How Do Multiple Regulators Regulate? Evidence from Fairness Opinion Providers'

Conflict of Interest Disclosures

Abstract: Producing and disseminating financial reporting disclosures often involves multiple parties operating under multiple regulators. Conflict of interest disclosures by fairness opinion providers in mergers and acquisitions are an important example. The Securities and Exchange Commission (SEC) oversees the companies responsible for disseminating in their SEC filings any conflicts of interest of their fairness opinion providers. The Financial Industry Regulatory Authority (FINRA) regulates the fairness opinion providers who supply conflict of interest information to their client companies. We use the fairness opinion setting to assess the effectiveness of each regulator's enforcement efforts and to examine whether they improve or degrade enforcement when they enforce jointly. We find each regulator is effective when acting independently. However, when FINRA begins to regulate the disclosure in transactions previously enforced by only the SEC, regulatory effectiveness diminishes. The result suggests the SEC delegates some of the enforcement tasks to FINRA when FINRA is present even though FINRA does not directly enforce the SEC filers. Our cross-sectional tests show that the reduction in enforcement effectiveness under joint regulators is smaller when the SEC faces fewer resource constraints or joint oversight is more needed. Our findings provide implications for the design of disclosure regulations.

Keywords: Conflict of Interest, Disclosure, Fairness Opinion, Mergers and Acquisitions, Enforcement, FINRA, SEC, Court system, multiple regulators.

JEL Classification: K22, M48, G28, G34, G38.

1. Introduction

Whether the interaction between different regulatory bodies in the enforcement process enhances or worsens regulatory oversight has long been a subject of debate (Marks and Hooghe, 2003; Inman and Rubinfeld, 1997). Previous banking studies (Agarwal et al., 2014; Nicoletti, 2018; Bischof et al., 2022; Kim and Kim, 2023), which examine cases where multiple regulators oversee the same regulatee, yield mixed results regarding the effectiveness of this regulatory approach. The process of producing and disseminating financial reporting disclosures, however, often involves multiple parties, each of whom is under the authority of a specialized regulator. For example, certain information in 10-K filings is provided by third parties who operate under a different regulator than the Securities and Exchange Commission (SEC). The audit report is provided by the auditor, who is regulated by the Public Company Accounting Oversight Board (PCAOB). In March 2024, the SEC adopted rules regarding climate-related disclosure under which it will oversee firms' Scope 1 and Scope 2 emission disclosures, although the Environmental Protection Agency regulates the accuracy of firms' emission data.

Despite the prevalence and importance of multiple regulator-regulatee pairs in information production and dissemination, research about regulatory effectiveness in these circumstances is limited. We advance such research by studying the interaction of two regulators focusing on conflict of interest (COI) disclosures by fairness opinion (FO) providers in mergers and acquisitions (M&A). The setting allows us to examine how disclosure quality is affected by the interaction of two important financial regulators: the SEC and the Financial Industry Regulatory Authority (FINRA). The SEC has authority over the company, while FINRA has authority over investment banks acting as FO providers. FO providers have the most information about their COIs with a client, and they communicate this information to the firm's board. Firm managers then disseminate COI information under their firm's reporting requirements as an SEC registrant.

Analyzing how the SEC and FINRA interact in enforcing the COI disclosure in FOs is important because of the relevance of FOs in M&A transactions. FOs are important in target boards' M&A due diligence following the landmark Delaware case *Smith v. Van Gorkom* (Bebchuk and Kahan 1989, Bowers

et al. 2004, Imperatore et al. 2024). Targets and/or acquirers often obtain an FO from a third-party investment bank. FOs can provide incremental information, impose constraints on equity values, and discipline transactions (e.g., DeAngelo 1990, Cain and Dennis 2013, Liu 2020). However, they can instead be biased and uninformative (e.g., Bebchuk and Kahan 1989), particularly when there are COIs between the FO client's management and the investment bank providing the FO. As U.S. investment bankers generate billions of dollars in fees from M&A transactions and much of the COI information is proprietary (e.g., FO providers' personal, financial, and business interests with the FO client), it is important to understand whether and how the SEC and FINRA interact in mandating and enforcing COI disclosure.

The SEC and FINRA each provide regulatory guidance on COI disclosure (see Figure 1 for the illustration of the setting). The SEC does not require FO COI disclosures in all M&A transactions, but has long required such disclosures in mergers and deals requiring shareholder votes (e.g., Badawi et al. 2021). The SEC comment letter process is the primary enforcement mechanism for disclosure violations in M&A filings. Research indicates this process improves disclosure compliance (e.g., Bens et al. 2016, Bozanic et al. 2017, Johnston and Petacchi 2017, Brown et al. 2018, Cunningham et al. 2017). However, due to the strict timeline of the SEC's review and the complexity of M&A filings (e.g., Johnson et al. 2023), SEC staff may lack the time and resources to thoroughly investigate undisclosed COIs or low-quality disclosures.

In contrast, FINRA has, since late 2007, required its members (i.e., investment banks) to disclose COIs for all M&A transactions to a client firm's board when writing FOs. FINRA evaluates investment banks' internal control effectiveness in ensuring compliance with FINRA regulations and operates under SEC oversight. However, FINRA is a self-regulatory organization (SRO), and some theoretical literature questions whether SRO incentives result in under-enforcement (DeMarzo et al. 2005). Moreover, the primary mechanism for disclosing COI information to investors is through SEC filings. As FO providers do not directly disclose information to investors, it is possible for an FO provider to include a COI disclosure in their FO, only to have management remove or modify it when creating the related SEC filing.

It is unclear ex-ante how the SEC and FINRA interact with each other, as they oversee different entities (i.e., firms and FO providers) involved in the same transaction. On one hand, given that FO

providers are the most informed about their COIs with M&A transaction parties, FINRA regulation likely increases an FO client firm manager's certainty about the status of the FO provider's COI and thus increases the manager's COI information precision. When FINRA's regulation improves an FO client firm manager's information precision about the FO provider's COI, the SEC can better enforce informative disclosures. On the other hand, the SEC and FINRA have overlapping mandates over the same transaction and may fulfill each other's roles to some extent. When FINRA starts regulating the same area, the SEC may delegate some regulatory responsibilities to FINRA. The SEC's enforcement of firm disclosures could become less intensive, anticipating that FINRA will specifically target FO providers, particularly since FINRA operates under SEC oversight. However, as FINRA has its own expertise and authority over a different regulatee than the SEC does for COI disclosures, it may not be able to fulfill responsibilities shifted toward it to the same extent as the SEC was doing before such a shift.

Our empirical strategy is to examine how firms' COI disclosure compliance changes after different types of regulatory oversight are introduced. We measure disclosure compliance using self-constructed indices of disclosure quality. To do so, we collect data on whether firms disclose COIs in their SEC filings and manually code information about their FO providers' COIs, including financial, business, and personal relationships and contingent fees. High-quality disclosures are unambiguous about whether a COI exists and give specific information about the nature of the COI and how it is mitigated.

The SEC's enforcement rule applies throughout our sample period and varies by M&A structure (i.e., merger vs. tender offer). FINRA enforcement switches from off to on (for all M&A transactions) in late 2007. Thus, depending on the type of M&A transaction and its year, we observe COI disclosures under the jurisdiction of zero, one, or two regulators. Before 2007, mergers are subject to SEC enforcement for FO COI disclosures whereas tender offer transactions are exempt from any regulatory obligations pertaining to FO COI disclosures. In contrast, after 2007, all M&A transactions, including tender offers, are subject to FINRA enforcement and mergers are subject to both SEC and FINRA enforcement.

Using manually collected and coded data on COI disclosure quality, we first show the effectiveness of a single regulator in overseeing COI disclosures. We find an increase in the quality of FO COI disclosures

with a single regulator relative to no regulator, demonstrating the efficacy of a single regulator. Through further exploiting the cross-sectional and timing variation of when the SEC and FINRA have COI disclosure oversight, we then examine interactions between the two. We find a negative association between the presence of dual oversight and the quality of FO COI disclosure. The results suggest the SEC delegates some enforcement responsibility to FINRA once the latter becomes involved in COI disclosure regulation, and that the effectiveness of SEC enforcement decreases enough to outweigh FINRA's impact.

To further support the interpretation of lessened enforcement under dual oversight, we exploit variation in the SEC resource constraints and the necessity for shareholder protection. First, we investigate instances where the SEC faces resource constraints, which we measure using the intensity of IPO and M&A filing reviews (referred to as "busy" filing review months). In such instances, the SEC may have stronger incentives to delegate enforcement tasks to FINRA. Consistent with this notion, we observe a stronger negative association between dual oversight and COI disclosure quality when the SEC faces resource constraints. Moreover, we use variation in the need for shareholder protection, which affects the requirements for effective enforcement. This need is assessed through several proxies, including the contentiousness of the deal, concerns about the quality of the registrant's disclosure (arising from prior comment letters or restatements), and the presence of a private bidder. When there is a greater demand for protecting shareholders, and the SEC tends to focus more on potential information frictions and agency conflicts between company insiders and external shareholders, we find a diminished negative association between dual oversight and COI disclosure quality.

Our paper makes several contributions. First, we add to the literature on the regulatory design of financial reporting disclosures, especially when disclosures have negative implications. Given that the different parties need to coordinate information and that disclosed content may have negative implications (Leuz et al. 2020), there is a natural concern about noncompliance or partial compliance. Oversight from more regulators may increase a regulation's strictness or could provide multiple dimensions of regulatory expertise. However, the involvement of multiple regulators can also lead to contradictory or duplicative requirements, thus increasing the costs of compliance (e.g., Kalmenovitz and Chen, 2023; Kalmenovitz et

al., 2024). Our findings show that when multiple regulatees provide inputs into a regulated disclosure, the effectiveness of regulators in overseeing the mandated disclosure varies with whether there is more than one regulator and, when there is, with the circumstances of both the regulators and the regulatees. Although a single regulator improves COI disclosure quality, the introduction of a second regulator is harmful to disclosure quality on average. However, the extent to which this negative dual oversight effect occurs depends on the constraints of the regulators and shareholders' demand for protection.

Second, we add to prior literature that examines three main factors affecting the interactions of enforcement agencies with each other (e.g., Agarwal et al. 2014, Nicoletti 2018, Charoenwong et al. 2019, Ciancio and García-Jimeno 2019, Bischof et al. 2022, Kim and Kim 2021). One such factor is the relative resources of the multiple regulators. We examine SEC resource constraints in the cross-sectional tests and find that the extent to which dual FINRA-SEC oversight is associated with lower COI disclosure quality is much greater during months when the SEC has above-average busyness reviewing other SEC filings. The second factor examined in prior literature is the incentive compatibility of a regulator with the other regulator(s) as well as with the regulatee(s). We capture this dimension in our cross-sectional tests by capturing variation in the extent to which the SEC (given its ideology, objectives, and strictness) is likely to be concerned about information frictions and agency conflicts between the registrant's insiders and non-insider owners. We find some evidence consistent with the negative impact of dual FINRA-SEC oversight being lessened or eliminated when the SEC is likely to be more concerned about the registrant's agency conflicts and information frictions.

