

# Due Diligence on the Bidder and the Certification Effect

Andrey Golubov, Dimitris Petmezas, Theodore Sougiannis, and  
Nickolaos G. Travlos\*

*January 2013*

**ABSTRACT:** Target firm shareholder wealth in stock swap transactions depends on the value of the bidder's shares, while the bidder has the incentives to inflate its stock price. This motivates the target to carry out a due diligence investigation that will certify the bidder's value. We show that targets do perform such due diligence, and that bidders targeting firms with reputable due diligence accountants experience a positive certification effect manifested in higher excess returns at the announcement of stock swap transactions. This effect in turn spills over into higher target firm returns in such deals because the bidder's value is certified. The certification effect is concentrated in settings with greater uncertainty about the bidder's worth, and is not present when the due diligence provider cannot be deemed independent.

**JEL Classification:** G14; G34; M41

**Keywords:** Due Diligence; Mergers and Acquisitions; Reputation; Certification; Information Asymmetry; Abnormal Returns

\*Andrey Golubov is from Cass Business School, City University London, UK, E-mail: andrey.golubov.1@city.ac.uk. Dimitris Petmezas is from Surrey Business School, University of Surrey, UK, E-mail: d.petmezas@surrey.ac.uk. Theodore Sougiannis is from the College of Business, University of Illinois at Urbana-Champaign, USA and the ALBA Graduate Business School at The American College of Greece, E-mail: sougiani@illinois.edu. Nickolaos Travlos is from the ALBA Graduate Business School at The American College of Greece, E-mail: ntravlos@alba.edu.gr. We thank seminar participants at the 2011 American Accounting Association (AAA) meeting and, particularly, Daniel Wangerin for useful comments and suggestions. Golubov acknowledges financial support received from the School of Management, University of Surrey. Travlos acknowledges financial support received from the Kitty Kyriacopoulos Chair in Finance. All remaining errors are our own.

## **1. Introduction**

Due diligence in corporate mergers and acquisitions (M&A) transactions is designed to verify the reliability of financial statement information provided by the firms involved in the deal. Such review helps assess the true financial position of the parties and serves as the basis for setting the terms of the deal, particularly those related to valuation. Despite its apparent far-reaching consequences, the notion of due diligence has received relatively little attention in the academic literature. The common wisdom is that most of the due diligence is geared towards the seller whereby the bidder assesses the financial position of the target firm. However, due diligence can also be a “mutual review undertaken by the two parties to a merger” (Lajoux and Elson, 2011: p.6). That is, target firms also can, and frequently do, perform their own due diligence on the bidder. It is this type of due diligence that we investigate in this paper.

When a firm is sold the board of directors is responsible for maximising shareholder value by ensuring that the highest price has been received for the shares. Failure to do so can trigger lawsuits against the board members for not exercising their fiduciary duty. In a cash offer the payoff to the target firm shareholders is certain, and the board may not be particularly concerned about the credibility of bidder’s financials and its valuation (apart from making sure that the bidder has the financial muscle to consummate the transaction). The extent of due diligence on the bidder in this situation should be minimal. In a stock deal, however, the deal value for target shareholders depends on the valuation of bidder shares offered in the exchange. And according to the adverse selection theory of Myers and Majluf (1984) firms decide to issue stock only when it is overvalued - a notion supported by the empirical evidence (e.g. Chemmanur et al. (2009)). In this situation due diligence on the bidder becomes important, because when the shares received are overvalued, the value the target firm shareholders receive is compromised.

At the same time, the bidder has all the incentives to offer its shares at the highest possible price as this minimizes the purchase price through a more favorable exchange ratio. Consistent with such incentives, there is evidence that acquirers resort to earnings-increasing accruals management prior to stock-for-stock acquisitions (Erickson and Wang (1999), Louis (2004), Gong et al. (2008)). Further, Kravet et al. (2012) show that acquirers frequently misstate their financials prior to acquisitions, particularly stock-financed ones. To make matters worse, Ge and Lennox (2011) provide evidence that acquirers withhold bad news about future earnings in the run-up to stock-financed acquisitions. This further motivates a thorough due diligence on the *buyer* in takeovers structured as stock swaps, and the extent and the quality of such due diligence should have important valuation implications for the firms involved. This is exactly the notion we explore in this paper.

Below we provide evidence consistent with the conjecture that targets in stock swap transactions perform due diligence on the bidder. Effectively, a stock bidder submits itself to an independent check on its financial position by the target's due diligence accountant whose task is to certify bidder's worth. As a result, the announcement of the deal, which coincides with the signing of the definitive merger agreement (see e.g. Denis and Macias (2012), Wangerin (2012)), signals that the target's due diligence accountant was satisfied with the state of the bidder's financial reporting and the value of its assets and liabilities.<sup>1</sup> We therefore predict the bidder will experience a positive certification effect manifested in higher excess returns at deal announcement when the target retains a reputable due diligence accountant. This certification effect is similar to that afforded by reputable underwriters in the IPO market (see Booth and Smith (1986)). This effect should only be pronounced in acquisitions fully or partially paid for with bidder stock as there is no need to certify the bidder's worth in a cash offer (i.e., no adverse selection). Further, given that the

---

<sup>1</sup> We describe these dynamics in more detail using real examples from our sample in the background and hypotheses development section below.

announcement of a stock-financed M&A deal makes target firm shares exchangeable into bidder shares, this certification effect should also positively affect target firm shareholder wealth due to the reduction in uncertainty regarding the payoff.

As a practical matter, due diligence is typically performed by the firm's independent accounting firm. This allows exploiting the two-tiered structure of the accounting industry using the Big versus non-Big status of the target's accountant as proxy for the quality of due diligence. We find strong empirical support for our predictions in a sample of almost two thousand US M&A deals involving public bidders and targets taking place over the period 1996-2009. Bidders targeting firms retaining a reputable due diligence accountant experience announcement returns that are higher, on average, by a statistically significant 1.47%, *ceteris paribus*. This effect is driven solely by stock-financed acquisitions, where the incremental bidder returns are 2.64% and 3.69% for partially and fully stock paid deals, respectively. These effects, in turn, feed into the valuation of the target firm. The economic magnitude of these estimates is staggering – the certification effect of reputable due diligence accountants is almost 100% of the (absolute) value of unconditional bidder announcement returns in the respective subsamples. Targets retaining reputable due diligence accountants in partially stock-financed deals enjoy announcement returns that are on average 4.00% higher than other targets; this benefit is 6.89% in pure stock swap deals. In contrast, there is no significant bidder certification effect and corresponding target wealth effect in pure cash deals.

To confirm that it is the certification effect at play, we further examine these relationships conditional on characteristics that make certification more or less valuable and credible. For instance, the value of certification should be higher when the information asymmetry is greater. On the other hand, certification should not be present when the bidder and the target share the same due diligence accountant, as the independence of the due diligence provider in this situation is undermined. These predictions are borne out by the data. The certification effect is concentrated in situations where the information asymmetry

regarding the bidder's worth is more pronounced. Bidder announcement returns in acquisitions of targets retaining reputable due diligence accountants are higher by as much as 5.10% and 5.66% when the bidder is a high idiosyncratic volatility firm and when the bidder and the target reside in different industries, respectively. A similar pattern is observed for target firm returns. On the contrary, no certification effect is present when the two firms share the same due diligence accountant.

Higher bidder and target firm returns at deal announcement can also be consistent with a synergy explanation. For instance, target firm audited by reputable auditors may make inherently better takeover targets, although it is not clear why any such incremental synergies would be found in stock swaps only. To rule out the synergy explanation we analyze post-acquisition operating performance improvements. We find that acquisitions of reputably audited targets do not generate better future operating performance improvements for the bidder than acquisitions of less reputably audited targets - neither in the full sample, nor in the subsample of stock swaps. Hence, we believe that the relationships we document are not due to higher synergies, but rather to the certification effect.

This study contributes to the finance and accounting literature by enhancing our understanding of the due diligence process in corporate takeovers. To the best of our knowledge, no study to date has explored the notion of due diligence on the *buyer* and its valuation implications. This complements the work of Wangerin (2012) who studies due diligence on the target and its consequences for post-acquisition performance and financial reporting. Further, our work is related to the studies by Erickson and Wang (1999), Louis (2004), Gong et al. (2008), Kravet et al. (2012) and Ge and Lennox (2011) who examine the window dressing activities performed by acquirers prior to stock swap transactions. We provide evidence on how due diligence on the buyer may counter these activities and effectively certify the value of the bidder to the market overall and to the target firm in particular.

The paper is organized in the following way. Section 2 provides background information leading to our testable hypotheses. Section 3 presents the data and defines the variables used in the analysis. Section 4 reports the results of our empirical tests. We discuss alternative explanations in Section 5, and address several robustness issues in Section 6. Finally, Section 7 concludes.

## **2. Background and Hypotheses Development**

It is common wisdom that the buyer in M&A deals performs due diligence on the target firm. The motivation for this process is straight-forward: the bidder needs to obtain the information necessary for valuing the target and arriving at the appropriate offer price. As one would expect the extent of such due diligence has important implications for the performance of the acquirer and its subsequent financial reporting as demonstrated by Wangerin (2012). What about the seller? Do target firms have any reason to perform due diligence on the bidder? Below we argue that in particular deal structures sellers do have this incentive, and provide evidence of this actually happening in real merger deals.

In a cash transaction, the selling side should not be particularly concerned with the state of financial reporting of the buyer or, indeed, its valuation as the shareholders just walk away with their payment. Therefore, one would not expect the target firm to conduct due diligence on the bidder in cash deals, apart from ensuring that the bidder has the financial ability to successfully consummate the transaction. However, in a deal paid for with bidder's shares, the value for selling shareholders depends upon the valuation of these shares. At the same time, the bidder's objective is to minimize the purchase price. In a stock swap transaction, the purchase price is directly linked to the valuation of the bidder's shares – the higher the latter, the more favorable the exchange ratio is for the bidder. Therefore, the bidder has the incentives to inflate its stock price prior to stock-for-stock acquisitions.

In fact, there is ample evidence that bidders actively pursue this avenue by engaging in various window-dressing activities. First, Erickson and Wang (1999) and Louis (2004) examine the earnings management behavior of acquiring firms and show that bidders resort to earnings-increasing accruals prior to stock-based acquisitions, but not prior to cash deals. Second, Kravet et al. (2012) study the occurrence of financial statement misstatements by acquiring firms and demonstrate that acquirers frequently misstate their financial reports prior to acquisitions, and that such misstatements tend to be significantly larger prior to stock-financed acquisitions. Third, Ge and Lennox (2011) evaluate the earnings forecasts made by acquiring firms' managers and provide evidence that bidders are significantly more likely to withhold negative news regarding future earnings prior to stock-for-stock acquisitions than prior to cash-financed deals.

Therefore, in a deal structured as a stock swap the target should be concerned with the state of the bidder's financial reporting and its value, and thus has a reason to conduct a due diligence investigation on the buyer. This should be particularly apparent where the seller is to receive a substantial ownership position in the merged firm, with the extreme case being a "merger of equals", where no clear distinction between the buyer and the seller can be made (perhaps apart from which firm is the legally surviving entity).

