Shaking the Faith?
Global Frauds and Trust in Capital Markets

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Abstract

Accounting fraud can threaten capital markets by eroding trust between firms and investors. We investigate whether such negative fraud-related spillovers are uniform globally, focusing on whether *ex ante* investor trust plays some role. We find that high-trust markets see reduced stock market participation and reduced trading and price responses to earnings news following scandals, consistent with prior literature. Low-trust markets experience the opposite, with increased participation and greater reactions to earnings news after fraud revelation, potentially viewing unearthed scandals as signs of previously unexpected, yet effective, oversight and lower amounts of fraud overall. The effect is stronger for earnings news where perceived credibility is vital, such as positive surprises. Regulators that enforce strong investor protections enhance the disparity in the changing reactions to earnings news between high-trust and low-trust markets.

JEL classification: F39, G14, G15, G39, M41, M42, Z10

Keywords: trust, capital market participation, corporate scandals, financial misconduct, earnings credibility, corporate earnings announcement, gatekeepers, auditors, analysts, investor protections, enforcement

1. Introduction

Financial reporting misconduct is widely seen as a major threat to the existence and efficiency of capital markets, eroding the trust between firms and market participants (Amiram et al., 2018). Numerous studies highlight the negative consequences of financial misconduct, which not only impact the firm and its employees but also create spillovers on other firms (e.g., Karpoff et al., 2008; Beatty et al., 2013; Kapons et al., 2023; Choi and Gipper, 2024). To explain some negative spillovers, studies suggest that financial misconduct undermines trust in the stock market, reducing investor participation (Giannetti and Wang, 2016; Cahan et al., 2024). However, do revelations of financial misconduct always lead to negative spillovers for the market? Could investors interpret financial scandal revelations as evidence of effective gatekeepers and misbehavior as less pervasive than previously thought?

In this paper, we take a descriptive approach to investigate whether the stock market spillover effects of financial misconduct are uniform globally. Specifically, we examine how investor trust in capital markets influences their interpretation of financial scandals and find a stark divergence between high-trust and low-trust markets.[1] Participation in capital markets requires trust in the reliability of reported numbers and the fairness of the overall system (Guiso et al., 2008). Therefore, we focus on the "subjective probability that individuals attribute to the possibility of being cheated" (Guiso et al., 2008, p. 2,557) as a crucial factor affecting how investors perceive the impact of revealed fraud in corporate financial reports, which are key data in capital markets (Ball and Brown, 1968; Healy and Palepu, 2001; Beyer et al., 2010).

Investors in high-trusting markets are more likely to experience a significant decline in their trust in capital markets when financial misconduct is revealed. In these contexts, financial

[1] Because a country can switch from high trust to low trust during our sample period, our paper refers to high-trusting and low-trusting markets or societies rather than high-trusting and low-trusting countries.

reporting scandals may signal lower-than-expected reliability of reported numbers. This can occur due to gatekeeper inaction over managerial opportunism, possibly because of limited resources or misaligned incentives not anticipated by investors.[2] Consequently, these investors' trust in gatekeepers (e.g., regulators, equity analysts, auditors) to maintain the quality of financial reporting plausibly declines. As a result, high-trusting markets are likely to see a reduction in investor activity following accounting scandals. This decline in trust during high-scandal periods is evident in the U.S., a market with relatively high levels of trust (Sapienza and Zingales, 2012). The U.S. market also shows declines in market participation, investor shareholdings, and households' reliance on the financial intermediation industry in high-scandal periods (Giannetti et al., 2016; Gurun et al., 2018; Cahan et al., 2024).

Conversely, investors in low-trusting markets may not expect gatekeepers to be effective at detecting and revealing financial wrongdoing. In these markets, where the expectation is that managers are opportunistic and gatekeepers are idle or captured, revelations of financial misconduct might actually enhance the perceived credibility of financial reporting. The effects of exposed accounting scandals would be twofold. First, investors will believe that fraud is more likely to be detected and brought to light. Second, because detection makes fraud costly for perpetrators, investors will *ex post* believe that less fraud is occurring overall. Thus, investors in low-trusting markets are positively surprised by fraud revelations, and these markets can experience an increase in participation and greater reliance on reported numbers in trading decisions and firm valuations when financial misconduct is uncovered.

[2] Regulators are not fully effective at curbing misconduct and sometimes the regulatory regime is only established due to market failures and investors' demand for reform (Amiram et al., 2018; Hail et al., 2018). Institutional gatekeepers may also establish and enforce rules that can be perceived as self-serving, burdensome, or overly restrictive by investors and firms. Thus, investors could perceive the country-level institutional gatekeepers to be sluggish or captured. Tight budget constraints can further limit the efficacy of enforcement actions (Thomsen, 2009; Kedia and Rajgopal, 2011). Regulators can also misallocate limited resources by incorporating political biases in their investigation and penalty decisions (Yu and Yu, 2011; Correia, 2014; Mehta and Zhao, 2020; Pandey et al., 2024).

We combine the measure of societal trust from the World Values Survey, accounting scandals data from Hail et al. (2018), and capital market participation data from various sources. Our firm-year sample includes 123,120 observations across 20 countries between 1996-2015. Societal trust levels for each country-year are measured as the mean response to the question, "Generally speaking, would you say that most people can be trusted or that you have to be very careful in dealing with people?" following, e.g., La Porta et al. (1997), Guiso et al. (2008), Aghion et al. (2010). High-scandal periods for each country are identified based on the above-median number of scandals within the twelve months preceding the earnings announcement day relative to the historical number of scandals per year. This measure captures high-scandal periods in the context of a given country relative to that country's history of scandals. Our country-level measure of stock market participation is the proportion of households owning stock relative to the total number of surveyed households for each country and year. We measure reactions to earnings announcements with abnormal trading volume and stock price reactions to earnings news.

We begin our analyses by examining two country-level reactions to accounting scandals. First, we show that articles in high-trust markets generally have a more positive tone than those in low-trust markets. However, scandal-related articles show a significantly more negative tone in both markets, with a more pronounced drop in high-trust markets. These findings are consistent with differential reactions to scandals based on *ex ante* trust levels. Second, we examine whether capital market participation at the country-year level is associated with scandal revelations. The results suggest that the association between accounting scandal revelations and capital market participation varies with societal trust levels. In high-trust environments, scandals are associated with a decrease in stock market participation. Conversely, in low-trust environments, scandals are linked to increased market participation. This result reveals heterogeneity across countries in the

way households' perceptions of the stock market change following high-scandal periods. High-trusting (low-trusting) investors likely revise their trust in markets downwards (upwards) after high-scandal periods.

To understand whether changes in stock market participation are also accompanied by differential reactions to earnings announcements, we study abnormal trading volume and the pricing of earnings news as measures of how investors perceive managers' credibility (e.g., Gipper et al., 2020). These announcements occur well after the scandal revelation date so are relatively uncontaminated by changing expectations coming from the direct effects of fraud, e.g., the demise of an important firm. As with stock market participation, we find a divergence between high-trust and low-trust markets. During high-scandal periods, high-trust markets exhibit lower abnormal trading volumes, while low-trust markets experience higher abnormal trading volumes. In high-scandal periods, the difference in abnormal trading volume between high- and low-trust markets is approximately 6 percent of one standard deviation, akin to the impact of a firm's size doubling.

We study the pricing of earnings news using the earnings response coefficient (ERC) framework. Our analyses consistently reveal a divergence in the pricing of earnings news between high-trust and low-trust markets during high-scandal periods.[3] High-trusting investors, who are naturally more inclined to perceive the earnings reports as credible, reduce reactions to earnings news, consistent with a negative shock to their trust. At the same time, low-trusting investors, who are disinclined to perceive the earnings numbers as credible and gatekeepers as doing their job well, increase reactions to earnings news, consistent with a positive shift in their trust. Cross-sectional reactions to various types of news which may be inherently less credible, i.e., firms

[3] We find greater abnormal trading volume and larger ERCs in high-trust markets. The stronger investor reactions to earnings news in more trusting societies are consistent with higher perceived credibility of corporate earnings in these societies. These results confirm the findings of Pevzner et al. (2015) using a broader array of measures.

reporting profits or positive surprises, support the interpretation that investors' trust in the credibility of reported figures contributes to the disparity between high- and low-trust markets.

Taken together, the findings suggest that scandals undermine or enhance investors' faith in the capital market in a way that is associated with the *ex ante* level of trust. Investors' updated beliefs differ between high- and low-trusting markets where we observe an erosion of trust and a boost in trust, respectively. However, the above findings face at least two challenges. First, our measure of trust is broad and encompasses trust in various gatekeepers. Second, trust levels are not shaped in isolation from other important market characteristics.[4] Therefore, the observed divergence between high-trust and low-trust markets may be driven by differences in trust towards various gatekeepers or by other market characteristics correlated with societal trust.

We examine whether specific gatekeepers or local factors contribute to the divergence observed in our findings. To this end, we decompose the scandal coefficient into components that reflect gatekeeper-related characteristics of the market; this allows us to test whether the disparity is confined to certain types of gatekeepers, such as regulators, equity analysts, or auditors.[5] Our first analysis explores whether disclosure requirements play a role in the divergence between high- and low-trust markets. While a high disclosure index generally elevates ERCs in both trust-type markets, the variation in ERCs between high- and low-trust markets after high-scandal periods does not appear to be directly linked to any specific disclosure regime. Next, we investigate the role of investor protection in contributing to the divergence between these market types. Here, we

[4] Trust has been shown to be associated with economic growth, firm size, financial development, institutions, and other factors (Knack and Keefer, 1997; Zak and Knack, 2001; Guiso et al., 2004; Bloom et al., 2012; Lins et al., 2017; Isidro et al., 2020; Amiraslani et al., 2023; Hasan et al., 2023).Similarly, financial misconduct is shaped by various factors, including incentives and relative performance, economic growth, regulation, and enforcement (e.g., Harris and Bromiley, 2007; Povel et al., 2007; Kedia and Philippon, 2009; Ball, 2009; Hail et al., 2018; Choi et al., 2024).

[5] Regulators often emerge from market failures and investor demands for reform or oversight, sometimes following accounting frauds (e.g., Hail et al., 2018). Therefore, the divergence in our findings between high- and low-trusting markers might reflect the expected regulatory changes in the aftermath of the scandals (Christensen et al., 2019).

find three important results that are highly relevant for our predictions. First, investor protection generally leads to higher ERCs, and more so for high-trusting markets. Second, the ERC erosion in high-trust markets following high-scandal periods occurs only in markets expected to have strong investor protection. Third, like high-trust markets (except with the opposite sign), the ERC enhancement in low-trust markets after high-scandal periods is present only in markets where gatekeepers are expected to protect investors. Our final analyses reveal that the ERC erosion in high-trust markets is concentrated in firms with high analyst following or high analyst agreement and other firms with the same scandal auditor. In low-trust markets, the increase in ERC is concentrated in firms with low analyst following and Big 4 auditors. Overall, these cross-sectional analyses show that differences in high- versus low-trusting investor reactions to scandal revelation are not explained by gatekeeper or market characteristics; instead, some characteristics, like investor protection, amplify the disparity in investor reactions.

