.00	0.00	3,144	0.27
Cash	0.36	0.00	0.00	1.00	3,144	0.48
Toehold	0.04	0.00	0.00	0.00	3,144	0.19
Tender Offer	0.17	0.00	0.00	0.00	3,144	0.37
Withdrawn	0.06	0.00	0.00	0.00	3,144	0.23
Private Bidder	0.16	0.00	0.00	0.00	3,144	0.37
Buyout	0.09	0.00	0.00	0.00	3,144	0.29
Stapled Financing	0.02	0.00	0.00	0.00	3,144	0.12
Tobin's Q	1.89	1.28	1.05	1.94	3,026	2.10
ROA	0.01	0.03	0.00	0.07	3,032	0.15

Panel B: Summary Statistics by the Use of Multiple Fairness Opinions

	Mean	Median	Mean	Median	Diff	t-value
Variable	*MFO* = 0		*MFO* = 1		*MFO* (0) − *MFO* (1)	
CAR (−2, +2)	0.22	0.19	0.17	0.14	0.04***	3.47
CAR (−10, +10)	0.25	0.22	0.19	0.17	0.06***	4.51
CAR (−63, +126)	0.33	0.30	0.25	0.22	0.08***	3.58
Deal Value	1,529.00	371.46	5,503.62	1,746.33	−3,974.60***	−10.78
Diversifying	0.37	0.00	0.44	0.00	−0.06**	−2.14
Compete	0.04	0.00	0.08	0.00	−0.04***	−3.35
Hostile	0.02	0.00	0.08	0.00	−0.06***	−5.71
Rumor	0.07	0.00	0.23	0.00	−0.16***	−9.88
Cash	0.36	0.00	0.40	0.00	−0.05	−1.62
Toehold	0.04	0.00	0.06	0.00	−0.03**	−2.31
Tender Offer	0.17	0.00	0.14	0.00	0.03	1.44
Withdrawn	0.05	0.00	0.07	0.00	−0.02	−1.35
Private Bidder	0.15	0.00	0.28	0.00	−0.12***	−5.50
Buyout	0.08	0.00	0.21	0.00	−0.13***	−7.66
Stapled Financing	0.01	0.00	0.09	0.00	−0.08***	−4.81
Tobin's Q	1.88	1.28	1.98	1.33	−0.10	−0.76
ROA	0.01	0.02	0.01	0.03	0.00	−0.33

(continued on next page)

percent in the multiple-opinion group. These results are consistent with Bargeron, Schlingemann, Stulz, and Zutter (2008), who suggest that private operating companies are similar to public acquirers in that the main motivation of the acquisition is to exploit operating synergies. Thus, in deals involving private operating firms, management conflicts are less severe compared to in buyout deals involving private equity bidders, because management is likely to have a direct interest in buyout deals.

Consistent with my expectation that a second opinion is more likely in stapled financing deals, Panel B of Table 3 reports that 9 percent of deals with multiple opinions offer stapled financing, compared to only 1 percent of deals with a single opinion. Finally, the significant difference of the rumor dummy between these two groups indicates that focusing on longer windows to avoid measurement bias in the multiple-opinion group is important. If a deal starts with a rumor, then the stock price at the

TABLE 3 (continued)

Panel C: Use of Multiple Opinions by Bidder Type and Stapled Financing

	Mean	Median	25th Pctl	75th Pctl	n	Std. Dev.
Bidder Type						
Public	0.08	0.00	0.00	0.00	2,625	0.27
Private non-buyout	0.08	0.00	0.00	0.00	226	0.27
Buyout	0.22	0.00	0.00	0.00	293	0.41
Financing Type						
Non-stapled financing	0.09	0.00	0.00	0.00	3,095	0.28
Stapled financing	0.53	1.00	0.00	1.00	49	0.50

***, **, * Correspond to statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.
This table presents summary statistics of M&A deals between the sample periods 1996–2013. Panel A reports the summary statistics for the full sample. Panel B reports the summary statistics for different fairness opinion structures: simple opinion versus multiple opinions. The last two columns of Panel B report paired t-tests that test the null that the means of the two samples are equal. Panel C reports the use of multiple opinions by bidder and financing types.
Definitions of all variables are provided in Appendix A.

announcement is likely to have already incorporated some merger anticipation, thus reducing the abnormal returns around the public announcement. If the multiple-opinion group has a higher percent of rumor deals, focusing on *CAR* around a short window would introduce downward bias when measuring wealth effects.

Panel C of Table 3 partitions the sample by bidder and financing type and reports the percentage of deals with multiple opinions. I further separate deals with private bidders into buyout deals and non-buyout deals. Results again confirm that the likelihood of target firms seeking a second opinion is similar regardless of whether public or private operating bidders are involved. However, the likelihood of such firms seeking a second opinion is significantly higher in buyout deals. Results based on financing type further indicate the high probability of a second opinion being sought when the stapled financing option is available: More than half of deals with stapled financing have multiple opinions. These results suggest that the use of multiple opinions is more likely driven by conflicts of interest instead of bidder types (i.e., private versus public bidders).

Table IA2 in the Online Appendix presents the correlation matrix. None of the correlations of the independent variables warrant any concern for multicollinearity except for the correlation between *Private Bidder* and *Buyout* (correlation = 0.71). This high correlation is not surprising; although not all deals involving private bidders are buyouts, buyout deals almost always involve private bidders. Given the high correlation between these two variables, and the argument that buyout deals induce the use of a second opinion, I include only the buyout dummy in the remaining regression analysis instead of including both variables.

IV. EMPIRICAL RESULTS

The Determinants of the Use of Multiple Opinions

In this section, I examine the determinants of seeking a second opinion using multivariate Probit regressions. The dependent variable is a dummy variable that equals 1 if the target firm obtains multiple opinions, and 0 otherwise. Marginal effects are reported instead of coefficients. Thus, the reported coefficients represent the change in the probability per unit change in the relevant explanatory variables; for indicator variables, the coefficient represents the change in the probability associated with moving the indicator from 0 to 1.