The third factor examined in prior work is the differences in expertise or specialization of the multiple regulators. In our setting, regulators oversee different regulatees for the same financial reporting disclosure (i.e., the SEC oversees firms and FINRA oversees fairness opinion providers). We find that, on average, the differences in specialized knowledge of the SEC and FINRA are not so large as to lead to enhanced COI disclosure quality when both oversee a given COI disclosure.

A final contribution of our paper is that we provide empirical evidence that furthers our understanding of the effectiveness of FINRA enforcement, and its interaction with the SEC in enforcing

the same disclosure. M&A transactions are not the only major events where the SEC and FINRA share enforcement duties to provide investors with adequate disclosures. The SEC works with FINRA to establish that underwriters provide sufficient disclosure of the underwriting terms and conflicts with the S-1 registration statement filing that the SEC requires domestic issuers to file in order to publicly offer new securities (FINRA, 2024). Prior literature has primarily focused on settings where enforcement power has shifted between the SEC and SROs, not on their interactive and incremental roles in disclosure enforcement. DeMarzo (2005) theoretically shows under-enforcement by SROs and that government agencies can mitigate SRO under-enforcement by enforcing at a later stage, which has been supported in some empirical research (e.g., Lennox and Pittman 2010). In our setting, the government agency (the SEC) is the established enforcer, and it is instead the SRO (FINRA) entering to regulate a different party involved in disclosure production. We find that adding FINRA's regulation of the FO provider's role in COI disclosures to the pre-existing SEC enforcement of the disclosures themselves by the SEC registrant is associated with a lowering of the quality of the COI disclosures.

2. Institutional Setting and Hypothesis Development

2.1 Institutional Setting

2.1.1 FO and COIs in FO

Obtaining an FO has become an important part of a target board's M&A due diligence because of the influence of the state courts. In 1985, the Delaware Supreme Court ruled in *Smith v. Van Gorkom* that the board of Trans Union Corporation violated its duty of care when it failed to obtain an FO.¹ Several subsequent cases established the use of FOs to meet the standard set by this case (Kisgen et al. 2009).²

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¹ The court did not rule that a target board needed to acquire a fairness opinion. Rather, it ruled that when evaluating a takeover proposal, boards are required to inform themselves about the corporation's sale value through a well-prepared financial analysis. Delaware statute title 8, section 141(e) states that directors are "fully protected in relying in good faith" on the opinion presented to the company "by any other person as to matters the member reasonably believes are within such other person's professional or expert competence." In *Van Gorkom*, directors claimed that they relied on the chief executive and financial officers, and the judge specified that the full protection offered to directors under section 141(e) applies only to *outside* fairness opinions.

² Section 1203 of the California Corporate Code requires a fairness opinion for tender offers made by certain insiders, which is (to our knowledge) the only time that fairness opinions are required under state law.

Although FOs can be written by consultants, CPAs, commercial banks, or appraisers, investment banks are the most common writers of FOs and we confirm that they are the only FO providers in our sample.

FO valuations rely predominantly on accounting data. There is a great deal of flexibility in the creation of FO valuations. Writers must perform an underlying valuation analysis, but there is no consensus as to which technique is the most appropriate.³ A weighted combination of multiple techniques is common, but the choice and weight of each technique are subjective. The measurement of key variables in each technique is also inherently subjective.

Of particular concern given the subjectivity of FOs, a number of COI categories for FO providers have been documented (Davidoff 2006). The most common conflict arises when the investment bank that gives one of the companies in the merger transaction financial advice is also hired to write the FO, as the fees for financial advice are likely contingent on the deal closing (and are often much larger than the fees for writing the FO).⁴ In some fee structures, the FO writer is paid only when they agree that the deal is fair (Davidoff 2006). Furthermore, FO providers may have previous/ongoing business or personal relationships with managers or boards. Sometimes, the FO provider holds stock in the relevant companies and might financially benefit from an unfair deal. Even when there is no financial conflict, there are often biases; if an advisor is significantly involved with the construction of the deal, they likely feel that the deal is fair.

The prevalence of these conflicts may explain the common bias found in FO valuation estimates (Cain and Denis, 2013). Many scholars are cynical about the usefulness of FOs, viewing them as skewed and uninformative (e.g., Bebchuk and Kahan 1989). Kisgen et al. (2009) synthesize these critiques in the legal protection-only hypothesis, which argues that FOs serve to provide only legal protection for managers

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³ The most common techniques include discounted cash flow, benchmark premiums, break-up value, liquidation analysis, and comparable companies (Davidoff 2006, Imperatore et al. 2024). Imperatore et al. (2024) provide empirical evidence that FO valuations based on peer comparables are partially driven by a strategic motivation to mitigate litigation risk.

⁴ According to Tuch (2014), the amount of investment banking fees from M&A in 2012 was \$17 billion. MarketWatch reported that in the first three quarters of 2020, investment banks earned \$64 billion from M&A and IPO transactions. Companies who hire FO providers pay the FO fee. The average cost per FO in the 2000s ranged from \$500,000 to \$750,000, with many deals using multiple FOs (Kisgen et al. 2009, Liu 2020) https://www.marketwatch.com/story/wall-street-banks-net-64-billion-in-fees-in-bumper-year-for-m-a-and-ipos-11601479432.

and board members. However, the authors reject the legal protection-only hypothesis in cases where the FO is written for the acquirer. They find that the use of an FO and the independence of the opinion writer both affect the probability of deal completion and the deal premium. The results suggest there is a connection between the information in the FO COI disclosures and how an investor evaluates the deal.

2.1.2 The SEC and COI disclosure in FO

Fairness opinions are typically disclosed by the obtaining firm. Thus, the disclosure is regulated by several different processes. At the SEC, there is the comment letter review process. In 1979, the SEC's Rule 13e-3 required issuers in going-private transactions to make a statement to unaffiliated securities holders on whether the transaction is fair, to disclose any FOs prepared by third parties, and to communicate the COIs for any external party rendering an FO. In 1986, the SEC adopted similar rules for proxy documents and for the S-4 (Proxy Rules-Comprehensive Review Exchange Act Release No. 34-23789, which was issued on Nov. 10, 1986, and which created § 229.1015 (Item 1015)). An S-4 needs to be filed for stock-based transactions, and proxy documents need to be filed whenever the shareholders have to vote to approve the merger, which includes all targets of mergers (but not tender offers) and acquirers who issue more than 20% of their stock in the deal. The SEC rules for FO COI disclosure are that the filer must "describe any material relationship [with the FO provider or any FO provider affiliate/ representative] that existed during the past two years or is mutually understood to be contemplated and any compensation received or to be received as a result of the relationship" (§ 229.1015(b)(4)).

The SEC also requires the filer to disclose if any compensation is contingent on the completion of the merger, and to "quantify, including cases in which the fee is zero, any compensation received or to be received" over the last two years, including but not limited to transaction-related compensation (Question and Answer 217.01 of the Division of Corporation Finance's Compliance and Disclosure Interpretations for Going Private Transactions, Exchange Act Rule 13e-3 and Schedule 13E-3, 2009). FO compensation, transaction fees, and any other unrelated compensation are all expected to be listed separately in the disclosure. However, the SEC has traditionally taken a "hands-off" position when reviewing the proxy and

S-4 filings for Item 1015(b) compliance (Davidoff, 2006). The SEC has also never required FOs or FO COI disclosures for cash offers in required Schedule TO (Tender Offer) and 14-D9 filings.

The SEC is required to review all M&A filings within 30 days.⁵ These reviews have traditionally been done by the SEC's division of corporate finance or by the division of mergers and acquisitions. During these reviews, the SEC confirms that the filing follows SEC disclosure requirements (as mentioned above, not all M&A filings require an FO COI disclosure). If a firm fails to comply with any requirements, the SEC comment letter can encourage compliance, as an M&A transaction cannot be completed until the SEC review is complete.

2.1.3 FINRA and COI disclosure in FO

FINRA (which is also a federal-level organization) requires its members to disclose COIs when writing an FO. FINRA is a self-regulating association comprised of (and funded by) broker-dealers with experience operating under SEC oversight. FINRA can be seen as a specialized regulator for capital market participants, able to impose rules that are better tailored to specific industry needs because of FINRA's close industry ties, expertise, and technical knowledge. Broker-dealers and investment bankers must register with FINRA as a member or as an associated person, and are thereby subject to FINRA's rules. Under FINRA, members providing fairness opinions are required to disclose any conflicts of interest to the client firm's board. This federal requirement was created in late 2007 with the passing of Rule 2290, which has since been renamed Rule 5150.7 FINRA enforces compliance with its own rules, with the Exchange

⁵ Johnson et al. (2020) explain that the SEC reviews all S-4s related to M&A deals, but only selectively reviews proxy statements or other periodic reports related to M&A deals; the selection criteria are not publicly disclosed. Ege et al. (2020) claim that all M&A and IPO transactional filings are reviewed by the SEC. The 2016 report by the U.S. Government Accountability Office (GAO) on the SEC's internal supervisory (https://www.gao.gov/assets/690/680352.pdf) claims that all M&A transactional filings are reviewed. Liu et al. (2022) find that only 31% of the mergers in the ThomsonOne Banker SDCdatabase from 2005 to 2017 have comment letters; the lack of a comment letter, however, does not prove that the SEC failed to review a filing. Liu et al. (2022) also find that one of the most frequent topics in its sample for SEC comments is the FO and the valuation.

⁶ FINRA was preceded by the NASD, which survived until 2007. In 2007, NASD merged with the enforcement arm of the New York Stock Exchange to form FINRA. FINRA is funded by broker-dealers, and has the power to discipline broker-dealers, financial advisors, investment bankers, and other members and associated persons. Sanctions can include fines, censures, suspensions, and being barred from practice.

⁷ See https://www.finra.org/rules-guidance/rulebooks/finra-rules/5150#the-rule

Act, and with other related rules. FINRA uses two common disciplinary procedures to impose sanctions: a complaint alleging the violation of a rule, and the initiation of a matter (without an associated complaint). FINRA has the ability to fine, suspend, or expulse members from practicing in the profession.

FINRA has specified that FO writers need to disclose COI information as part of their fairness opinions and enforcement could be important given that some COI information is likely to be viewed by the FO provider as proprietary. FO writers typically provide their FO to the firm's board of directors as an oral report or as a letter with an average of two to four pages. It is then the board's responsibility to report the FO and COI disclosures to its shareholders. FO providers do not have an alternative reporting mechanism for investors to verify that a board of directors has not tampered with or abbreviated the FO. However, Rule 5150 creates a mechanism to extend culpability to the FO provider in situations where they are complicit in, or the source of, FO-related securities fraud. For example, assume an acquirer hires an FO provider with a material COI but does not disclose that information to their investors in the S-4. If the acquirer's management and board are unaware of the COI because the FO provider never disclosed it, then Rule 5150 establishes that the FO provider bears some legal responsibility for the misinformation.

