The roles and interplay of enforcers and auditors in the context of accounting fraud: a review of the accounting literature

Abstract

This study reviews and discusses the accounting literature that analyzes the role of auditors and enforcers in the context of fraud. We use a mixed-methods research synthesis (MMRS) and select 64 accounting journal articles to analyze the main proxies for fraud, the stages of the fraud process under examination, and the roles played by auditors and enforcers. Our results highlight heterogeneity in relation to terms and concepts used to capture the fraud phenomenon, a fragmentation in terms of measures used in quantitative studies and low levels of detail in the fraud analysis. Our MMRS also shows a limited number of case studies and a lack of focus on the interactions and interplay between enforcers and auditors. Accordingly, we critically discuss these aspects and pave avenues for future research.

Keywords: Auditors; Enforcement; Accounting fraud; Literature review.

JEL Classification: K42; M41; M42.

1. Introduction

Accounting fraud is the most severe form of financial statement manipulation. Beasley et al. (2010 p. 7) define it as "the intentional, material misstatement of financial statements or financial disclosures or the perpetration of an illegal act that has a material direct effect on the financial statements or financial disclosure". This definition highlights some traits common to various fraud definitions (e.g., Beasley, 1996; International Standard on Auditing (ISA) 240, 2009): the intentional violation of law, norms, or accounting standards by the fraudster and the deceptive nature of fraud.

The impact of fraud is not merely limited to a financial loss but has a significant impact on several aspects of society. Fraud affects employees, the industry, the environment, and the society as a whole (International Public Sector Fraud Forum, 2020). Indeed, many families can lose their income when a company disappears after a fraud. Fraud creates market distortions when fraud companies obtain competitive advantages that drive out legitimate businesses. Furthermore, serious accounting fraud can ignite scandals generating far-reaching contamination effects going well beyond the directly involved individuals and organizations (Adut, 2008; Greve et al., 2010).

Preventing these potentially destructive events is a primary area of interest for regulators, practice, and scholars. However, despite a significant increase in the level of monitoring over companies' actions, serious corporate accounting fraud can be still observed nowadays in disparate, and theoretically strong, institutional settings. For example, on July 21, 2021, SEC announced charges against FTE Networks Inc., a company based in Florida, accused of having inflated the company's revenues through an improper recognition of revenue, misappropriated company funds to pay for CEO and CFO's private expenses and unauthorized salary increases, and concealed an issuance of almost $23 million in convertible notes (SEC, 2021).[1] On June 25, 2020, Wirecard filed for insolvency in Germany after admitting that €1.9 billion, theoretically deposited in two Philippine banks, was "missing" from its balance sheet (Engelen, 2021). In April 2020, it was discovered that a Chinese coffee company and coffeehouse chain, Luckin Coffee, had fabricated about 40% of its annual sales projected by analysts (Johnson, 2020).

Accounting research reveals that setting laws is not enough to produce the intended effects if by an effective enforcement does not accompany them (Cai et al., 2014; Christensen et al., 2013; Florou & Pope, 2012; Houqe et al., 2012; Leuz et al., 2003; Quagli et al. 2021). Enforcers' monitoring and sanctioning powers constitute a key financial reporting control and are essential features for the global financial architecture, which are increasingly attracting scholars' attention (Leventis & Humphrey, 2021). Similarly, independent auditors serve a significant function for the effective functioning of capital markets by assessing the integrity of firms' financial statements (Firth et al., 2005).

Even though fraud prevention and detection is not the primary objective of accounting enforcers and auditors, their monitoring activity on the quality of financial reporting and its compliance with the regulatory framework requires careful consideration of fraud risk and signals (Brasel et al., 2019; Carpenter, 2007; Wilks & Zimbelman, 2004). Indeed, auditing standards require different audit responses when a misstatement is likely to result from a management's intentional act (e.g., AS No. 14, PCAOB 2010a). Furthermore, auditors' unmodified opinions on annual reports that are subsequently found to be materially misstated represent audit failures that investors cannot tolerate anymore, especially in cases of accounting fraud (Staubus, 2005). Detrimental

[1] https://www.sec.gov/news/press-release/2021-127.

deficiencies in the supervision and enforcement of financial reporting can also lead to a late fraud detection, which can been highly harmful to investors' trust in capital markets and their monitoring role. Conversely, effective enforcement and auditors' scrutiny can reduce the incentives and opportunities for accounting fraud, thereby affecting one key element of the fraud triangle model (Cressey, 1953; Wolfe & Hermanson, 2004), which frames the conditions that allow the perpetration of fraud.