To confirm our logic we examine merger-related SEC filings detailing the pre-announcement dynamics of several recent stock swaps transactions. We find pervasive references to "mutual due diligence review", "due diligence review of each other's business" or "reciprocal due diligence investigations". Moreover, we find recurring evidence that target firms retain their accounting firms to perform due diligence on the bidder. To exemplify this point below we provide excerpts from S-4 forms filed in relation to several of our sample mergers.

Sprint Corp. (bidder) - Nextel Communications Inc. (target), announced December 15, 2004:

“On December 12, the Nextel board of directors reviewed the possible merger. At the meeting, the Nextel board received an extensive presentation from Nextel’s senior management regarding the terms of the possible transaction, Sprint’s and Nextel’s respective standalone prospects, the strategic rationale and potential benefits of a merger and potential synergies that could be realized in a merger and the results of Nextel’s and its independent registered public accounting firm’s due diligence reviews relating to Sprint.”

Digitas Inc. (bidder) - Modem Media Inc. (target), announced July 15, 2004:

“At a special meeting of the Modem Media board on July 10, 2004, Modem Media senior management again reviewed with the board the strategic considerations for the transaction and the progress of negotiations regarding the terms of the transaction and, with PricewaterhouseCoopers LLP, apprised the board of the results of its due diligence review of Digitas.”

Cadence Design Systems, Inc. (bidder) - Simplex Solutions Inc. (target), announced April 24, 2002:

“On April 17, 2002, Simplex engaged PricewaterhouseCoopers LLP to assist with Simplex’s due diligence investigation of Cadence in connection with the proposed business combination.

[...]

On April 18, 2002, Cadence’s counsel and accounting representatives commenced legal and accounting due diligence with respect to Simplex. From April 18, 2002 until April 24, 2002, representatives of Cadence and Simplex held daily conference calls regarding logistics and due diligence.”

American Tower Corporation (bidder) - SpectraSite Inc. (target), announced May 4, 2005:

“On May 2, 2005, SpectraSite’s board of directors met at its regularly scheduled meeting, which commenced following SpectraSite’s Annual Meeting of Stockholders held earlier the same day. [...] Representatives of Ernst & Young LLP, SpectraSite’s independent registered public accountants, then provided SpectraSite’s board of directors with an overview of its accounting due diligence efforts and representatives of Paul, Weiss provided the board of directors with an overview of the legal due diligence.”

The quality of the due diligence investigation on the buyer should have direct valuation implication for both parties involved in the deal. Higher quality and more skilled due diligence providers should be better able to detect the window-dressing activities described above and advise the seller on the appropriate adjustments to the proposed exchange ratio.



Maintaining the standard assumption in the literature that reputable accounting firms are more skilled and provide higher quality services (e.g. DeAngelo, 1981, Titman and Trueman, 1986), we predict that bidders targeting firms retaining reputable due diligence accountants will experience a positive certification effect (higher abnormal returns) at deal announcement because investors view the bidders' value as credibly certified (note that the identity of the target's accountant is readily observed at the time of announcement).<sup>2,3</sup>

*H1: Bidders targeting firms retaining reputable due diligence accountants in stock-financed deals experience a positive certification effect (higher abnormal returns) at deal announcement, ceteris paribus.*

Given that the target firm shares are exchanged into bidder's shares upon completion of the stock-financed acquisition, the announcement of the deal effectively pegs the value of target firm stock to the valuation of bidder's shares. Therefore, a positive bidder value certification effect should feed into a higher valuation of the target firm upon announcement. This leads to our second hypothesis:

*H2: Targets retaining reputable due diligence accountants in stock swap transactions experience a positive wealth effect (higher abnormal returns) at deal announcement, ceteris paribus.*

---

<sup>2</sup> This certification effect is akin to that proposed by Booth and Smith (1986) in the context of IPOs where reputable underwriters provide more credible certification of the issuer's value than their less reputable competitors.

<sup>3</sup> The empirical evidence supports the notion that reputable accountants provide higher quality services. For instance, reputable accounting firms have been found to be associated with higher quality earnings (Becker et al., 1998), higher earnings response coefficients (Teoh and Wong, 1993), lower IPO underpricing (Balvers et al., 1988, Beatty, 1989) and lower cost of debt financing (Mansi et al., 2004, Pittman and Fortin, 2004). Utilizing accounting scandals, Chaney and Philipich (2002), Rauterkus and Song (2005) and Weber et al. (2008) provide further evidence that investors value accounting firm reputation.

Note that neither the bidder certification effect nor the target wealth effect should be present in cash-financed deals. This is because the payoff to the target firm shareholders in cash deals is not contingent upon the valuation of bidder's shares. Therefore, the quality of the due diligence investigation on the buyer (if any) has no valuation implications for the firms involved.

### **3. Data and Methodology**

#### *3.1 Sample Selection Criteria*

In order to test our predictions we collect a sample of mergers and acquisitions announced during the period between January 1, 1996 and December 31, 2009 from Thomson Financial SDC Database (SDC). Both bidders and targets are US public firms (repurchases are excluded) and the deal value and the method of payment should be reported. The original sample contains 4,539 deals. We clean the sample from deals classified as liquidations, restructurings, leveraged buyouts, reverse takeovers, privatizations, bankruptcy acquisitions, and going private transactions. The remaining sample contains 4,308 observations. Next, since we are interested in transactions that represent a transfer of control, we require that the bidder owns no more than 10% of target shares before the deal and seeks to own more than 50%, as in Faccio et al. (2006).<sup>4</sup> There are 3,834 transactions that satisfy these criteria. The bidder and the target have to be covered in CRSP database, leaving us with 2,789 transactions. We further exclude deals worth less than \$1 million and less than 1% of bidder market value, to avoid our results being generated by economically insignificant transactions. The remaining sample includes 2,601 deals. Our final screen is that the target firm's due diligence accountant is known – an issue we discuss next.

---

<sup>4</sup> The results are unchanged when we restrict the sample to 100% acquisitions.

### 3.2 *Due Diligence Accountant and the Quality of Due Diligence*

As a practical matter, due diligence is customarily performed by the firm's auditor. After the passage of Sarbanes-Oxley Act of 2002, auditors are still allowed to perform due diligence associated with M&A transactions for their audit clients as it falls under the so-called "permissible non-audit services", but this must now be pre-approved by the client's board audit committee (Kinney et al., 2004). We obtain the data on the target firm's auditor identity from Compustat, which leaves 1,981 deals in our final sample.<sup>5</sup> Another potential data source is SDC which collects the data on the target's due diligence accountant (TACC data field).<sup>6</sup> However, SDC coverage is poorer and tilted heavily towards stock-financed deals. This suggests that targets in cash deals do not perform due diligence on the bidder, confirming our premise that due diligence on the bidder is important in stock but not cash deals. Further, where SDC data is available, we compare it with auditor identities from Compustat and find an almost complete correspondence. Thus, we take comfort in our definition of the target due diligence provider.

We follow the convention in the literature and classify the Big accounting firms as reputable due diligence providers, and all other accounting firms as less reputable due diligence accountants at any point during our sample period. Thus, our key variable *Reputable Accountant* is dichotomous, taking the value of 1 when the target auditor is a Big accounting firm, and the value of 0 otherwise. Since 2002 the Big accounting firms (the Big-4) are PricewaterhouseCoopers, Ernst & Young, KMPG, and Deloitte and Touche.<sup>7</sup> Apart

---

<sup>5</sup> Roughly half of the 620 targets missing due diligence accountant data are not on Compustat altogether, meaning that they would have been eliminated from the regression analysis anyway due to unavailability of certain control variables.

<sup>6</sup> Through our conversations with Thomson Financial SDC data specialists we confirmed that the data reported in the TACC data field pertains specifically to the due diligence accountant employed by the target and not just its auditor.

<sup>7</sup> During part of our sample period, Coopers & Lybrand, and Arthur Andersen also belonged to the Big Accounting Firms league. The former merged with Price Waterhouse to form PricewaterhouseCoopers, while

from making our results comparable to prior studies, there are two additional reasons why such a dichotomous measure is appropriate. First, it captures the two-tiered structure of the accounting industry, acknowledged by practitioners, researchers, regulators, and the financial press. Second, it is preferable econometrically, because the use of a continuous measure requires it to capture quality with precision and to have a constant effect on the dependent variables (e.g., Titman and Trueman (1986) and Fang (2005)). This dichotomous classification of accounting firms yields 1,778 (89.75% of the sample) transactions where the target retained a reputable due diligence provider, and 203 (the remaining 10.25% of the sample) deals involving targets employing a less reputable due diligence accountant.<sup>8</sup>

### 3.3 Sample Statistics and Variable Definitions

Table 1 presents descriptive statistics for the overall sample, as well as for the reputable and less reputable due diligence provider sub-samples. Panels A and B report statistics for bidder and target characteristics, respectively. *Bidder (Target) MV* is the bidding (target) firm market value 4 weeks prior to the acquisition announcement obtained from CRSP. The mean (median) *Bidder MV* in our sample is 10,406.86 (1,641.16) US\$ million. Bidders of targets retaining reputable due diligence accountants are substantially larger (11.37 US\$ billion) than those employing other due diligence providers (1.93 US\$ billion). Bidder announcement returns have been shown to be negatively related to bidder size (Moeller et al., 2004). The mean (median) target size is 1,399.65 (217.08) US\$ million. As expected, clients of reputable

---

the latter went out of business as a consequence of being involved in the Enron scandal. Since these firms used to belong to then-existing “Big-5” or “Big-6”, they are also included in the reputable accountant category.

<sup>8</sup> Out of the 203 targets retaining less reputable accountants, 60 were advised by Grant Thornton, 32 by BDO, 14 by McGladrey and Pullen, 6 by Moss Adams, 5 by Crowe Chizek, 3 by Plante & Moran, 2 by Richard A. Eisner, 2 by J H Cohn, 1 by Baird, Kurtz and Dobson, 1 by Cherry, Bekaert and Holland, 1 by Moore Stephens, and 76 by “Other” as reported by Compustat. Thus, the less reputable accountant category is not disproportionately represented by firms immediately below the Big-4 threshold.

accountants are larger firms. Schwert (2000) shows that larger targets exhibit lower acquisition returns.

*Bidder (Target) Book-to-Market Ratio (B/M)* is calculated as the bidder's (target's) book value of equity in the fiscal-year end prior to the announcement divided by the market value of equity four weeks prior to the acquisition announcement. Mean (median) book-to-market ratio for the bidders in our sample is 0.46 (0.34). Target book-to-market ratios are slightly higher (a mean of 0.70 and a median of 0.49 for the full sample). Dong et al. (2006) show that bidder and target announcement period returns are positively related to the respective book-to-market ratios. Additionally, Moeller et al. (2005) argue that wealth destruction during the 1998-2001 merger wave was associated with highly overvalued bidders.