The Probit regression results are reported in Table 4. Consistent with the summary statistics, Models (1) and (2) indicate that the use of a second opinion is significantly more likely in buyout deals and stapled financing deals. These results remain significant after controlling for deal and firm characteristics. Models (3) and (4) show that a second opinion is more likely to be used in hostile deals and in large deals, consistent with anecdotal evidence that boards of directors tend to seek second opinions in more complex deals. Model (5) controls for additional deal characteristics, and Model (6) further controls for target pre-merger operating performance and growth opportunities, proxied by return on assets and Tobin's Q, respectively. Consistent with the summary statistics reported in Table 3, deals starting with a rumor are more likely to have second opinions, highlighting the need for focusing on longer windows when analyzing abnormal returns. Finally, the results based on Model (6) suggest that firms with relatively lower operating performance and growth opportunities are more likely to seek second opinions.

TABLE 4

Probit Regression Analysis
Determinants of MFO

	(1)	(2)	(3)	(4)	(5)	(6)
Buyout	0.136***				0.060***	0.065***
	(5.52)				(2.60)	(2.69)
Stapled Financing		0.443***			0.201***	0.210***
		(6.19)			(2.96)	(3.00)
Hostile			0.184***		0.115***	0.112***
			(3.76)		(2.69)	(2.65)
Target Size				0.043***	0.038***	0.040***
				(15.57)	(13.46)	(13.37)
Diversifying					−0.005	−0.006
					(−0.53)	(−0.64)
Compete					0.013	0.014
					(0.56)	(0.59)
Rumor					0.051***	0.050***
					(2.69)	(2.67)
Cash					0.01	0.01
					(0.99)	(0.92)
Toehold					0.02	0.02
					(0.82)	(0.83)
Tender Offer					−0.011	−0.01
					(−0.96)	(−0.82)
Tobin's Q						−0.006*
						(−1.86)
ROA						−0.101***
						(−2.80)
Private (*Non-Buyout*)						0.037
						(1.47)
Observations	3,144	3,144	3,144	3,142	3,142	3,018
Pseudo R^2	0.023	0.031	0.012	0.129	0.173	0.185

***, **, * Correspond to statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.
This table reports *marginal effects* of probit regression of the determinants of the use of multiple opinions. The dependent variable, *MFO,* is a dummy variable that equals 1 if the target obtains at least two opinions. Heteroscedasticity-robust standard errors are estimated and robust z-statistics are reported in parentheses.
Definitions of all variables are provided in Appendix A.

To provide further evidence on whether the results are driven by conflicts of interest or the type of bidders, Model (6) in Table 4 includes both buyout and private non-buyout dummies. The results suggest that the use of a second opinion is driven by conflicts of interest and not purely by bidder types, as the coefficient of the private non-buyout variable is statistically insignificant.[15]

In summary, the results reported in Table 4 suggest that a second opinion is more likely to be sought by the target board when conflicts of interest are high—e.g., buyouts and stapled financing deals. In addition, the target board is also more likely to obtain a second opinion in complex deals—e.g., large deals and hostile deals.

The Value Implications of Seeking a Second Opinion: OLS Regression Analysis

In this section, I estimate how the use of multiple opinions affects deal outcomes in a multivariate regression framework. The dependent variables are the cumulative net of market returns around the (−2, +2) window, the (−10, +10) window, and the (−63, +126) window, respectively. Since Table 2 reports wide industry and time variations regarding the use of multiple

[15] In the Online Appendix, Table IA3, I further control for the target firm's corporate governance measured by board size, board independence, and whether the CEO is also chairman of the board (*CEO-COB Duality*). None of the coefficients of the three governance measures is statistically significant, while the buyout and stapled financing dummies remain significant, suggesting that corporate governance is not a key determinant of the use of a second opinion.

opinions, industry (defined by Fama and French's [1997] 48 industry classifications) and year fixed effects are controlled for in the regressions. Heteroscedasticity-robust standard errors are estimated. The regression model is specified as:

$$CAR = \beta_0 + \beta_1 MFO + \beta_2 Buyout + \beta_3 Target\ Size + \beta_4 Rumor + \beta_5 Stapled\ Financing + \beta_6 Diversifying + \beta_7 Compete + \beta_8 Hostile + \beta_9 Cash + \beta_{10} Toehold + \beta_{11} Tender\ Offer + \beta_{12} Tobin's\ Q + \beta_{13} ROA + \varepsilon \quad (1)$$

The key variable of interest is the use of multiple opinions (*MFO*), a dummy variable that equals 1 if the target firm obtains multiple opinions. All control variables are defined in Appendix A. The results of the multivariate regression analysis are reported in Table 5. In contrast to the simple mean tests reported in the summary statistics (Panel B of Table 3), Table 5 shows that once I control for deal and firm characteristics, the coefficients of multiple opinions become statistically indifferent from zero, indicating that the group with multiple opinions is not worse off as measured by all three event windows. Thus, the multivariate regressions show no evidence that the use of multiple opinions destroys shareholders' wealth.

The coefficient of *Rumor* is −6.8 percent in Table 5 and is highly significant over the three-day event window, consistent with the expectation that deals with pre-bid events experience lower returns around the short event window. Note that the coefficient becomes insignificant over the window (−63, +126), consistent with Schwert (1996) and Mulherin and Simsir (2015), who show that longer event windows better capture target price run-up effects. The *Buyout* coefficients are negative and statistically significant in all models, consistent with Bargeron et al. (2008), who document that lower premiums are paid in buyout deals. The negative coefficient of *Compete* suggests that announcement returns are 3.9 percent lower over the short window (Model (1)). One potential explanation is that the initial relatively low bidding price could attract subsequent competitors to bid on the deal. The coefficients of *Compete* become insignificant over the longer windows. The signs of the coefficients of other control variables are consistent with prior studies.[16]

The Value Implications of Seeking a Second Opinion: 2SLS Regressions

Admittedly, the use of multiple opinions is endogenously determined by target firms. The analysis of determinants shows that the use of multiple opinions is related to factors such as firm size and other deal characteristics. Nonetheless, these variables may not completely explain why management would choose to obtain multiple opinions. Other unobservable factors could likely affect this decision and could also be correlated with target returns. In this section, I employ a two-stage least squares (2SLS) approach to alleviate the endogeneity concern.