Based on these considerations, our study reviews and discusses the accounting literature addressing the role of enforcers and auditors in fraud prevention and detection, paying particular attention to the interrelations and interplay between these two financial reporting controls. Indeed, enforcement bodies and auditors can be seen as components of a system of external financial reporting controls, characterized by an intense level of relationships and information flows that have evolved over time.

Such complex interactions between enforcers and auditors can affect their outcomes in several ways. In most countries, accounting enforcers have direct or indirect oversight authority on auditors. For instance, in the US, the Securities and Exchange Commission (SEC) approves the rules, standards, and budget of the Public Company Accounting Oversight Board (PCAOB), which investigates and disciplines registered public accounting firms and their associated persons for regulatory violations. Enforcers can affect auditor incentives and audit quality, as shown by research documenting a more conservative auditors' approach in case of high levels of enforcement (Bannister & Wiest, 2001; DeFond et al., 2018) as well as higher audit efforts associated with a greater enforcement probability (Leventis, 2018). Enforcement actions can also have significant consequences on the auditor-client relationship. Investigations by an enforcement agency are likely to reveal information that may influence a client's assessment of the auditor's quality and the inherent risk of clients (Brocard et al., 2018). Indeed, erroneous financial statements being uncovered by an enforcement action are likely to lead to auditor changes aimed at increasing audit quality and restoring reputation. Similarly, auditors' reports contain essential inputs for national enforcers, and auditors must inform the enforcer if they detect potential illegal acts having a material impact on the financial statements (see, for example, Section 10A of the Securities Exchange Act of 1934 in the US).

The financial reporting literature is devoting increasing attention to the interplay of different financial reporting controls, progressively enlarging the scope of the analysis to consider the role of monitoring actors other than auditors, such as accounting enforcers (Chen & Cheng, 2007; Di Fabio et al., 2021; Kabir & Laswad, 2015) and audit oversight bodies (Garcia-Osma et al., 2017; Gipper et al., 2020; Goelzer, 2020). Recent literature, focusing primarily on financial reporting quality and earnings management, also challenges the conventional view that more regulation and enforcement constantly lead to better outcomes (Christensen et al, 2020), shedding light also on their costs (Florou et al., 2020) and unintended consequences (Adhikari et al., 2021; Tanyi & Litt, 2017).

Our literature review espouses the view that different firms' financial reporting controls require a joint consideration and focus on their relationship with accounting fraud, intended as any type of fraud that leads to a financial misrepresentation. Accordingly, this paper aims to summarize and discuss how accounting literature addresses the roles and the complex interplay between enforcers and auditors in the accounting fraud domain, thus differing from those articles that focus on a single monitoring mechanism or broadly deal with fraud. Our analysis encompasses both qualitative and quantitative studies, based on the idea that the findings obtained with different research paradigms can shed light on the complex interactions between different financial reporting controls, whose weaknesses emerge in case of enforcement or audit failures.

The relevance of diverse research paradigms is particularly evident in the enforcement literature, where the economics-informed research paradigm has shown the positive impact of enforcement on financial reporting, and the socio-political and institutional perspective has drawn attention to the complex structure of the global regulatory architecture (Caramanis et al., 2015; Hartmann et al., 2018, Leventis & Humphrey, 2021). For these reasons, this study provides a mixed methods research synthesis (hereafter MMRS), which differs from mono-method quantitative and qualitative literature reviews (i.e., meta-analyses and meta-syntheses) for using various kinds of qualitative and quantitative synthesis techniques (Heyvaert et al., 2017). MMRS is particularly suitable for addressing complex topics and problems as it combines the strengths of qualitative and quantitative studies (Heyvaert et al., 2013), which are jointly available in many research domains, including accounting fraud (Cooper et al, 2013).

By assessing 64 selected articles published in highly-ranked accounting journals, we find a high level of heterogeneity in relation of terms and concepts used to capture the fraud phenomenon. Thus, we emphasize the need for a common language for researchers interested in this line of research, especially considering the interdisciplinary perspectives used to address it (Amiram et al., 2018). Similarly, we observe a fragmentation in terms of measures used as proxies for fraud in quantitative studies. The use of some measures seems also motivated by the need to obtain significant sample sizes. Accordingly, we have the impression that, in this stream of literature, the research method strongly impacts on the choice of the variables and the nature of the study rather than vice versa.

Moreover, we do not find a significant level of details in the analysis of fraud, and we also do not observe a significant amount of case studies. We believe that such deficiencies need to be addressed by future research. Finally, we note a limited focus of extant research on the interactions and interplay between enforcers and auditors. We emphasize that auditors and enforcers are two actors of a broader system where all elements work together and where the actions of an actor affect those of the others. For these reasons, more research is needed to analyze the dynamics and interrelations between the actors expected to contrast the perpetration of fraud.