Rule 5150 was initially written by the NASD in 2004, but was not fully approved and enacted until 2007. The long delay appears to have been caused by the nature of the approval process. Rule changes for SROs must go through a comment period at their own organization and at the SEC. The NASD amended the rule three times because of comments and a fourth time when NASD became FINRA. The delay, however, helps separate any endogenous events or changes in the profession that might have inspired the initial proposal in 2004 from its eventual implementation in 2007.

2.2 Hypothesis Development and Literature Review

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⁸ For example, in re *El Paso Co*. the FO provider, Goldman Sachs, did not tell the board nor disclose to investors that the lead advisor working on the FO personally owned approximately \$340,000 of the acquirer's stock. In *re Del Monte* and in *re Rural Metro Corporation*, the FO provider did not disclose to their client, the target's board, that if the transaction completed they would provide financing to the acquirer, for a considerable fee.

We examine the effectiveness of each regulator's enforcement and study their potential interactions with each other (i.e., whether joint enforcement is associated with higher or lower disclosure quality) when enforcing COI disclosures. Although both regulators regulate the same disclosure, each has authority over a different regulatee: the SEC over the managers who create the filings and FINRA over the FO providers (see Figure 1). The regulatees need to work jointly to generate informative COI disclosures. FO writers have the most information about their COIs and should communicate this information with their client's board of directors, with the easiest method of communication being as part of the formal FO report written by the FO provider for consumption by the board and investors at large as part of the M&A disclosures. Managers, with the oversight of the board, disseminate both the FO and the FO provider's COI information to investors and the public through M&A disclosures filed with the SEC. Each regulator has its strengths and challenges in enforcing FO COI disclosures, and we examine how their interactions affect enforcement.

The literature has generally found that the SEC comment letter process is effective at increasing disclosure quality (e.g., Bens et al. 2016, Bozanic et al. 2017, Johnston and Petacchi 2017, Brown et al. 2018, Cunningham et al. 2019). For example, Ege et al. (2020) view the SEC comment letter process as an enforcement mechanism that often serves as the first line of defense against potential disclosure violations. Given the literature's strong endorsement of the comment letter process and the fact that the SEC is required to review all M&A transactions, the SEC comment letter process is likely the main source of enforcement for COI disclosures by FO providers (Ege et al. 2020, Liu et al. 2022, Johnson et al. 2023). Although all M&A filings are reviewed to ensure compliance, only selected filings are under the requirement to disclose COIs for FO providers. Thus, we predict that when the SEC requires a registrant involved in an M&A transaction to disclose the COI of its FO providers, the related filings are more likely to disclose the conflicts of interest.

On the other hand, some law literature (Davidoff 2006, Herlihy et al. 1992) claims the SEC has historically under-enforced COI disclosures. To our knowledge, these claims have not been empirically tested. Nonetheless, SEC employees might lack the time and resources to investigate the possibility of

undisclosed COIs. A branch of literature has noted the presence of resource constraints (see, e.g., Ege et al. 2020, Gunny and Hermis 2020). These papers, however, focus on variations in the quality of individual comment letters instead of on a general failure to enforce regulation. Johnson et al. (2023) explain that the SEC is expected to finish their review in under 30 days. Given the length and complexity of M&A filings and the 30-day timeline, SEC staff likely must prioritize issues to focus on when reviewing a document.

FINRA's regulatory processes could increase COI disclosure quality for all firms with FOs. FINRA might have an advantage over the SEC in regulating COI disclosures for several reasons. First, the SEC might lack the industry knowledge to impose specific rules, especially for FO disclosures. In our setting, FO providers, typically investment banks, have the most information about their COIs with the M&A parties. Therefore, FINRA's regulation/enforcement can help increase the informativeness of the COI disclosures from FO providers. Second, FINRA regulation is not contingent on merger structure or filing type, but on the membership of the FO provider.

FINRA, though overseen by the SEC, is a self-regulatory organization (SRO). Theoretical research predicts SROs will under-regulate their members (DeMarzo et al. 2005, Fogarty 1996). DeMarzo et al. (2005) predict that the SEC increases the effectiveness of SRO enforcement actions, although their model assumes that the SRO is the first mover. Tuch's (2014) empirical results, however, create doubt that FINRA is properly enforcing SEC regulation. Tuch (2014) examines all FINRA enforcement between January 2008 and June 2013 and finds no censure of investment bankers for any merger-related activities, including those related to COI disclosures. Another possible explanation for this result is perfect compliance with COI disclosure requirements. However, Tuch mentions the *re Del Monte Foods Co.* and *re El Paso*

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⁹ Empirically, most of the research on the effectiveness of SRO enforcement, especially as compared to federal regulators, has looked at the American Institute of Certified Public Accountants (AICPA). Auditing procedure was set by the AICPA until Sarbanes Oxley created the Public Company Accounting Oversight Board (PCAOB). The creation of the PCAOB was a reaction to a series of accounting scandals that created doubt about the ability of the AICPA, as an SRO, to deter fraud. A number of papers compare the enforcement activities of the PCAOB to those of the AICPA, examining the changes in audit or financial reporting quality under the PCAOB (e.g., Anantharaman 2009, Lennox and Pittman 2010, DeFond 2010).

Corp. cases, which both happened during his sample period, suggesting that perfect compliance does not explain FINRA's lack of enforcement actions.

Another potential consideration is regulatory capture, in which regulators get captured by the regulatee and their objective is to please the regulatee (e.g., Stigler 1971, Posner 1974, Peltzman 1976, Becker 1983). While it is institutionally unlikely for the SEC, FINRA might be subject to this concern given that it is funded by broker-dealers. If FINRA were captured by its regulatees, we would expect laxer enforcement and thus lower-quality disclosures than if FINRA is not captured.¹⁰

Given the above conceptual arguments for and against each regulator's enforcement effectiveness on COI disclosures, we state the null hypothesis as follows:

H1: We predict that each regulator (SEC and FINRA) has no association with the quality of FO COI disclosures.

Assuming both regulators in our setting share the objective of obtaining clear and complete COI disclosures, ¹¹ the existence of potential multiple information frictions (such as between the firm and shareholders and between the firm and its FO provider) makes one regulator less likely to be sufficient. Each regulator has jurisdiction over a different party involved in the disclosure. The SEC's comment letter process enforces regulation on filers, which is firm management. FINRA has enforcement authority over FO providers, but not over the management or the board of directors. Each regulator oversees a different regulatee in the same financial reporting disclosure, and regulatees need to work jointly to provide an informative financial reporting disclosure, which makes regulators' interactions and co-existence

¹¹ The SEC's desire for high-quality COI disclosures would stem from their mandate to protect minority investors and the efficiency of markets. The Division of Corporate Finance has this objective because it is what is required to be compliant with current securities regulation. FINRA's desire for clear and complete COI disclosures would stem from their desire to protect the perceived ethical standing of the investment banking profession, similar to how the bar association has an incentive to enforce lawyer's COI disclosures to clients to protect the profession.

¹⁰ Related to potential regulatory capture, we check the lobbying activity surrounding the introduction of Rule 5150. There were 19 organizations that lobbied FINRA when Rule 5150 was proposed. Of the 19 organization, all FINRA members were against the rule, while the investor groups such as AFL-CIO Office of Investment and OPERS supported the rule and actually called for additional rules to prevent FO COIs.

important. Conditional on regulators effectively enforcing the disclosure rules (HI), we examine the dynamics and interactions among the two regulators (if any).

The consequences of multiple regulators for enforcement has been the topic of a long-standing debate in the economics literature (Marks and Hooghe 2003, Inman and Rubinfeld 1997, Oates 1999). In the context of financial misreporting, Schantl and Wagenhofer (2020) use an analytical theory model to examine the interaction between public and private enforcement. Their findings suggest that strengthening one enforcement institution can negatively impact the incentives of other institutions, potentially weakening the overall deterrence effect rather than strengthening it.

In our setting, dual regulators can have both positive and negative effects on disclosure quality relative to disclosure regulation by the SEC alone. The presence of FINRA, in addition to the SEC, raises the question of whether FINRA enhances or impairs SEC enforcement. Although the SEC has the power to enforce FINRA's rules, the SEC regards FINRA as having "primary responsibility" for regulating broker-dealers' activity, because, as an SRO, FINRA is considered the first line of defense in regulating the conduct of market participants. Furthermore, the SEC is rarely involved in enforcing FINRA's "just and equitable" rule, even though the SEC does have jurisdiction (Tuch 2014).

There have been claims that each regulator struggles with enforcement issues (Tuch 2014, Davidoff 2006, Herlihy et al. 1992), sometimes in ways that make it unlikely the other regulator will become involved. For example, although FINRA can start a disciplinary process by publicly issuing a complaint for which the adjudicating determination is subject to the SEC review (and any SEC order is subject to judicial review), this is not generally the approach FINRA pursues. Instead, it usually initiates a disciplinary matter without issuing a complaint, public notice occurs only on settlement, and settlement (if any) occurs without the SEC review (Tuch 2014).

Nevertheless, the two imperfect regulators may work together often and constructively enough to enhance the strength of enforcement on FO COI disclosures. FINRA regulation likely increases managers' certainty about the COI status of the FO provider, given that, due to FINRA, the FO provider faces

substantial fines and expulsion from the profession if they fail to share COI information with the firm. The two regulators can strengthen the disclosure enforcement because FINRA can be viewed as regulating disclosure quality, whereas the SEC regulates public firms and their dissemination of information. When FINRA's regulation improves managers' information precision about FO COI, the SEC can better enforce informative disclosure. Thus, the quality of FO COI disclosure can be enhanced.

Alternatively, there may be negative aspects for FO COI enforcement of having the two regulatory bodies. The introduction of FINRA as a regulator for FO providers could reduce the SEC's incentive to directly oversee FO COI disclosures, as the SEC expects FINRA to focus specifically on FO providers. The SEC may choose to delegate enforcement responsibilities to FINRA, particularly since FINRA operates under the SEC's oversight. ¹² If the SEC does delegate to FINRA, it is not clear that FINRA will necessarily provide as high a level of enforcement as the SEC. Nevertheless, delegation could become more pronounced when the SEC faces resource and time constraints, allowing it to potentially save time and effort.

In sum, concerns about each regulator's ability to enforce disclosures and the presence of loopholes within disclosure rules create space for multiple regulators and the need for additional enforcement. Thus, we might see disclosure quality increase as an additional regulator is given oversight of a particular merger. Conversely, we might see no increase or even a decrease in the quality of disclosure if the first regulator delegates to the second and the second enforces less strictly. We generalize our second hypothesis:

H2: We predict that FINRA and the SEC will impair (enhance) each other's disclosure enforcement, and expect to find no change or a decrease (increase) in COI disclosure quality when FINRA and the SEC jointly enforce disclosure relative to either regulator enforcing by itself.

3. Data and measurement

3.1. Sample selection

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¹² FINRA describes the relationship it has with underwriter COI disclosures as one where the SEC "defers" to FINRA on the adequacy of underwriter COI disclosures within the S-1 (FINRA, 2024). Such a clear relationship is not spelled out for the M&A setting, but may be the SEC's expectation.