*Bidder (Target) Run-Up* is the market-adjusted buy-and-hold bidder (target) return over the period beginning 205 days and ending 6 days prior to the announcement date, consistent with Moeller et al. (2007). Bidders exhibit an average run-up of 5.5%, while the median run-up is -6.0%. The mean target run-up is 0.6% and the median is -16.4% in our sample. Rosen (2006) finds that bidder returns are negatively related to the bidder run-up, while Schwert (1996) finds no relationship between target returns and target run-ups.

*Bidder (Target) Sigma*, which has been extensively used as a measure of information asymmetry following the work of Dierkens (1991), is the standard deviation of the bidding (target) firm daily market-adjusted stock returns measured during the period beginning 205 and ending 6 days before deal announcement. Bidders for targets retaining reputable due diligence accountants have a mean sigma of 0.031, comparable to that of bidders targeting firms with less reputable accountants (0.029). Targets retaining reputable due diligence accountants have somewhat higher mean sigma (0.040 vs. 0.044) than other targets, but the medians are not significantly different (0.034 vs. 0.035). Moeller et al. (2007) provide evidence that high sigma bidders generate lower announcement period returns in stock

acquisitions, while Officer et al. (2009) show that bidders gain more when stock is used for acquisitions of high sigma targets.

*Bidder (Target) Cash Reserves* ratio is defined as cash and short-term investments divided by total assets (both values are from Compustat). The mean (median) bidder cash reserves ratio is 17.9% (8.3%). Bidders pursuing targets retaining reputable due diligence providers have significantly larger mean and median cash holdings than bidders pursuing targets using by less reputable due diligence providers (mean of 18.2% versus 14.8% with a difference p-value of 0.028). Target firms have a mean (median) level of cash holdings of 21.8% (10.7%). Targets retaining reputable due diligence accountants appear to have accumulated more cash than those employing less reputable ones (mean of 22.2% versus 17.3% with a difference p-value of 0.006). Harford (1999) demonstrates that cash-rich bidders destroy value.

Panel C presents the statistics for deal characteristics. The average (median) *Deal Value* in our sample is 2,090.54 US\$ million (342.45 US\$ million). Transactions involving targets with reputable due diligence providers are larger (mean of 2,304.75 US\$ million) than those involving targets with less reputable due diligence accountants (mean of 214.35 US\$ million) and the difference is highly significant (p-value of 0.000).

*Relative Size* is defined as *Deal Value* divided by *Bidder MV*. Mean (median) relative size of targets in our sample is 48.2% (25.0%). This measure is significantly higher for acquisitions of targets retaining reputable due diligence accountants than those using the services of less reputable ones (mean of 49.5% versus 36.9% with a difference p-value of 0.026). Bidder returns have been shown to decrease with the relative size of the target in public acquisitions (e.g., Servaes (1991), Travlos (1987), and Jensen and Ruback (1983)). Target firm returns follow the same pattern (Officer, 2003).

*Number of Bidders* is the number of firms bidding for the same target. The mean (median) number of bidders is 1.11 (1.00) in our sample period. This is consistent with Boone

and Mulherin (2007), who note that bidders are often uncontested in their pursuit of a particular target firm. Competition for the target firm is expected to decrease bidder returns (Morellec and Zhdanov, 2005) but to increase target returns (Berkovitch and Narayanan, 1990).

*Hostile Deals* represent acquisitions that are reported as “hostile” or “unsolicited” in SDC. Hostile offers represent 5.86% of our sample, consistent with the evidence that the late 1990s and the early 2000s were dominated by friendly deals in the global market for corporate control (Rossi and Volpin, 2004). Servaes (1991) documents that hostile bids are associated with relatively lower bidder returns, while Schwert (2000) finds no significant effect for the bidder, but a positive effect for the target returns.

*Diversifying Deals* is a dummy variable taking the value of 1 when the 4-digit primary SIC code of the bidder is different from that of the target and 0 when it is the same. Based on this definition, almost 62.34% of acquisitions in our sample are diversifying deals. There are slightly more diversifying deals involving targets retaining less reputable accountants. Morck et al. (1990) find that investors respond negatively to diversifying acquisitions. However, recent research suggests that the “diversification discount” can be a product of the methodology (Campa and Kedia, 2002) or the source of data employed (Villalonga, 2004).

In terms of the method of payment, 40.03% of the transactions in our sample were pure *Stock*-financed, 24.79% represent pure *Cash* deals, while the remaining 35.18% involved a *Mixed (Some Stock)* consideration. Neither type of financing is significantly associated with the use of a reputable due diligence by the target firm, apart from all-cash deals which are marginally more prevalent in deals targeting firms with less reputable due diligence providers. Travlos (1987) shows that bidders offering stock in public acquisitions experience lower returns. Targets also gain less when the offer consideration is stock (Berkovitch and Narayanan, 1990). As for the acquisition technique, *Tender Offers* represent 17.16% of the

transactions. Jensen and Ruback (1983) document that tender offers are associated with higher bidder and target announcement period returns.

*Premium* is the difference between the offer price and the target stock price 4 weeks before the acquisition announcement divided by the latter (data is from SDC). We winsorize values beyond the range of [0, 2] as in Officer (2003). Takeover premiums are quite high in our sample period. Mean premium is 45.06%, while the median premium is 36.07%. Clients of reputable due diligence providers receive premiums not significantly different from those of other accounting firms.

### 3.4 Abnormal Returns Methodology

To measure the announcement effects, we calculate *Bidder* and *Target CARs*. *Bidder (Target) CAR* is the cumulative abnormal return of the bidding (target) firm's stock in the five-day event window (-2, +2) where day 0 is the acquisition announcement day. Expected returns are calculated using the market model estimated over the period starting 240 days and ending 41 days prior to the announcement. The benchmark returns are the CRSP value-weighted index returns.

Table 1, panel A, shows that acquiring firms experience a mean CAR of -2.11%, which is statistically significant at the 1% level. The mean *Bidder CAR* is quite low due to our sample composition, which is tilted towards large public firm acquisitions as a result of our requirement for the target to be covered in both CRSP and Compustat. Public firm acquisitions tend to be associated with negative announcement period returns, which also decrease with size (Moeller et al., 2004). Panel B shows that target shareholders gain a mean CAR of 22.65%, also significant at the 1% level. Median CARs follow a similar pattern.

The differences in mean and median wealth effects associated with acquiring a target retaining reputable due diligence accountants versus a target employing other due diligence providers are statistically insignificant. However, this univariate comparison does not take



into account any confounding effects. For instance, acquirers pursuing targets audited by reputable audit firms are larger, and these targets are larger firms themselves. It has also been shown that larger firms are associated with lower announcement period returns (see Moeller et al. (2004) for acquirers, and Schwert (2000) for targets). Therefore, in the next section we examine the effects of reputable target accountants on *bidder* and *target CARs* in a cross-sectional regression context which controls for various firm- and deal-specific characteristics.

Before proceeding to our analysis, we examine the variables correlation matrix presented in Table 2. As expected, the *Reputable Accountant* indicator is positively correlated with target and bidder size, as well as with the relative size of the deal. It is also positively correlated with bidder and target cash holdings, but negatively correlated with target stock price run-up and return volatility (sigma). Importantly, our main variable of interest does not exhibit correlations with the control variables that would be high enough to trigger multicollinearity concerns; specifically, none of the correlations of the *Reputable Accountant* indicator with the other variables exceeds 0.1.

[Please Insert Tables 1 & 2 About Here]

## **4. Empirical Results**

### *3.1 Bidder CARs*

We argued above that transactions involving targets retaining reputable due diligence providers should be associated with higher bidder announcement returns due to the certification effect, and that this effect should only be pronounced in deals fully or partially financed with stock. Table 3 presents the results of cross-sectional regression analysis based on Model (1):

Model (1)

$$\begin{aligned}
Bidder\_CAR_i = & \beta_0 + \beta_1 Reputable\_Accountant_i + \beta_2 Ln(Bidder\_Size_i) \\
& + \beta_3 Bidder\_B/M_i + \beta_4 Bidder\_Run\_Up_i + \beta_5 Bidder\_Sigma_i \\
& + \beta_6 Bidder\_Cash\_Resrves_i + \beta_7 Relative\_Size_i + \beta_8 Some\_Stock_i \\
& + \beta_9 Diversifying\_Deals_i + \beta_{10} Hostile\_Deals_i \\
& + \beta_{11} Tender\_Offers\_Dummy_i + \beta_{12} Multiple\_Bidder\_Contest_i \\
& + \beta_{13} Premium_i + \beta_{14} Bubble\_Period\_(98 - 2001)_i + e_i
\end{aligned}$$

This regression controls for various characteristics of the bidder, as well as for the following deal-specific characteristics: *Relative Size* of the deal, *Some Stock* (which takes the value of 1 when consideration includes any non-zero proportion of bidder's stock), target industry relatedness (*Diversifying Deals*), *Hostile Deals*, the acquisition technique (*Tender Offers Dummy*), presence of competing bidders (*Multiple Bidder Contest*) and a *Bubble Period (1998-2001)* dummy to account for the wealth destruction associated with this time period (Moeller et al., 2005).

Specification (1) is estimated using the entire sample. The *Reputable Accountant* indicator obtains a positive coefficient, significant at the 10% level. The magnitude of the coefficient suggests that acquisitions of targets retaining reputable due diligence accountants experience a positive certification effect of about 1.47%, *ceteris paribus*. Most of the control variables have significant coefficients, the signs of which are in line with prior M&A literature. However, our prediction was that the effect should be present in fully and partially stock-financed acquisitions, only. To test whether this is the case, specifications (2), (3), and (4) are estimated using pure cash, mixed payment, and pure stock deals, respectively. Consistent with our prediction, there is no significant certification effect in pure cash deals. Rather, the full sample result is driven entirely by acquisitions fully or partially paid for with stock, where the coefficients on the *Reputable Accountant* variable are significant at the 1% and 5% levels, respectively. The estimated coefficients also substantially increase in magnitude: for the subsample of deals involving some stock in the consideration structure, the certification effect is a positive 2.64%, and it is 3.69% for the pure stock swap transactions. The economic significance of these results is staggering when considered in

connection with the unconditional bidder announcement returns in partially and fully stock-financed deals of -2.98% and -3.80%, respectively. The magnitude of the certification effect is thus almost 100% of the (absolute) unconditional bidder CAR.