The rest of the paper is organized as follows. The following section illustrates the review objectives and how they complement previous literature reviews on accounting fraud. Section 3 describes the review protocol and presents some descriptive information about the selected papers as well as the methodological choices made to analyze the articles. Section 4, 5, and 6 present our findings focusing on the fraud proxies used by reviewed articles, the stages of the fraud process under examination, and the roles and interplay between auditors and enforcers in the context of fraud, respectively. Section 7 concludes the paper highlighting its main findings and contributions as well as paving avenues for future research.

2. Review objectives

This study focuses on the roles and interplay of auditors and enforcers in fraud prevention and detection, building upon and extending previous literature reviews on accounting fraud, which adopt viewpoints reflecting different purposes, ranging from policy-oriented insights to theoretical contributions. Hogan et al. (2008) summarize academic research findings on fraudulent financial reporting to inform regulators and facilitate the development of auditing standards. They conclude that much of the extant research focuses on only one aspect of the fraud triangle, with limited evidence on the other features, such as the rationalization dimension.

Trompeter et al. (2013) look at the auditors' role on fraud deterrence and detection and extend their review by considering literature outside the pure accounting field, including criminology, ethics, finance, organizational behavior, psychology and sociology. They move beyond the fraud triangle and categorize the literature in the following areas: anti-fraud measures put in place by auditors and firms; the elements of fraud such as the fraud scheme, the effort to conceal the act, and the identification of the benefits that accrue to the fraudster; the auditors' fraud risk assessment based on the SAS No. 99 / AU Section 316; the fraud detection procedures or auditor characteristics that are effective at detecting fraud; the consequences of fraudulent financial reporting. They suggest future research for any of the categories discussed in their paper.

Other fraud literature reviews have a more focused scope or orientation. Free (2015) reviews popular frameworks used in the fraud examination, mainly looking at the development of the fraud triangle. He emphasizes that accounting research on fraud remains fragmented and emergent despite the proliferation of interest in such an impactful phenomenon. In proposing avenues for future research, Free (2015) stresses the importance to investigate fraud by interacting directly with the actors involved in this field through the use, for example, of traditional behavioral methods of criminology rather than the classic cross-sectional statistical analysis. He argues that this approach would open up concepts directly relevant to the decision to perpetrate fraud. The article by van Driel (2019), instead, review business history research on financial fraud and constructs a conceptual framework for researching fraud. This framework highlights the role of regulation, which can affect fraudulent practices or their determinants and can itself change when fraud has a serious socio-economic impact.

Other contributions emphasize the importance of a multidisciplinary approach to increase the understanding of financial fraud, whose complexity requires diverse theoretical and empirical approaches (Anand et al., 2015). Fraud-related literature from non-accounting publications is the focus of Trompeter et al. (2014), who review studies on anti-fraud measures associated with detection and the perception of detection through the investigation of whistleblowing, the role of regulation, computer analytics, and interviewing and interrogation. They claim that non-accounting research on regulation and oversight provides interesting insights on fraud detection and deterrence, which could inform accounting studies, primarily focused on the effect of the regulation (or potential regulation) on audit quality. A multidisciplinary approach also characterizes the work by Amiram et al. (2018), who review the literature on financial reporting misconduct from the perspectives of law, accounting, and finance, implicitly focusing on US regulation. They highlight that fraud lies at the far right of a spectrum of discretionary accounting choices, with earnings management located at the far left, and a grey area in the middle. They argue that insights from the earnings management literature have been used to develop models to predict misconduct. The main challenges they identify in the literature include open questions about the discipline and deterrence of financial misconduct around the world, and the role of gatekeepers in detecting misconduct.

Based on an agency theory approach, the impact of the monitoring and deterrence role of corporate governance on corporate financial misconduct is the focus of a recent review of archival research carried out by Velte (2021). He highlights that financial restatements are the dominant misconduct proxy used in the literature, while enforcement actions and fraud events are less common. Thus, he calls for a more detailed analysis of misconduct proxies. Additionally, he emphasizes the need for a better understanding of the interplay between the board of directors and external auditors and encourages future research investigating the interdependencies among different actors, including country-related governance (e.g. enforcement strength) as well.