In this paper, we document the divergent impact of revealed accounting misconduct between high-trust and low-trust markets globally, which adds to the literature in four ways. First, we suggest that previously documented evidence of the negative effects associated with scandals in the U.S. represents only part of the picture attributable to markets with relatively high societal trust (Sapienza and Zingales, 2012; Giannetti and Wang, 2016; Gurun et al., 2018). At the same time, a large part of the globe, characterized by low trust, appears to gain trust in capital markets when scandals are revealed. Second, our study extends the literature that trust is an important factor for investors' perception of the market by showing global evidence and utilizing scandal-based shocks to trust (e.g., Guiso et al., 2008; Pevzner et al., 2015; Christensen et al., 2019). Third, our findings also add to the literature on the revelation of financial misconduct by suggesting these events can positively spill over on other firms when trust is low (Gleason et al., 2008; Weber et

al., 2008; Giannetti and Wang, 2016). Fourth, we highlight the important role that gatekeepers play in perceptions of firms' disclosure credibility (Blackwell et al., 1998; Leuz et al., 2003; La Porta et al., 2006; McLean et al., 2012; Carnes et al., 2019; Ellahie and Kaplan, 2021; Pan et al., 2022).

2. Related Literature and Hypothesis Development

2.1 Related Literature

"Virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time" (Arrow, 1972). Trust influences various aspects of society and the economy, including government effectiveness, civic participation, international trade, economic growth, and the scale of the largest firms (Gambetta, 1988; Coleman, 1990; Putnam, 1993; Fukuyama, 1996; Knack and Keefer, 1997; La Porta et al., 1997; Guiso et al., 2004; 2009; Algan and Cahuc, 2010). It holds particular significance in capital markets, where investors trade their money for future promises (Sapienza and Zingales, 2012), and it notably affects investor behavior. For instance, individuals with lower levels of trust are less likely to buy stocks, and lower bilateral trust between European countries leads to reduced cross-country trade, portfolio investment, and direct investment (Guiso et al., 2008; Guiso et al., 2009; Georgarakos and Pasini, 2011). Moreover, higher levels of trust correlate with increased abnormal trading volume and stock return variance around corporate earnings announcements (Pevzner et al., 2015). Consequently, investors incorporate trust, i.e., the risk of being deceived, into their decisions to participate in the stock market and reactions to earnings news.

Studies show that financial scandals create negative spillovers. Gleason et al. (2008) find share price declines among non-restating industry peers of firms with accounting restatements, attributable to skepticism about the accounting quality among these peers. Additionally, peer firms often adjust their decision-making (e.g., for investments) in response to fraudulent reports (Beatty

et al., 2013). Brazel et al. (2015) surveyed nonprofessional investors and find that these investors place greater emphasis on fraud risk assessments during periods of high scandal. Gurun et al. (2018) and Das et al. (2024) report a shift from scandal-exposed financial industries (financial intermediation and banking, respectively) to safer venues for those people exposed to the scandals. Friedman (2019) shows that beliefs about disclosure quality, measured through surveys, decline around accounting scandals. Kapons et al. (2023) suggest that mutual funds increase their demand for dividend-paying stocks following accounting fraud discoveries within their portfolios. Other studies show that spillovers can be mediated via gatekeepers, such as auditors. Weber et al. (2008) study the accounting scandal involving ComROAD and its auditor KPMG in Germany and find negative spillovers in terms of abnormal returns for KPMG's clients. Skinner and Srinivasan (2012) study the accounting fraud at Kanebo, a Japanese company audited by ChuoAoyama, and find a quarter of ChuoAoyama's clients leave after the scandal revelation.[6]

This paper emphasizes societal trust as a critical factor influencing investors' interpretation of financial scandals. Investor responses to firms' financial reporting hinge on the credibility of the underlying signals (Holthausen and Verrecchia, 1988; Kim and Verrecchia, 1991). As a result, investor participation in capital markets and their reaction to reported numbers depend on their expectations of the accuracy of the financial information. Consistent with a loss of trust in the stock market from exposure to scandals, Giannetti and Wang (2016) show that households reduce their holdings in non-fraudulent firms, even if they do not hold stock in the fraudulent ones. Societies with low trust increase household equity ownership in response to securities regulation (Christensen et al., 2019). Thus, low-trusting investors may demand stronger institutional safeguards, such as additional regulation to prevent misconduct, although excessive regulation can

[6] We focus on the spillover aspect of financial misconduct. For a review of papers about the direct consequences of misconduct for the fraudulent firms, please see Amiram et al. (2018).

itself foster distrust (Aghion et al., 2010).

2.2 Hypothesis Development

As we describe above, the literature conjectures that the negative economic spillovers from accounting misconduct to peer firms indicate a decline in investors' trust in the stock market following scandals (Sadka, 2006; Gleason et al., 2008; Weber et al., 2008; Skinner and Srinivasan, 2012; Beatty et al., 2013; Giannetti and Wang, 2016; Kapons et al., 2023). A decrease in trust after a scandal seems intuitive. However, we posit that revisions in trust in capital markets will depend on how trusting investors are at the outset.

Trust is the subjective probability that individuals attribute to the possibility of being cheated (Guiso et al., 2008, p. 2,557). In the aftermath of a scandal, investors are likely to change their assessment of both the likelihood that managers are cheating (e.g., lying to conceal poor performance) and the likelihood that any cheating, if it occurs, will be discovered and revealed. We refer to these probabilities as latent fraud and detection rates, respectively. In the context of these rates, trust is the belief that the managers are not committing accounting fraud because, if so, they would get caught.

We frame our discussion with two ideas for how investors update with respect to the latent fraud and detection rates. First, if latent fraud and detection rates are independent, then revealed fraud can increase investors' beliefs about the latent fraud and detection rates. So, investors are likely to have posteriors that latent fraud and detection rates are higher than their priors, although their priors may reduce the extent of updating if they *ex ante* believe these rates to be very high. Second, latent fraud and detection rates are not likely to be independent and probably negatively related. This negative association is built into rational models of criminal behavior. Offenders commit fewer (more) crimes because an increased (a decreased) likelihood of being caught causes

higher (lower) expected costs from misconduct (e.g., Becker, 1968). Investors will likely update their priors along these lines, either (a) latent fraud rates are higher and detection rates are lower or (b) latent fraud rates are lower and detection rates are higher than they previously believed.

We argue that scandal-induced revisions in markets' beliefs about latent fraud rates and detection rates can depend on the initial level of trust. Investors who are inclined to believe in the credibility of reported numbers (i.e., expect low *ex ante* latent fraud rates and high *ex ante* detection rates) are likely to downgrade their trust in capital markets, believing *ex post* in higher latent fraud rates and lower detection rates. Conversely, those who are inclined to distrust financial reporting and gatekeepers may positively revise their beliefs with lower latent fraud rates and higher detection rates.

Specifically, investors in high-trust markets are likely to perceive financial reporting as credible because they have a prior that latent fraud rates are low and that detection rates are high. This perception aligns with greater capital market participation and stronger stock market reactions to earnings announcements in high-trust markets (Guiso et al., 2008; Sapienza and Zingales, 2012; Pevzner et al., 2015). In these high-trust markets, periods marked by significant scandals reveal that management conceals poor firm performance more than expected (Leuz et al., 2003; Dyck et al., 2023). Put differently, investors likely have higher posteriors for latent fraud rates but might be limited in raising their beliefs for detection rates. And the high trusting investors may even lower their detection rate posteriors because higher latent fraud rates pair rationally with lower detection rates (Becker, 1968; Lui, 1986). Such changes in beliefs, higher latent fraud rate and lower detection rate, would cause investors to expect more fraud to be occurring and to go undetected. This sentiment is echoed by evidence from Sapienza and Zingales (2012). In the U.S., with its high levels of trust, the last three months of 2008 during the global financial crisis

undermined individuals' trust in capital markets. Consequently, investors' participation in the stock market and their reaction to earnings news are likely to decline in high-trust markets following high-scandal periods.

At the same time, investors in low-trust markets have priors that managers are rapacious and always cheating and do not expect gatekeepers to detect or reveal any wrongdoing, i.e., latent fraud rates are high, and detection rates are low. The gatekeepers' inaction in these markets is evidenced by lower financial reporting quality, despite having regulated reporting requirements like those in high-trust markets (Nanda and Wysocki, 2011; Garrett et al., 2014). The low expectations of investors in low-trust markets increase the chances that they are positively surprised when frauds are revealed. Scandal revelation indicates that some gatekeeper has potentially outed fraud or facilitated whistleblowing (e.g., Dyck et al., 2010). Put another way, investors likely have higher posteriors for detection rates but may have limited increases of posteriors for latent fraud rates. Indeed, the low trusting investors may lower their latent fraud rate posteriors because higher detection rates would associate with lower latent fraud rates, consistent with Becker's (1968) rational crime framework. Such changes in beliefs, higher detection rates and lower latent fraud rates, would cause investors to expect less undetected fraud to be occurring. Hence, high-scandal periods may lead to a positive revision in investors' trust within these markets. In turn, an increase in trust is associated with greater capital market participation and heightened trading activity (Guiso et al., 2008; Pevzner et al., 2015). Consequently, high-scandal periods can raise investor engagement in the stock market in low-trust markets.

H1a: Scandal-induced changes in investors' capital market participation depend on the underlying level of trust.

H1b: Scandal-induced changes in investors' responses to earnings news depend on the underlying level of trust.

2.3 Anecdotes and Media Sentiment toward Scandals in High- and Low-Trust Markets

We briefly discuss two cases to help fix ideas, Wirecard of Germany, a relatively high-trusting market, and Parmalat of Italy, a relatively low-trusting market. The frauds and collapses of these two companies have similar themes: billions of missing assets potentially related to overseas acquisitions, arrested CEOs, and substantial shareholder losses. A major difference between the two cases highlights the reasoning behind our hypothesis. For Parmalat, an "astonished Italian public learned from the mass-media shortly after Parmalat's collapse that civil actions were being launched, at a speed unthinkable for Italy" (Ferrarini and Giudici, 2005). Though some civil remedies were being pursued internationally, Italians appear to be positively surprised by the swift actions taken in late 2003 and early 2004, including measures taken by Consob, the Italian markets regulator. In contrast, for Wirecard, investors sued BaFin, the German markets regulator, over its failure to address the scandal (Bloomberg, 2020). BaFin even sided with Wirecard against *Financial Times* journalists who claimed that the firm was committing fraud for years leading up to the firm's failure in 2020. Germans appear to be negatively surprised, both by the occurrence of fraud and by the regulator's prolonged inability to detect it.