Table 1 outlines our sample selection. From SDC Platinum, we obtain all M&A transactions involving publicly traded target U.S. firms announced between January 2000 and December 2015. For these 8,350 deals, we examine SEC filings to extract fairness opinions (FOs). We use textual analysis with a Python script to examine the following SEC filings for acquirer and target firms: S-4, S-4/A, DEFM14A, DEF14A, DEFR14A, and SC14D9 and arrive at a sample of 6,139 M&A that include FOs. As we describe in detail below, the highly technical nature of COI disclosure precludes automating its collection, and the manual collection process is time-consuming. We thus limit our data collection of COI disclosures to a random sample of deals. To determine the random sample size, we perform a power analysis with the following parameters: i) statistical power equal to 80%; ii) significance level equal to 5%, and iii) expected effect size between 0.1 and 0.5. 13 The results of the power analysis suggest that the (minimum) sample size should lie between 29 and 861 observations. Thus, we select a random sample of 900 observations and further require the observations to be equally distributed before and after 2007 within our sample period from 2000 to 2015. We obtain data on firm characteristics from COMPUSTAT, information on M&A deal transactions, including advisors, from SDC, and information on the number of SEC filings and SEC comment letters from WRDS Suite and Audit Analytics. We check if each of these 900 observations has the control variable information we require for our regression analyses and drop the 159 observations that do not. Finally, we check the remaining 741 observations to confirm that the FO provider is always an investment bank so that the FO provider is subject to FINRA oversight after 2007 and the pre-2007 observations are comparable to the post-2007 observations.

3.2. COI disclosure quality

Our analyses rely on a proprietary, hand-collected database of COI disclosures and self-constructed disclosure indices. The analysis of textual data and construction of indices related to FO COIs are not trivial

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¹³ In determining the optimal sample size, researchers specify a null hypothesis and an alternative hypothesis. In the null hypothesis, the effect size is zero as no effect is expected. In the alternative hypothesis, the effect size takes on a specific value (i.e., the minimum detectable effect size). We estimate the minimum detectable effect size on the basis of the pilot study described in section 3.2 considering the mean and standard deviation of COI disclosure in mergers and tender offers.

tasks. Challenges arise due to several factors, such as: 1) variation in the choice of words used to describe COIs, and 2) significant differences in FO information, even within a single filing type, especially when multiple FO providers are involved. These complexities can lead to errors in textual analysis when attempting to identify sentences pertaining to FO COIs. Such features of COI disclosure imply that mechanized linguistic tools, such as automated text analysis software, are not suitable and can lead to noisy results. Therefore, we perform manual coding as it enables a more precise, detailed, and meaning-oriented analysis (Li, 2010).

Despite its benefits, meaning-oriented content analysis can suffer from the subjectivity and possible lack of reliability of the coding procedures. We deal with intra- and inter-coder subjectivity issues in several ways. Following Breton and Taffler (2001), we first define the coding procedure and rules. Then, we perform a pilot test during which three co-authors independently apply the coding procedure to a subsample of six FOs covering firms of various sizes and in different periods. We discuss the results of the coding and resolve disagreements. We calculate the agreement ratio to assess reliability. The overall agreement rate is more than 95%, which we consider satisfactory. We then share the coding procedure with twelve coders. The twelve coders go through a selection process based on a pilot test on the same set of deals screened by the three co-authors. Coders with a high percentage of disagreement relative to the co-authors' coding are not considered for the subsequent data collection, which, hence, involves only eight coders. The coding is performed in three waves, and each wave entails the coding of 300 FOs, 150 before and 150 after 2007. The 300 FOs were subsequently allocated among the eight coders so that every coder was in charge of coding between 37 and 44 FOs for each wave.

¹⁴ We recognize that the quality of COI disclosure can be affected by the intensity of M&A activity in the period before the deal takes place. Specifically, both SEC and FINRA require FO writers to inform investors about the existence of material ties with deal parties in the two years before the deal is announced. If the two years are characterized by a smaller number of M&A activities, COI due to past ties are less likely to arise with relevant implications for the need and quality of COI disclosure. We alleviate this concern by comparing the time trend in M&A deals with time-series variation in COI disclosure. We fail to find a significant correlation between the two temporal variations, thus reducing the concern that COI disclosure proxies reflect time-series variation in M&A deals.

We calculate our composite measure of COI disclosure quality by capturing the extent to which companies disclose information about COI in compliance with SEC Regulation M-A on Fairness Opinion Conflict of Interest Disclosures. The SEC mandates that FO providers and companies provide information on whether i) the FO provider will receive compensation or any other significant payment that is contingent on the successful completion of the transaction (SEC Contingent Fees), and ii) the company and FO provider had any material relationships during the past two years (SEC Material Ties). Although the SEC requires client firms to disclose COI information for merger deals, firms have flexibility in deciding the level of compliance with the SEC requirements. We use this flexibility as our proxy for COI disclosure quality. We measure COI disclosure quality starting from the two COI items requested by the SEC. Then we assign a score of 0 to an SEC COI item if the firm does not disclose information on a COI, a score of 1 when the firm provides a general description of the COI, a score of 2 when the firm provides a detailed description of the COI, and a score of 3 when the firm either explicitly reports the absence of a COI or exhaustively describes the presence of the COI. We obtain the SEC COI disclosure score (SEC COI score) by summing the scores of both COI items and then dividing by the maximum total score of six. Thus, our proxy captures the extent to which COI disclosure of a given client complies with the SEC regulation. We report the coding rules in Appendix A1 and coding examples in Appendix A2.

4. Research design and main results

4.1. Research design

Our empirical strategy is to examine how firms' COI disclosure quality changes after coming under different regulators. We start our analysis by examining the standalone effects of SEC regulatory enforcement and FINRA enforcement on COI disclosure by estimating the following two regression equations:

$$y_{imt} = \alpha_{imt} + \beta_1 SEC_{im} + State_{im} \times Industry_{im} Fixed Effects + \gamma' X_{imt} + \varepsilon$$
 (1)

$$y_{imt} = \alpha_{imt} + \beta_1 FINRA_t + State_{im} \times SEC_{im} Fixed \ Effects + Industry_{im} \times SEC_{im} Fixed \ Effects + \gamma' X_{imt} + \varepsilon$$
 (2)

where *i* indexes the firm, *m* indexes the type of M&A (i.e., merger or tender offer), *t* indexes years, and *y* is the dependent variable (i.e., firm's COI disclosure quality). We use Eq. (1) to analyze the standalone effect of the SEC by including an indicator variable (*SEC*) that equals one if the client firm is involved in a merger and zero if it is involved in a tender offer (which is not subject to the SEC regulation). In Eq. (2), we study the standalone effect of FINRA by including an indicator variable (*FINRA*) that equals one after the FINRA COI disclosure regulation goes into effect (i.e., post-2007).

In addition to the SEC oversight, deal parties are also exposed to state laws, which may differ in their requirements pertaining to mergers and tender offers. Moreover, firms operating in certain specific sectors (e.g., financial sectors) may be subject to an additional layer of scrutiny. Therefore, we account for state and industry characteristics that can differentially impact mergers and tender offers. To this end, we include state \times SEC fixed effects as well as FO client industry (two-digit SIC code) \times SEC fixed effects. However, in Eq. (1) we are interested in the average effect of SEC scrutiny and the inclusion of such a set of fixed effects will reduce the interpretability of our coefficient of interest (which would be subsumed in the intercept). Therefore, in Eq. (1), we include state \times FO client industry effects to account for local and industry shocks. Likewise, as *FINRA* is a time-based variable, we include year fixed effects only in Eq. (1), while in Eq. (2), we add a trend variable.

In both equations, we include a vector of control variables shown in prior work to be associated with merger outcomes, which includes client firm and deal-level characteristics. Client-level controls include return on assets (*ROA*), book-to-market ratio (*BTM*), an indicator for whether the firm has an operating loss (*Loss*), leverage (*Lev*), and asset turnover (*Asset Turnover*). Merger-level controls include the natural log of the dollar amount of the deal (*Deal Size*), the number of days from announcement to

¹⁵ Our results hold if we add state \times year fixed effects and FO client industry \times year fixed effects.

completion (*Deal Length*) as in Wangerin (2019), and the percentage of cash used for payment (*Percent Cash*). Standard errors are clustered at the client state of incorporation level to account for lack of independence due to potential litigation risk.

Predictions about the coefficients based on our hypothesis are as follows. In Eq. (1), β_1 measures the standalone effect for the SEC. For H1, we do not make a signed prediction, but if $\beta_1 > 0$ it is consistent with SEC oversight being positively associated with the quality of FO COI disclosures. In Eq. (2), β_1 measures the standalone effect of FINRA. Here if $\beta_1 > 0$, it is consistent with FINRA regulation being positively associated with the quality of FO COI disclosures.

To examine the joint effect of SEC and FINRA regulatory enforcement on COI disclosure quality, we modify Eq. (1) by including the interaction term between FINRA and SEC and by including the year fixed effects. In this way, the main effect of SEC is subsumed in the intercept, and we can observe the joint effect of the new FINRA regulation and the pre-existing SEC regulation. Specifically:

$$y_{imt} = \alpha_{imt} + \beta_1 FINRA_t \times SEC_{im} + State_{im} \times SEC_{im} Fixed \ Effects + Industry_{im} \times SEC_{im} Fixed \ Effects + Year Fixed \ Effects + \gamma' X_{imt} + \varepsilon$$
 (3)

where *i* indexes the firm, *m* indexes the type of M&A (e.g., merger or tender offer), *t* indexes years, and *y* is the dependent variable (i.e., firms' COI disclosure quality). For H2, finding that $\beta_1>0$ indicates that FINRA enhances the SEC oversight of COI disclosure, whereas finding $\beta_1 <=0$ indicates that joint oversight by the SEC and FINRA is associated with lower COI disclosure quality relative to SEC oversight alone.¹⁶

4.2. Descriptive statistics

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¹⁶ In our specifications we control for the state of incorporation of client firms, but we do not include additional controls for SEC regional offices. Prior studies (Bozanic et al., 2017) document that SEC reviews are performed by staff in the industry offices of the Division of Corporation Finance, which are entirely located at the SEC's Washington DC branch. Thus, we use industry fixed effects to deal with variation across the SEC's industry offices (SEC, 2023).

Before turning to the results from the estimation of Eq. (1), Eq. (2), and Eq. (3), we briefly highlight the descriptive statistics presented in Table 2. The COI-related dependent variables are presented in Panel A. By construction, the overall COI disclosure quality score varies between zero and one. Both the mean and the median are above 0.5, indicating that the typical sample firm's FO COI disclosures are of reasonable quality.¹⁷ Focusing on the items used to construct the SEC_COI_score, we find that the mean of item disclosure quality regarding material past ties is lower than the mean of item disclosure quality for contingent fees. For the purpose of our analyses, we assume that COI disclosures are accurate. That is, we assume that firms choose to either not disclose or to provide low-quality information rather than to provide a knowingly inaccurate disclosure. Consistent with this assumption, court cases where the FO writer is proven dishonest are rare. 18 After reviewing the SEC comment letters, we find that most of the ones about COI disclosures ask for disclosures to be provided or for more detailed information about the nature of a COI. It is rare to see the SEC taking enforcement action on firms' inaccurate COI disclosures.