We concur with the view that mechanisms conceived to prevent and detect fraud can have significant interdependencies (Velte, 2021), but unintended consequences must also be acknowledged (Anand et al., 2015). For this reason, our study aims to complement prior literature by exploring how accounting research on financial reporting fraud has addressed the roles of auditors and enforcers and their interplay in fraud prevention and/or detection. To this end, we consider accounting studies using several proxies for exploring accounting fraud, including financial restatements and enforcement actions (e.g., Accounting and Auditing Enforcement Release – hereafter AAER). Conversely, we do not include the earnings management literature in our MMRS because this kind of manipulation does not violates GAAP (Dechow & Skinner, 2000) and is also seen as having an informative nature (Guay et al. 1996; Subramanyam, 1996), even if some studies consider it as predictive of fraud (Ettredge et al., 2010; Perols & Lougee, 2011).

3. Review protocol and article selection

Our study adopts a mixed-method approach to synthesize and integrate the fraud literature focusing on the role of auditors and enforcers. A MMRS offers the opportunity of combining evidence from quantitative and qualitative studies to enhance the breadth and depth of understanding of complex phenomena (Heyvaert et al., 2013). We conduct our literature review following a rigorous process encompassing the following seven stages

(Heyvaert et al., 2017): (i) development of the review protocol; (ii) selection of the sampling strategy; (iii) search for studies according to the sampling strategy; (iv) application of inclusion/exclusion criteria; (v) data extraction from the selected articles; (vi) data synthesis; and (vii) review writing.

Our review protocol documents all methodological and substantive choices, including the review objectives and design. Based on our objectives, presented in the previous section, we adopt an integrated MMRS design (Sandelowski et al., 2006), which is suitable when differences between qualitative and quantitative studies do not warrant separate syntheses and both kinds of research in a common domain can address the same research purposes and question. Indeed, the inclusion of both qualitative and quantitative research allows us to build a comprehensive picture of previous research on the roles and complex interrelations between enforcers and auditors. This choice is coherent with the primary objective of this literature review, which is a comprehensive analysis of the state of the art, not limited to the review of proxies and methods used by previous studies.

We select the sampling strategy and conduct a selective search for primary-level studies, thereby consulting a limited number of resources to identify all relevant studies but within specified limits (Booth, 2006). More specifically, we search for studies that meet inclusion criteria regarding the journals, the time horizon, and the topic under investigation. In terms of academic journals, we focus on articles published in accounting journals ranked 4*, 4, and 3, in the Academic Journal Guide (earlier known as ABS) 2021 Ranking list. This choice is consistent with our focus on accounting research and responds to the need for defining feasible boundaries ensuring the inclusion of rigorous and impactful studies. We do not carry out a separate critical appraisal of the studies' methodological quality, which is an optional phase in MMRSs (Heyvaert et al., 2017), as the rigorous review process of the journals included in our analysis should already ensure strong research quality. Additionally, this reduces subjective choices in our MMRS. The time horizon ranges from 2000 to 2020, thus allowing us to consider the most recent research on accounting fraud and extend previous literature reviews covering this phenomenon with different focuses and perspectives (Amiram, 2018; Free, 2015; Hogan et al., 2008; Trompeter et al., 2013, 2014; van Driel, 2019, Velte, 2021).

To search for articles addressing the role of auditors and enforcers in preventing and detecting accounting fraud, we define three groups of keywords concerning fraud, auditors, and enforcement building on our knowledge of accounting fraud research and prior literature reviews, as detailed in Appendix A. Specifically, the keywords chosen for the enforcement group reflect the intent to adopt a broad concept of enforcer, i.e. considering all the actors charged with monitoring activities on the firms' compliance with the applicable financial reporting regulation and having sanctioning powers in case of its violation.

We use the Scopus database to search for the articles published on our target journal list within the defined time range, with at least one of the keywords for each group (i.e., fraud, auditors, and enforcement) in their title, abstract or keywords. The criterion of the joint presence of words from each of these three groups aims to increase the likelihood of obtaining articles addressing the role of both auditors and enforcers, in line with the focus of our MMRS.

Based on the sampling strategy discussed above, we obtained 178 articles. We apply the inclusion and exclusion criteria stipulated in the protocol to filter out irrelevant studies for the review objectives in two phases: in the first phase, we peruse the title and the abstract of each article; in the second phase, we analyze the full text of the articles remaining after the first phase. We adopt an inclusive approach in these phases. Each author has first individually assessed the papers and, after, we shared and discussed each exclusion to avoid excessive heterogeneity. The application of our inclusion and exclusion criteria led to the exclusion of 114 articles. In particular, we exclude the papers dealing with earnings management (8 papers), those exclusively focused on internal controls (30 papers), those that do not investigate accounting fraud (6 papers), those exclusively focused on auditing (69 papers), and those that do not include auditors in their analyses (1 paper). At the end of this process, our literature review includes 64 academic articles. The list of the selected papers is presented in Appendix B.