To assess whether the perception of scandals varies between high-trust and low-trust markets on a larger scale, we compare media sentiment scores for scandal-related articles to scores for non-scandal articles within each trust-type market separately. We follow a three-step process, integrating the scandal articles identified by Hail et al. (2018) with a sample of non-scandal articles for each country included in our study. First, for each country, we randomly select two dates from the years 1995, 2000, 2005, and 2010. Second, using Factiva, we download the first hundred

articles published on each selected date for the given country, ensuring the sources overlap with those cited by Hail et al. (2018). Third, we exclude any articles that mention the firms involved in the scandals. The non-scandal sample of articles serves as a baseline. To calculate the sentiment score, we use Hutto and Gilbert's (2014) "valence aware dictionary and sentiment reasoner" or "VADER", which includes a Google Translation step built in for non-English media articles. We present the average and median sentiment scores across a two-by-two grid: comparing scandal versus non-scandal articles and high-trust versus low-trust markets, using the most recently available World Value Survey trust scores for each country-year. Table 1 presents the results.

We find that non-scandal articles have positive average VADER scores, with high-trust markets showing a higher average score of 0.41, compared to 0.33 for low-trust markets. This suggests that low-trust markets maintain a slightly less optimistic sentiment toward non-scandal news events. In contrast, for scandal articles, low-trust markets display relatively higher VADER scores, with an average of –0.10 compared with high-trust markets with an average VADER score of –0.33. These averages are significantly different from each other at conventional levels of significance. This indicates that sentiment toward revealed fraud is relatively more positive in low-trust markets. Median scores follow a similar pattern, further reinforcing these findings.

3. Data and Research Setting

3.1 Data and Sample Selection

We use a sample of international firms which spans 20 years from 1996 to 2015. We start with all the firms in I/B/E/S, Worldscope, and Datastream that have CUSIP, OFTIC, earnings announcement dates, and the actual value of EPS. We only keep observations where earnings announcements are made within 150 days of the fiscal year-end and available analyst forecasts to generate a measure of unexpected earnings. We remove other observations that lack identifiable

countries in the data or for which we are unable to calculate a CAPM Beta. Further, we merge the resulting observations with the World Values Survey (WVS), Hail et al. (2018) accounting scandal data, and stock market participation data, and we keep observations with available data for our variables of interest and control variables.

We combine various sources of data on direct stock participation. For the United States, following Hong et al. (2004), we use the Health and Retirement Study (HRS) administered by the University of Michigan in 1996-2014 (biannual data). The survey question Q316 asks whether the household has any shares of stocks or stock mutual funds.[7] For European countries, we follow Georgarakos and Pasin (2011) and Kaustiaa et al. (2022) and use the Survey of Health and Retirement in Europe (SHARE).[8] The survey reports whether households had stocks or shares at the time of the interview. For China, we follow Cooper and Zhu (2018) and use the China Household Finance Survey (CHFS) in 2011-2015 (biannual data). Direct stock holding information is reflected in question D3101. For South Africa, we use the National Income Dynamics Study downloaded from the Datafirst website (waves 1, 2, and 4). The survey asks household members whether they have unit trusts, stocks, or shares. For Australia, we use the Share Ownership Study/Reports provided by the Australian Securities Exchange. The report provides the number of people and the percentage of the adult Australian population who participated in the Australian share market directly.

[7] The relevant questions for 1996, 1998, and 2000 are E4339, F5099, G5554, respectively.

[8] The main questionnaire is partly based on the Health and Retirement Study (HRS) and the English Longitudinal Study of Aging (ELSA). All questions are standardized across countries. We include Wave 1 (2004), Wave 2 (2006/2007), Wave 4 (2011), Wave 5 (2013) and Wave 6 (2015). We do not include Wave 3 because the survey did not ask the respondents whether they held any shares at the time of the survey instead asking whether they ever had any money in stocks or shares. Wave 1 differs from the rest of the waves in that not all the respondents were asked the question about the stock holdings. For this wave, we calculate the participation rate as the number of respondents who answer "yes" scalded by the number of respondents who were asked this question. Because of the selection issue for Wave 1, the participation rate is considerably higher than in other waves. We therefore report the results with Wave 1 and dropping this wave from our sample.

3.2 Measurement of Societal Trust, Accounting Scandals, and Capital Market Engagement

We measure accounting scandals at a country-year level using the data from Hail et al. (2018).[9] Specifically, we use the number of total scandals and accounting & near-accounting scandals and, separately, non-accounting scandals at the country-year level for our country-level tests.[10] In Hail et al.'s (2018) data, accounting scandals meet four criteria: (i) the event involves financial reporting practices, (ii) the practices are morally or legally wrong, (iii) the event had material negative consequences, like bankruptcy, and (iv) the event caused public attention via press coverage and additional examination. Near-accounting scandals do not meet the first criteria, but accounting still plays some role, like tax fraud with account manipulations. Non-accounting scandals do not meet the first criteria, and there is no accounting role, like bribery. For our firm-level tests, we sharpen the measure by using only accounting scandals and the dates of the media articles collected by Hail et al. (2018). We classify the country-year as being in a "high-scandal" period if the number of scandals within the twelve months preceding the earnings announcement day exceeds the historical median number of scandals per year.[11]

Following the literature, we measure societal trust based on responses to the World Value Survey (WVS) question "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" (La Porta et al., 1997; Guiso et al., 2008; Inglehart et al., 2014). This proxy for trust is associated with society's expectation that people will do the right thing (Bjørnskov, 2007). Importantly, this measure is also used to show that capital markets in high trust countries have greater stock return variance and higher trading volume

[9] We use the words "fraud" and "scandal" interchangeably. However, we note that Hail et al. (2018) suggest accounting scandals to be a superset of accounting frauds because scandals can be either morally wrong or legally wrong, and thus drawing public condemnation as scandalous, while fraud must be at least legally wrong.
[10] Their data covers a historical time series of accounting scandals for a panel of 26 countries from 1800 to 2015.
[11] In Appendix B, we conduct an analysis of scandal article dates from the Hail et al. (2018) data. We conclude that the article dates are reasonably proximate but do not necessarily correspond to true "revelation dates" in many instances. This misalignment may introduce some noise into our analysis.

responses to earnings news (Pevzner et al., 2015). Not all countries are surveyed in every WVS nor is the survey conducted every year. We roll forward the survey measures for missing years.

We measure stock market participation rate for each year and country by counting the number of households that own stock and scaling it with the total number of surveyed households.[12] To study investors' responses to earnings news, we calculate abnormal trading volume around earnings announcements as the average trading volume over the event window (0, +1), scaled by the average trading volume over the estimation window (-120, -21). We also use earnings response coefficients (ERCs) to measure investors' assessments of reporting credibility (Kothari, 2001; Dechow et al., 2010). Investors likely respond to a given amount of earnings news more strongly when they believe that reported earnings accurately measure the underlying economic performance (Holthausen and Verrecchia, 1988). To measure unexpected earnings (*UE*), we rank the difference between reported earnings per share and mean of recent analyst forecasts of earnings per share divided by pre-announcement stock price into 100 percentile groups and divide this by 100. This ranking approach reduces the impact of noise in earning news at the tails and improves ERC measurement (Gipper et al., 2020; Gassen and Veenman, 2021). The cumulative abnormal returns in the ERC regressions are from the market model during the firm's earnings announcement window (0, +1) scaled up by 100.

4. Research Design and Results

4.1 Stock Market Participation

We run our analysis of capital market participation at the country-year level and allow the coefficient on scandals to vary with the underlying trust level:

$$Stock\ Market\ Participation_{c,t} = \beta_1 \times Trust_{c,t-} + \beta_2 \times \text{Ln}(1+Scandals_{c,t-1})$$

[12] For cases where multiple members of a household were asked, only when all of them answered "no" we consider this household to not hold any stock.

$$+ \beta_3 \times Trust_{c,t-} \times \text{Ln}(1+Scandals_{c,t-1}) + \lambda \times Wave\_1_{c,t} + Country\ FE + \varepsilon_{c,t} \quad (1)$$

where subscript *c* corresponds to country and subscript *t* reflects year. We measure scandals (trust) in the year prior (most recent country-specific WVS wave prior) to the measurement year for stock market participation. We incorporate country fixed effects to account for inherent, time-invariant characteristics specific to each country. Additionally, we include a dummy variable for Wave 1 due to differences in the selection process of respondents for stock ownership questions in that wave. We also provide separate results after excluding Wave 1 for robustness. All variables are defined in Appendix A.

Table 2 consists of two panels. Panel A provides descriptive statistics for the stock market participation analysis. In the median country-year observation, 16.56% of households own stock and experience two scandals, of which one scandal is an accounting or near-accounting scandal. Panel B presents the results of our analysis. Columns (1)-(4) include a dummy variable for Wave 1, while columns (5)-(8) display the results after excluding Wave 1 from the sample. We evaluate the impact of various measures of scandals: columns (2) and (6) report results for all corporate scandals as documented in Hail et al. (2018); columns (3) and (7) focus on accounting scandals; and columns (4) and (8) address non-accounting scandals, i.e., other scandals. Our hypothesis suggests that β_2 will be positive and β_3 will be negative. This is based on the expectation that low-trust markets will be positively surprised by scandal revelation, with lower posteriors in the latent fraud rate and higher posteriors in the detection rate (i.e., come to be more trusting) and, thus, will participate more in stock markets (β_2), whereas high-trust markets are disappointed by scandal revelation and will face higher posteriors in the latent fraud rate and lower posteriors in the detection rate (i.e., become less trusting) and will participate less in stock markets ($\beta_2 + \beta_3$).

While trust is positively associated with capital market participation (as shown in columns

(1) and (5)), the inclusion of accounting scandals and their interaction with trust reveals significant heterogeneity based on trust levels (columns (3) and (7)). In low-trust environments, accounting scandals are positively correlated with increased capital market participation. Conversely, as trust levels increase, the stock market participation declines. A doubling of the number of accounting scandals (or going from no scandals to one scandal) increases stock market participation by seven percentage points. However, this effect disappears with a two-standard-deviation increase in societal trust. This outcome suggests that how investors update their beliefs in response to scandals varies depending on the prevailing level of trust.

4.2 Descriptive Statistics for Firm-level Data

Table 3, Panel A provides summary information about the by-year distribution of our firm-level sample. The number of observations increases during the first half of the period, peaking in 2007 with 8,654 firms. This number then declines in the second half, with the lowest count in 2015 at 4,494 firms. We also show the time series pattern of scandals in the data counted by the firm-years affected. All years have firms subject to non-scandal, single scandal, and multi-scandal environments, indicating rich variation through time. Panel B provides summary information on the distribution of the by-country sample, as well as distributional statistics regarding countries' trust levels and occurrences of accounting scandals (measured at the yearly level as reported in the press, Hail et al., 2018). Japan and the United States provide the greatest number of observations; while many countries, such as Egypt or Israel, have fewer than 1,000 firm-years. Sweden and Finland have the highest trust levels, whereas Brazil and South Africa have the lowest trust levels. Japan and the United States have the highest number of discovered fraud cases.