Two-stage regressions require a valid instrumental variable correlated with the endogenous regressor (i.e., the use of multiple opinions), but uncorrelated with the error in the structural equation. In other words, the instrumental variable affects target returns only through its effect on the choice of multiple opinions. My instrument for the use of multiple opinions is the concurrent demand for them. The rationale behind this instrument is that a sudden increased demand for multiple opinions will increase the costs of seeking a second opinion, given that the number of investment banks providing fairness opinions has remained relatively stable.[17] For example, assume that four merger transactions are simultaneously under negotiation. Target Firm A is considering seeking a second opinion and finds that retaining a second bank to provide this opinion is difficult because Firms B, C, and D are also obtaining second opinions. In this hypothetical example, to obtain a second opinion, Firm A has to either pay a higher fee or, most likely, wait for a longer time period to receive the second opinion, or simply forgo getting the second opinion altogether. Thus, a negative relation between the concurrent demand for multiple opinions and a firm's decision to seek a second opinion is expected, which satisfies the relevance condition. On the other hand, the decisions of Firms B, C, and D to seek multiple opinions are likely driven by their own transaction-specific features, such as deal size and deal complexity, and should not directly affect Firm A's deal outcomes. Thus, the exclusion condition is also likely to be met.

To measure the concurrent demands for multiple opinions for each transaction, I first define concurrent transactions as transactions announced within a year and within the same industry, as defined by Fama and French's (1997) 48 industry classifications. I then calculate the percent of concurrent transactions that obtained multiple opinions, excluding the transaction for which the instrument is being calculated.[18] The window of within one year is motivated by Liu, Mulherin, and Brown

[16] For example, Officer (2003) reports a negative relation between target returns and target size. Huang and Walkling (1987) report a positive effect for cash and for tender offers. Eckbo and Langohr (1989), Betton and Eckbo (2000), Goldman and Qian (2005), and Jarrell and Poulsen (1989) report that target returns decrease with toeholds.

[17] During 1996–2013, over 50 percent of fairness opinions are provided by the top ten investment banks, and over 70 percent of fairness opinions are provided by the top 25 banks. The ranking is measured by the number of fairness opinions provided to target firms by each bank divided by the total number of fairness opinions sought by target firms.

[18] The percentage is the ratio of the number of concurrent deals with multiple opinions to the total number of concurrent deals. Scaling by merger activities controls for general economic conditions, regulatory/technological shock, and market liquidity.

TABLE 5

Use of Multiple Opinions: OLS Regression Analysis

	Dep. Var. =		
	***CAR* (−2, +2)**	***CAR* (−10, +10)**	***CAR* (−63, +126)**
	(1)	**(2)**	**(3)**
Intercept	0.247***	0.307***	0.384***
	(4.53)	(5.87)	(5.68)
MFO	−0.011	−0.009	−0.011
	(−0.95)	(−0.72)	(−0.55)
Buyout	−0.042***	−0.061***	−0.119***
	(−3.40)	(−4.75)	(−5.98)
Target Size	−0.013***	−0.021***	−0.019***
	(−5.07)	(−6.98)	(−4.21)
Rumor	−0.068***	−0.053***	−0.024
	(−5.51)	(−3.91)	(−1.20)
Stapled Financing	−0.025	−0.021	−0.046
	(−1.12)	(−0.84)	(−1.20)
Diversifying	−0.005	−0.006	0.003
	(−0.57)	(−0.70)	(0.22)
Compete	−0.039**	−0.025	0.040
	(−2.49)	(−1.25)	(1.43)
Hostile	0.049**	0.032	0.013
	(2.48)	(1.54)	(0.40)
Cash	0.034***	0.031***	0.030**
	(3.88)	(3.34)	(2.32)
Toehold	−0.038**	−0.048***	−0.057**
	(−2.27)	(−2.81)	(−2.05)
Tender Offer	0.073***	0.093***	0.073***
	(6.69)	(8.01)	(4.61)
Tobin's Q	−0.005	−0.000	−0.012
	(−1.45)	(−0.04)	(−1.62)
ROA	−0.019	−0.044	−0.081
	(−0.62)	(−1.18)	(−1.33)
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	3,014	3,014	3,014
R^2	0.150	0.165	0.157

***, **, * Correspond to statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.
This table reports regression analysis of target announcement returns on the use of multiple opinions and other explanatory variables. The dependent variables are *CAR* (−2, +2), *CAR* (−10, +10), and *CAR* (−63, +126). The main independent variable is the use of multiple opinions (*MFO*). Industry and year effects are controlled in all regression specifications. Heteroscedasticity-robust standard errors are estimated and robust t-statistics are reported in parentheses.
All variables are defined in Appendix A.

(2017), who document that in the 1990s and thereafter, days between the private initiation and the public announcement are about 200, on average, and about 300 for the 75th percentile. Thus, even if Transaction B is announced several months after the announcement of Transaction A, both transactions were nonetheless very possibly negotiated simultaneously before the announcement of Transaction A.[19] I further include industry and year effects to control for any industry/time factors that could possibly be related to deal outcomes and also be related to the decision of peer firms to seek multiple opinions.

[19] As a robustness check, I construct two variations of the instrumental variable. First, I use within six months as an alternative window and find similar results. Second, I calculate the average number of opinions obtained by concurrent transactions as an alternative measure of demand for opinions and find similar results.

Table 6 presents the 2SLS results. Model (1) reports the first-stage regression of multiple opinions (*MFO*) on the instrument and other control variables. Models (2) to (4) report the second-stage regressions of target announcement returns on the fitted value of *MFO*. In Model (1), the coefficient on the instrument *MFO Demand* is significantly negative, as predicted.[20] More importantly, the coefficients on the fitted value of *MFO* become positive and significant in Models (2) to (4), suggesting a positive wealth effect after controlling for endogeneity.