The following Table 1 presents some descriptive information for the papers included in the literature review.

[Insert Table 1 here]

Panel A classifies the articles by the journal where they appear. We observe that the relative majority of the papers (about 22%) are published in *Auditing: A Journal of Practice & Theory*. Moreover, 25% of the articles are evenly published in *Accounting Horizon* and *The Accounting Review* and another 9% of the papers appear in *Critical Perspective of Accounting*. Panel B of Table 1 classifies the articles based on the year of publication. We find that about 14% of the studies are recent since they were published in 2020. The year with the lowest number of publications is 2003.

Other analysis (not tabulated) on the research methods used by the selected articles reveals that 56 out of the 64 of them use empirical analyses, while the remaining papers are more theoretical/conceptual. The data used by the selected papers come mainly from commercial databases even if we notice a relevant number of articles (12 out of 64) that use hand-collected data or data coming from proprietary datasets and/or internal resources

(5 out of 64). We also observe a significant number of articles based on experiments (14 out of 64). The methodological approach has also evolved, especially in the analysis of audit effort and audit quality based on proxies built on audit fees. Indeed, an increasing number of articles is adopting measures based on abnormal fees (e.g., Asare et al., 2019; Blankley et al., 2012; Chakrabarty et al., 2020; Hribar et al., 2014; Raghunandan et al., 2003; Zhao et al., 2017) rather than the actual level of fees paid to auditors. We notice that the main institutional setting investigated is the US, which is analyzed by 84% of the selected articles (54 out of 64). The European context is investigated mainly focusing on the UK (2 articles) and with some evidence from Germany and the Netherlands (1 article for each of these settings).

In addition to the descriptive information reported above, we extract relevant data following a coding guide, after testing it, and then identify and discuss any difference together. In accordance with the review purpose and the extracted data, we select a qualitizing approach for data synthesis (Heyvaert et al., 2017), thus converting quantitative findings into categories and narratives for the qualitized data to be afterward included in qualitative syntheses. The selected articles are critically discussed in the following sections focusing on the main proxies for fraud used in the analysis (section 4), the stages of the fraud process under examination (section 5), and the roles and interplay between auditors and enforcers (section 6).

4. Proxies for accounting fraud

Generally accepted accounting principles (GAAP) are commonly rules-based or principle-based standards allowing users some discretion in terms of accounting options, policies and estimates to prepare the annual report according to the general accounting concepts stated in the accounting framework. There are situations where firms work within the regulatory framework and in accordance with the accounting standards but introduce biased choice to mislead stakeholders about the real performance of the firm or to favorably influence contractual conditions linked to accounting results (Healy & Wahlen, 1999). The accounting literature commonly label these practices as earnings management. As indicated before, we did not consider the earnings management literature in our MMRS because it implies working within accounting standards and the regulatory framework, and a stream of accounting literature even recognizes an informative role of earnings management (Guay et al., 1996; Subramanyam, 1996).

Accounting manipulation may become invasive and result in material errors in the annual report. If the auditors or other regulatory bodies detect these activities, firms may be required to make one or more restatements. Restatements represent an acknowledgement that prior financial statements contained material departure from GAAP (Palmrose & Scholz, 2004) that require adjustments. They have often been used to identify financial reporting failures (Kravet and Shevlin, 2010). The SEC explicitly states that if any previous published annual report "either have become inaccurate by virtue of subsequent events, or are later discovered to have been false and misleading from the outset, and the issuer knows or should know that persons are continuing to rely on all or any material portion of the statements" (Skinner, 1997, p. 252), the management has the duty to make all due corrections (Srinivsan, 2005).

Two types of restatements exist, income-decreasing restatements and income-increasing restatements (Scholz, 2008). The former decrease reported income, while the latter increases it. This distinction is relevant since they have different effects on investors and users of annual reports (Scholz, 2008). It is also worth highlighting that restatements may refer to "technical" situations rather than intentional errors, which may arise from particular circumstances, such as discontinued operations, spin-off, mergers and acquisitions, non-intentional mistakes (Srinivsan, 2005). Moreover, they may be linked to events related to accounting standards such as the adoption of new accounting policies for specific items and changes in the accounting standards adopted by a company.