Finally, Panel B of Table 2 presents descriptive statistics for our variable of interest and the control variables. These data indicate that 80 percent of our M&A transactions are exposed to SEC scrutiny because they are mergers. In addition, target profits, leverage, and book-to-market ratios tend to be low, and on average, 79% of the payments in the deals are made using cash.

4.3. Main results

4.3.1 The Standalone Effect of Each Regulator

Turning to the regression results, Table 3 presents the results from estimating Eq. (1) and Eq. (2) without and with firm-level controls. The table shows the standalone effects of SEC and FINRA COI regulation on COI disclosure quality. In Column (2), the positive coefficient for SEC (coef. = 0.023; t-stat = 2.92) indicates that the quality of overall COI disclosure is higher when the deal is exposed to SEC

¹⁷ In our untabulated analyses, we find that 99% of our observations include a COI disclosure for their fairness opinion. This high proportion of observations with COI disclosures alleviates concerns regarding the unobservability of whether non-disclosure indicates a true absence of COI or non-compliance with the disclosure mandate.

¹⁸ In the rare cases where we find these, such as in re El Paso Co. or re Del Monte Co., the inaccuracies always present as under-disclosures.

scrutiny (i.e., it is a merger). The magnitude of the coefficient indicates that the quality of COI disclosure in deals exposed to SEC regulation is higher by an average of 0.023 compared to deals that are not subject to SEC scrutiny, which amounts to 0.69% of a standard deviation of the COI disclosure score. We obtain similar results in Column (1) where we include firm-level controls (coef. = 0.012; t-stat = 1.95).

In Column (4), we find a positive coefficient for *FINRA* (coef. = 0.310; t-stat = 12.68), denoting an increase in the quality of COI disclosure after FINRA mandates COI disclosure to FO providers. These results suggest that regulatees react to FINRA's demand for COI disclosure. The 0.310 amounts to 6.70% of a standard deviation increase in *SEC_COI_score*. The result is similar in Column (4) when we include firm-level controls (coef. = 0.293; t-stat = 12.24).

Taken together, results in this section suggest that both the SEC and FINRA have a positive standalone effect on FO COI disclosure quality as regulatees report higher-quality COI disclosure when they are exposed to their scrutiny. In the next section, we study how FO COI disclosure quality varies when deals are subject to both regulators.

4.3.2 Results on the Regulatory Interaction

Table 4 presents the results from estimating Eq. (2) without and with firm-level control variables. The table shows the change in COI disclosure quality in deals subject to SEC regulation following the introduction of FINRA COI regulation. In column (2), we find a negative coefficient for *FINRA* × *SEC* (coef. = -0.072; t-stat = -2.72), suggesting that client firms exposed to SEC regulation decrease the quality of COI disclosure after FINRA regulation comes in (i.e., as in the case of target firms involved in mergers after 2007). The magnitude on the interaction term indicates a 0.072 decrease in *SEC_COI_score*, which represents a 2.65% of a standard deviation decrease of *SEC_COI_score*. The result is similar in Column (1) when we include firm-level control variables (coef. = -0.095; t-stat = -3.55).

hypothesis.

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regressing it on the set of control variables and fixed effects included in the model used to test the corresponding

¹⁹ Given the presence of several fixed effects in our model, we follow Breuer and DeHann (2024) to compute the economic magnitude of our effects. Specifically, we multiply the regression coefficient by the standard deviation of the residualized values of the variable of interest. The residualized values of the variable of interest are obtained by

Taken together, these results suggest that, when a new regulator (i.e., FINRA) is in place, the preexisting regulator (i.e., the SEC) decreases its level of enforcement over its regulatee (i.e., managers of the
firm, including the FO and COI information in SEC filings) by partially delegating the task to the new
regulator²⁰. The SEC is time- and resource-constrained, thus giving incentives to delegate regulatory
oversight to FINRA. Moreover, the introduction of a new regulator disciplining a different regulatee (i.e.,
the FO provider) can raise uncertainty on who should oversee the COI disclosure quality.²¹ Our evidence
suggests that such frictions offset the benefits of introducing a new and more specialized regulator, leading
to an overall reduction in the quality of COI disclosure required by the SEC. In the next section, we perform
cross-sectional tests to further support the interpretation of lessened enforcement under dual oversight.²²

4.4. Cross-sectional tests

In this section, we substantiate the interpretation that the SEC decreases its level of enforcement over its regulatees by partially delegating enforcement responsibilities to the new regulator, FINRA. We examine whether the SEC's resource or expertise constraints affect the relation between FO COI disclosure quality and the SEC's delegation of disclosure enforcement responsibilities.

With respect to the resource constraints of regulators, we focus on SEC busyness. Prior studies (Ege et al., 2020; Gunny and Hermis, 2020) document that the review activity of the SEC is of lower quality when the SEC has to review an abnormally high number of transactional filings (e.g., initial public offerings

²⁰ In an untabulated descriptive analysis, we find that the number of SEC comment letters mentioning FO COI disclosures decreases after 2007, which seems in line with our current analysis. However, because of the small sample size (60 comment letters in total) and potential confounding variables we are hesitant to conclude that SEC enforcement definitely decreased from this descriptive analysis.

²¹ An alternative explanation for the negative joint regulator effect we observe is that FINRA is not only a more specialized agency but, also an SRO. Hence, it can be more exposed to regulatory capture which in turn can lower enforcement effectiveness. In contrast with the SEC, capturing the level of FINRA enforcement effectiveness is empirically challenging thus precluding us from a direct test of this mechanism.

²² In additional analyses, we examine the timing of the negative joint regulator effect by replacing *FINRA* with two indicator variables: *Y2008_2010*, equal to 1 if the deal is announced in 2008, 2009 or 2010; and *Y2011_2015*, equal to 1 if the deal is announced in the period between 2011 and 2015. We observe that the negative relation arises in both sub-periods and, although the magnitude of the coefficient seems higher in the period 2008-2010, a formal test of the difference in coefficients reveals that there is no significant difference. Moreover, our results hold if we remove the crisis years (2008 and 2009).

or acquisitions). Building on these findings, we contend that, if the deal is announced in a month with an abnormally high number of transactional filings (i.e., a "busy period"), the SEC is more likely to delegate the disclosure enforcement responsibility to FINRA as the SEC faces time and resource constraints. We classify a month as busy if the number of transactional filings (S-1, S-4, PREM14A, and SC 13E3 as taken from WRDS SEC Analytics) in the month is higher than the yearly average. Then, we re-estimate our main models separately in "busy" and "non-busy" months. We expect that our findings are stronger (i.e., the decreases in SEC enforcement are more likely) in busy periods when the SEC lacks time and resources. We report the results in Table 5.

Column (3) displays the results for non-busy periods and shows that the coefficient on FINRA × SEC is negative, but not statistically significant. In Column (4), we observe that the coefficient on FINRA × SEC is negative and statistically significant in busy periods. A one-tailed t-test for the difference in coefficients confirms that the two coefficients are statistically different at < 1% level. Empirical evidence is similar in Columns (1) and (2) when we do not include firm-level control variables. Overall, the Table 5 results support our conjecture that the SEC reduces its enforcement efforts over its regulated entities by partially delegating the task to FINRA when the SEC faces more resource and time constraints.

Given the resource and time constraints SEC faces, it is reasonable to expect that it prioritizes transactions that threaten shareholders' interests, such as transactions where either the target or the bidder exhibits high levels of agency conflicts or information frictions. In these cases, we conjecture that the SEC has stronger incentives to directly monitor the COI disclosure quality (rather than delegating enforcement to FINRA) to safeguard shareholders' interests. To examine this conjecture, we explore three sources of cross-sectional variation: contentious deals where shareholder interests likely need more attention from the SEC, low quality of pre-merger target disclosure, and involvement of private bidders.

First, we consider whether the deal is a management buyout (MBO) or a going-private transaction (i.e., "contentious deals"). Management buyouts and going-private transactions are deals that historically exhibit greater exploitation of minority shareholders and are more exposed to litigation risk (e.g., Bruere

and Shaffer, 2021). In MBOs, managers have a direct financial incentive to minimize the takeover price paid. Similarly, in going-private transactions, target shareholders typically receive cash payments and cannot participate in any potential upside of the firm's post-going-private performance. Thus, both types of deal are exposed to higher litigation and appraisal risk (Imperatore et al., 2024). Given the greater demand for shareholder protection, the SEC and FINRA have stronger incentives to coordinate to protect the interests of target shareholders. We test this conjecture by separately examining the Contentious Deals (including MBOs and going-private transactions) and Non-Contentious Deals (all other mergers). We present the results in Table 6 Panel A. In Column (3), we observe that the coefficient on *FINRA* × *SEC* is significantly negative in non-contentious deals, whereas in Column (4), the coefficient is insignificantly negative in contentious deals. The estimates in Columns (3) and (4) exhibit a significant difference at the <1% level. Furthermore, the empirical evidence is similar in Columns (1) and (2) when firm-level covariates are excluded, albeit with differences in statistical significance levels below 5%. The results are consistent with the interpretation that the SEC is more likely to delegate enforcement responsibilities when the deal requires less regulatory scrutiny, whereas it is more inclined to engage in enforcement when the deal is contentious and more regulatory scrutiny is needed.

Second, the SEC may have weaker incentives to delegate the oversight task to FINRA if, in the past, there were concerns about the reliability of the target firm's disclosures. In such cases, direct oversight is more likely to be desired by the SEC to help ensure that conflicts of interest are properly disclosed and shareholders' interests are protected. We use the presence of SEC comment letters or restatements of financial statements in the three years before the merger announcement to proxy for low quality of premerger FO client firm disclosure quality. As SEC comment letters become available only after 2004, in this test we limit our sample to the period 2004-2015. We compare deals where FO client firms did not receive SEC comment letters or restatements in the three years before the deal announcement with others where the firm received either an SEC comment letter or restated its financial statements. We report the results in Table 6 Panel B.

Column (3) displays the results for the SEC_COI_score dependent variable for FO client firms that do not receive SEC comment letters or restate financial statements. It shows a negative and significant coefficient on $FINRA \times SEC$. Column (4) shows a significantly negative coefficient on $FINRA \times SEC$ for FO client firms that did receive SEC comment letters or restate their financial statements. The coefficient in Column (3) nearly doubles compared to that in Column (4). However, the statistical significance of the difference in coefficients between Column (3) and Column (4) does not meet the conventional significance level, with a p-value=0.11. When firm-level control variables are not included in Columns (1) and (2), the coefficients on $FINRA \times SEC$ are not statistically different at the conventional level, with a p-value=0.23, although the coefficient nearly doubles as well. Overall, the results suggest weak evidence that SEC delegation to FINRA is less likely when prior concerns about the reliability of the FO client firm's disclosures require regulators' joint effort.