Table 4 provides the summary statistics for the variables we use in our firm-level analyses. The main dependent variables across these analyses are abnormal trading volume (*Abnormal*

Volume) and cumulative abnormal returns (*CAR*), both measured around the earnings announcement date. A typical country-year has about 2.7 (2) accounting scandals on average (at the median). Due to limited data availability for the control variables, the sample for abnormal trading volume is a subset of the data used for cumulative abnormal returns tests.

4.3 Abnormal Trading Volume

We next examine short-window market reactions to earnings news in the aftermath of accounting scandals. Earnings announcement trading and price reactions enable us to measure whether management-provided news changes market participants' beliefs about firm value depending on how investors may have updated beliefs of latent fraud and detection rates. If investors believe that latent fraud rates are higher and detection rates lower—that is, formerly high trust markets but after scandal revelations—then we expect that they would react less to earnings news, believing it to be less informative and less useful for valuing the firm. However, if investors believe that latent fraud rates are lower and detection rates higher—that is, formerly low trust markets but after scandal revelations—then we expect that market participants would react more to earnings news, now finding it to be more informative and more useful for valuing the firm because they think there is less, undetected fraud coloring (or biasing) the earnings reports. Using the low trust markets as an example, we expect to find results for volume because investors update their beliefs about firm value more conditional on receiving management-provided news and trade more. And we expect to find results for price reactions because investors impound more of the management-provided surprise into price.

We begin by focusing on abnormal trading volume around earnings announcements. Our analysis is conducted at the firm-year level, enabling us to perform subsample analyses for high-trust and low-trust markets. For each subsample, we use the following specification:

$$Abnormal\ Volume_{i,t} = \beta_1 \times High\ Scandal_{i,t}\ [+ \beta_2 \times Trust_{c(i),t} + \beta_3 \times Trust_{c(i),t} \times High\ Scandal_{i,t}] + Controls + Industry\ FE + Year\ FE + \varepsilon_{i,t} \quad (2)$$

where subscript *i* denotes a firm, *c* corresponds to the country, and *t* reflects the year. *High* $Scandal_{i,t}$ is a dummy variable that equals one if the number of scandals within the twelve months preceding the earnings announcement day exceeds the historical median number of scandals per year. We include a range of controls at the firm-year level as well as industry and year fixed effects. Standard errors are clustered by firm. We perform the subsample analyses for high-trust and low-trust markets and exclude the *Trust* variable, hence the brackets in equation (2). Then, we combine these markets and include trust and its interaction with the high-scandal dummy in the specification. For robustness, we refine the specification by separately including country and firm fixed effects.

Table 5, Panel A presents the results for the specifications incorporating industry and year fixed effects. Columns (1) and (2) display the subsample analyses for high-trust and low-trust markets, respectively. Columns (3) and (4) report the results for the combined sample of high- and low-trust markets, after incorporating trust and its interaction with the high-scandal dummy into the specifications. Column (3) uses the raw measure of trust, while column (4) uses percentiles of trust to facilitate easier interpretation of the findings. In Column (1), the analysis reveals a drop in abnormal trading volume in high-trust markets during high-scandal periods. Conversely, Column (2) indicates a positive but non-significant coefficient for low-trust markets. When combining the two samples, Columns (3) and (4) show that low-trust markets experience an increase in abnormal trading volume during high-scandal periods, as evidenced by the positive coefficient on the *High Scandal* variable. Simultaneously, high-trust markets exhibit a negative adjustment in abnormal trading volume, reflected by the negative coefficient on the *High Scandal* × *Trust* interaction term in both columns. These results support the observed heterogeneity in our capital market tests, demonstrating a divergence in trading volume changes during high-scandal periods between high.

In Panel B of Table 5, we report the results for specifications incorporating country and year fixed effects (columns (1) and (2)), as well as firm and year fixed effects (columns (3) and (4)). Columns (1) and (3) utilize the raw measure of trust, whereas columns (2) and (4) use trust percentiles for easier interpretation. The results consistently demonstrate a negative interaction between trust and scandals, reinforcing our earlier finding that investors in high- and low-trust markets update their beliefs about the stock market differently.

4.4 Earnings Response Coefficients

Next, we examine price reactions with the use of an earnings response coefficient (ERC) framework. ERC analyses come with tradeoffs. Prior theoretical work (e.g., Holthausen and Verrecchia 1988; Kim and Verrecchia 1991) indicates that investors' assessments of reporting credibility will relate to how strongly prices respond to earnings news. Prior empirical research has similarly used ERCs to proxy for investors' assessment of earnings credibility (e.g., Gipper et al. 2020). Moreover, price reactions to surprises are easier to interpret than volume reactions, which may also reflect investor disagreement. However, because we only infer ERCs from price-to-surprise associations, as opposed to measuring them directly, estimation demands a lot from the data with many interactive terms in the regression specification. We start by separately examining the subsamples of high-trust and low-trust markets. To investigate how the incorporation of earnings news varies with accounting scandals, conditional on a given trust level, we run the following specification:

$$\begin{aligned} CAR_{i,t} = {} & \beta_1 \times High\ Scandal_{i,t} \times UE_{i,t} + \beta_2 \times High\ Scandal_{i,t} + \\ & [+ \beta_3 \times Trust_{c(i),t} \times UE_{i,t} + \beta_4 \times Trust_{c(i),t} + \\ & + \beta_5 \times High\ Scandal_{i,t} \times Trust_{c(i),t} \times UE_{i,t} + \beta_6 \times High\ Scandal_{i,t} \times Trust_{c(i),t}\ ] \\ & + Controls + Fixed\ Effects + Controls \times UE_{i,t} + Fixed\ Effects \times UE_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (3)$$

As in the abnormal volume analyses, $High\ Scandal_{i,t}$ is a dummy variable that equals one if the number of scandals within the twelve months preceding the earnings announcement day exceeds

the historical median number of scandals per year. Following the ERC literature, we include several time-varying firm control variables (e.g., Kothari, 2001). Our regression specification includes an indicator for the firm reporting a loss (*Loss*), the natural log of the firm's size (*Size*), the firm's leverage as a ratio of total liabilities to total assets (*Leverage*), the beta from a capital asset pricing model (*Beta*), and the firm's book-to-market ratio (*Book-to-Market*). We also interact these variables with *UE* to control for the extent to which investors incorporate earnings news into stock prices in ways that vary systematically with these firm characteristics. For example, earnings surprises of firms that report losses are plausibly less value relevant because earnings may not reflect the abandonment value of the firm or are recognized on a one-time basis as an artefact of conditional conservatism in accounting (e.g., Hayn, 1995; Basu, 1997).

We include industry and year fixed effects to absorb the variation in abnormal returns during the earnings announcements that are common to firms within the same industry or within a given year, respectively. However, to control for the average ERC within an industry or year (as typically the researcher wants to accomplish with non-interactive models, i.e., control for the average main effect), we also interact these effects with *UE* (e.g., Gassen and Veenman, 2021). With these interactions, *UE* becomes collinear with the fixed effects and is consequently omitted from the specification. Industry-by-*UE* fixed effects allow us to compare firms within the same industry experiencing the same earnings surprise but exposed to different levels of scandals. Similarly, year-by-*UE* fixed effects facilitate comparison across observations within the same year experiencing the same earnings surprise but subject to varying levels of scandals. We cluster standard errors by firm.

Table 6 presents the results consistent with the disparity observed in our abnormal trading volume analyses. Specifically, whether scandals undermine or enhance investors' confidence in

earnings numbers depends on the underlying level of trust. Column (1) indicates that during high-scandal periods, high-trust investors exhibit a muted response to earnings incorporation into stock prices. In other words, investors who are inclined to perceive earnings numbers as highly credible due to their faith in managers and gatekeepers—such as regulators, auditors, and analysts—adjust this perceived credibility downward when scandal revelations occur. Conversely, column (2) shows that in low-trust societies, high-scandal periods are associated with a greater incorporation of earnings into stock prices. This suggests that investors who are inclined to perceive reported earnings with skepticism, rely more on earnings news during times of heightened scandal.

In Columns (3) and (4), we combine high-trust and low-trust markets into a single sample and expand the specification to include the triple interaction $High\ Scandal_{i,t} \times Trust_{c(i),t} \times UE_{i,t,}$ as well as the two-way interactions $High\ Scandal_{i,t} \times UE_{i,t}$ and $Trust_{c(i),t} \times UE_{i,t,}$ and the main effects of these variables. Column (3) uses a dummy variable for high trust and column (4) uses the percentile version of the trust variable. The negative coefficient on the triple-interaction term reinforces the disparity in how investors in high- and low-trust markets adjust their trust in the stock market.

These results are consistent with our explanation for the disparity in that investors from low-trust markets had no faith in managers or gatekeepers—such as auditors, analysts, or regulators—to report fairly or perform their duties effectively. The revelation of scandals can raise low-trust investors' confidence in the reported numbers, as they observe investigations and penalization of misconduct, at least through public shaming in the media. Consequently, ERCs increase in low-trust markets when scandals are exposed.

4.5 Cross-sectional Variation Based on the Inherent Credibility of News

Because trust in earnings numbers is more relevant for positive earnings and positive earnings news, we examine whether the ERC erosion in high-trust markets and the ERC increase in low-trust markets are concentrated in firm-years with positive earnings (columns (1) and (2)) and positive earnings news (columns (3) and (4)). In columns (1) and (2), we modify equation (3) by decomposing the key interaction term, *High Scandal* × *UE*, into two components: one corresponding to a loss (*High Scandal* × *UE* × *Split=1)* and the other corresponding to positive reported earnings (*High Scandal* × *UE* × *Split=0*). Here, *Split=1* indicates a loss reported by the firms in a given year, while *Split=0* indicates positive earnings. We also include the two-way interactions of *Split* with *UE* and *High Scandal.*

Table 7 presents the results. The ERC erosion in high-trust markets is concentrated in firms reporting positive earnings. In addition, the ERC increase in low-trust markets is concentrated in firms that report positive earnings and have positive earnings news. These results align with the idea that investors in both high- and low-trust markets update their beliefs in cases where trust plays a key role.

4.6 Cross-Sectional Results: Trust in Institutions

The WVS measures trust as a general concept, encompassing trust in regulators, analysts, and auditors, which can all contribute to the disparity in stock market effects between high- and low-trust markets. To further investigate which of these gatekeepers contribute to our findings, we introduce regulatory, equity analyst, and auditor characteristics into our analyses.

Institutions are potentially an important determinant of investors' perception of how credible firm disclosure is. Some studies show disclosure and private enforcement to be related to capital market development but do not find such effects for public enforcement (e.g., La Porta et

al., 2006). Other studies show investor protection to be related to better capital allocation and investment efficiency (e.g., McLean et al.,2012). Weak investor protection is also connected to poorly performing firms experiencing takeovers and replacing CEOs (Lel and Darius, 2015). Pevzner et al. (2015) find a more pronounced positive effect of societal trust on investor reactions to earnings news when investor protection and disclosure requirements are weaker, interpreting these findings as evidence that trust acts as a substitute for formal institutions.