Restatements that are not caused by the technical situations highlighted above may indeed result from intentional and significant manipulation of the accounts by the management. In fact, the SEC considers accounting restatements as "the most visible indicator of improper accounting" (Schroeder, 2001). Accordingly, twenty-one studies included in our MMRS use restatements as a proxy for financial misconduct in their analyses (i.e., Ashbaugh-Skaife et al., 2007; Blankley et al., 2012; Burke et al., 2020; Cao et al., 2020; Cassell et al., 2013; Chan et al., 2012; Files et al., 2014; Francis et al., 2013; Glendening et al., 2019; Hribar et al., 2014; Knechel & Sharma, 2012; Liu et al., 2009; Pittman & Zhao, 2020; Raghunandan et al., 2003; Romanus et al., 2008; Schmidt, 2012; Singer & Zhang, 2018; Srinivasan & Richardson, 2005; Sun et al., 2020; Tan & Young, 2015; Zhao et al., 2017).

We observe that all articles that use accounting restatements employ a research approach based on regression analysis and the variable that captures the restatements is often presented only in a dichotomous form. This approach has at least the following limitations: (i) it does not consider whether the restatement increases or decreases the income; (ii) it does not take into account the size of the restatement; (iii) it does not highlight the subject that has proposed the restatement. These points need to be carefully considered by future research because they affects the each restatement's nature and the effects on users and investors.

Furthermore, based on the different nature of restatements discussed before, we observe that most studies that use restatements as a proxy for accounting or audit failures only consider restatements related to intentional mistakes or omissions. This strategy is possible thanks to the presence of accurate commercial databases. For example, Zhao et al. (2017) indicate that they take data about restatements from the Audit Analytics Advanced Non-Reliance Restatement database, which excludes all technical restatements (e.g., restatements due to changes in accounting principle, mergers and acquisitions, discontinued operations) that do not imply a misstatement in the original filings (Lobo & Zhao 2013, 1395). Similarly, Knechel and Sharma (2012, p. 92) explicitly specify that "restatements due to changes in GAAP, mergers and acquisitions, and others of a non-economic or technical nature are not considered financial restatements in our analyses, nor are interim or quarterly restatements". However, this clarification is not included in all of the papers we reviewed. We believe, instead, that papers that use restatements as a proxy for accounting failures need to clarify whether technical restatements are excluded from the analyses; otherwise, assessing the strength of the research design may be difficult. Finally, we note that the time period covered by the studies included in our literature review is quite comprehensive, going from 1995 to 2019.

The most opportunistic behaviors in terms of financial reporting refers to those strategies aimed at managing annual reports to cover for some perpetrated fraud. Any sort of business scandal, somehow, results in accounting fraud. Jones (2010) states that providing an exact definition of fraud would be elusive. He points out that what distinguishes fraud from other types of "creating accounting" is that fraud involves working outside the regulatory framework to serve the interests of the preparers of financial statements for the following five purposes: increase income; decrease expenses;

increase assets; decrease liabilities; increase cash flow (Jones, 2010). Hence, accounting fraud refers to the presentation of financial statements that do not conform to GAAP because of intentional errors, thus with the sole purpose of misleading users of annual reports (Beasley, 1996).

A significant portion of the literature use the SEC's issuance of an AAER as a starting point for defining financial reporting fraud (Glancy & Yadav, 2010). Indeed, an AAER refers to an administrative proceeding or litigation release that entails an accounting or auditing related violation of the securities laws enforced by the SEC (Glancy & Yadav, 2010, p. 595). All AAERs are assigned a litigation number by the SEC, as well as the action or settlement and details of the fraudulent behavior once the investigation is over (Nicholls, 2016). Accordingly, together with accounting restatements, AAERs are the most common proxies for accounting failures observed in 16 articles included in our MMRS (i.e., Ashbaugh-Skaife et al., 2007; Cao et al., 2020; Carcello & Nagy, 2004; Caster et al., 2008; Chakrabarty et al., 2020; Farber, 2005; Eutsler et al., 2016; Feng et al., 2011; Glendening et al., 2019; Jackson et al., 2017; Kinney et al., 2004; Leng et al., 2011; Markelevich & Rosner, 2013; Mason et al., 2020; O'Connell, 2001; Perols et al., 2017). In terms of methodological approach, we have the same concerns raised for the analysis of accounting restatements. In particular, using regression analyses with a dichotomous AAER variable leads to a lack of differentiation in terms of type of actions sanctioned by the SEC and amount of misstatements.