The last factor that may influence the SEC in delegating enforcement to FINRA is whether the bidding firm is private. When the bidder is private, it does not have publicly traded equity to offer in the transaction. Most such acquisitions are thus cash deals, and target shareholders receive, on average, a lower premium (Bargeron et al., 2008). Moreover, in the relatively infrequent cases where the private acquirer uses its shares as part of the consideration, target shareholders become owners of a private firm with a reduced possibility of liquidating their investment and a higher exposure to expropriation risk. These features of private bidders imply a greater need for scrutiny by regulators to protect target shareholders. We test this conjecture by separately examining deals featuring private and public bidders. We report results in Table 6 Panel C. Column (3) shows the results for deals with a public bidder and displays a significantly negative coefficient on *FINRA* × *SEC*. In contrast, in Column (4), the coefficient is not statistically significant in deals with a private bidder, consistent with the idea that when target shareholders need to be protected delegation by the SEC to FINRA is less likely. The coefficients are statistically different from each other at <1% level. Results hold when we do not include firm-level control variables in Columns (1) and (2).

4.5. Robustness tests

In this section, we examine the robustness of our findings to alternative measures of COI disclosure quality. First, we re-estimate our regressions by separately considering the disclosure quality on material past ties and contingent fees. Results from estimating Eq. (2) are reported in Table 7 Panel A, Columns (1) and (2) without firm-level control variables, and in Columns (3) and (4), including firm-level controls. In all cases, we find that the coefficient for $FINRA \times SEC$ is negative and significant, indicating that client firms exposed to SEC regulation decrease the quality of their disclosures on both material past ties and contingent fees following the introduction of FINRA regulation.²³

Moreover, we repeat our analyses by considering two alternative proxies of the firm's level of compliance with COI disclosure regulation. First, we calculate the firm's level of compliance with COI disclosure mandated by the FINRA 5150 rule following the same procedure we used for SEC regulation. Thus, we first identify the three COI items requested by FINRA (FINRA Contingent Fees, FINRA Additional Fees, and FINRA Material Ties). SEC and FINRA COI disclosure requirements largely overlap, further reinforcing the notion that the SEC and FINRA have overlapping enforcement responsibilities in terms of FO COI disclosure. Then, for each FINRA COI item, we allocate a score ranging from zero to three. After having determined the individual FINRA COI indices, we compute an aggregate disclosure quality proxy (FINRA_COI_score), which represents the sum of the zero to three scores on the three FINRA COI-related items (i.e., contingent fees, additional fees, and material past ties) divided by the maximum score of nine. A COI-related items (i.e., contingent fees, additional fees, and material past ties) divided by the maximum score of nine. OUI-related items (i.e., contingent fees, additional fees, and material past ties) divided by the maximum score of nine. OUI-related items (i.e., contingent fees, additional fees, and material past ties) divided by the maximum score of nine. OUI-related items (i.e., contingent fees, additional fees, and material past ties) divided by the maximum score of nine. OUI-related items (i.e., contingent fees, additional fees, and material past ties) divided by the maximum score of nine. OUI-related items (i.e., contingent fees, additional fees, and material past ties) divided by the maximum score of nine.

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²³ When we inspect the cross-sectional tests, we find that results reported in Tables 5 and 6 hold when we consider the COI disclosure quality relative to material past ties, while they are weaker when we consider the COI disclosure quality relative to contingent fees.

²⁴ The distribution of FINRA_COI_score is similar to the distribution of SEC_COI_score, albeit with slightly lower values. Focusing on the items used to construct the FINRA_COI_score, we document that the item disclosure quality is quite similar to the item disclosure quality under the SEC, with the SEC disclosures slightly better for material past ties. The relatively low scores under the FINRA rules for the additional fees COI component is the main reason that the overall COI score distribution is a bit lower for FINRA than for the SEC.

reported in Table 7 Panel B Columns (1) and (2) for *FINRA_COI_score* and in Table 7 Panel B Columns (3) and (4) for *COI score*. We find that both the quality of the COI disclosure required by FINRA and the overall quality of COI disclosure are lower after the introduction of FINRA regulation if client firms have already been exposed to SEC regulation, confirming our main findings.

Last, we attempt to rule out the concern that our findings are due to different characteristics of mergers and tender offers announced before versus after 2007. Specifically, we perform a placebo test where we re-estimate Eq. (3) using deal premium as the dependent variable instead of COI disclosure quality. In untabulated analyses, we find that the interaction term $FINRA \times SEC$ is not significant, mitigating the concern that our findings are merely driven by changes in merger and tender offer fundamentals.

5. Conclusion

We study the effectiveness of the SEC and FINRA in enforcing the quality of fairness opinion conflict of interest disclosures that are included in SEC filings related to M&A activity. We find that each regulator achieves better COI disclosure when benchmarking the regulator acting alone relative to no regulator. However, we also find that after 2007, when FINRA began to regulate the same merger COI disclosures that had already long been subject to SEC oversight, FINRA's addition as a second regulator is harmful rather than helpful in enforcing better quality of COI disclosures.

In addition, cross-sectional tests indicate that the negative association between joint regulation and COI disclosure quality is more likely when the SEC is resource-constrained due to busy periods with other filings, but is less likely when the SEC has more reason to be concerned about potential frictions between the filing firm and its external shareholders. These cross-sectional results might suggest that the SEC's delegation of regulation oversight to FINRA may be rational from the regulators' perspectives, even though it is associated with reduced disclosure quality.

Although we focus on the FO COI disclosure setting, the incentives and the relative strengths of the two regulators should remain consistent and generalizable for other financial reporting disclosures regulated

by either or both of the SEC and FINRA. DeMarzo et al. (2005) treat the incentive misalignment of a regulator as equally important for government agencies (e.g., the SEC) and self-regulatory bodies (e.g., FINRA and the AICPA). Schantl and Wagenhofer (2020) study the interaction between public (e.g., the SEC) and private (e.g., the state court) enforcement and consider each party's strategic incentives in the relationship. This generalizability is helpful as the SEC works with FINRA to establish sufficient disclosure of the underwriting terms and conflicts in S-1 filings (FINRA, 2024).

More broadly, we view our paper's findings as being generalizable to the regulatory design of financial reporting disclosures, especially when different regulatees must work jointly to provide an informative financial reporting disclosure or when disclosures have negative implications. Previous literature suggests that information about incentive alignment and the relative ability and resources of regulators are predictive of their interactions (Tullock 1969, Strumpf and Oberholzer-Gee 2002, and Besley and Coate 2003). Banking regulators have unique variation in their incentive overlap with other regulators because of differences in objective functions (e.g., the stability of the banking industry versus the protection of investors). The objective functions of banking regulators can sometimes align with those of disclosure regulators, resulting in joint enforcement, as for risk disclosures after Basil II (Bischof et al. 2022). Alternatively, the objective functions may differ for banking and securities disclosure regulators (e.g., Kim and Kim, 2023). Sometimes, the incentive functions might diverge, as for loan loss provisions, where the SEC is concerned about earnings management, leading to overly large "cookie jar" reserves whereas banking regulators worry about insufficient recognition of risk (Beck and Narayanamoorthy 2013).

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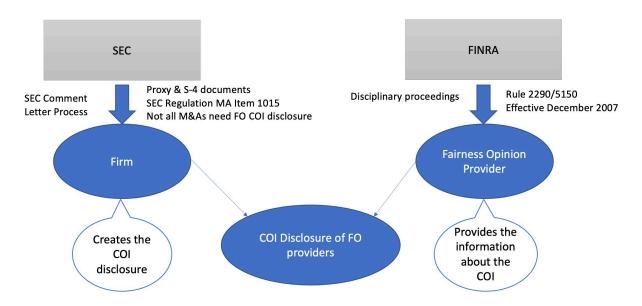
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Figure 1



Notes: Figure 1 shows the relationship in our setting between different regulators and regulatees. Although both regulators oversee the same disclosure, each has authority over a different regulatee. The SEC has authority over the managers who create the filings, and FINRA has authority over the FO providers. These regulatees need to coordinate with each other to generate informative COI disclosures. For instance, FO writers have the most information about their own COIs with a company (i.e., information production) and should communicate this information with the board of directors, who contract with an advisor who can write the FO. Managers, with the oversight of their board of directors, disseminate COI information to the public.

Appendix A1

Instructions to Research Assistants for the Identification of Conflict of Interest Disclosures

SEC_Material_Ties - SEC COI Disclosure Item B Point 4) "Describe any material relationship that existed during the past two years or is mutually understood to be contemplated" Score capturing the extent to which the firm "Describe any material relationship that existed during the past two years or is mutually understood to be contemplated". The maximum score of 3 is provided in one of the two following conditions: i) the firm clearly states that there is no COI; ii) the firm provides a detailed description of COI disclosing the presence of bank's prior relationship in a detailed way, bank's prior relationship past fees paid and bank's future relationships.

A score of 2 is granted if the firm provides a general description of the COI due to past relations and discloses two out of the following information: presence of bank's prior relationship in a detailed way, bank's prior relationship past fees paid and bank's future relationships.

A score of 1 is granted if the firm provides a general description of the COI due to past relations and disclose one out of the following information: presence of bank's prior relationship in a detailed way, bank's prior relationship past fees paid and bank's future relationships.

A score of 0 is granted when the firm provides no disclosure.

SEC_Contingent_Fees - SEC COI
Disclosure Item B Point 4) bis
"Describe any compensation
received or to be received as a
result of the relationship between:
(i) The outside party, its affiliates,
and/or unaffiliated representative;
and (ii) The subject company or its
affiliates"

Score capturing the extent to which the firm "Describe any compensation received or to be received as a result of the relationship between: (i) The outside party, its affiliates, and/or unaffiliated representative; and (ii) The subject company or its affiliates". Score capturing "if the member has acted as a financial advisor to any party to the transaction that is the subject of the fairness opinion, and, if applicable, that it will receive compensation that is contingent upon the successful completion of the transaction, for rendering the fairness opinion and/or serving as an advisor".

It ranges from 0 to 3.

Maximum score (3) is provided in one of the two following conditions: i) when the firm provides a detailed disclosure of COI disclosing the bank's compensation arrangement dollar amount, structure, and enough information to determine the ratio of advisory and opinion fees (all present); ii) when the firm clearly states that there is no conflict of interest.

A score of 2 is granted if the firm provides a general description of the COI due to fees and discloses two out of the following information: the bank's compensation arrangement dollar amount, structure, and enough information to determine the ratio of advisory and opinion fees.

A score of 1 is granted if the firm provides a general description of the COI due to fees and discloses one out of the following information: the bank's compensation arrangement dollar amount, structure, and enough information to determine the ratio of advisory and opinion fees (generic disclosure).

A score of 0 is granted when the firm provides no disclosure.