The 2SLS results indicate that OLS results are biased downward because of potential endogeneity. This indication is plausible because the omitted variables, such as deal complexity, are likely to be positively correlated with the use of multiple opinions, but negatively correlated with target announcement returns. In this case, the endogeneity issue caused by omitted variable problems downward-biases the OLS regressions results. However, it is also important to note that the results of 2SLS should be interpreted with caution because they rely heavily on the instrument, which can be imperfect. Nevertheless, the results of the 2SLS regressions give us added confidence that the use of multiple opinions does not harm shareholders' wealth. These results contrast with the findings in Makhija and Narayanan (2007), who report significantly lower target returns if target firms obtained fairness opinions, and conclude that fairness opinions are used to entrench managers.[21] Results reported in Tables 5 and 6 suggest that seeking a second opinion is a strategic decision made by the target board when the expected benefits justify their costs.[22]

The Use of Multiple Opinions and Conflicts of Interest

As discussed in Section II, a second opinion is expected to be most beneficial when used in situations in which conflicts of interest are high. In this section, I examine the use of multiple opinions and conflicts of interest by adding the interaction terms of multiple opinions and buyouts/stapled financing as explanatory variables, in addition to those specified in Equation (1). The regression models are specified as:

$$CAR = \beta_0 + \beta_1 MFO * Buyout + \beta_2 MFO * Stapled\ Financing + \beta_3 MFO + \beta_4 Buyout + \beta_5 Stapled\ Financing + Controls + \varepsilon \quad (2)$$

The control variables are the same as those included in Model (1). The results are reported in Table 7. The coefficients for both first-degree terms of *Buyout* and *Stapled Financing* are generally negative and significant, indicating a lower target shareholder wealth effect in those deals with only one fairness opinion. These results provide supportive evidence that the objectivity of fairness opinions might be compromised in those high conflict-of-interest situations. However, the interaction terms for both *Buyout* and *Stapled Financing* are positive and significant at the 5 percent level, except for the shortest event window of (−2, +2). As discussed in Section III, the longer event windows are more appropriate when measuring target shareholders' wealth effects because longer windows are able to capture the pre-announcement price run-up and the post-announcement price mark-up effects. The positive coefficients of the interaction terms suggest that the negative shareholder wealth effects from buyouts and stapled financing deals are lessened when there is a second fairness opinion.[23] These results contradict some legal experts and academics. In the *Toys "R" Us* decision, Vice Chancellor of the Delaware Court of Chancery Leo Strine states that a second opinion, at a high cost to shareholders, is just a "banker protection" and does little to benefit target shareholders. Similarly, Davidoff (2006) states that a second fairness opinion, at a high cost, does not address the real issues that arise in a deal.

Overall, results provided in Table 7 suggest that, *on average,* there is a positive wealth effect associated with the use of a second opinion in buyout and stapled financing deals. However, this may not be the case for *all* buyout and stapled financing deals. The decision to seek a second opinion is likely a trade-off between expected costs and benefits. Firms incur various costs associated with obtaining a second opinion. The direct costs are, on average, $500,000 to $740,000 (Kisgen et al. 2009; Cain and Denis 2013). Cain and Denis (2013) discuss potential indirect costs such as the diversion of managerial effort and delayed bids. Bebchuk and Kahan (1989) also point out that a second opinion might be hard to find because second opinion providers receive relatively small fees, but bear all the liability, resulting in providers being wary of providing such opinions. In addition to the potential indirect costs noted above in seeking and then waiting for a second opinion, involving an additional investment

[20] The Stock and Yogo (2005) tests reject the null hypothesis that the instrument is weak, as the F-test value of the first-stage regression is well above the critical values.

[21] Similarly, Kisgen et al. (2009) conclude that fairness opinions sought by *bidder* management are used to entrench managers because bidder returns are significantly negatively associated with *bidders'* use of fairness opinions.

[22] As a robustness check, I also perform 2SLS analysis for all OLS regressions conducted for the rest of the paper (i.e., Tables 7, 9, and 10). The 2SLS results are qualitatively similar except for Table 7, in which some of the coefficients lose statistical significance, although they maintain the same signs. This robustness test is reported in the Online Appendix, Table IA5.

[23] As a further robustness check, I have removed private non-buyout bidders and have found that the main results are not affected. This analysis is reported in the Online Appendix, Table IA4.

TABLE 6

Two-Stage Regression Analysis

	First Stage	Second Stage		
		Dep. Var. =		
	MFO (1)	*CAR* (−2, +2) (2)	*CAR* (−10, +10) (3)	*CAR* (−63, +126) (4)
Intercept	−1.544	0.224***	0.273***	0.355***
	(−1.41)	(3.06)	(3.15)	(3.90)
MFO		0.132**	0.194***	0.157*
		(2.19)	(2.82)	(1.69)
Buyout	0.349***	−0.050***	−0.073***	−0.131***
	(2.60)	(−3.73)	(−4.98)	(−6.10)
Target Size	0.308***	−0.020***	−0.030***	−0.027***
	(11.33)	(−5.25)	(−6.75)	(−4.18)
Rumor	0.398***	−0.078***	−0.070***	−0.039*
	(3.49)	(−5.30)	(−4.09)	(−1.67)
Stapled Financing	0.901***	−0.068**	−0.083**	−0.092**
	(4.11)	(−2.26)	(−2.53)	(−2.16)
Diversifying	−0.006	−0.004	−0.006	0.005
	(−0.07)	(−0.50)	(−0.61)	(0.38)
Compete	0.180	−0.046***	−0.037*	0.023
	(1.03)	(−2.78)	(−1.83)	(0.83)
Hostile	0.493***	0.023	−0.001	−0.019
	(2.60)	(1.06)	(−0.03)	(−0.52)
Cash	0.029	0.035***	0.034***	0.032**
	(0.31)	(3.96)	(3.50)	(2.48)
Toehold	0.102	−0.032*	−0.045**	−0.064**
	(0.60)	(−1.86)	(−2.44)	(−2.33)
Tender Offer	0.008	0.071***	0.092***	0.071***
	(0.07)	(6.40)	(7.67)	(4.40)
Tobin's Q	−0.029	−0.003	0.002	−0.011
	(−0.95)	(−0.84)	(0.55)	(−1.64)
ROA	−0.822***	0.000	−0.021	−0.067
	(−2.66)	(0.01)	(−0.54)	(−1.10)
MFO Demand	−1.597***			
	(−4.48)			
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	2,885	2,885	2,885	2,885
Pseudo R^2/R^2	0.236	0.109	0.098	0.142

***, **, * Correspond to statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

This table reports results of the 2SLS analysis. In the first stage, coefficients are obtained using Probit regression. Predicted values of the endogenous variable (*MFO*) obtained from the Probit regression are then used as the instrument in a standard 2SLS approach. The dependent variables are *CAR* (−2, +2), *CAR* (−10, +10), and *CAR* (−63, +126). For each observation, the instrument variable *MFO Demand* is the percent of the same industry transactions with multiple opinions that were announced within one year. Industry and year effects are controlled in all regression specifications. Heteroscedasticity-robust standard errors are estimated and robust t-statistics are reported in parentheses.