Country-level institutional gatekeepers, such as regulators or disclosure regimes, are supposed to address market failures and societal demands for oversight (e.g., McLean et al., 2012). However, these gatekeepers may establish and enforce rules that investors can perceive as ineffective or influenced by special interests. Thus, investors' trust in country-level gatekeepers can further decline when accounting scandals occur (e.g., Aghion et al., 2010). Alternatively, investors might rely on country-level gatekeepers to intervene with legal authority and to reassure them that fraudulent activities will be properly addressed.

We test whether trust in institutions can explain the disparity between high- and low-trust markets in how investors react to earnings news during high-scandal periods. We start by using the index from La Porta et al. (2006) that captures a country's requirement (or the lack thereof) of the delivery of a prospectus to potential investors in advance of securities issuance, and the extent of affirmative disclosure requirements in the following five areas: insiders' compensation, ownership by large shareholders, inside ownership, contracts outside the normal course of business, and transactions with related parties. We assign *Split=1* for country-year observations with above-median disclosure index and *Split=0* otherwise. Similar to the decompositions in the prior two panels, we include the two-way interactions of *Split=1* with *High Scandal* and *UE* and the main effect of this dummy into our regressions.

In Panel A of Table 8, columns (1) and (2) report the decomposition based on the disclosure index. We find that high disclosure index increases ERCs in general. However, disclosure seems to be unrelated to investor reactions to scandals in both high-trust and low-trust markets. Therefore, there does not appear to be an erosion of trust in capital market disclosure requirements following scandals in high-trust markets, nor is there an increase in reactions to earnings news in low-trust markets.

Finally, we test whether trust in investor protection adds to the diverging reactions to scandals between high- and low-trust markets. We use an investor protection index that aggregates the anti-self-dealing index from Djankov et al. (2008) and the law enforcement index from Kaufmann et al. (2003) after both indices are rescaled to be between 0 and 1. We assign *Split=1* for country-year observations with above-median investor protection index and *Split=0* for below-median values of this index. We also include the two-way interactions of *Split=1* with *High Scandal* and *UE* and the main effect of this dummy into our regressions.

We report the findings in Panel A of Table 8. Columns (3) and (4) show three important results for our predictions. First, investor protection is generally associated with higher ERCs, and this association is stronger for high-trust markets. Second, during high-scandal periods, high-trust investors lose confidence in institutions enforcing investor protection. This suggests that scandals can shake the faith of high-trusting investors in these institutions, possibly because they previously believed such protections were effective at preventing scandals. Third, low-trust investors appear to gain trust in these gatekeepers. We find the ERC increase from scandals in low-trust countries to be concentrated in high-protection markets. It appears that regulators providing high investor protection are important for low-trusting investors to revise their perception of the reported

numbers upward when they observe misconduct getting caught. There is no effect for either high- or low-trusting investors when investor protections are weak.

4.7 Cross-Sectional Results: Trust in Analysts

The next type of gatekeepers we examine is equity analysts.[13] We modify equation (3) by decomposing the key interaction of interest, *High Scandal* × *UE*, into two components: one corresponding to high analyst following (*High Scandal* × *UE* × *Split=1)* and another corresponding to low analyst following (*High Scandal* × *UE* × *Split=0*). *Split=1* reflects above-median analyst following, and *Split=0* reflects below-median analyst following. We also include the two-way interactions of *Split=1* with *High Scandal* and *UE* and the main effect of this dummy into our regressions.

Panel B in Table 8 presents the findings. Columns (1) and (2) show the results of the decomposition based on analyst following for the two subsamples. Columns (3) and (4) show the results of the decomposition based on analyst forecast dispersion. First, we note that analysts' scrutiny increases the perceived credibility of earnings numbers regardless of the trust level. This is indicated by the positive coefficients on *UE* × Split in columns (1) and (2)—i.e., more analyst attention enhances scrutiny, although other factors such as improved expectations could also contribute to the positive coefficient. Conversely, the negative coefficients on this term in columns (3) and (4) imply that greater analyst disagreement could suggest lower scrutiny, possibly due to a higher number of stale forecasts, though alternative explanations are possible.

In high-trust markets, we observe that the ERC erosion during high-scandal periods is concentrated in firms with high analyst following and low forecast dispersion. This finding aligns with the notion that scandals shake investors' faith in analysts in high-trust societies. For example, formerly high-trusting investors might perceive a large number of analysts or greater analyst agreement as

[13] Reinforcing analyst forecast revisions are associated with larger ERCs, investors react more to earnings news accompanied by analyst forecast revisions when there is greater consensus among analysts (Lobo et al., 2017).

indicators of thorough scrutiny of companies' earnings figures. However, during high-scandal periods, this positive perception of analysts' scrutiny is likely to diminish, weakening the perceived reliability of analysts. In low-trust markets, high-scandal periods result in incrementally larger ERCs for firms with low analyst following. This might imply that low-trust investors elevate the perceived credibility of reported earnings for firms with low analyst following during high-scandal periods, thus narrowing the distinction between firms with high and low analyst following. This is consistent with an increase in low-trust investors' reliance on even just a few analysts to scrutinize companies' financial reporting. Alternatively, this might reflect a greater likelihood of analysts following large-ERC firms in low-trust markets after scandals.

4.8 Cross-Sectional Results: Trust in Auditors

Auditors' assurance is another factor contributing to investors' perception of the credibility of reported earnings, which may be affected by financial reporting fraud. Audit quality enhances investors' reliance on financial information, evidenced by higher ERCs following the Securities Exchange Act of 1934, which mandated disclosure of audited financial statements, and by the higher ERCs for clients of Big Eight auditors compared to non-Big Eight clients (Teoh and Wong, 1993; Binz and Graham, 2022). Moreover, investors' price response to earnings surprises is lower when an auditor changes due to disagreement-related or fee-related reasons, as well as for firms with high levels of non-audit fees than for firms with low levels of such fees (Hackenbrack and Hogan, 2002; Francis and Ke, 2006). Trust affects the demand for audit services and audit fees, with a negative (positive) association between trust and Big N presence in countries that have strong (weak) investor protection (Knechel et al., 2019). In addition, a dismissal of the auditor following a restatement can help restore the credibility of financial reporting (Wilson, 2008; Chen et al., 2014). Overall, investors factor the auditor characteristics into their assessment of firms'

reporting credibility.

A few recent studies examine auditors' role in either complementing high trust in financial reporting or substituting for low trust (e.g., Knechel et al., 2019; Wei and Zhang, 2023). This interaction of auditors and trust in capital markets appears to be a critical idea which auditors (or their regulators) often point to in statements, emphasizing the importance of trust for the prevention of fraud and facilitation of capital formation through lower debt and equity costs (e.g., Doty, 2017; KPMG, 2018). Though, it is unclear how investors would react in the presence of fraud given auditors' involvement in the financial reporting process. On the one hand, auditors may substitute for low or falling trust because auditors can raise the perceived credibility of financial reporting in low-trust markets where the benefit is large from reducing investors' financial reporting concerns (Watts, 1977; Watts and Zimmerman, 1983; Knack and Keefer 1997). On the other hand, auditors may themselves be subject to decreasing societal trust arising out of fraud. Lowered trust coming from fraud will erode the value of auditing because investors' perception would be that auditors, like managers, are likely to cheat investors due to the opaque nature of financial audits and related agency issues, like a firm capturing its auditor.

To study whether trust in auditors contributes to the divergent ERC association with scandals based on prior trust levels, we decompose *High Scandal* × *UE* into two components based on the Big 4 membership of the firm's auditor. The first component in the decomposition corresponds to clients of Big 4 auditors (*High Scandal* × *UE* × *Split=1)* and the second component corresponds to clients of non-Big 4 auditors (*High Scandal* × *UE* × *Split=0*). We also include the two-way interactions of *Split=1* with *High Scandal* and *UE* and the main effect of this dummy into our regressions.

We show the findings in Table 8 Panel C. Columns (1) and (2) show that increases in ERCs in low-trusting markets are concentrated in the clients of Big 4 auditors. This result aligns with the

findings in Wei and Zhang (2023) where firms located in low trust regions within the U.S. use Big 4 auditors to substitute for low ERCs. Note that for both types of markets, we do not find Big 4 auditors to be associated with ERCs in the absence of scandal revelations, a common finding in prior literature (Teoh and Wong, 1993). In an untabulated test, where we (i) pool the observations from both high- and low-trust markets into a single sample and (ii) drop the scandal variable (and its interactions), we do find a significant coefficient on *UE* × *Big 4* of 0.5 with a t-statistic of 2.59.

We then assign *Split=1* for firms audited by scandalous auditors (those that audit the scandal firms) and *Split=0* otherwise. Perhaps unsurprisingly, we find ERC erosion for scandalous auditors in high-trust markets, suggesting negative spillover effects from scandals on the clients of these auditors even though these other companies do not have scandals. Overall, we find relatively weak evidence in these tests; however, an important caveat in our interpretation of the results in Panel C is the potential lack of power in detecting the effects due to sample attrition because we require auditor data.

5. Conclusion

Our paper provides evidence on the heterogeneity in stock market effects associated with scandals across the globe. We highlight a stark disparity between high-trust and low-trust markets in how investors update their beliefs during high-scandal periods. In high-trust markets, the revelation of financial misconduct typically results in a negative shock to investors' trust, as these scandals may indicate a lower-than-expected reliability of reported numbers and perceived unfairness of the system. This can lead to muted investor participation in the stock market and lower reaction to earnings reports. One example of this phenomenon appears to be the U.S., a market with relatively high societal trust.

Conversely, in low-trust markets, scandals are positively associated with the perceived credibility of financial reporting and increased investor confidence. This likely stems from the *ex ante* expectation that managers are opportunistic and gatekeepers are ineffective. The uncovering of misconduct positively surprises investors by demonstrating some level of scrutiny, which can lead to increased market participation and greater reactions to earnings news.

Our findings indicate that the divergence between high- and low-trust markets is concentrated in markets with institutions enforcing investor protection, suggesting that differences in local institutional environments alone are insufficient to explain these results. In addition, we find some evidence that other, non-institutional gatekeepers, such as analysts and Big 4 auditors are related to the divergence between high- and low-trust markets during high-scandal periods. Therefore, trust in gatekeepers' ability to detect fraud adds to the investors' updating of their beliefs. Further studies could explore whether investors in high-trust societies exhibit different information gathering patterns and revert to the pre-scandal market reactions over a different horizon, compared to investors in low-trust societies.

This paper enhances our understanding of the economic and social costs associated with financial reporting misconduct by documenting that the negative effects observed in high-trust markets, such as the U.S., represent only part of the global picture. In contrast, low-trust markets seem to gain trust in capital markets when scandals are exposed. This study extends the literature on capital market participation by emphasizing the important role of trust in shaping investors' perceptions of the stock market. It also contributes to the understanding of financial misconduct by proposing that such events can have positive spillover effects on other firms in low-trust environments. Furthermore, the paper underscores the significant role of various gatekeepers in influencing investors' perceptions of the credibility of firm disclosures.