Appendix A2

Example of Conflict of Interest Disclosures

Companies: Heartland & BT Securities

Fairness Opinion Writer: Lazard Freres & Co. LLC

Year: 1995

SEC_Material_Ties=3 SEC Contingent Fees=3

Heartland's Advisor is an internationally recognized investment banking firm that regularly engages in the valuation of businesses and their securities in connection with mergers and acquisitions. Heartland selected Heartland's Advisor to act as its financial advisor on the basis of Heartland's Advisor's international reputation and familiarity with Heartland and its industry. Heartland's Advisor was not involved directly in the negotiation of any of the Transactions. An affiliate of Heartland's Advisor, together with BT Securities, was the initial purchaser of the Units sold by Heartland on April 26, 1995, for \$100,000,000. In January 1995, Heartland retained Heartland's Advisor to act as exclusive financial advisor for a six month period in connection with obtaining a prospective senior secured bank credit facility. Heartland decided not to arrange a senior secured bank credit facility during the six month period and the engagement expired. The Heartland Advisor did not receive any compensation as a result of such engagement. A significant number of general members of Heartland's Advisor are limited partners of Jupiter. Heartland's Advisor also is a limited partner of the general partner of Jupiter.

Pursuant to the engagement letter between Heartland and Heartland's Advisor, Heartland agreed to pay Heartland's Advisor a fee of \$300,000 for its financial advisory services. Of this amount, \$150,000 was payable upon execution of the engagement letter, and \$150,000 was payable on January 1, 1996. In addition, a fee of \$1,000,000 was payable to Heartland's Advisor upon delivery of the fairness opinions. Heartland has also agreed to reimburse Heartland's Advisor for expenses reasonably incurred by Heartland's Advisor (including fees and expenses of legal counsel). In connection with the execution of the engagement letter, Heartland and Heartland's Advisor also entered into an indemnification letter providing for the indemnification of Heartland's Advisor and its members, employees, agents, affiliates and controlling persons against certain expenses and liabilities, including liabilities under the federal securities laws, in connection with its services.

Companies: Zygo & Ametek

Fairness Opinion Writer: Barclays

Year: 2014

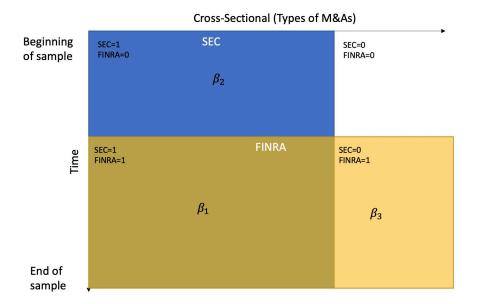
SEC_Material_Ties= 1 SEC_Contingent_Fees=3

Barclays is an internationally recognized investment banking firm and, as part of its investment banking activities, is regularly engaged in the valuation of businesses and their securities in connection with mergers and acquisitions, investments for passive and control purposes, negotiated underwritings, competitive bids, secondary distributions of listed and unlisted securities, private placements and valuations for estate, corporate and other purposes. Zygo's board of directors selected Barclays because of its qualifications, reputation and experience in the valuation of businesses and securities in connection with mergers and acquisitions generally, as well as substantial experience in transactions comparable to the proposed transaction.

Barclays is acting as financial advisor to Zygo in connection with the proposed transaction. As compensation for its services in connection with the proposed transaction, \$350,000 became payable by Zygo upon the delivery of Barclays' opinion. Additional compensation of \$4.6 million will be payable on completion of the proposed transaction, against which any amounts paid for the opinion will be credited. In addition, Zygo has agreed to reimburse Barclays for a portion of its reasonable out-of-pocket expenses incurred in connection with the proposed transaction and to indemnify Barclays for certain liabilities that may arise out of its engagement by Zygo and the rendering of Barclays' opinion. Barclays has performed limited investment banking and financial services for Zygo, AMETEK and their respective affiliates in the past, for which Barclays has not received any investment banking or financial advisory fees in the past two years. Barclays may in the future provide investment banking or financial advisory services to Zygo, AMETEK and their respective affiliates for which Barclays may receive compensation.

Barclays and its affiliates engage in a wide range of businesses from investment and commercial banking, lending, asset management and other financial and non-financial services. In the ordinary course of its business, Barclays and its affiliates may actively trade and effect transactions in the equity, debt and/or other securities (and any derivatives thereof) and financial instruments (including loans and other obligations) of Zygo, AMETEK and their respective affiliates for its own account and for the accounts of its customers and, accordingly, may at any time hold long or short positions and investments in such securities and financial instruments.

Appendix B



Note: This figure shows the empirical variation in the paper. For the SEC, there is no time variation, but we do have variation in the types of M&As that are subject to SEC regulation. For FINRA, we have a timing variation.

Appendix C

Variables' Definition

Dependent	
Variables	Definition
SEC_COI_score	The sum of SEC_Item B point 4 (SEC Material Ties) and SEC_Item B point 4bis (SEC Contingent Fees), divided by the maximum value of the score (6)
Independent	
Variables	Definition
FINRA	An indicator variable equal to one if the deal has been announced after 2007, and zero otherwise An indicator variable equal to one in the case of a merger and zero in the case of a tender
SEC	offer.
Public Acquiror	An indicator variable equal to one if the bidder is a public firm, and zero otherwise An indicator variable equal to one if the deal is an MBO or going private transaction and zero
Contentious deal	otherwise.
SEC Resource	The year-month sum of the following filings: S-1, S-4, PREM14A and SC 13E3. The filings have been taken from WRDS SEC Analytics and we merged the year-month of the filing date
Constraints	in SEC with the year-month of the deal announced.
Prior SEC	An indicator variable equal to one if in the year before the deal, the target received a SEC
comment letters	comment letter, and zero otherwise
Control Variables	Definition
ROA	The ratio of the client firm's income before extraordinary items to total assets for the fiscal year before the merger announcement.
BTM	The ratio of the client firm's book value of assets to the market value of assets for the fiscal year before the merger announcement, where the market value of assets is defined as the book value of assets plus the market value of equity minus the book value of equity.
Loss	An indicator variable equal to one if the client firm's net income is negative for the fiscal year before the merger announcement, and zero otherwise.
Lev	The client firm's total current and long-term debt scaled by total assets, for the fiscal year before the merger announcement.
Asset Turnover	The ratio of the client firm's total sales to total assets for the fiscal year before the merger announcement.
Deal Size	The natural log of the value of the merger transaction measured at the announcement date of the merger.
Deal Length	The number of days between the merger announcement date and completion date.
Percent Cash	The percentage of the overall merger consideration consisting of cash, per SDC.

Table 1. Sample selection

This table shows the steps to obtain the final set of mergers and FOs used throughout the analysis.

Sample: SDC mergers with U.S. public target and U.S. acquirer (2000-2015) Less: Mergers unable to identify a FO 2,211 SDC mergers with U.S. public target and a FO available Less: Elimination of observations not randomly selected for FO extraction Random subset of mergers with FO available selected for FO extraction 900 Less: FOs for clients with missing data required for control variables 5,239 Sample of mergers and FOs

Table 2: Summary statistics

This table presents summary statistics for the sample of FOs for deals announced during the period 2000-2015. Panel A shows the summary statistics of SEC COI disclosure score and its components. Panel B provides summary statistics of the characteristics of deals and target firms.

Panel A. Descriptive statistics of SEC COI disclosure scores

Variable	N	Mean	SD	Min	p25	p50	p75	Max
SEC_COI_score	741	0.621	0.248	0.000	0.500	0.667	0.833	1.000
SEC Material Ties	741	1.617	1.038	0	1	2	3	3
SEC Contingent Fees	741	2.107	0.911	0	2	2	3	3

Panel B. Descriptive statistics of independent variables and control variables

Variable	N	Mean	SD	Min	p25	p50	p75	Max
SEC	741	0.799	0.401	0	1	1	1	1
ROA	741	-0.072	0.677	-13.057	-0.040	0.016	0.055	0.340
BTM	741	0.774	0.328	0.168	0.546	0.768	0.985	1.906
Loss	741	0.364	0.482	0.000	0.000	0.000	1.000	1.000
Lev	741	0.226	0.238	0.000	0.006	0.163	0.369	1.126
Asset Turnover	741	1.027	0.876	0.035	0.410	0.809	1.420	4.803
Deal Size	741	5.833	1.859	0.554	4.601	5.918	7.113	10.927
Deal Length	741	101.632	70.255	0.000	56.000	89.000	136.000	513.000
Percent Cash	741	78.985	36.332	0.000	70.130	100.000	100.000	100.000

Table 3. The standalone effects of SEC and FINRA regulations on COI disclosure in FO valuations

This table presents the results from examining the standalone effect of SEC and FINRA on COI disclosure in FO valuations. The sample includes a random subset of 741 deals with FOs announced between 2000 and 2015 for which COI disclosure was manually coded. The independent variable in columns 1-2 (3-4) is SEC (FINRA). All variables are defined in Appendix A. The specification in Column 1 includes state × two-digit SIC industry fixed effects, and year fixed effects. In Column 2, deal-level and firm-level controls are added. A time trend variable is included in all specifications. The specification in Column 3 includes state × SEC and two-digit SIC industry × SEC fixed effects. In Column 4, deal-level and firm-level controls are added. A time trend variable is included in all specifications. A constant term is included in all regressions, but not reported. The t-statistics are reported below coefficient estimates in parentheses and are calculated based on standard errors clustered at the state level. ***, ***, and * denote significance at the 1%, 5%, and 10% levels, respectively, using a two-tailed t-test.

		SEC_COI_	SEC_COI_	SEC_COI_	SEC_COI_
Dependent variable:		score	score	score	score
	Pr. Sign	(1)	(2)	(3)	(4)
SEC	?	0.012*	0.023***		
		(1.95)	(2.92)		
FINRA	?			0.293*** (12.57)	0.310*** (12.68)
Target ROA			0.024*** (12.68)		0.017*** (7.86)
Target BTM			-0.024 (-1.17)		0.017 (0.53)
Target Loss			0.011 (1.17)		0.033*** (3.26)
Target Lev			0.055*** (4.19)		0.014 (0.39)
Target Asset Turnover			-0.005 (-0.65)		0.000 (0.04)
Deal Size			0.006** (2.04)		0.011** (2.55)
Deal Length			0.000 (0.62)		-0.000 (-0.59)
Percent Cash			0.001***		0.001***
			(3.54)		(3.78)
State x Industry Fixed Effects		Yes	Yes	No	No
State x SEC Fixed Effects		No	No	Yes	Yes
Industry x SEC Fixed Effects		No	No	Yes	Yes
Year Fixed Effects		Yes	Yes	No	No
Year trend		No	No	Yes	Yes
Observations		741	741	741	741
R-squared		0.472	0.486	0.292	0.309

Table 4. The joint effect of SEC and FINRA regulations on COI disclosure in FO valuations

This table presents the results from examining the joint effect of SEC and FINRA on COI disclosure in FO valuations. The sample includes a random subset of 741 deals with FOs announced between 2000 and 2015 for which COI disclosure was manually coded. All variables are defined in Appendix A. The specification in Column 1 includes state \times SEC, two-digit SIC industry \times SEC fixed effects and year fixed effects. In Column 2, deal-level and firm-level controls are added. A constant term is included in all regressions, but not reported. The t-statistics are reported below coefficient estimates in parentheses and are calculated based on standard errors clustered at the state level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively, using a two-tailed *t*-test.