All other variables are defined in Appendix A.

bank in the sale process also increases the risk of information leakage. The significantly positive relation between having a rumor and multiple opinions reported in Table 4 suggests that deals with multiple opinions are more likely to have information leakage during the negotiation process. The potential damages of information leakage could include significantly negative effects on target firms' businesses and their relationships with business partners, customers, and employees.

TABLE 7

Use of Multiple Opinions and Conflicts of Interest

	Dep. Var. =		
	***CAR* (−2, +2)**	***CAR* (−10, +10)**	***CAR* (−63, +126)**
	(1)	**(2)**	**(3)**
Intercept	0.240***	0.293***	0.356***
	(13.40)	(11.62)	(12.45)
MFO ∗ Buyout	0.041*	0.055***	0.047**
	(1.91)	(2.84)	(1.99)
MFO ∗ Stapled Financing	0.022	0.084**	0.177***
	(0.61)	(2.21)	(3.60)
MFO	−0.019*	−0.023*	−0.027*
	(−1.66)	(−1.73)	(−1.73)
Buyout	−0.049***	−0.070***	−0.124***
	(−4.00)	(−5.92)	(−5.56)
Stapled Financing	−0.043	−0.073**	−0.133***
	(−1.35)	(−2.29)	(−2.92)
Target Size	−0.013***	−0.020***	−0.017***
	(−3.31)	(−6.18)	(−4.33)
Rumor	−0.069***	−0.055***	−0.026*
	(−5.13)	(−3.97)	(−1.74)
Diversifying	−0.005	−0.006	0.006
	(−0.67)	(−0.82)	(0.42)
Compete	−0.039***	−0.024	0.029
	(−2.92)	(−1.29)	(1.22)
Hostile	0.049***	0.032*	0.025
	(2.60)	(1.89)	(1.06)
Cash	0.034***	0.031**	0.028**
	(2.81)	(2.49)	(2.07)
Toehold	−0.038**	−0.048**	−0.052**
	(−2.05)	(−2.45)	(−2.44)
Tender Offer	0.073***	0.092***	0.066***
	(6.38)	(9.42)	(4.68)
Tobin's Q	−0.005*	0.000	−0.014***
	(−1.66)	(−0.06)	(−2.88)
ROA	−0.02	−0.044	−0.071
	(−0.43)	(−0.99)	(−1.04)
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	3,014	3,014	3,014
R^2	0.151	0.166	0.176

***, **, * Correspond to statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.
This table reports the regression analysis of target *CAR* on the use of multiple opinions interacting with management/investment bank's conflicts of interest. It reports results of target returns on multiple opinions, a buyout dummy, a stapled financing dummy, and their interaction terms. The dependent variables are *CAR* (−2, +2), *CAR* (−10, +10), and *CAR* (−63, +126). Industry and year effects are controlled in all regression specifications.
All variables are defined in Appendix A.

Economically, the estimated benefits of seeking a second opinion in stapled financing deals can be estimated by adding β_2 and β_3 and then multiplying the resulting sum by the target size. Given that the mean (median) target size among stapled financing deals is $1,962 ($1,284) million and the sum of β_2 and β_3 is 14.9 percent, the estimated benefit of obtaining a second opinion is $293 ($192) million. Statistically, the sum of the coefficients of β_2 and β_3 is different from zero at the 1 percent level

(p-value = 0.00). For buyout deals, the sum of the coefficients of β_1 and β_3 is 2.03 percent, but it is not statistically different from zero at traditional levels (p-value = 0.20).[24]

In summary, the direct and indirect costs associated with seeking a second opinion might prevent a target firm from obtaining one if the expected benefits were low. The higher estimated benefits of obtaining a second opinion in stapled financing deals are consistent with Table 3, Panel C, which reports that about 22 percent of buyout deals obtained a second opinion; this percentage increased to 53 percent among stapled financing deals. Indeed, as pointed out by Carlsson-Sweeny (2010), many banks now have internal policies that require target boards to obtain a second fairness opinion from another independent bank if they provide stapled financing to potential bidders.

A Closer Look at Fairness Opinion Valuation Methods

After documenting a positive wealth effect associated with the use of a second opinion in situations with high conflicts of interest (i.e., buyouts and stapled financing deals), in this section, I further explore the channels by which a second opinion adds value. DeAngelo (1990) argues that fairness opinion valuations that rely mainly on accounting numbers impose impartial external constraints on equity exchange values. The author demonstrates that a target firm's pre-offer price is an inadequate measure of its acquisition value because, on average, bidders pay a significant premium to acquire a target. DeAngelo (1986, 1990) argues that accounting numbers can serve as market valuation substitutes in those transactions.

DeAngelo (1990) reports that in her buyout sample during 1973–1982, 100 percent of the proxy materials cite accounting information as influencing the bank's evaluation of the offer terms. However, how accounting information is used in equity valuation is not exactly clear because disclosing detailed valuation methods was not mandatory at that time. The author suggests that the valuation information presented to the boards of directors by financial advisors can be analyzed to shed light on how valuation methods incorporate accounting data.