[Please Insert Table 3 About Here]

### 3.2 Target CARs

We now turn to the examination of target firm announcement returns. Given that the target firm shares in fully or partially stock-financed deals are exchangeable into bidder shares, the positive certification effect should flow through to the *target CARs*. Table 4 presents the related regression tests, where we control for target and deal characteristics as shown in Model (2) below:

Model (2)

$$\begin{aligned}
 Target\_CAR_i = & \beta_0 + \beta_1 Reputable\_Accountant_i + \beta_2 Ln(Target\_Size_i) \\
 & + \beta_3 Target\_B/M_i + \beta_4 Target\_Run\_Up_i + \beta_5 Target\_Sigma_i \\
 & + \beta_6 Target\_Cash\_Reserves_i + \beta_7 Relative\_Size_i + \beta_8 Some\_Stock_i \\
 & + \beta_9 Diversifying\_Deals_i + \beta_{10} Hostile\_Deals_i \\
 & + \beta_{11} Tender\_Offers\_Dummy_i + \beta_{12} Multiple\_Bider\_Contest_i \\
 & + \beta_{13} Bubble\_Period\_(98 - 2001)_i + e_i
 \end{aligned}$$

Specification (1) is for the full sample. The *Reputable Accountant* indicator is positive and statistically different from at the 10% level in this regression. The magnitude of the coefficient suggests that targets retaining reputable due diligence accountants enjoy announcement returns that are on average 3.30% higher than other targets. However, as shown by the subsample tests that follow (specifications (2) through (4)), this effect is driven by deals either partially or fully financed with bidder stock. The certification effect feeds into a positive target shareholder wealth effect of 4.00% in deals containing some stock in the consideration; this estimate is significant at the 10% level. As expected, the largest effect occurs in pure stock swap transactions – a positive 6.89% on average, which is significant at the 5% level. This effect is not significant for pure cash deals, consistent with our predictions.

The control variables have signs consistent with prior literature. For instance, larger targets (both in terms of absolute size and relative to the bidder size) experience lower returns. The book-to-market ratio, the tender offers dummy and the hostility indicator are positively associated with target returns, while payment with stock has a negative impact on target returns.

[Please Insert Table 4 About Here]

### 3.3 *Is this a Certification Effect?*

Overall, the above findings are consistent with the bidder certification effect. In this section we perform additional analyses that reinforce this argument.

#### 3.3.1 *Conditioning on Information Asymmetry*

The value of certification should be higher when the information asymmetry regarding bidder's worth is relatively greater. Therefore, we condition our *bidder* and *target CARs* analysis on variables that capture uncertainty about bidder value.

Target firm managers face more difficulties in valuing bidders with high idiosyncratic return volatility (high sigma bidders) and bidders residing in industries different from that of the target. Moeller et al. (2007) and Officer et al. (2009) use idiosyncratic return volatility as a measure of information asymmetry in their studies of bidder returns. In addition, Servaes and Zenner (1996) and Chemmanur et al. (2009) use target industry relatedness as a proxy for information asymmetry in their studies of the use of investment banks and the choice of the method of payment in acquisitions, respectively. We split the sample into subsamples based on these two information asymmetry proxies and run our regressions separately for each subsample. We focus on pure stock transactions (where we find the certification effect to be the strongest) to preserve space, the results for mixed payment deals are qualitatively similar. We first discuss the results for *Bidder CARs* which are reported in Table 5.

Specifications (1) and (2) split the sample into high and low sigma bidders. High (low) sigma bidders are those with values of sigma above (below) the sample median. In line with our prediction, the estimated effect of reputable due diligence providers is only significant for high sigma bidders. Moreover, the magnitude of the coefficient on the *Reputable Accountant* indicator for high sigma bidders is substantially higher, implying a 5.10% positive certification effect, *ceteris paribus*. Specifications (3) and (4) split the sample into diversifying and same industry deals based on the *Diversifying Deals* indicator. Again, the effect is confined to acquisitions involving greater uncertainty about bidder's worth, namely diversifying ones. The estimated effect of reputable due diligence accountants on bidder CARs is 5.66% in this subsample. On the contrary, there is no significant effect in same industry transactions.

[Please Insert Table 5 About Here]

We now repeat this analysis for *target CARs*. The results are presented in Table 6. Specifications (1) and (2) are for high and low sigma subsamples, respectively. Targets receiving pure stock offers from high sigma bidders gain by 8.74% more when they retain a reputable due diligence provider (effect significant at the 5% level). There is no significant effect when the bidder is a low sigma firm. The results for industry relatedness are reported in specifications (3) and (4). The coefficient on the *Reputable Accountant* indicator in the diversifying stock swap acquisitions subsample is a positive 7.71%, significant at the 10% level. On the other hand, it does not approach statistical significance for same industry stock swaps.

[Please Insert Table 6 About Here]

Overall, in line with our prediction, the bidder certification effect and the associated target wealth effect are stronger in situations where the uncertainty about bidder's worth is greater. This is consistent with the certification story.

#### *4.3.2. Conditioning on the Independence of the Due Diligence Provider*

For the certification signal to be credible, the market and the target firm should perceive the due diligence provider as independent. This is not the case when two firms share the same audit firm. When the target firm due diligence is provided by the accountant who is also bidder's auditor, the independence of the due diligence provider is compromised – the target firm due diligence accountant is the same firm that signed off on the bidder's financial statements. Further, when the target due diligence provider and the bidder auditor are the same, the incentive of the accountant is just to complete the deal rather than to scrutinize bidder's worth since after the merger the target will switch to the bidder's auditor (or its assets will transfer to bidder's ownership, increasing the size of the bidder and therefore potential audit fees for the incumbent auditor). We therefore examine the relationship between target firm due diligence quality and bidder and target CARs conditional on whether the merging firms share the same auditor. Table 7 reports the results for bidder CARs.

The first two columns in Table 7 are estimated using a subsample of deals at least partially financed with stock, and the last two columns are for pure stock swaps. Odd columns are estimated over the subsample of deals where the bidder and the target share the same auditor, and even columns are for deals where the due diligence provider is independent. As predicted, the positive certification effect is confined to situations where the due diligence provider is independent. The estimated effect is 2.67% for deals involving some stock as payment, and 4.53% for pure stock swaps. Both of these estimates are significant at the 5% level. At the same time, there is no significant effect when the target due diligence accountant is also bidder's auditor.

[Please Insert Table 7 About Here]

Table 8 conditions the effect of target CARs on whether the target due diligence provider is also bidder's auditor. The results mirror those for bidder CARs. Specifically, the positive target shareholder wealth effect is 4.60% (significant at the 10% level) for deals at

least partially financed with stock, and 8.31% (significant at the 5% level) in pure stock swaps.

[Please Insert Table 8 About Here]

Overall, these results confirm our prediction that the certification effect should be conditional on the perceived independence of the due diligence provider.<sup>9</sup> This reinforces our argument that it is the certification effect at play. However, we also discuss below some potential alternative explanations.

## 5. Alternative Explanations

The results we document could be consistent with several alternative explanations. In this section we argue why we believe our story is a more plausible one.

First, Xie et al. (2010) examine target firm auditor reputation in takeovers and document, similar to our findings, that acquisitions of reputedly audited targets generate higher bidder returns. They attribute this result to the insurance effect of reputable auditors, arguing that the bidder can sue the target firm auditor and recover damages if a material irregularity is discovered after the acquisition. While this may be a plausible explanation in light of the full sample result, their insurance hypothesis is at odds with our evidence that the effect is driven by stock-financed deals only. Further, the insurance story explains neither the fact that the positive effect on bidder returns is concentrated in deals with higher uncertainty regarding *bidder's* worth, nor the fact that the effect disappears when the two firms share the same auditor.

---

<sup>9</sup> We also considered the effect of reputable target due diligence accountants conditional on whether the bidder employs a reputable or less reputable auditor. Presumably, the certification effect of reputable target accountants should be greatest when the bidder's auditor is less reputable. However, the fact that bidder auditors are predominantly Big-4 renders the power of this test very low. Specifically, from the 1981 deals in our sample, in 1651 both the bidder and the target have Big-4 accountants, in 59 both the bidder and the target have non-Big-4 accountants, in 137 the bidder has a Big-4 accountant and the target a non-Big-4 accountant, and in 67 the bidder has a non-Big-4 accountant and the target a Big-4 accountant.

Second, the effect we document could be consistent with a synergy explanation. That is, acquisitions of targets retaining reputable due diligence accountants could generate higher synergy gains. However, as is the case with the insurance hypothesis of Xie et al. (2010), the synergy explanation cannot reconcile the facts that the effect is pronounced only for stock-financed deals and is absent when the two firms have the same auditor. In addition, there is no clear economic rationale for why such incremental synergies would exist and be captured by the auditor variable. Furthermore, we can rule this explanation out by analyzing post-acquisition operating performance improvements of the merged firm. If the synergy explanation is valid, post-merger operating performance improvements should be higher for acquisitions of reputedly audited targets. In unreported analysis, we perform this test and verify that this is not the case. Specifically, we compare the changes in bidder industry-adjusted return on assets and industry-adjusted return on sales from the pre-acquisition year to the average of 3 (2 for deals taking place in 2009 as the data for 2012 are not yet available) post-acquisition years across the two types of target auditors. These operating performance improvements are not different between acquisitions of targets audited by reputable and less reputable auditors in both univariate and multivariate settings. Therefore, the synergy explanation lacks empirical support.

Third, one could argue that the reputable target due diligence provider (auditor) proxies for the quality of target's corporate governance, and that better governed firms make better targets. However, as demonstrated by Wang and Xie (2009), bidder and target announcement returns are higher when the target has *weaker* corporate governance relative to that of the bidder. This is explained by the so-called "governance transfer", whereby the assets of the target move to a better governance regime and thus increase in value. Therefore, based on this evidence, if one maintains that targets retaining reputable due diligence providers (auditors) are better governed, one would expect to find higher acquisition returns when the target due diligence accountant (auditor) is less reputable – we find the opposite effect.



Besides, Wang and Xie (2009) show that the corporate governance effect is a synergy effect as evidenced by better post-acquisition operating performance improvements – a relationship which is not present in our case. Finally, as is the case with all alternative explanations, it is not clear why any governance effects would be contingent on the deal being structured as a stock swap.

Thus, we believe that the underlying economic effect for the results we document is the certification of bidder value afforded by a reputable target firm due diligence provider.

## **6. Robustness Checks**

### *6.1 Selection Bias Concerns*

The above analysis relies on the assumption that target firm due diligence accountant reputation is exogenous. While the assignment of due diligence providers to their client firms could be non-random, we are comfortable with this assumption given that any non-randomness in the matching between accounting firms and their clients occurs at the *target* side while the economic force behind our results stems from the certification of *bidder's* value and is therefore not due to the attributes of the target. Since target firm due diligence provider (auditor) reputation and *bidder* characteristics are plausibly orthogonal, selection bias is not an issue in our setting.

In order to further alleviate the concerns that the *Reputable Accountant* variable is picking up target firm characteristics we utilize propensity-score matching, implemented as in Drucker and Puri (2005). Specifically, we match acquisitions of targets retaining reputable due diligence accountants with acquisitions where targets retain a less reputable accountant based on a one-dimensional propensity score which is a function of all target firm characteristics used in our analysis. We find that the results are unaffected throughout our tests; that is, the average treatment effect (ATE) of reputable accountants on *bidder* and

*target CARs* is significant in stock-financed deals and is not significant in cash deals (results unreported but available from the authors upon request).