Overall, we observe that the choice of any proxy for accounting fraud found in our MMRS cannot eliminate the partial observation issue that is inherent with fraud analysis. Indeed, data available to researchers only covers firms' or auditors' behaviors that have been previously detected as frauds, eventually receiving enforcement actions and sanctions. The disadvantages of using this type of proxies are the high number of fraud firms that are likely to go unidentified and possible selection biases in cases pursued by enforcers (Dechow et al., 2011). Accordingly, authors may need to acknowledge that some of the entities classified as “non-fraudulent firms” in their studies may potentially be companies that carried out fraudulent activities that were undetected at the time of their research. Additionally, this partial observation issue only enables investigations on small samples (Perols et al., 2017), causing problems for research based on statistical analysis. Several studies in our MMRS address this issue by using more than one proxy for fraud (e.g., Ashbaugh-Skaife et al., 2007; Glendening et al., 2019; Hribar et al. 2014; Sun et al. 2020), or other indirect variables (e.g., Benford’s law, Chakrabarty et al., 2020) that allow bigger sample sizes.

5. The accounting fraud process

To explore how accounting research addresses the role of auditors and enforcers in fraud prevention and detection, we analyze the focus of the selected articles in relation to the phases of the fraud process under investigation. To this end, we adopt a process view including four phases: (i) fraud determinants, including the elements that can increase or decrease the fraud risk; (ii) the fraud act and concealment; (iii) the discovery, which regards only the portion of detected frauds; and (iv) the fraud consequences following its public disclosure. This conceptualization builds on previous literature considering both the pre-fraud state, anti-fraud measures, and the fraud elements (Trompeter et al., 2013) but adopts a process view to capture how research explores anti-fraud measures and activities by auditors and enforcers as a form of fraud prevention (phase of fraud determinants) and detection (phases of fraud act and concealment, discovery, and consequences).

All of the selected articles address the role of auditors and enforcers in contrasting accounting fraud, but this area is not necessarily the primary focus of all papers, which may also adopt different viewpoints on the fraud phenomenon. Furthermore, some studies in our MMRS explore issues related to more than one phase of the above-mentioned fraud process. For instance, papers studying the association between fraud and some firm-level variables (e.g., financial items, internal controls) can be classified as research on fraud determinants and also, if the relationship is confirmed, as red flags useful for fraud detection, thus concerning the phase of discovery. Notwithstanding these considerations, we maintain that this classification can be helpful to illustrate the main findings of the selected articles stressing how they relate to fraud prevention and detection.

5.1 Fraud determinants and limiting factors

This section presents the research contributions on fraud determinants focusing on the corporate features associated with accounting fraud, mainly derived from their financial reports (Section 5.1.1), and on the structural and operational features of auditors (Section 5.1.2). These studies examine the conditions that can influence the incentives and the opportunity to commit fraud, which can be limited through effective monitoring of external actors, such as auditors, which are the focus of most articles in our MMRS.

One of the most recent studies provides an interesting perspective by examining the influence of tax controls on accounting fraud (Mason & Williams, 2020) using the information on Internal Revenue Service (IRS) audit rates and instances of fraud disclosed in SEC AAERs. They find that the monitoring activity of IRS has a disciplining effect reducing managements' incentives to engage in rent diversion activities such as costly financial statement misreporting, supporting the idea that tax controls can exert positive effects in reducing the likelihood of accounting fraud. These findings suggest a promising avenue for future research, which could assess the existence of positive externalities in reducing agency costs through monitoring and enforcement by actors different from auditors and public enforcers.

5.1.1 Firm determinants

Research looking at firm-specific factors that can favor accounting frauds examine primarily governance traits and firm variables derived from financial reports.

The first group of studies investigates the quality of governance mechanisms, the role of CFO in material accounting manipulations, the influence of internal control system deficiencies, and the effectiveness of recovery (or clawback) provisions. Relative to a control sample in the year preceding the fraud discovery, fraud firms show poor governance (Farber, 2005), measured by structural and operational proxies (numbers and incidence of outside board members, coincidence between CEO and chairman of the board of directors, number of audit committee meetings, presence of financial experts on the audit committee). Furthermore, fraud firms improve their governance three years after the fraud detection, showing governance characteristics similar to those of the control firms and a superior stock price performance, thus suggesting also a feedback effect. A thorough analysis of AAERs sheds light on the role of CFOs in material accounting manipulations (Feng et al., 2011), concluding that CFOs are involved in material accounting manipulations because they succumb to pressure from CEOs, rather than seeking immediate personal financial benefit from their equity incentives.