In more recent years, both regulators and courts have called for more detailed disclosures of the underlying valuation methods used in forming opinions. In the decision of *Pure Resources* in 2002, the Court of Chancery issued a "firm statement that stockholders are entitled to a fair summary of the substantive work performed by the investment bankers upon whose advice the recommendations of their board as to how to vote on a merger or tender rely."[25] The court noted that "The real informative value of the banker's work is not in its bottom-line conclusion, but in the valuation analysis that buttresses that result." In 2005, the National Association of Securities Dealers, Inc. (NASD) filed proposed rules with the SEC that would require "information that formed a 'substantial basis' for the fairness opinion" to be disclosed. The proposed rules were approved by the SEC in 2007.[26]

These increased disclosure requirements allow access to information that is key to understanding how valuation methods incorporate accounting data, as suggested by DeAngelo (1990). Specifically, I collect valuation methods used in forming fairness opinions disclosed in merger documents for transactions with multiple opinions announced in the last five years of the sample period (from 2009 to 2013). The valuation information is available for 64 transactions during this period.[27] Table 8 reports that a total of 476 valuation analyses were performed for these 64 transactions, averaging 7.4 analyses per transaction. The most commonly used valuation methods were public company multiple analysis (also called comparable company analysis), precedent transaction analysis (also called comparable acquisition analysis), and discounted cash flow analysis (DCF). For example, the public company multiple analysis, on average, was used 1.84 times per transaction, indicating that most of the time, both advisors providing fairness opinions chose this method. In untabulated results, I find that leveraged buyout analysis, on average, was used 0.75 times per transaction in the buyout subsample, compared to only 0.3 times among all deals, indicating that in most buyout deals, at least one advisor performed leveraged buyout analysis.

The Online Appendix further demonstrates how accounting information is used in estimating target price ranges. For example, in the selected comparable company analysis performed by Evercore in the Dell buyout, a range of implied equity values per share was estimated using data on the enterprise value/EBITDA (earnings before interest, tax, depreciation, and amortization), market value/net income, and market value/cash flow multiples of Dell, compared to those of Acer Inc.,

[24] Given that the mean (median) target size of all buyout deals is $1,177 ($354) million, the estimated benefit of obtaining a second opinion using a similar approach would be $23.5 ($7.09) million for an average (median) buyout deal. However, because the sum of the coefficients is not statistically significant, I am unable to draw a firm conclusion about the economic benefits for buyout deals.

[25] See *In re Pure Res., Inc., S'holders Litig.*, 808 A. 2d 421, 449 (Del. Ch. 2002).

[26] The effective date of the new rules (known as FINRA Rule 5101 or as NASD Rule 2290) is December 8, 2007. See: https://www.finra.org/sites/default/files/NoticeDocument/p037445.pdf

[27] There were a total of 70 transactions with multiple opinions announced during 2009–2013. The valuation information is unavailable for several tender offers because for tender offers, although the use of fairness opinions must be disclosed, the disclosure of valuation analyses in the opinions is not required. Out of the 64 deals in which valuation analyses are available, 59 deals obtained two fairness opinions and five deals obtained three fairness opinions.

TABLE 8

Fairness Opinion Valuation Methods

Variable	Mean	Maximum	Minimum	Total
Public company multiples	1.84	3	0	118
Precedent transactions	1.80	3	0	115
Discounted cash flows	1.88	3	0	120
Leveraged buyout	0.30	2	0	19
Premium analysis	0.75	3	0	48
Net asset valuation	0.06	1	0	4
PV of future stock price	0.59	3	0	38
Sum of parts	0.22	2	0	14
Total methods used in analysis	7.44	12	4	476

This table reports valuation methods used in transactions with multiple opinions in the period of 2009–2013. The sample comprises 64 transactions with 131 fairness opinions and 476 valuation analyses. Out of the 64 transactions, 16 are buyout deals and 48 are non-buyout deals. The Online Appendix provides examples of the most commonly used methods: public company multiples, precedent transactions, and discounted cash flow analysis.

ASUSTeK Computer Inc., Lenovo, Toshiba Corporation, Apple Inc., and other companies.[28] The estimated prices based on the EBITDA multiple ranged from $10.09 to $16.99. The estimated equity price range was then compared with the offer price, which was $13.88 in this case. This example illustrates that the comparable company analysis, one of the most commonly used methods, is clearly an accounting-based valuation approach.

The other two popular methods, precedent transaction analysis and DCF analysis, also rely heavily on accounting information. The Online Appendix shows that in the Morton's Restaurant transaction, KBCM described the attributes of five acquisitions in the restaurant industry. KBCM reported acquisition values as a multiple of the latest 12-month EBITDA from 10-K or 10-Q filings. In the DCF analysis performed by J.P. Morgan in the Dell transaction, J.P. Morgan used a multiple of EBITDA to estimate terminal values, and used the capital asset pricing model (CAPM) to estimate the discount rate used to discount the estimated unlevered free cash flows and terminal values. Finally, in the leveraged buyout analysis, Evercore used a multiple of EBITDA to estimate the exit value of the company, assuming that the financial buyer would exit in five years (i.e., 2018). The evidence in Table 8 and the Online Appendix is consistent with DeAngelo (1990), who argues that "[t]he equity valuation process can be reasonably characterized as one that predominantly employs accounting information to estimate fair compensation to outside stockholders."

Fairness Opinions and Earnings Quality

Given that investment banks' valuation techniques rely on accounting information, particularly earnings and cash flows, in this section, I conduct additional analyses to test whether the benefits of seeking a second opinion increase as a firm's earnings quality increases to provide evidence on how investment banks' valuations depend on the quality of a firms' financial data. The informativeness of fairness opinion valuation is expected to increase as the quality of the inputs to valuation models increases.

To capture a target firm's earnings quality, I use the measure of accrual estimation error developed in Dechow and Dichev (2002) (*DD*) and a modified version of this measure suggested in McNichols (2002) (*Modified DD*). Dechow and Dichev (2002) argue that the quality of earnings decreases in the magnitude of estimation error in accruals. This measure is based on the notion that accruals are associated with past or future cash flow realizations, so that the quality of accruals and earnings is inversely related to the precision of accruals estimates. The *DD* measure captures both discretionary accruals, which are likely subject to managerial interventions, and unintentionally poorly estimated accruals, which are more likely related to economic factors or the nature of the firm. I argue that the *DD* measure is appropriate in testing how earnings quality affects fairness opinions because lower earnings quality, regardless of the presence or absence of managerial interventions, is likely to negatively affect the informativeness of fairness opinion valuations. Specifically, I estimate the following regression by industry and year:

$$\Delta WC_t = \beta_0 + \beta_1 CFO_{t-1} + \beta_2 CFO_t + \beta_3 CFO_{t+1} + \varepsilon \quad (3)$$

[28] In estimating price ranges, Evercore performed four analyses based on forecasted EBITDA, net income, and free cash flow: one analysis relied on a management forecast (the September 21 case), two analyses relied on the forecasts of the Boston Consulting Group (BCG) hired by the special committee (the BCG base case and BCG productivity case), and one relied on the consensus analyst forecasts.