## 6.2 *Other Sensitivity Tests*

Our main results are also robust to the following alternations of the research design: i) extending the announcement period window to 11 trading days (-5, +5) ii) using equally-weighted CRSP index (instead of value-weighted) as the market return in the market model estimation, iii) using market-adjusted returns, iv) using bidder dollar gains (defined as bidder CAR multiplied by bidder MV) as the dependent variable in bidder returns regressions instead of *bidder CARs*, v) restricting the sample to transactions representing at least 5% of bidder size, vi) introducing industry fixed effects at the 2-digit SIC level into our regressions vii) excluding bidders from regulated utilities industries (SIC codes 4900-4999) ix) controlling for acquisition accounting method (purchase vs. pooling of interest; this choice existed up until 2001) in the bidder returns regressions motivated by Pandit (2009), x) controlling for target firm characteristics in bidder returns regressions and for bidder characteristics in target returns regressions.

Finally, we also test for the change in the perception of reputation of large accounting firms following the Enron scandal and the demise of its audit firm, Arthur Andersen, which used to belong to the reputable accountant category. To that end, we introduce a post-2002 dummy and interact it with the *Reputable Accountant* indicator. The coefficient on this variable is insignificantly different from zero, suggesting that the reputation perception of other large accounting firms was not affected by the involvement of Arthur Andersen in the Enron scandal.

## 7. Conclusion

This paper examines the notion of due diligence on the *bidder* in M&A transactions. Target firm shareholder wealth in stock swap transactions depends upon the valuation of bidder shares. At the same time, the bidder has the incentive to inflate its share value in order to minimize the purchase price through a more favourable exchange ratio. There is evidence that bidders actively engage in such activities. This motivates a due diligence investigation on the bidder in deals partially or fully financed with bidder stock, and we provide evidence consistent with sellers performing such due diligence.

When the target firm employs a reputable due diligence provider, the announcement of the deal conveys a certification signal to the market, leading to higher bidder CARs in such deals. Since the announcement of a stock swap makes the target firm shares exchangeable into bidder shares, the positive bidder value certification effect feeds into higher target firm announcement returns. These effects are not present in pure cash deals. The value of certification increases with information asymmetry regarding bidder's worth. The certification effect and the associated target firm wealth effect are not present when the merging firms share the same due diligence provider. These results do not reflect a synergy effect and cannot be explained by the insurance role of Big 4 accounting firms.

Overall, this paper highlights the role of due diligence on the *bidder* and shows that it has important valuation implications for the firms involved in M&As.

## References

- Balvers, R.J., McDonald, B., Miller, R.E., 1988. Underpricing of new issues and the choice of auditor as a signal of investment banker reputation. *Accounting Review* 63, 605-622.
- Beatty, R.P., 1989. Auditor reputation and the pricing of initial public offerings. *Accounting Review* 64, 693-709.
- Becker, C.L., Defond, M.L., Jiambalvo, J., Subramanyam, K.R., 1998. The effect of audit quality on earnings management. *Contemporary Accounting Research* 15, 1-24.
- Berkovitch, E., Narayanan, M.P., 1990. Competition and the medium of exchange in takeovers. *Review of Financial Studies* 3, 153-174.
- Boone, A.L., Mulherin, J.H., 2007. How are firms sold? *Journal of Finance* 62, 847-875.
- Booth, J.R., Smith, R.L., II, 1986. Capital raising, underwriting, and the certification hypothesis. *Journal of Financial Economics* 15, 261-281.
- Campa, J.M., Kedia, S., 2002. Explaining the diversification discount. *Journal of Finance* 57, 1731-1762.
- Chaney, P.K., Philipich, K.L., 2002. Shredded reputation: The cost of audit failure. *Journal of Accounting Research* 40, 1221-1245.
- Chemmanur, T.J., Paeglis, I., Simonyan, K., 2009. The medium of exchange in acquisitions: Does the private information of both acquirer and target matter? *Journal of Corporate Finance* 15, 523-542.
- DeAngelo, L.E., 1981. Auditor size and audit quality. *Journal of Accounting & Economics* 3, 183-199.
- Denis, D.J., Macias, A.J., 2012. Material adverse change clauses and acquisition dynamics. *Journal of Financial & Quantitative Analysis* forthcoming.
- Dierkens, N., 1991. Information asymmetry and equity issues. *Journal of Financial & Quantitative Analysis* 26, 181-199.
- Dong, M., Hirshleifer, D., Richardson, S., Teoh, S.H., 2006. Does investor misvaluation drive the takeover market? *Journal of Finance* 61, 725-762.
- Drucker, S., Puri, M., 2005. On the benefits of concurrent lending and underwriting. *Journal of Finance* 60, 2763-2799.
- Erickson, M., Wang, S.-W., 1999. Earnings management by acquiring firms in stock for stock mergers. *Journal of Accounting & Economics* 27, 149-176.
- Faccio, M., McConnell, J.J., Stolin, D., 2006. Returns to acquirers of listed and unlisted targets. *Journal of Financial & Quantitative Analysis* 41, 197-220.
- Fang, L.H., 2005. Investment bank reputation and the price and quality of underwriting services. *Journal of Finance* 60, 2729-2761.

- Ge, R., Lennox, C., 2011. Do acquirers disclose good news or withhold bad news when they finance their acquisitions using equity? *Review of Accounting Studies* 16, 183-217.
- Gong, G., Louis, H., Sun, A.X., 2008. Earnings management, lawsuits, and stock-for-stock acquirers' market performance. *Journal of Accounting & Economics* 46, 62-77.
- Harford, J., 1999. Corporate cash reserves and acquisitions. *Journal of Finance* 54, 1969-1997.
- Jensen, M.C., Ruback, R.S., 1983. The market for corporate control. *Journal of Financial Economics* 11, 5-50.
- Kinney, W.R.J., Palmrose, Z.-V., Scholz, S., 2004. Auditor independence, non-audit services, and restatements: Was the U.S. Government right? *Journal of Accounting Research* 42, 561-588.
- Kravet, T.D., Myers, L.A., Sanchez, J.M., Scholz, S. 2012. Do financial statement misstatements facilitate corporate acquisitions?, Working Paper, University of Texas at Dallas, University of Arkansas, and University of Kansas.
- Lajoux, A.R., Elson, C.M., *The art of M&A due diligence: Navigating critical steps and uncovering crucial data.* McGraw-Hill: New York; 2011.
- Louis, H., 2004. Earnings management and the market performance of acquiring firms. *Journal of Financial Economics* 74, 121-148.
- Mansi, S.A., Maxwell, W.F., Miller, D.P., 2004. Does auditor quality and tenure matter to investors? Evidence from the bond market. *Journal of Accounting Research* 42, 755-793.
- Moeller, S.B., Schlingemann, F.P., Stulz, R.M., 2004. Firm size and the gains from acquisitions. *Journal of Financial Economics* 73, 201-228.
- Moeller, S.B., Schlingemann, F.P., Stulz, R.M., 2005. Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave. *Journal of Finance* 60, 757-782.
- Moeller, S.B., Schlingemann, F.P., Stulz, R.M., 2007. How do diversity of opinion and information asymmetry affect acquirer returns? *Review of Financial Studies* 20, 2047-2078.
- Morck, R., Shleifer, A., Vishny, R.W., 1990. Do managerial objectives drive bad acquisitions? *Journal of Finance* 45, 31-48.
- Morellec, E., Zhdanov, A., 2005. The dynamics of mergers and acquisitions. *Journal of Financial Economics* 77, 649-672.
- Myers, S.C., Majluf, N.S., 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13, 187-221.
- Officer, M.S., 2003. Termination fees in mergers and acquisitions. *Journal of Financial Economics* 69, 431-467.
- Officer, M.S., Poulsen, A., Stegemoller, M., 2009. Target-firm information asymmetry and acquirer returns. *Review of Finance* 13, 467-493.

- Pandit, S. 2009. Accounting choice, announcement returns and operating performance in stock-for-stock acquisitions, Working paper, University of Illinois at Chicago.
- Pittman, J.A., Fortin, S., 2004. Auditor choice and the cost of debt capital for newly public firms. *Journal of Accounting & Economics* 37, 113-136.
- Rauterkus, S.Y., Song, K., 2005. Auditor's reputation and equity offerings: The case of arthur andersen. *Financial Management* 34, 121-135.
- Rosen, R.J., 2006. Merger momentum and investor sentiment: The stock market reaction to merger announcements. *Journal of Business* 79, 987-1017.
- Rossi, S., Volpin, P.F., 2004. Cross-country determinants of mergers and acquisitions. *Journal of Financial Economics* 74, 277-304.
- Schwert, G.W., 1996. Markup pricing in mergers and acquisitions. *Journal of Financial Economics* 41, 153-192.
- Schwert, G.W., 2000. Hostility in takeovers: In the eyes of the beholder? *Journal of Finance* 55, 2599-2640.
- Servaes, H., 1991. Tobin's q and gains from takeovers. *Journal of Finance* 46, 409-419.
- Servaes, H., Zenner, M., 1996. The role of investment banks in acquisitions. *Review of Financial Studies* 9, 787-815.
- Teoh, S.H., Wong, T.J., 1993. Perceived auditor quality and the earnings response coefficient. *Accounting Review* 68, 346-366.
- Titman, S., Trueman, B., 1986. Information quality and the valuation of new issues. *Journal of Accounting & Economics* 8, 159-172.
- Travlos, N.G., 1987. Corporate takeover bids, methods of payment, and bidding firms' stock returns. *Journal of Finance* 42, 943-963.
- Villalonga, B., 2004. Diversification discount or premium? New evidence from the business information tracking series. *Journal of Finance* 59, 479-506.
- Wang, C., Xie, F., 2009. Corporate governance transfer and synergistic gains from mergers and acquisitions. *Review of Financial Studies* 22, 829-858.
- Wangerin, D.D. 2012. The consequences of M&A due diligence for post-acquisition performance and financial reporting, Working Paper, Michigan State University.
- Weber, J., Willenborg, M., Zhang, J., 2008. Does auditor reputation matter? The case of KPMG germany and ComROAD AG. *Journal of Accounting Research* 46, 941-972.
- Xie, Y., Yi, H., Zhang, Y. 2010. The value of big n target auditors in corporate takeovers, Working Paper, Fordham University, University of Oklahoma, and American University.