Dependent variable:		SEC COI score	SEC COI score
	Pr. Sign	(1)	(2)
$FINRA \times SEC$?	-0.095*** (-3.55)	-0.072** (-2.72)
ROA			0.022*** (8.07)
BTM			-0.011 (-0.34)
Loss			0.022 (1.64)
Lev			0.021 (0.56)
Asset Turnover			0.009 (0.95)
Deal Size			0.011*** (2.89)
Deal Length			-0.000 (-0.82)
Percent Cash			0.001*** (3.29)
State × SEC Fixed Effects		Yes	Yes
Industry × SEC Fixed Effects		Yes	Yes
Year Fixed Effects		Yes	Yes
Observations		741	741
R-squared		0.337	0.353

Table 5. The moderating role of SEC resource constraints

This table presents the results from examining the role of SEC resource constraints in the joint effect of SEC and FINRA regulation on COI disclosure in FO valuations. The sample includes a random subset of 741 deals with FOs announced between 2000 and 2015 for which COI disclosure was manually coded. Deals with Low SEC Resource Constraints (High SEC Resource Constraints) are defined as those announced in a month when the total number of filings SEC has to review is below the yearly median. All variables are defined in Appendix A. The specification in Column 1-2 includes state × SEC, two-digit SIC industry and year fixed effects. In Columns 3-4, deal-level and firm-level controls are added. A constant term is included in all regressions, but not reported. The t-statistics are reported below coefficient estimates in parentheses and are calculated based on standard errors clustered at the state level. ***, ***, and * denote significance at the 1%, 5%, and 10% levels, respectively, using a two-tailed *t*-test.

Dependent variable:		SEC CO	OI score	SEC COI score		
Grouping	D 6	Low SEC Resource Constraints	High SEC Resource Constraints	Low SEC Resource Constraints	High SEC Resource Constraints	
	Pr. Sign	(1)	(2)	(3)	(4)	
$FINRA \times SEC$?	-0.033 (-1.42)	-0.180*** (-9.42)	-0.024 (-0.73)	-0.150*** (-8.99)	
ROA				0.029*** (5.34)	0.043 (0.68)	
BTM				-0.031 (-0.65)	0.030 (1.03)	
Loss				-0.000 (-0.01)	0.029 (0.82)	
Lev				-0.058 (-0.98)	0.132*** (3.77)	
Asset Turnover				0.009 (0.55)	-0.019 (-0.95)	
Deal Size				-0.001 (-0.22)	0.017*** (3.61)	
Deal Length				0.000 (1.08)	-0.000 (-0.16)	
Percent Cash				-0.000 (-0.15)	0.001*** (3.20)	
One-tailed T-test		<0	.01	<0	.01	
State × SEC Fixed Effects		Yes	Yes	Yes	Yes	
Year Fixed Effects		Yes	Yes	Yes	Yes	
Industry Fixed Effects		Yes	Yes	Yes	Yes	
Observations		349	332	349	332	
R-squared		0.403	0.371	0.416	0.414	

Table 6. The moderating role of the need for shareholders' protection

This table presents the results from inspecting the moderating role of shareholders' need for protection in the joint effect of SEC and FINRA regulation on COI disclosure in FO valuations. In Panel A, we focus on the deal type, in Panel B we focus on SEC monitoring activity before the deal announcement, while in Panel C we focus on bidder type. In Panel A, contentious deals (Contentious deal No) are defined as MBOs and going-private transactions (all other deals). In Panel B, we define deals previously exposed to SEC monitoring if SEC comment letters or restatements are present in one of the three years before the deal (Yes SEC comment letter or Restatement), and all other deals as not exposed (No SEC comment letter & Restatement). In Panel C, we compare deals with public (Public Acquiror) and private bidders (Non-Public Acquiror). In Panel A and C, the sample includes a random subset of 741 deals with FOs announced between 2000 and 2015 for which COI disclosure was manually coded. In Panel B the sample is limited to 2004-2015. All variables are defined in Appendix A. In all panels, the specification in Column 1-2 includes state × SEC fixed effects, two-digit SIC industry and year fixed effects. In Column 3-4, deal-level and firm-level controls are added. A constant term is included in all regressions, but not reported. The t-statistics are reported below coefficient estimates in parentheses and are calculated based on standard errors clustered at the state level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively, using a two-tailed t-test.

Panel A. The moderating role of deal type

Dependent variable:		SEC CO	OI score	SEC COI score		
Grouping		Contentious deal No	Contentious deal Yes	Contentious deal No	Contentious deal Yes	
	Pr. Sign	(1)	(2)	(3)	(4)	
$FINRA \times SEC$?	-0.068** (-2.51)	0.032 (0.71)	-0.065** (-2.08)	0.085 (1.72)	
ROA				0.017** (2.55)	0.044*** (6.91)	
BTM				0.047 (0.98)	-0.099 (-1.15)	
Loss				0.036* (1.73)	0.028 (1.00)	
Lev				0.008 (0.12)	-0.047 (-0.77)	
Asset Turnover				0.029 (1.49)	-0.014 (-0.80)	
Deal Size				0.020** (2.35)	0.004 (0.45)	
Deal Length				-0.000 (-0.15)	0.000 (0.04)	
Percent Cash				0.001** (2.48)	0.001 (1.66)	
One-tailed T-test		0.	03	<0	.01	
State × SEC Fixed Effects		Yes	Yes	Yes	Yes	
Year Fixed effects		Yes	Yes	Yes	Yes	
Industry Fixed Effects		Yes	Yes	Yes	Yes	
Observations		468	226	468	226	
R-squared		0.341	0.419	0.363	0.449	

Panel B. The moderating role of SEC incentives' compatibility

Dependent variable:		SEC CO	OI score	SEC COI score		
Grouping	-	No SEC comment letters & Restatement	Yes SEC comment letters or Restatement	No SEC comment letters & Restatement	Yes SEC comment letters or Restatement	
	Pr. Sign	(1)	(2)	(3)	(4)	
$FINRA \times SEC$?	-0.244 (-1.48)	-0.139*** (-9.71)	-0.250* (-2.12)	-0.131*** (-6.98)	
ROA				0.349*** (4.28)	0.014*** (4.10)	
BTM				0.120** (2.96)	-0.046 (-1.68)	
Loss				0.015 (0.92)	0.024 (1.15)	
Lev				0.209*** (4.50)	0.014 (0.53)	
Asset Turnover				0.034** (2.63)	-0.006 (-0.63)	
Deal Size				-0.025*** (-3.63)	0.006 (1.18)	
Deal Length				-0.000 (-0.04)	-0.000 (-0.19)	
Percent Cash				0.002*** (5.28)	-0.000 (-0.31)	
One-tailed T-test		0.	23	0.	11	
State × SEC Fixed effects		Yes	Yes	Yes	Yes	
Year Fixed Effects		Yes	Yes	Yes	Yes	
Industry Fixed Effects		Yes	Yes	Yes	Yes	
Observations		152	385	149	385	
R-squared		0.540	0.377	0.511	0.285	

Panel C. The moderating role of buyer type

Dependent variable:	Dependent variable:		COI score	SEC COI score		
Grouping	Pr. Sign	Public Acquiror (1)	Non-Public Acquiror (2)	Public Acquiror (3)	Non-Public Acquiror (4)	
$FINRA \times SEC$?	-0.106*** (-5.06)	0.006 (0.19)	-0.099*** (-4.23)	0.046 (1.70)	
ROA				0.011 (1.15)	0.038*** (2.87)	
BTM				0.107*** (2.95)	-0.151*** (-3.70)	
Loss				0.038* (2.04)	0.034** (2.11)	
Lev				-0.013 (-0.18)	-0.068 (-1.36)	
Asset Turnover				0.022 (1.58)	-0.012 (-0.67)	
Deal Size				0.020** (2.25)	0.001 (0.10)	
Deal Length				-0.000 (-0.88)	0.000 (0.07)	
Percent Cash				0.001** (2.38)	0.001** (2.33)	
One-tailed T-test	-	<	0.01	<()	0.01	
State × SEC Fixed Effects		Yes	Yes	Yes	Yes	
Year Fixed Effects		Yes	Yes	Yes	Yes	
Industry Fixed Effects		Yes	Yes	Yes	Yes	
Observations		407	334	407	334	
R-squared		0.412	0.443	0.435	0.476	

Table 7. Robustness tests

This table presents the results from examining the joint effect of SEC and FINRA on COI disclosure in FO valuations using alternative measures of COI disclosure quality. Panel A shows the findings using sub-components of the overall COI disclosure score. The dependent variable in Column 1-3 (2-4) is the disclosure score relative to material ties (contingent fees). Panel B reports the findings using alternative proxies for overall COI disclosure quality. The dependent variable in Column (1) and (3) is client firm's level of compliance to FINRA regulation (FINRA_COI_score), while in Column (2) and (4) the dependent variable is the principal component of SEC_COI_score and FINRA_COI_score (COI_score). In both Panels, the sample includes a random subset of 741 deals with FOs announced between 2000 and 2015 for which COI disclosure was manually coded. All variables are defined in Appendix A. The specification in Column 1-2 includes state × SEC, two-digit SIC industry × SEC fixed effects and year fixed effects. In Column 3-4, deal-level and firm-level controls are added. A constant term is included in all regressions, but not reported. The t-statistics are reported below coefficient estimates in parentheses and are calculated based on standard errors clustered at the state level. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively, using a two-tailed t-test.

Panel A. Distinct COI

Dependent variable:	D. C.	SEC Material Ties	SEC Contingent Fees	SEC Material Ties	SEC Contingent Fees
-	Pr. Sign	(1)	(2)	(3)	(4)
$FINRA \times SEC$?	-0.396*** (-3.48)	-0.174** (-2.32)	-0.276** (-2.17)	-0.153** (-2.59)
Controls		No	No	Yes	Yes
State × SEC Fixed Effects		Yes	Yes	Yes	Yes
Industry × SEC Fixed Effects		Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	Yes	Yes
Observations		741	741	741	741
R-squared		0.313	0.374	0.334	0.378

Panel B. Alternatives COI scores

Dependent variable:		FINR_COI_ score	COI score	FINRA_COI_ score	COI score
	Pr. Sign	(1)	(2)	(3)	(4)
$FINRA \times SEC$?	-0.079*** (-3.24)	-0.331*** (-3.79)	-0.061** (-2.36)	-0.244*** (-2.84)
Controls		No	No	Yes	Yes
State \times SEC Fixed Effects		Yes	Yes	Yes	Yes
Industry × SEC Fixed Effects		Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	Yes	Yes
Observations		741	741	741	741
R-squared		0.363	0.364	0.370	0.377