TABLE 9

Use of Multiple Opinions and Earnings Quality

	Dep. Var. =					
	***CAR* (−2, +2)** (1)	***CAR* (−10, +10)** (2)	***CAR* (−63, +126)** (3)	***CAR* (−2, +2)** (4)	***CAR* (−10, +10)** (5)	***CAR* (−63, +126)** (6)
Intercept	0.239***	0.304***	0.369***	0.221***	0.294***	0.360***
	(3.92)	(5.45)	(4.94)	(3.67)	(5.42)	(5.01)
MFO ∗ *EQ* (*DD*)	0.013**	0.017**	0.022**			
	(2.24)	(2.25)	(2.06)			
EQ (*DD*)	0.009	−0.006	0.005			
	(1.60)	(−0.85)	(0.46)			
MFO ∗ *EQ* (*Modified DD*)				0.011**	0.013**	0.012
				(2.28)	(2.38)	(1.50)
EQ (*Modified DD*)				0.013**	−0.004	0.006
				(2.14)	(−0.61)	(0.46)
MFO	−0.009	−0.016	0.001	−0.014	−0.022	−0.007
	(−0.72)	(−1.23)	(0.07)	(−1.16)	(−1.61)	(−0.31)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,259	2,259	2,259	2,087	2,087	2,087
R^2	0.175	0.186	0.168	0.169	0.180	0.163

***, **, * Correspond to statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.
This table reports the regression analysis of target announcement returns on the use of multiple opinions, firms' earnings quality, and the interaction between multiple opinions and earnings quality. The dependent variables are *CAR* (−2, +2), *CAR* (−10, +10), and *CAR* (−63, +126). *EQ* (*DD*) is the earnings quality measure developed in Dechow and Dichev (2002). *EQ* (*Modified DD*) is the DD measure modified in McNichols (2002). Earnings quality measures are standardized to have a mean of zero and a standard deviation of 1. Control variables include *Buyout, Target Size, Stapled Financing, Diversifying, Compete, Hostile, Rumor, Cash, Toehold, Tender Offer, Tobin's Q,* and *ROA*. Industry and year effects are controlled in all regression specifications. Heteroscedasticity-robust standard errors are estimated and robust t-statistics are reported in parentheses.
All variables are defined in Appendix A.

where ΔWC_t is defined as the change in accounts receivable plus the change in inventory, minus the change in accounts payable, minus the change in taxes payable, and plus the change in other assets. Following Francis, LaFond, Olsson, and Schipper (2005) and Doyle, Ge, and McVay (2007), in each year, I estimate the above regression cross-sectionally within each of the 48 Fama and French (1997) industry classifications.[29] I then take the regression residuals in the five-year period prior to the merger announcement and calculate the standard deviation of residuals for each target firm. I use the negative value of the standard deviation as my measure of earnings quality, so that a higher value indicates higher earnings quality. Finally, I standardize the measure to have a mean of 0 and a standard deviation of 1 so that the change of the coefficient from 0 to 1 can be interpreted as the change of one standard deviation of earnings quality.

The results are reported in Models (1) to (3) in Table 9. Consistent with the expectations that high-quality earning numbers will result in better valuations, the coefficients of the interaction terms between multiple opinions and the *DD* measure of earnings quality are positive across all event windows and statistically significant at the 5 percent level. These results suggest that benefits increase with the firm's earnings quality when conditioned on seeking multiple opinions.

As a robustness check, I also construct a *Modified DD* measure, as suggested in McNichols (2002), by linking the *DD* model with the Jones (1991) model of discretionary accrual estimation.[30] The results are reported in Models (4) to (6) in Table 9. Again, the coefficients of the interaction terms are positive and significant, with the exception in Model (6). In summary, these results provide suggestive evidence consistent with DeAngelo's (1990) conjecture that "investment bankers' valuation

[29] All variables are scaled by average total assets. Following Doyle et al. (2007), I require a minimum of 20 observations in each industry in a given year.
[30] Specifically, I include the change in sales and the level of property, plant, and equipment (*PPE*) in Equation (3) to mitigate the potential problem of *CFO* being a noisy proxy for the cash flows recognized in accruals. However, this modified measure is more likely to capture the role of management discretion in influencing earnings quality.

TABLE 10

The Effects of Sarbanes-Oxley 2002

	Prior SOX Period			Post-SOX Period		
	Dep. Var. =					
	CAR (−2, +2) (1)	*CAR* (−10, +10) (2)	*CAR* (−63, +126) (3)	*CAR* (−2, +2) (4)	*CAR* (−10, +10) (5)	*CAR* (−63, +126) (6)
Intercept	0.143***	0.235***	0.299***	0.325***	0.377***	0.446***
	(2.87)	(4.87)	(2.82)	(4.63)	(6.43)	(7.04)
MFO ∗ *Buyout*	−0.007	0.021	0.060	0.077***	0.086***	0.098**
	(−0.13)	(0.31)	(0.56)	(3.02)	(3.14)	(2.21)
MFO	−0.005	−0.020	−0.050	−0.025	−0.019	−0.009
	(−0.24)	(−0.78)	(−1.09)	(−1.55)	(−1.12)	(−0.35)
Buyout	−0.029	−0.061***	−0.116***	−0.057***	−0.078***	−0.147***
	(−1.28)	(−2.65)	(−3.07)	(−3.31)	(−4.33)	(−5.75)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,657	1,657	1,657	1,357	1,357	1,357
R^2	0.157	0.181	0.146	0.208	0.209	0.227

***, **, * Correspond to statistical significance at the 1 percent, 5 percent, and 10 percent levels, respectively.
This table reports the subsample analysis on multiple opinions and buyouts in the pre- and post-SOX periods. The pre-SOX period is from 1996 to 2002 and the post-SOX period is from 2003 to 2013. Dependent variables are *CAR* (−2, +2), *CAR* (−10, +10), and *CAR* (−63, +126). Control variables include *Target Size, Stapled Financing, Diversifying, Compete, Hostile, Rumor, Cash, Toehold, Tender Offer, Tobin's Q,* and *ROA*. Industry and year effects are controlled in all regression specifications. Heteroscedasticity-robust standard errors are estimated and robust t-statistics are reported in parentheses. All variables are defined in Appendix A.

techniques make extensive use of accounting data" and that "This demand for accounting information in equity valuation is distinct from that previously recognized in the capital markets."