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Appendix A: Variable Definitions

Variable	Short Description
Dependent variable	
CAR	Cumulative abnormal return from the market model during the firm's earnings announcement window (0, +1).
Abnormal Trading Volume	The average trading volume over the event window (0, +1), scaled by the average trading volume over the estimation window (-120, -21)
Stock Market Participation	Ratio of the number of respondents who directly owns stock or through mutual funds relative to the total number of respondents for U.S., China and European countries. Ratio of the number of respondents who owns trusts, stocks, or shares relative to the total number of total respondents for South Africa. For Australia, the percentage of adult Australian population who participated in the Australian share market directly reported by Australian Securities Exchange. We multiply this ratio by 100.
Main variables	
UE	Unexpected earnings. The difference between the actual value of EPS (IBES: VALUE with Periodicity = 1) and the mean forecasted annual earnings (IBES: VALUE with FPI = 1) calculated by us over the last 180 days deflated by stock price (WorldScope: market capitalization at the fiscal year-end (ITEM 8002) divided by common shares outstanding (ITEM 5301)). We take the percentile rank of this variable and divide by 100.
Trust	Societal trust based on responses to the WVS question: Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? We recode the response to this question to 1 if a survey participant reports that most people can be trusted and 0 otherwise and then calculate the mean of the response in each country-year. Higher index values correspond to higher trust.
Scandals	The number of accounting scandals at the country-year level collected by Hail, Tahoun, and Wang (2018) using the variable 'scand_acct' (replacing missing values with zeros). For the country-level analysis, we also use the number of near accounting scandals, using the variable 'scand_near' (again replacing missing values with zeros).
Split variables	
Forecast Number	The number of annual earnings forecasts reported by I/B/E/S.
Forecast Dispersion	The standard deviation of analysts' earnings forecasts scaled by the most recent stock price. We complement IBES unadjusted history analyst forecast file with the IBES forecast summary file.

Big 4	Indicator variable that equals one if the auditor (Eikon: TR.F.Auditor) of that fiscal year is KPMG, Deloitte, PwC, or Ernst Young, zero otherwise.
Scandal Auditor	Indicator variable that equals one if the auditor is ever affiliated with a scandal case from Hail, Tahoun, and Wang (2018) hand collected by us, zero otherwise.
Investor Protection Index	The sum of the anti-self-dealing index from Djankov et al. (2008) and the law enforcement index from Kaufmann et al. (2003) after both indices are rescaled to be between 0 and 1.
Disclosure Requirement Index	This index is from La Porta, Lopez-de-Silanes, and Shleifer (2006) and captures a country's requirement (or the lack thereof) of the delivery of a prospectus to potential investors in advance of securities issuance, and the extent of affirmative disclosure requirements in the following five areas: insiders' compensation, ownership by large shareholders, inside ownership, contracts outside the normal course of business, and transactions with related parties.
Controls	
Loss	An indicator variable that equals one if the actual EPS (IBES: VALUE and Periodicity = ANN) is less than zero and zero otherwise.
Size	The natural log of market capitalization at the fiscal year-end (WorldScope: ITEM 8002).
Leverage	The ratio of the total liabilities (WorldScope: ITEM 3351) to the total assets (WorldScope: ITEM 2999).
Beta	The CAPM beta calculated from firm and country-level market returns data from Datastream
Book-to-Market	The ratio of book value to market capitalization at the fiscal year-end (WorldScope: ITEM 8002).
Quarterly Reporting	An indicator variable that equals one if the firm has quarterly reporting and zero otherwise.
Cross Listed	An indicator variable that equals one if the firm is cross listed across exchanges (Worldscope: ITEM 11496).
Reporting Lag	The difference between the earnings announcement date (IBES: 'ANNDATS') and the fiscal period end date (IBES: 'PENDS') in days.
$Wave_1$	An indicator variable that equals one if the country-year has stock market participation data from HRS survey Wave 1 and zero otherwise.
Largest 20	An indicator variable that equals one if the firm is one of the largest 20 firms in its country based on firm size.

Appendix B: Scandal Firms and Scandal Article Dates

We hand match the scandal firms from the Hail et al. (2018) data to firms in our IBES / Worldscope / Datastream panel. While we drop these firms from our abnormal volume and earnings response coefficient analyses, we utilize the earliest available article dates (sometimes the Hail et al. data corresponds one scandal to many articles with different dates) to construct the *Scandals* or *High Scandal* variables, i.e., periods of time where countries are experiencing recent scandals or above median scandal rates prior to firms' earnings announcements, depending on the analysis.

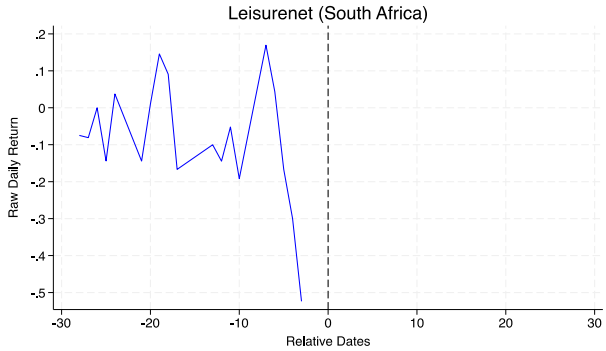
We use stock returns of the scandal firms to assess whether article dates from the Hail et al. (2018) data are approximately the same as scandal revelation dates. In this assessment, we presume that scandals will correspond to large negative returns for the scandal firm, indicating the loss of firm value associated with frauds (e.g., Karpoff et al., 2008).

In Figure 1B, we show daily return graphs for six fairly representative firms from our scandal-firm matched sample. Specifically, the graphs plot raw daily returns over a 60-day event window, centered around the first available article date for that firm's corresponding scandal.

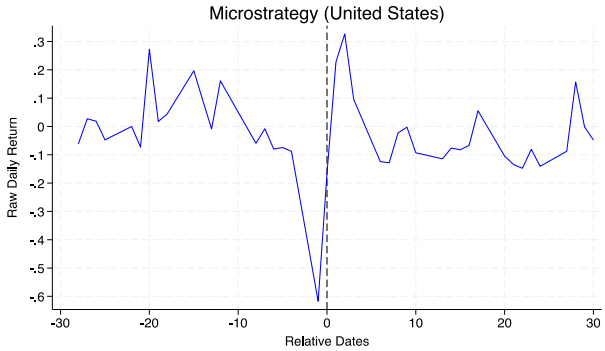
Based on the returns from these figures, we infer that the article dates are reasonably close to the scandal revelation dates but may not be the first date that capital markets perceive problems (i.e., have large negative returns) for the firm in all cases. For example, in Panel C, the returns for Nikko Cordial had already started to decline significantly before the article's publication. This suggests that the market may have reacted to information related to the scandal prior to the identified article date. By the time the article was published, Nikko Cordial had exhibited a rebound, reflected in substantial positive returns. Similar patterns with large negative returns preceding the article date can be observed in other examples, such as Leisurenet in Panel A (which does not have returns data over the entire 60-day window, presumably due to a halt in trading related to the scandal) and Microstrategy in Panel B. Other cases may not have an obvious stock price drop even within thirty days of the article date, e.g., Nortel in Panel D or Rite Aid in Panel F. Some cases appear to show close alignment between a price crash and the article date, such as Phoenix in Panel E.

Appendix B: Figure 1B. Stock Returns in 60-day Windows around Scandal Article Dates

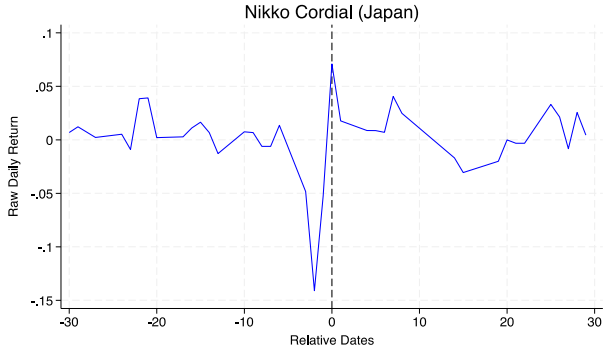
Panel A



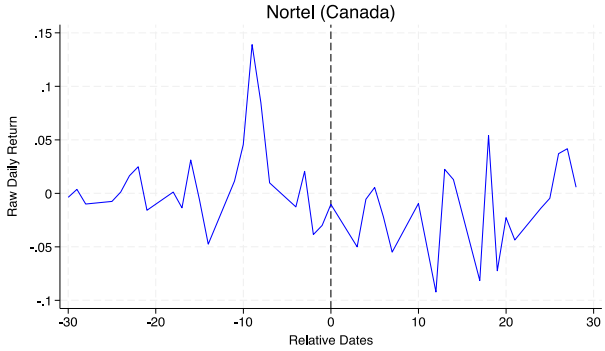
Panel B



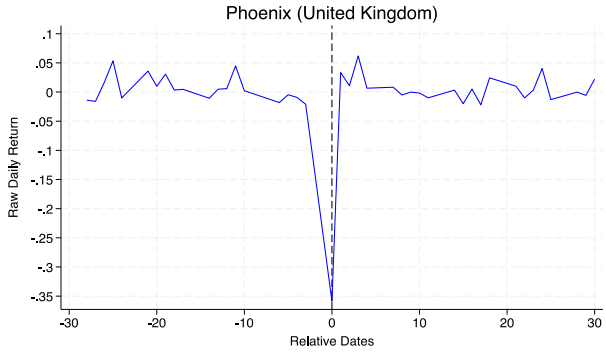
Panel C



Panel D



Panel E



Panel F

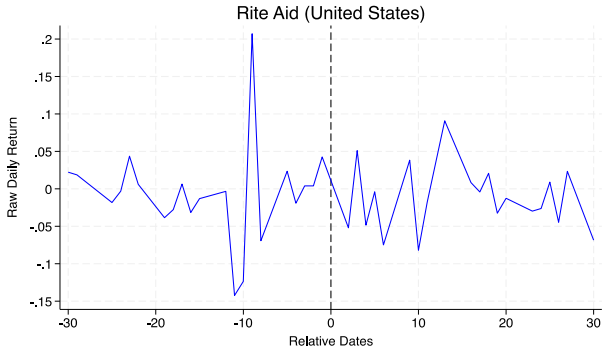


Table 1. Media Sentiment Scores for Scandals Conditioning on Trust

Articles	(1) VADER scores mean High-trusting markets	(2) VADER scores mean Low-trusting markets	(3) VADER scores median High-trusting markets	(4) VADER scores median Low-trusting markets
Scandal articles	-0.32	-0.10	-0.93	-0.40
Non-scandals articles	0.41	0.33	0.84	0.76

Table 1 shows average and median sentiment scores, i.e., VADER scores, for samples of scandal- and non-scandal-related media articles in high trust and low trust markets. Sentiment scores are calculated using the algorithm supplied by Hutto and Gilbert (2014), including Google translations of non-English language articles prior to scoring. High trust and low trust are determined using the most recently available World Values Survey average for the country-year of the scandal articles. Scandal articles are provided by Hail et al. (2018); non-scandal articles are sourced from random dates in years 1995, 2000, 2005, and 2010.