**Table 1**  
**Sample Descriptive Statistics**

	All Sample (1)			Reputable Accountants (2)			Less Reputable Accountants (3)			Difference (2)-(3)	
	Mean	Median	N	Mean	Median	N	Mean	Median	N	p-value mean	p-value median
<b>Panel A: Acquirer Characteristics</b>											
<b>Bidder MV (mil.)</b>	10406.860	1641.160	1981	11374.68	1906.358	1778	1930.088	521.307	203	0.000	0.000
<b>Bidder B/M</b>	0.464	0.339	1935	0.455	0.328	1737	0.537	0.467	198	0.153	0.000
<b>Bidder Run-Up (%)</b>	0.055	-0.060	1909	0.054	-0.060	1713	0.065	-0.062	196	0.851	0.760
<b>Bidder Sigma (%)</b>	0.030	0.025	1981	0.031	0.025	1778	0.029	0.024	203	0.275	0.517
<b>Bidder Cash Reserves (%)</b>	0.179	0.083	1935	0.182	0.090	1737	0.148	0.054	198	0.028	0.028
<b>Bidder CAR (-2, +2)</b>	-2.113%***	-1.547%***	1981	-2.121%***	-1.558%***	1778	-2.042%***	-1.195%***	203	0.918	0.799
<b>Panel B: Target Characteristics</b>											
<b>Target MV (mil.)</b>	1399.654	217.076	1981	1542.465	248.695	1778	148.822	70.044	203	0.000	0.000
<b>Target B/M</b>	0.701	0.487	1981	0.690	0.474	1778	0.790	0.580	203	0.271	0.000
<b>Target Run-Up (%)</b>	0.006	-0.164	1931	-0.066	-0.172	1732	0.639	-0.128	199	0.000	0.024
<b>Target Sigma (%)</b>	0.041	0.034	1981	0.040	0.034	1778	0.044	0.035	203	0.040	0.460
<b>Target Cash Reserves (%)</b>	0.218	0.107	1980	0.222	0.109	1777	0.173	0.072	203	0.006	0.057
<b>Target CAR (-2, +2)</b>	22.645%***	18.798%***	1981	22.681%***	18.774%***	1778	22.325%***	19.233%***	203	0.860	0.597
<b>Panel C: Deal Characteristics</b>											
<b>Deal Value (mil.)</b>	2090.543	342.449	1981	2304.754	409.350	1778	214.346	107.462	203	0.000	0.000
<b>Relative Size (%)</b>	0.482	0.250	1981	0.495	0.262	1778	0.369	0.201	203	0.026	0.063
<b># of Bidders</b>	1.106	1.000	1981	1.109	1.000	1778	1.074	1.000	203	0.215	0.196
<b>% of Diversifying Deals</b>	62.342	-	1981	61.699	-	1778	67.980	-	203	0.080	-
<b>% of Hostile Deals</b>	5.857	-	1981	6.130	-	1778	3.448	-	203	0.123	-
<b>% of Tender Offers</b>	17.163	-	1981	17.548	-	1778	13.793	-	203	0.179	-
<b>% of All-Cash Deals</b>	24.785	-	1981	24.241	-	1778	29.557	-	203	0.096	-
<b>% of All-Stock Deals</b>	40.030	-	1981	40.551	-	1778	35.468	-	203	0.162	-
<b>% of Mixed (Some Stock) Deals</b>	35.184	-	1981	35.208	-	1778	34.975	-	203	0.945	-
<b>% Completed</b>	85.159	-	1981	85.827	-	1778	79.310	-	203	0.013	-
<b>Premium (%)</b>	45.058	36.065	1894	45.189	36.335	1704	43.888	34.485	190	0.662	0.447

The table presents sample descriptive statistics for US public firm acquisitions announced over the period between January 1, 1996 and December 31, 2009 drawn from the Thomson Financial SDC Database. Panels A, B and C describe the mean, the median and the number of deals for bidder-, target-, and deal-specific characteristics, respectively for the whole sample as well as for “*Reputable*” and “*Less Reputable*” categories of target due diligence accountants. Statistical tests for differences in means and equality of medians for each characteristic of reputable versus less reputable are also presented. *Reputable Accountants* are PricewaterhouseCoopers (including both Price Waterhouse and Coopers & Lybrand before their merger in 1998), Ernst & Young, KPMG, Deloitte and Touche and Arthur Andersen (before its demise). All other accounting firms are classified as “*Less Reputable*” due diligence accountants. *MV* is the bidder (target) market value in US\$ mil. four weeks prior to the acquisition announcement. *Book-to-market (B/M)* is calculated as the bidder’s (target’s) net book value divided by its market value of equity four weeks prior to the acquisition announcement. *Run-Up* is the market-adjusted buy and-hold return of the bidding (target) firm stock over the period starting 205 days to 6 days prior to the announcement of the deal. *Sigma* is the standard deviation of the bidding (target) firm’s stock return in excess of the value-weighted CRSP index return starting 205 days before and ending 6 days before the announcement. *Cash Reserves* variable measures cash holdings by the bidding (target) firm and is defined as cash and short-term investments divided by total assets for the fiscal year-end preceding the acquisition announcement. *Deal Value* is the transaction value in US\$ mil. as reported by SDC. *Relative Size* is the deal value divided by the bidder size four weeks prior the announcement. *# of Bidders* is the number of firms bidding for the target taken from SDC. *Hostile Deals* is a dummy variable that takes the value of one if the deals are classified by SDC as “hostile” or “unsolicited”, and 0 otherwise. *Diversifying Deals* is an indicator variable taking the value of 1 if the bidder and the target share the same 4-digit primary SIC code, and 0 otherwise. *Tender Offers* dummy is an indicator variable which takes the value of 1 if the deal is a tender offer and 0 otherwise. *Cash* and *Stock* deals are dummies that take the value of 1 if transactions are made with 100% cash or 100% stock, respectively and 0 otherwise. All others are defined as *Mixed* or *Some Stock*. *Completed* deals is a dummy variable taking the value of 1 for completed transactions, and 0 for unsuccessful. *Premium* is the difference between the offer price and target’s stock price 4 weeks before the announcement divided by the latter after winsorizing values beyond the range of [0; 2], in percentage. Bidder and Target *CAR* (-2, +2) are the returns in excess of those predicted by a single factor market model (value-weighted CRSP index return is the market return) cumulated over 5 trading days centered on the acquisition announcement day. The market model is estimated over the period starting 240 days to 41 days before the announcement date. Stock price data is from CRSP, accounting data is from Compustat. Symbols \*\*\*, \*\* and \* denote statistical significance at the 1%, 5% and 10% levels, respectively. N denotes the number of observations.

---



Table 2  
Variables Correlation Matrix

	Reputable Accountant	Bidder CAR	Target CAR	Bidder MV	Bidder B/M	Bidder Run-Up	Bidder Sigma	Bidder Cash Reserves	Target MV	Target B/M	Target Run- Up	Target Sigma	Target Cash Reserves
Bidder CAR	-0.0023												
Target CAR	0.0040	<b>0.1406</b>											
Bidder MV	<b>0.0936</b>	-0.0183	0.0165										
Bidder B/M	-0.0325	<b>0.1034</b>	0.0019	<b>-0.0889</b>									
Bidder Run-Up	-0.0043	<b>-0.1557</b>	-0.0271	0.0269	<b>-0.1770</b>								
Bidder Sigma	0.0245	<b>-0.1024</b>	<b>-0.0457</b>	<b>-0.1776</b>	<b>0.1837</b>	<b>0.1431</b>							
Bidder Cash Reserves	<b>0.0500</b>	<b>-0.1262</b>	<b>0.0608</b>	<b>-0.0554</b>	-0.0133	<b>0.0968</b>	<b>0.4447</b>						
Target MV	<b>0.0838</b>	<b>-0.0794</b>	<b>-0.0852</b>	<b>0.5320</b>	<b>-0.0557</b>	0.0315	<b>-0.1211</b>	<b>-0.0756</b>					
Target B/M	-0.0248	<b>0.0507</b>	<b>0.2193</b>	<b>-0.0874</b>	<b>0.1803</b>	<b>-0.0969</b>	<b>0.1444</b>	<b>0.0797</b>	<b>-0.0776</b>				
Target Run-Up	<b>-0.0885</b>	0.0066	<b>-0.0609</b>	<b>0.0415</b>	-0.0354	<b>0.1391</b>	-0.0178	-0.0080	0.0073	<b>-0.0717</b>			
Target Sigma	<b>-0.0462</b>	-0.0198	<b>0.1045</b>	<b>-0.1337</b>	<b>0.1065</b>	<b>0.0844</b>	<b>0.6396</b>	<b>0.3817</b>	<b>-0.1729</b>	<b>0.2291</b>	<b>0.1823</b>		
Target Cash Reserves	<b>0.0618</b>	<b>-0.1196</b>	0.0362	0.0101	-0.0222	<b>0.1113</b>	<b>0.3613</b>	<b>0.5464</b>	<b>-0.0776</b>	-0.0275	-0.0104	<b>0.3121</b>	
Relative Size	<b>0.0502</b>	<b>0.0445</b>	<b>-0.1444</b>	<b>-0.1257</b>	<b>0.1589</b>	<b>-0.0401</b>	<b>0.1023</b>	-0.0068	<b>0.0708</b>	0.0032	-0.0128	<b>-0.1037</b>	<b>-0.0900</b>
Some Stock	<b>0.0373</b>	<b>-0.1467</b>	<b>-0.1914</b>	<b>-0.0395</b>	-0.0345	<b>0.0744</b>	<b>0.1984</b>	0.0074	<b>0.0856</b>	-0.0290	-0.0195	<b>0.0596</b>	<b>-0.0915</b>
Diversifying Deals	<b>-0.0393</b>	-0.0162	-0.0023	0.0293	-0.0256	-0.0009	-0.0181	<b>-0.0436</b>	<b>-0.0691</b>	0.0051	<b>-0.0560</b>	0.0164	<b>-0.0431</b>
Hostile Deals	0.0346	-0.0062	0.0137	-0.0028	0.0333	-0.0216	<b>-0.0433</b>	<b>-0.0424</b>	<b>0.0422</b>	0.0052	-0.0195	<b>-0.0819</b>	<b>-0.0832</b>
No of Bidders	0.0279	-0.0038	<b>-0.0641</b>	-0.0043	<b>0.0402</b>	-0.0366	<b>-0.0439</b>	<b>-0.0601</b>	<b>0.0891</b>	0.0053	<b>0.0633</b>	<b>-0.0629</b>	<b>-0.0788</b>
Premium	0.0101	-0.0045	<b>0.5925</b>	<b>-0.0453</b>	0.0295	<b>0.1399</b>	<b>0.1447</b>	<b>0.0934</b>	<b>-0.0939</b>	<b>0.1969</b>	-0.0009	<b>0.2828</b>	<b>0.0795</b>
	Relative Size	Some Stock	Diversifying Deals	Hostile Deals	No of Bidders								
Some Stock	<b>0.1340</b>												
Diversifying Deals	<b>-0.0414</b>	<b>-0.0528</b>											
Hostile Deals	<b>0.1289</b>	<b>-0.1257</b>	0.0030										
No of Bidders	<b>0.1289</b>	<b>-0.0647</b>	-0.0253	<b>0.3297</b>									
Premium	<b>-0.0654</b>	<b>-0.0691</b>	0.0023	0.0197	0.0360								

The table presents pairwise Pearson correlations of the variables used in the analysis. Correlation coefficients significant at the 10% level or better are in boldface. The sample consists of US public acquisitions over the period between January 1, 1996 and December 31, 2009 drawn from the Thomson Financial SDC Database. All variables are defined in Table 1.