A Subsample Analysis: Pre- and Post-Sarbanes-Oxley Act of 2002

In this last section of empirical tests, I conduct a subsample analysis by partitioning the full sample into two subsample periods: pre- and post-SOX. On July 30, 2002, Congress enacted SOX in response to a series of major accounting scandals. Kisgen et al. (2009) suggest that SOX increases the importance and scrutiny of fairness opinions. Specifically, SOX directed the SEC to adopt rules that required the disclosure of potential conflicts of interest between investment banks and a firm. In addition, SOX prohibits an external auditor from providing fairness opinions and other appraisal and valuation services.[31] Section 404 of SOX requires that the majority of publicly traded companies include a report on the effectiveness of their internal controls, which, when viewed from an M&A perspective, indicates a need for greater due diligence that could include an independently provided fairness opinion (Kisgen et al., 2009). Similarly, Bowers, Latham, and Nedanov (2008) point out that the SOX requirement that CEOs be held personally responsible for the accuracy of financial information should provide an incentive for management to hire an independent provider—a firm other than their financial advisor—for a fairness opinion.

The above discussion suggests that although SOX does not explicitly regulate investment banks in providing fairness opinions, SOX's emphasis on conflicts of interest, increased independence, and enhanced financial reporting quality can positively impact the usefulness of multiple opinions, especially in buyout deals in which both conflicts of interest and demand for an independent valuation are high. The significant trend in having more fairness opinions shown in Figure 2 also indicates that more firms have sought second opinions post-SOX.

Table 10 reports the wealth effects of multiple opinions interacting with buyouts in the pre- and post-SOX periods. The coefficients of the interaction terms are insignificant in the pre-SOX period for all three windows. The interaction coefficients are highly significant in the post-SOX period over both the short and long windows. The coefficients of the interactions

[31] See: https://www.sec.gov/news/press/2003-9.htm

between the pre-SOX and post-SOX periods over the short window (Models (1) and (4)) are significantly different at the 10 percent level. However, the null hypothesis that the coefficients of the interactions are equal pre- and post-SOX cannot be rejected over the longer windows.[32]

V. CONCLUSION

This study provides evidence on the determinants and wealth effects of a target firm's decision to seek multiple fairness opinions in M&As. The wealth effects of the use of multiple opinions have long been debated among investor activists, practitioners, regulators, and lawyers. Using a hand-collected sample from 1996 to 2013, I first show that a second opinion is more likely to be sought in deals facing high conflicts of interest and in complex deals. I then document positive relations between the use of multiple opinions and target announcement returns in buyout deals and stapled financing deals. In addition, the benefits of seeking multiple opinions increase with a target firm's earnings quality. Overall, the findings provide novel evidence suggesting that a second fairness opinion plays an important role in takeover transactions. Importantly, accounting data provide useful information used in equity valuation in corporate control transactions.

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APPENDIX A

Variable Definitions and Sources

Variable	Definition	Data Source
MFO	A dummy variable equal to 1 if the target obtains at least two fairness opinions.	Merger documents
CAR (−2, +2)	Cumulative abnormal returns around the event window (−2, +2), where abnormal returns are net of market returns, proxied by the CRSP value-weighted index, and day 0 is the public merger announcement date.	CRSP
CAR (−10, +10)	Cumulative abnormal returns around the event window (−10, +10), where abnormal returns are net of market returns, proxied by the CRSP value-weighted index, and day 0 is the public merger announcement date.	CRSP
CAR (−63, +126)	Cumulative abnormal returns around the event window (−63, +126), where abnormal returns are net of market returns, proxied by the CRSP value-weighted index, and day 0 is the public merger announcement date.	CRSP
Buyout	A dummy variable equal to 1 if the deal is an LBO/MBO.	SDC, merger documents
Stapled Financing	A dummy variable equal to 1 if the target advisors offer a financing commitment to potential bidders.	Merger documents
Cash	A dummy variable equal to 1 if the bidder uses cash as the only method of payment.	SDC
Compete	A dummy variable equal to 1 if there are two or more public bidders.	SDC
Hostile	A dummy variable equal to 1 if the target board rejects the offer.	SDC
Private Bidder	A dummy variable equal to 1 if bidder public status is "private."	SDC
Private (*Non-Buyout*)	A dummy variable equal to 1 if bidder public status is "private" and the deal is a non-buyout deal.	SDC
Rumor	A dummy variable equal to 1 if the deal starts as a rumor.	SDC, merger documents
Target Size	The log value of the target market capitalization four weeks prior to the merger announcement date.	CRSP
Tender Offer	A dummy variable equal to 1 if the deal is a tender offer.	SDC
Toehold	A dummy variable equal to 1 if a bidder has an ownership stake of 5 percent or more in the target.	SDC
Diversifying	A dummy variable equal to 1 if the bidder and target are from different industries, defined by two-digit SIC code.	SDC
Deal Value	The transaction value reported by SDC.	SDC
Withdrawn	A dummy variable equal to 1 if deal is withdrawn.	SDC
Tobin's Q	The ratio of market value of assets divided by the book value of assets. The market value of assets is defined as the book value of assets plus the market value of common stock less the book value of common stock and balance sheet deferred taxes.	Compustat
ROA	Return on asset, measured as the ratio of earnings to average asset for the fiscal year prior to the merger announcement.	Compustat
EQ (*DD*)	Earnings quality measure developed in Dechow and Dichev (2002).	Compustat
EQ (*Modified DD*)	Earnings quality measure developed in Dechow and Dichev (2002) and modified in McNichols (2002).	Compustat
MFO Demand	The percent of the same industry transactions with multiple opinions and announced within one year, using the 48 Fama and French (1997) industry classifications.	Merger documents, SDC, CRSP

APPENDIX B

accr-52444_Online Appendix: http://dx.doi.org/10.2308/accr-52444.s01