Table 2. Country-level Stock Market Participation and Fraud

Panel A: Descriptive Statistics

Variables	(1) N	(2) Mean	(3) S.D.	(4) P25	(5) P50	(6) P75
Stock Market Participation	90	19.22	16.92	8.824	16.56	25.78
Trust	90	0.348	0.149	0.229	0.352	0.396
Ln(1 + *All Scandals*)	90	0.985	0.703	0.693	1.099	1.386
Ln(1 + *Accounting Scandals*)	90	0.709	0.671	0	0.693	1.099
Ln(1 + *Non-accounting Scandals*)	90	0.447	0.546	0	0	0.693

Panel B: Regressions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sample		All, with SHARE Wave 1 control				Excluding SHARE Wave 1		
Scandal Measurement		All Scandals	Accounting Scandals	Other Scandals		All Scandals	Accounting Scandals	Other Scandals
Dependent Variable				*Stock Market Participation*				
Trust	58.931***	9.307	7.132	-4.508	52.442***	7.250	8.789	-5.419
	(4.69)	(0.94)	(0.90)	(-0.68)	(4.57)	(0.82)	(1.18)	(-0.85)
Ln(1 + *Scandal*)	-	7.060	7.097*	-0.598	-	5.860	7.498**	-1.593
		(1.53)	(1.80)	(-0.23)		(1.42)	(2.07)	(-0.10)
Trust × Ln(1 + *Scandal*)	-	-13.990	-16.847*	2.425	-	-10.846	-18.828**	5.623
		(-1.45)	(-1.81)	(0.37)		(-1.29)	(-2.24)	(1.17)
Wave 1	41.557***	38.655***	39.127***	38.335***	-	-	-	-
	(6.10)	(7.45)	(7.35)	(7.23)				
Fixed Effects	Constant	Country	Country	Country	Constant	Country	Country	Country
Observations	90	90	90	90	84	84	84	84
R-squared	0.719	0.867	0.866	0.861	0.467	0.779	0.781	0.769

Table 2 shows the association between *Trust* and *Stock Market Participation* and the effects of *Scandal* on this association. Panel A provides descriptive statistics. Panel B provides regression analyses. We estimate OLS regressions following equation (1). Two approaches handle abnormal *Stock Market Participation* measurement from Wave 1 of the SHARE survey for European countries, i.e., columns (1)-(4) vs. (5)-(8). T-statistics calculated with country(-year) clustering for columns (1) and (5) (columns (2)-(4) and (6)-(8)) are shown in parentheses below coefficient estimates. *, **, and *** indicate two-sided significance at p<10%, 5%, and 1%, respectively.

Table 3. Firm-level Sample

Panel A: Firm-year Panel by Year

Year	Observations						Percent
	0 Scandals	1 Scandal	2 Scandals	3 Scandals	4+ Scandals	Total	
1996	1,243	1,111	213	2,729	0	5,296	4.3%
1997	552	43	1,406	3,181	0	5,182	4.2%
1998	310	171	154	3,217	1,711	5,563	4.5%
1999	480	2,013	5	3,275	722	6,495	5.3%
2000	394	261	2,727	169	2,992	6,543	5.3%
2001	260	1,091	1,944	382	2,912	6,589	5.4%
2002	1,084	173	0	2,151	3,187	6,595	5.4%
2003	1,192	497	3,050	2,012	0	6,751	5.5%
2004	1,550	256	2,830	125	2,158	6,919	5.6%
2005	974	4,096	69	57	2,183	7,379	6.0%
2006	1,847	672	3,078	118	2,266	7,981	6.5%
2007	3,984	1,360	458	478	2,374	8,654	7.0%
2008	4,373	1,209	0	0	2,765	8,347	6.8%
2009	1,650	2,060	1	2,160	0	5,871	4.8%
2010	1,295	2,161	0	0	2,012	5,468	4.4%
2011	2,156	1,118	1,960	0	0	5,234	4.3%
2012	816	2,421	602	476	0	4,315	3.5%
2013	1,632	805	2,232	0	0	4,669	3.8%
2014	469	3,981	325	0	0	4,775	3.9%
2015	2,091	546	0	0	1,857	4,494	3.7%
Total	28,352	26,045	21,054	20,530	27,139	123,120	100.0%

Table 3 contains descriptive statistics for the firm-level sample. Panel A shows sample distribution by year and number of firm-years associated with the counts of country-year-level accounting scandals. More than four accounting scandals (and up to twenty) are aggregated in the "4+ Scandals" column.

Continued.

Table 3. Firm-level Sample—continued

Panel B: Firm-year Panel by Country

Country	Trust		Scandals		Obs	%
	Mean	S.D.	Mean	S.D.		
Australia	0.459	0.052	0.67	1.23	5,096	4.1%
Brazil	0.046	0.028	0.43	0.50	389	0.3%
Canada	0.411	0.054	0.72	1.10	765	0.6%
China	0.503	0.018	1.50	1.89	2,207	1.8%
Egypt	0.299	0.094	0.00	0.00	48	0.0%
Finland	0.551	0.046	0.19	0.39	1,361	1.1%
France	0.186	0	0.76	0.61	2,424	2.0%
Germany	0.335	0.039	1.30	1.68	4,130	3.4%
India	0.237	0.078	0.51	0.64	3,285	2.7%
Israel	0.229	0	0.00	0.00	182	0.1%
Italy	0.275	0	1.67	1.39	1,220	1.0%
Japan	0.378	0.017	3.74	2.73	38,559	31.3%
Netherlands	0.499	0.103	0.33	0.47	697	0.6%
Poland	0.180	0.008	0.25	0.50	198	0.2%
South Africa	0.091	0.082	0.33	0.85	1,406	1.1%
South Korea	0.292	0.013	1.27	1.10	1,561	1.3%
Sweden	0.626	0.023	0.83	1.08	2,570	2.1%
Switzerland	0.423	0.071	0.50	0.67	2,197	1.8%
United Kingdom	0.296	0.004	0.98	1.14	10,310	8.4%
United States	0.368	0.016	3.31	4.55	44,515	36.2%
					123,120	100.0%

Table 3 contains descriptive statistics for the firm-level sample. Panel B shows sample distribution by country. Mean and standard deviation ("S.D.") are shown for variables *Trust* and (accounting) *Scandals* within each country.

Table 4. Descriptive Statistics

Variables	(1) N	(2) Mean	(3) S.D.	(4) P25	(5) P50	(6) P75
CAR	123,120	0.002	0.062	-0.025	0.000	0.028
Trust	123,120	0.366	0.080	0.352	0.359	0.396
UE (percentiles / 100)	123,120	0.509	0.270	0.280	0.510	0.740
Scandals	123,120	2.650	3.445	1	2	3
Loss	123,120	0.181	0.385	0	0	0
Size	123,120	21.59	2.704	19.52	21.53	23.56
Leverage	123,120	0.543	0.239	0.367	0.547	0.713
Beta	123,120	0.784	0.633	0.330	0.737	1.157
Book-to-Market	123,120	0.873	0.759	0.375	0.657	1.120
Abnormal Volume	88,710	1.985	1.958	0.891	1.448	2.343
Quarterly Reporting	88,710	0.692	0.462	0	1	1
Reporting Lag	88,710	49.75	21.43	35	46	60
Largest 20	88,710	0.042	0.201	0	0	0
Cross Listed	88,710	0.071	0.257	0	0	0
Forecast Dispersion	88,710	0.015	0.064	0.001	0.003	0.010
Forecast Number	88,710	7.370	6.697	3	5	10

Table 4 contains descriptive statistics for the firm-year panel used in the analysis. The panel is the intersection of datasets IBES / Worldscope / Datastream / World Value Survey and coverage by Hail, Tahoun, and Wang (2018).

Table 5. Scandals, Trust, and Abnormal Volume

Panel A: Main Result for Abnormal Volume

	(1)	(2)	(3)	(4)
Sample	High Trust	Low Trust	All	All
Trust Measurement			Raw Trust	Trust Percentile
Dependent Variable		*Abnormal Volume*		
High Scandal	-0.065**	0.044	0.297***	0.090***
	(-2.40)	(1.57)	(3.96)	(2.71)
High Scandal × Trust			-0.863***	-0.236***
			(-4.39)	(-4.14)
Trust			0.606***	0.037
			(5.31)	(1.04)
Size	-0.112***	-0.133***	-0.129***	-0.126***
	(-20.52)	(-23.48)	(-36.54)	(-34.89)
UE	1.236***	0.809**	1.091***	1.059***
	(2.92)	(2.45)	(4.30)	(4.16)
Leverage	0.264***	0.089	0.188***	0.186***
	(4.89)	(1.61)	(4.72)	(4.66)
Quarterly Reporting	0.023	-0.349***	-0.191***	-0.194***
	(0.68)	(-11.42)	(-9.40)	(-9.30)
Reporting Lag	-0.004***	-0.003***	-0.003***	-0.003***
	(-6.41)	(-5.62)	(-7.88)	(-8.08)
Largest 20	0.245***	-0.032	0.113***	0.116***
	(4.71)	(-0.75)	(3.32)	(3.30)
Cross Listed	0.017	-0.063	-0.023	-0.032
	(0.41)	(-1.60)	(-0.78)	(-1.08)
Forecast Dispersion	-0.020	-0.122	-0.051	-0.063
	(-0.06)	(-0.94)	(-0.42)	(-0.52)
Forecast Number	0.013***	0.016***	0.016***	0.016***
	(6.85)	(10.54)	(13.89)	(13.50)
Loss	-0.236***	-0.374***	-0.315***	-0.307***
	(-7.29)	(-11.40)	(-13.67)	(-13.28)
Fixed Effects	I & Y	I & Y	I & Y	I & Y
Observations	40,114	48,595	88,710	88,710
R-squared	0.069	0.052	0.053	0.052

Continued

Table 5. Scandals, Trust, and Abnormal Volume—continued

Panel B: Result Robustness for Abnormal Volume

	(1) Raw Trust	(2) Trust Percentile	(3) Raw Trust	(4) Trust Percentile
Dependent Variable	*Abnormal Volume*			
High Scandal	0.164**	0.055*	0.155**	0.037
	(2.21)	(1.65)	(2.02)	(1.06)
High Scandal × Trust	-0.498**	-0.158***	-0.507**	-0.147**
	(-2.56)	(-2.74)	(-2.51)	(-2.41)
Trust	0.214	0.111**	0.530*	0.151**
	(0.80)	(2.04)	(1.83)	(2.49)
Controls	Yes	Yes	Yes	Yes
Fixed Effects				
Industry	Yes	Yes	-	-
Year	Yes	Yes	Yes	Yes
Country	Yes	Yes	-	-
Firm	-	-	Yes	Yes
Observations	88,710	88,710	85,768	85,768
R-squared	0.061	0.061	0.244	0.244

Table 5 contains the association between *Abnormal Volume* and the interaction of *Trust* and *High Scandal* (an indicator equal to one when *Scandal* is above the median in the last year compared with the history of scandals within the firm's country). We estimate OLS regressions following specification equation (2) from the manuscript.