<b>Table 3</b>				
<b>Bidder Certification Effect</b>				
	<b>(1) All</b>	<b>(2) Cash</b>	<b>(3) Some Stock</b>	<b>(4) Pure Stock</b>
<b>Intercept</b>	0.0300 (1.53)	0.0567*** (2.63)	-0.0152 (-0.71)	-0.0175 (-0.54)
<b>Reputable Accountant</b>	0.0147* (1.91)	-0.0012 (-0.13)	0.0264*** (2.61)	0.0369** (2.28)
<b>Ln (Acquirer MV)</b>	-0.0042** (-2.40)	-0.0069*** (-3.48)	-0.0034* (-1.75)	-0.0035 (-1.24)
<b>Acquirer B/M</b>	0.0048 (0.71)	-0.0093*** (-4.80)	0.0242*** (2.77)	0.0406*** (2.71)
<b>Acquirer Run-Up</b>	-0.0144*** (-2.81)	-0.0098 (-1.25)	-0.0134** (-2.27)	-0.0082 (-1.09)
<b>Acquirer Sigma</b>	-0.0161 (-0.05)	0.3556 (0.82)	-0.1658 (-0.57)	-0.4271 (-1.19)
<b>Acquirer Cash Reserves</b>	-0.0665*** (-4.14)	-0.0426** (-1.99)	-0.0639*** (-3.36)	-0.0645** (-2.44)
<b>Relative Size</b>	0.0038 (0.45)	0.0333*** (5.17)	-0.0118*** (-2.74)	-0.0150 (-1.28)
<b>Stock Dummy</b>	-0.0302*** (-5.41)			
<b>Diversifying Deals</b>	-0.0016 (-0.33)	-0.0023 (-0.35)	-0.0018 (-0.32)	-0.0135 (-1.45)
<b>Hostile Deals</b>	-0.0194** (-2.32)	-0.0380*** (-3.83)	-0.0064 (-0.57)	-0.0172 (-0.84)
<b>Tender Offers Dummy</b>	0.0175*** (3.26)	0.0055 (0.89)	0.0224*** (2.81)	-0.0142 (-0.49)
<b>Multiple Bidder Contest</b>	-0.0051 (-0.59)	-0.0213** (-2.02)	0.0040 (0.36)	0.0087 (0.37)
<b>Premium</b>	0.0001 (0.90)	0.0002** (2.16)	0.0001 (0.76)	0.0001 (0.68)
<b>Bubble Period (98-2001)</b>	-0.0101** (-2.04)	-0.0167** (-2.04)	-0.0089 (-1.52)	-0.0032 (-0.36)
<b>N</b>	1814	465	1349	718
<b>Adj. R2</b>	0.071	0.216	0.063	0.071

The table presents the results of the cross-sectional OLS regression analysis of bidder 5-day CARs on target due diligence accountant (auditor) reputation and other firm- and deal-specific characteristics for US public acquisitions announced over the sample period 1996-2009. Specification (1) is for the full sample. Specifications (2), (3) and (4) are for pure cash offers, offers containing stock, and pure stock offers, respectively. Bidder CAR is the cumulative abnormal return of the bidding firm stock in the event window (-2, +2) around the acquisition announcement. CARs are computed using daily data with a market model (value-weighted CRSP index is the benchmark). The market model is estimated over the period starting 240 days to 41 days before the announcement date. *Reputable Accountants* are PricewaterhouseCoopers (including both Price Waterhouse and Coopers & Lybrand before their merger in 1998), Ernst & Young, KPMG, Deloitte and Touche and Arthur Andersen (before its demise). See Table 1 for the definitions of the variables. *Multiple Bidder Contest* is a dummy variable taking the value of 1 if there are competing bidders reported by SDC and 0 otherwise. *Bubble Period (98-2001)* is a binary variable that takes the value of 1 if the deal is announced over the period 1998-2001, and 0 otherwise. The symbols \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively. White's heteroskedasticity-adjusted t-statistics are reported in parentheses. N denotes the number of observations.

**Table 4**  
**Target Wealth Effect**

	(1) All	(2) Cash	(3) Some Stock	(4) Pure Stock
<b>Intercept</b>	0.3352*** (9.25)	0.3801*** (3.66)	0.2538*** (7.17)	0.2141*** (4.55)
<b>Reputable Accountant</b>	0.0330* (1.79)	0.0115 (0.32)	0.0400* (1.88)	0.0689** (2.21)
<b>Ln (Target MV)</b>	-0.0190*** (-4.50)	-0.0306** (-2.41)	-0.0162*** (-3.73)	-0.0154** (-2.43)
<b>Target B/M</b>	0.0395*** (4.71)	0.0644 (1.41)	0.0349*** (4.58)	0.0422*** (4.85)
<b>Target Run-Up</b>	-0.0049** (-2.37)	-0.0035 (-1.06)	-0.0065*** (-2.64)	-0.0016 (-0.29)
<b>Target Sigma</b>	-0.1374 (-0.30)	0.1084 (0.10)	-0.2141 (-0.44)	-0.3261 (-0.51)
<b>Target Cash Reserves</b>	0.0127 (0.43)	0.0673 (1.21)	0.0026 (0.08)	0.0484 (1.02)
<b>Relative Size</b>	-0.0391*** (-4.58)	-0.0489*** (-3.08)	-0.0376*** (-3.58)	-0.0803*** (-4.69)
<b>Stock Dummy</b>	-0.0650*** (-4.01)			
<b>Diversifying Deals</b>	-0.0187 (-1.59)	0.0067 (0.26)	-0.0258* (-1.91)	-0.0117 (-0.65)
<b>Hostile Deals</b>	0.0318 (1.64)	0.0178 (0.50)	0.0541** (2.41)	0.1644*** (4.12)
<b>Tender Offers Dummy</b>	0.1213*** (6.02)	0.0916*** (3.36)	0.1516*** (5.12)	0.0583 (0.75)
<b>Multiple Bidder Contest</b>	-0.0748*** (-4.71)	-0.0879*** (-2.74)	-0.0717*** (-3.80)	-0.0880** (-2.53)
<b>Bubble Period (98-2001)</b>	0.0098 (0.69)	-0.0132 (-0.39)	0.0155 (1.03)	0.0090 (0.43)
<b>N</b>	1930	482	1448	766
<b>Adj. R2</b>	0.137	0.131	0.101	0.115

The table presents the results of the cross-sectional OLS regression analysis of target 5-day CARs on target due diligence accountant (auditor) reputation and other firm- and deal- characteristics for US public acquisitions announced over the sample period 1996-2009. Specification (1) is for the full sample. Specifications (2), (3) and (4) are for pure cash offers, offers containing stock, and pure stock offers, respectively. Target CAR is the cumulative abnormal return of the target firm stock in the event window (-2, +2) around the acquisition announcement. CARs are computed using daily data with a market model (value-weighted CRSP index is the benchmark). The market model is estimated over the period starting 240 days to 41 days before the announcement date. *Reputable Accountants* are PricewaterhouseCoopers (including both Price Waterhouse and Coopers & Lybrand before their merger in 1998), Ernst & Young, KPMG, Deloitte and Touche and Arthur Andersen (before its demise). See Table 1 for the definitions of the variables. *Multiple Bidder Contest* is a dummy variable taking the value of 1 if there are competing bidders reported by SDC and 0 otherwise. *Bubble Period (98-2001)* is a binary variable that takes the value of 1 if the deal is announced over the period 1998-2001, and 0 otherwise. The symbols \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively. White's heteroskedasticity-adjusted t-statistics are reported in parentheses. N denotes the number of observations.

<b>Table 5</b>				
<b>Bidder Certification Effect by Information Asymmetry</b>				
	<b>(1) High Sigma Bidder</b>	<b>(2) Low Sigma Bidder</b>	<b>(3) Diversifying</b>	<b>(4) Same Industry</b>
<b>Intercept</b>	-0.0332 (-0.78)	0.0223 (0.57)	-0.0779** (-2.36)	0.0984 (1.59)
<b>Reputable Accountant</b>	0.0510** (2.29)	0.0070 (0.46)	0.0566*** (3.41)	-0.0277 (-0.77)
<b>Ln (Acquirer MV)</b>	-0.0047 (-1.21)	-0.0025 (-0.82)	-0.0004 (-0.12)	-0.0091* (-1.74)
<b>Acquirer B/M</b>	0.0393** (2.37)	0.0308 (1.55)	0.0429*** (2.86)	0.0428* (1.95)
<b>Acquirer Run-Up</b>	-0.0068 (-0.87)	-0.0321* (-1.84)	-0.0007 (-0.10)	-0.0177 (-1.23)
<b>Acquirer Sigma</b>	-0.2942 (-0.66)	-0.6119 (-0.64)	-0.3243 (-0.85)	-0.7105 (-0.86)
<b>Acquirer Cash Reserves</b>	-0.0584** (-2.01)	-0.0818 (-1.19)	-0.0575** (-2.06)	-0.0640 (-1.14)
<b>Relative Size</b>	-0.0087 (-0.64)	-0.0352** (-2.36)	-0.0055 (-0.47)	-0.0482* (-1.73)
<b>Diversifying Deals</b>	-0.0122 (-0.91)	-0.0171* (-1.90)		
<b>Hostile Deals</b>	-0.0437 (-1.29)	0.0125 (0.64)	-0.0389 (-1.62)	0.0510 (1.49)
<b>Tender Offers Dummy</b>	-0.0148 (-0.37)	-0.0314* (-1.74)	0.0128 (0.51)	-0.0553 (-0.94)
<b>Multiple Bidder Contest</b>	0.0321 (0.92)	-0.0270 (-1.08)	0.0301 (0.96)	-0.0400 (-1.33)
<b>Premium</b>	0.0001 (0.74)	-0.0000 (-0.04)	0.0001 (0.46)	0.0001 (0.49)
<b>Bubble Period (98-2001)</b>	-0.0113 (-0.90)	0.0147 (1.45)	-0.0131 (-1.25)	0.0215 (1.30)
<b>N</b>	473	245	455	263
<b>Adj. R2</b>	0.060	0.074	0.062	0.100

The table presents the results of the cross-sectional OLS regression analysis of bidder 5-day CARs on target due diligence accountant (auditor) reputation and other firm- and deal-specific characteristics for pure stock US public firm acquisitions announced over the sample period 1996-2009 conditional on the information asymmetry regarding bidder's worth. The first two columns split the sample into high and low sigma bidders based on the sample median of the *Sigma Bidder* variable. The second two split the sample according to the industry relatedness of the target based on the *Diversifying Deals* indicator. Bidder CAR is the cumulative abnormal return of the bidding firm stock in the event window (-2, +2) around the acquisition announcement. CARs are computed using daily data with a market model (value-weighted CRSP index is the benchmark). The market model is estimated over the period starting 240 days to 41 days before the announcement date. *Reputable Accountants* are PricewaterhouseCoopers (including both Price Waterhouse and Coopers & Lybrand before their merger in 1998), Ernst & Young, KPMG, Deloitte and Touche and Arthur Andersen (before its demise). See Table 1 for the definitions of the variables. *Multiple Bidder Contest* is a dummy variable taking the value of 1 if there are competing bidders reported by SDC and 0 otherwise. *Bubble Period (98-2001)* is a binary variable that takes the value of 1 if the deal is announced over the period 1998-2001, and 0 otherwise. The symbols \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively. White's heteroskedasticity-adjusted t-statistics are reported in parentheses. N denotes the number of observations.

<b>Table 6</b>				
<b>Target Wealth Effect by Information Asymmetry</b>				
	<b>(1) High Sigma Bidder</b>	<b>(2) Low Sigma Bidder</b>	<b>(3) Diversifying</b>	<b>(4) Same Industry</b>
<b>Intercept</b>	0.2723*** (4.34)	0.1432** (2.07)	0.2515*** (4.64)	0.1038 (1.23)
<b>Reputable Accountant</b>	0.0874** (2.07)	-0.0097 (-0.32)	0.0771* (1.89)	0.0263 (0.68)
<b>Ln (Target MV)</b>	-0.0255*** (-2.64)	0.0020 (0.29)	-0.0193** (-2.07)	-0.0011 (-0.12)
<b>Target B/M</b>	0.0429*** (4.72)	0.0016 (0.04)	0.0382*** (5.25)	0.0640** (2.44)
<b>Target Run-Up</b>	0.0022 (0.39)	-0.0827*** (-3.08)	-0.0112* (-1.82)	0.0003 (0.06)
<b>Target Sigma</b>	-0.8418 (-1.13)	1.6963* (1.65)	-1.2430* (-1.78)	1.7252* (1.77)
<b>Target Cash Reserves</b>	0.0411 (0.73)	0.0535 (0.86)	0.0664 (1.08)	0.0142 (0.22)
<b>Relative Size</b>	-0.0712*** (-3.66)	-0.1139*** (-3.09)	-0.0669*** (-4.14)	-0.1582*** (-4.07)
<b>Diversifying Deals</b>	-0.0216 (-0.86)	0.0112 (0.52)		
<b>Hostile Deals</b>	0.2198*** (3.60)	0.1018** (2.09)	0.1364*** (2.79)	0.2198*** (3.12)
<b>Tender Offers Dummy</b>	0.1513 (1.44)	-0.1115*** (-2.80)	0.0672 (0.79)	-0.0076 (-0.04)
<b>Multiple Bidder Contest</b>	-0.1423*** (-2.76)	-0.0140 (-0.40)	-0.1299*** (-3.42)	-0.0160 (-0.21)
<b>Bubble Period (98-2001)</b>	0.0172 (0.60)	-0.0160 (-0.70)	0.0114 (0.41)	0.0140 (0.47)
<b>N</b>	515	251	488	278
<b>Adj. R2</b>	0.124	0.129	0.104	0.181

The table presents the results of the cross-sectional OLS regression analysis of target 5-day CARs on target due diligence accountant (auditor) reputation and other firm- and deal-specific characteristics for pure stock US public firm acquisitions announced over the sample period 1996-2009 conditional on the information asymmetry regarding bidder's worth. The first two columns split the sample into high and low sigma bidders based on the sample median of the *Sigma Bidder* variable. The second two split the sample according to the industry relatedness of the target based on the *Diversifying Deals* indicator. Target CAR is the cumulative abnormal return of the target firm stock in the event window (-2, +2) around the acquisition announcement. CARs are computed using daily data with a market model (value-weighted CRSP index is the benchmark). The market model is estimated over the period starting 240 days to 41 days before the announcement date. *Reputable Accountants* are PricewaterhouseCoopers (including both Price Waterhouse and Coopers & Lybrand before their merger in 1998), Ernst & Young, KPMG, Deloitte and Touche and Arthur Andersen (before its demise). See Table 1 for the definitions of the variables. *Multiple Bidder Contest* is a dummy variable taking the value of 1 if there are competing bidders reported by SDC and 0 otherwise. *Bubble Period (98-2001)* is a binary variable that takes the value of 1 if the deal is announced over the period 1998-2001, and 0 otherwise. The symbols \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively. White's heteroskedasticity-adjusted t-statistics are reported in parentheses. N denotes the number of observations.

**Table 7**  
**Bidder Certification Effect Conditional on Sharing the Same Due Diligence Accountant**

	Some Stock Same	Some Stock Different	Pure Stock Same	Pure Stock Different
<b>Intercept</b>	0.0002 (0.01)	-0.0136 (-0.49)	0.0208 (0.35)	-0.0166 (-0.43)
<b>Reputable Accountant</b>	0.0160 (0.62)	0.0267** (2.41)	-0.0183 (-0.55)	0.0453** (2.51)
<b>Ln (Acquirer MV)</b>	-0.0049 (-1.14)	-0.0031 (-1.34)	-0.0035 (-0.56)	-0.0038 (-1.21)
<b>Acquirer B/M</b>	0.0287*** (3.24)	0.0245* (1.66)	0.0336 (1.37)	0.0429** (2.43)
<b>Acquirer Run-Up</b>	-0.0165** (-2.31)	-0.0131 (-1.59)	-0.0169* (-1.68)	-0.0067 (-0.65)
<b>Acquirer Sigma</b>	-0.0154 (-0.03)	-0.1546 (-0.45)	-0.3924 (-0.58)	-0.3125 (-0.71)
<b>Acquirer Cash Reserves</b>	-0.0296 (-0.87)	-0.0796*** (-3.47)	0.0002 (0.00)	-0.0932*** (-2.86)
<b>Relative Size</b>	-0.0460*** (-4.33)	-0.0066 (-1.40)	-0.0434 (-1.16)	-0.0122 (-1.02)
<b>Diversifying Deals</b>	-0.0106 (-0.95)	-0.0007 (-0.10)	-0.0177 (-0.96)	-0.0125 (-1.18)
<b>Hostile Deals</b>	-0.0034 (-0.13)	-0.0041 (-0.32)	-0.0027 (-0.05)	-0.0175 (-0.78)
<b>Tender Offers Dummy</b>	0.0584*** (4.32)	0.0134 (1.50)	0.0969*** (4.89)	-0.0374 (-1.26)
<b>Multiple Bidder Contest</b>	-0.0111 (-0.36)	0.0117 (1.02)	0.0232 (0.20)	0.0079 (0.41)
<b>Premium</b>	0.0004* (1.88)	-0.0000 (-0.17)	0.0004 (1.61)	-0.0001 (-0.27)
<b>Bubble Period (98-2001)</b>	-0.0086 (-0.74)	-0.0103 (-1.54)	-0.0098 (-0.48)	-0.0017 (-0.17)
<b>N</b>	328	1021	179	539
<b>Adj. R2</b>	0.114	0.060	0.031	0.090

The table presents the results of the cross-sectional OLS regression analysis of bidder 5-day CARs on target due diligence accountant reputation and other firm- and deal-specific characteristics for a sample of US public firm acquisitions announced over the sample period 1996-2009 conditional on whether the bidder and the target share the same due diligence provider. The first two columns are for the subsample of offers containing some stock; the second two are for pure stock offers. Bidder CAR is the cumulative abnormal return of the bidding firm stock in the event window (-2, +2) around the acquisition announcement. CARs are computed using daily data with a market model (value-weighted CRSP index is the benchmark). The market model is estimated over the period starting 240 days to 41 days before the announcement date. *Reputable Accountants* are PricewaterhouseCoopers (including both Price Waterhouse and Coopers & Lybrand before their merger in 1998), Ernst & Young, KPMG, Deloitte and Touche and Arthur Andersen (before its demise). See Table 1 for the definitions of the variables. *Multiple Bidder Contest* is a dummy variable taking the value of 1 if there are competing bidders reported by SDC and 0 otherwise. *Bubble Period (98-2001)* is a binary variable that takes the value of 1 if the deal is announced over the period 1998-2001, and 0 otherwise. The symbols \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively. White's heteroskedasticity-adjusted t-statistics are reported in parentheses. N denotes the number of observations.

**Table 8**  
**Target Wealth Effect Conditional on Sharing the Same Due Diligence Accountant**

	Some Stock Same	Some Stock Different	Pure Stock Same	Pure Stock Different
<b>Intercept</b>	0.2619*** (3.87)	0.2567*** (5.56)	0.2597*** (2.73)	0.1951*** (3.05)
<b>Reputable Accountant</b>	-0.0010 (-0.03)	0.0460* (1.90)	-0.0379 (-0.85)	0.0831** (2.20)
<b>Ln (Target MV)</b>	-0.0126 (-1.57)	-0.0168*** (-3.17)	-0.0078 (-0.67)	-0.0153** (-1.98)
<b>Target B/M</b>	0.0341*** (12.87)	0.0352 (1.60)	0.0357*** (15.12)	0.0671** (1.97)
<b>Target Run-Up</b>	-0.0275** (-2.45)	-0.0059** (-2.46)	-0.0201* (-1.97)	0.0022 (0.36)
<b>Target Sigma</b>	-0.5085 (-0.60)	-0.1917 (-0.34)	-0.2315 (-0.18)	-0.5932 (-0.83)
<b>Target Cash Reserves</b>	0.1102 (1.51)	-0.0242 (-0.60)	0.1688* (1.75)	0.0342 (0.59)
<b>Relative Size</b>	-0.0471*** (-2.72)	-0.0375*** (-3.23)	-0.1469*** (-3.15)	-0.0770*** (-4.27)
<b>Diversifying Deals</b>	-0.0204 (-0.84)	-0.0268* (-1.66)	-0.0070 (-0.21)	-0.0058 (-0.26)
<b>Hostile Deals</b>	0.0101 (0.30)	0.0683** (2.50)	0.0227 (0.31)	0.1964*** (4.69)
<b>Tender Offers Dummy</b>	0.1165*** (3.15)	0.1632*** (4.51)	0.2490 (1.34)	-0.0132 (-0.17)
<b>Multiple Bidder Contest</b>	-0.0947*** (-3.16)	-0.0640*** (-2.84)	-0.1277 (-1.51)	-0.0790** (-2.13)
<b>Bubble Period (98-2001)</b>	0.0259 (1.00)	0.0128 (0.71)	0.0320 (0.79)	0.0038 (0.17)
<b>N</b>	336	1112	176	590
<b>Adj. R2</b>	0.169	0.084	0.228	0.088

The table presents the results of the cross-sectional OLS regression analysis of target 5-day CARs on target due diligence accountant reputation and other firm- and deal-specific characteristics for a sample of US public firm acquisitions announced over the sample period 1996-2009 conditional on whether the bidder and the target share the same due diligence provider. The first two columns are for the subsample of offers containing some stock; the second two are for pure stock offers. Target CAR is the cumulative abnormal return of the target firm stock in the event window (-2, +2) around the acquisition announcement. CARs are computed using daily data with a market model (value-weighted CRSP index is the benchmark). The market model is estimated over the period starting 240 days to 41 days before the announcement date. *Reputable Accountants* are PricewaterhouseCoopers (including both Price Waterhouse and Coopers & Lybrand before their merger in 1998), Ernst & Young, KPMG, Deloitte and Touche and Arthur Andersen (before its demise). See Table 1 for the definitions of the variables. *Multiple Bidder Contest* is a dummy variable taking the value of 1 if there are competing bidders reported by SDC and 0 otherwise. *Bubble Period (98-2001)* is a binary variable that takes the value of 1 if the deal is announced over the period 1998-2001, and 0 otherwise. The symbols \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively. White's heteroskedasticity-adjusted t-statistics are reported in parentheses. N denotes the number of observations.