Panel A provides the main association with lower density fixed effects. In the table footer, we indicate fixed effects for industry (I) and year (Y). Column (1) and column (2) estimate the equation without an interaction in high and low trust subsamples. Column (3) estimates the equation with the raw value of *Trust*. Column (4) estimates the equation with the percentile version of *Trust*.

Panel B provides the main association with additional fixed effects. Columns (1) and (2) include country fixed effects. Columns (3) and (4) include firm fixed effects. Columns (1) and (3) estimate the equation with the raw value of *Trust*. Columns (2) and (4) estimate the equation with the percentile version of *Trust*.

T-statistics calculated with firm clustering are shown in parentheses below coefficient estimates. *, **, and *** indicate two-sided significance at p<10%, 5%, and 1%, respectively.

Table 6. Scandals, Trust, and Price Discovery

	(1)	(2)	(3)	(4)
Sample	High Trust	Low Trust	All	All
Trust Measurement			High Trust Dummy	Trust Percentile
Dependent Variable			*CAR*	
UE × *High Scandal*	-0.796***	0.529**	0.488**	0.478*
	(-3.02)	(2.24)	(2.22)	(1.73)
UE × *High Scandal* × *Trust*	-	-	-1.524***	-1.425***
			(-4.75)	(-3.01)
UE × *Trust*	-	-	1.575***	2.001***
			(8.76)	(7.13)
UE × *Loss*	-1.672***	-2.150***	-1.973***	-1.954***
	(-5.72)	(-6.86)	(-9.16)	(-9.08)
UE × *Size*	-0.558***	-0.224***	-0.432***	-0.435***
	(-10.64)	(-5.52)	(-14.19)	(-14.48)
UE × *Leverage*	-0.853	0.159	-0.309	-0.246
	(-1.51)	(0.30)	(-0.78)	(-0.62)
UE × *Beta*	2.074***	0.957***	1.551***	1.561***
	(10.03)	(4.91)	(11.01)	(11.07)
UE × *Book-to-Market*	-0.725***	-0.466***	-0.613***	-0.604***
	(-4.68)	(-3.20)	(-5.83)	(-5.75)
Main Effects of *UE* Interactions	Yes	Yes	Yes	Yes
Fixed Effects	I×*UE* & Y×*UE*	I×*UE* & Y×*UE*	I×*UE* & Y×*UE*	I×*UE* & Y×*UE*
Observations	58,178	64,940	123,120	123,120
R-squared	0.044	0.033	0.032	0.032

Table 6 contains the association between *CAR* and the interaction of *UE*, *Trust*, and *High Scandal* (an indicator equal to one when *Scandal* is above the median in the last year compared with the history of scandals within the firm's country). *UE* is the percentile-ranked, signed unexpected earnings relative to analyst expectations scaled between 0 and 1. We estimate OLS regressions following specification equation (3) from the manuscript. In the table footer, we indicate fixed effects for industry (I) and year (Y). All columns estimate the equation with industry and year effects stand-alone and interacted with *UE*. Column (1) and column (2) estimate the equation without an interaction in high and low trust subsamples, respectively. Column (3) estimates the equation with the above median split of the variable *Trust* (as used to generate the subsamples in columns (1) and (2)). Column (4) estimates the equation with the percentile version of *Trust*. T-statistics calculated with firm clustering are shown in parentheses below coefficient estimates. *, **, and *** indicate two-sided significance at p<10%, 5%, and 1%, respectively.

Table 7. Cross-sectional Reactions to Different Types of News

	(1)	(2)	(3)	(4)
Sample	High Trust	Low Trust	High Trust	Low Trust
Split Variable	*Loss*		*Good News*	
Dependent Variable	*CAR*			
UE × *High Scandal* × Split = 1	-0.130	0.644	0.568	2.519***
	(-0.24)	(1.17)	(1.15)	(5.09)
UE × *High Scandal* × Split = 0	-0.885***	0.535**	-0.044	-0.036
	(-3.24)	(2.17)	(-0.08)	(-0.06)
UE × Split	-1.880***	-2.197***	1.358***	1.378***
	(-5.32)	(-5.87)	(6.55)	(6.60)
UE Interaction Controls	Yes	Yes	Yes	Yes
Main Effects of *UE* Interactions	Yes	Yes	Yes	Yes
Fixed Effects	I×*UE* & Y×*UE*	I×*UE* & Y×*UE*	I×*UE* & Y×*UE*	I×*UE* & Y×*UE*
Observations	58,178	64,940	58,178	64,940
R-squared	0.044	0.033	0.045	0.034

Table 7 contains the association between *CAR* and the interaction of *UE*, *High Scandal* (an indicator equal to one when *Scandal* is above the median in the last year compared with the history of scandals within the firm's country), and variables indicating different types of news. *UE* is the percentile-ranked, signed unexpected earnings relative to analyst expectations scaled between 0 and 1. We estimate OLS regressions following specification equation (3) from the manuscript with additional cross-sectional interaction variables. In the table footer, we indicate fixed effects for industry (I) and year (Y). All columns estimate the equation with industry and year effects stand-alone and interacted with *UE*. Columns (1) and (3) estimate the equation in the high trust subsample, and columns (2) and (4) estimate the equation in the low trust subsample. Columns (1) and (2) have *Loss* as the cross-sectional interaction variable. Columns (3) and (4) have *Good News* (an indicator for positive *UE*) as the cross-sectional interaction variable. T-statistics calculated with firm clustering are shown in parentheses below the coefficient estimates. *, **, and *** indicate two-sided significance at p<10%, 5%, and 1%, respectively.

Table 8. Trust in Gatekeepers

Panel A: Regulators

	(1)	(2)	(3)	(4)
Subsample	High Trust	Low Trust	High Trust	Low Trust
Split Variable	*High Disclosure Requirements*		*High Investor Protection*	
Dependent Variable	*CAR*			
UE × *High Scandal* × Split = 1	-1.601	-0.415	-2.388***	0.698**
	(-1.37)	(-1.09)	(-3.84)	(1.97)
UE × *High Scandal* × Split = 0	-0.054	0.295	0.078	0.015
	(-0.19)	(0.97)	(0.27)	(0.05)
UE × Split	4.486***	3.015***	4.201***	1.865***
	(11.84)	(9.65)	(11.31)	(5.95)
UE Interaction Controls	Yes	Yes	Yes	Yes
Main Effects of UE Interactions	Yes	Yes	Yes	Yes
Fixed Effects	I×UE & Y×UE	I×UE & Y×UE	I×UE & Y×UE	I×UE & Y×UE
Observations	55,971	64,742	57,440	64,671
R-squared	0.050	0.035	0.048	0.034

Panel B: Analysts

	(1)	(2)	(3)	(4)
Subsample	High Trust	Low Trust	High Trust	Low Trust
Split Variable	*High Analyst Forecast Count*		*High Analyst Forecast Dispersion*	
Dependent Variable	*CAR*			
UE × *High Scandal* × Split = 1	-1.423***	0.249	-0.197	0.412
	(-3.870)	(0.771)	(-0.566)	(1.414)
UE × *High Scandal* × Split = 0	-0.239	0.668**	-3.262***	0.641
	(-0.743)	(2.216)	(-6.433)	(1.265)
UE × Split	1.898***	1.109***	-4.763***	-2.485***
	(6.570)	(4.437)	(-13.479)	(-7.831)
UE Interaction Controls	Yes	Yes	Yes	Yes
Main Effects of UE Interactions	Yes	Yes	Yes	Yes
Fixed Effects	I×UE & Y×UE	I×UE & Y×UE	I×UE & Y×UE	I×UE & Y×UE
Observations	58,178	64,940	40,296	48,923
R-squared	0.045	0.033	0.061	0.038

Continued.

Table 8. Trust in Gatekeepers—continued

Panel C: Auditors

	(1)	(2)	(3)	(4)
Subsample	High Trust	Low Trust	High Trust	Low Trust
Split Variable	*Big 4*		*Scandal Auditor*	
Dependent Variable	*CAR*			
UE × *High Scandal* × Split = 1	-0.319	0.630*	-0.786*	0.796
	(-0.94)	(1.77)	(-1.75)	(1.58)
UE × *High Scandal* × Split = 0	-0.412	-0.470	0.060	0.072
	(-0.67)	(-0.86)	(0.15)	(0.20)
UE × Split	0.039	-0.189	0.690**	0.194
	(0.10)	(-0.57)	(1.99)	(0.65)
UE Interaction Controls	Yes	Yes	Yes	Yes
Main Effects of UE Interactions	Yes	Yes	Yes	Yes
Fixed Effects	I×UE & Y×UE	I×UE & Y×UE	I×UE & Y×UE	I×UE & Y×UE
Observations	33,865	32,654	33,865	32,654
R-squared	0.042	0.039	0.042	0.039

Table 8 contains the association between *CAR* and the interaction of *UE*, *High Scandal* (an indicator equal to one when *Scandal* is above the median in the last year compared with the history of scandals within the firm's country), and an indicator variable for attributes of analysts, auditors, and regulators (and the split version of the indicator variable). *UE* is the percentile-ranked, signed unexpected earnings relative to analyst expectations scaled between 0 and 1. We estimate OLS regressions following specification equation (3) from the manuscript with additional cross-sectional interaction variables. In the table footer, we indicate fixed effects for industry (I) and year (Y). All columns estimate the equation with industry and year effects stand-alone and interacted with *UE*. In all panels, columns (1) and (3) estimate the equation in the high trust subsample, and columns (2) and (4) estimate the equation in the low trust subsample.

In Panel A, for columns (1) and (2), the split variable is *High Disclosure*, indicating above the median for the disclosure requirements index, from La Porta et al. (2006) as described in the Variable Appendix. For columns (3) and (4), the split variable is *High Investor Protection*, indicating above the median for the investor protection index, from Kaufmann et al. (2003) and Djankov et al. (2008) as described in the Variable Appendix. Observations with a missing index value have the indicator set to zero.

In Panel B, for columns (1) and (2), the split variable is *High Analyst Forecast Count*, indicating above the median number of analyst forecasts for that firm year. For columns (3) and (4), the split variable is *High Analyst Forecast Dispersion*, indicating that the analyst forecasts have above median dispersion.

In Panel C, for columns (1) and (2), the split variable is *Big 4*, indicating above the firm has a Big 4 auditor. For columns (3) and (4), the split variable is *Scandal Auditor*, indicating that the firm's auditor is involved in the accounting scandal(s).

T-statistics calculated with firm clustering are shown in parentheses below coefficient estimates. *, **, and *** indicate two-sided significance at p<10%, 5%, and 1%, respectively.