Regarding the influence of internal control system deficiencies, Ashbaugh-Skaife et al. (2007) observe that firms disclosing internal control deficiencies have more prior SEC enforcement actions and financial restatements. Additionally, they are more likely to use a dominant audit firm, have more concentrated institutional ownership, more complex operations, recent organizational changes, greater accounting risk, more auditor resignations, and fewer resources available for internal control. Instead, the incidence of accounting restatements declines after firms initiate recovery (or clawback) provisions introduced by Dodd-Frank Act (Chan et al., 2012). These provisions also produce a positive reaction by investors (i.e., increased earnings response coefficients) and auditors, who perceive less audit risk (i.e., less likely reports of material internal control weaknesses, lower audit fees, and shorter lag in issuing their opinions).

Studies exploring the association between accounting fraud and firm-level variables derived from financial reports focus on debt covenant restrictions and MD&A disclosures. Their findings indicate that debt covenant restrictions are positively associated with the probability of financial misstatements (Pitman and Zhao, 2020), extending previous evidence on the pressure for avoiding covenant violations as a contractual incentive to engage in earnings management practices (Fields, 2001). Additionally, this positive association is observed with performance covenants rather than capital covenants, and auditors charge higher audit fees to firms with more binding covenants even outside the violation state, thereby confirming their perception of a relevant risk factor. Glendening et al. (2019) analyze the less explored field of financial reports' disclosure. They focus on the impact of MD&A disclosures regarding the quantification of the earnings effect of reasonably likely changes in critical accounting estimates (quantitative CAE), which are negatively associated with management's incentives to misreport. Interestingly, they find that quantitative CAE reduce the incidences of AAERs, misstatements, and small positive earnings surprises.

5.1.2 Auditing as a fraud limiting factor

Accounting literature has deeply investigated the relationship between auditing characteristics and accounting fraud (Bonner et al., 1998; Hammersley, 2011; Mock & Turner, 2005). Many studies in our MMRS focus on audit fees and fees for non-audit services (NAS) to explore whether a high level of fees signals higher or lower fraud risks. The rationale is that higher NAS fees may undermine auditor's independence, thus inducing auditors to be more acquiescent towards clients' misreporting practices (economic bonding theory) (e.g., Koh et al. 2013; Zhang et al. 2016). An alternative view is based on the knowledge spillover effect theory, which postulates a significant negative association between NAS fees and fraud, or the audit effort-audit quality theory (e.g., Paterson & Valencia 2011; Svanstrom 2013), which predicts a negative relationship between NAS fees and fraud.

Regulatory changes in the US context favored a revamping of this issue in accounting journals, which dedicated particular attention to these open questions following the mandatory disclosure of NAS fees required by the SEC since 2001, and the SOX banning of these services for audit clients in 2002. The increase of restatements in that period motivates a study on the relation between restatements and NAS fees of previous periods, which derives a measure of unexpected NAS fees (Raghunandan et al., 2003). They do not find, however, significant different unexpected NAS fees between firms with and without restatements. Other studies exploring whether audit and NAS fees compromise auditor's independence result in reduced financial reporting quality, measured through restatements, yield mixed results. Kinney et al. (2004) find that restatements are associated with unspecified NAS – but not with those regarding financial information systems design and implementation of internal audit services – and negatively associated with tax services fees. Knechel and Sharma (2012) examine how NAS fees impact the audit effectiveness (measured by audit lags) and efficiency (proxied by restatements and discretionary accruals), finding that financial restatements do not increase when shorter audit lags occur in conjunction with high NAS fees. Blankley et al. (2012) find that abnormal audit fees are negatively associated with the likelihood that financial statements are subsequently restated, while Lyon and Maher (2005) show that audit fees are higher for clients that disclosed paying bribes, thus supporting the balancing effects of audit fees on client business risk and audit business risk. Collectively, these results seem to conflict with prior work that finds that audit fees are positively associated with future restatements (e.g., Beardsley et al., 2021).

By contrast, some papers support the view that audit and NAS fees can impair audit quality increasing the accounting fraud likelihood. In this sense, evidence indicates that firms paying significantly higher total fees, NAS fees, and audit fees are more likely to be sanctioned for issuing materially misstated/fraudulent financial statements (Markelevch & Rosner, 2013). Similarly, unexplained audit fees correlate positively with empirical measures of low financial report quality, such as the occurrence of restatements, frauds and SEC comment letters (Hribar et al 2014).

Audit fees can also capture the audit effort, thus inducing researchers to interpret abnormal high audit fees as a proxy for stronger engagement, which can also influence the actual achievement of expected benefits from new regulation. Empirical evidence supports this view indicating that the incremental benefits of 404(b) SOX over other internal control regimes in reducing misstatements is dependent on engagement resources (i.e., at or above the mean of abnormal audit fees; Zhao et al., 2017). Similarly, audit fees needed to perform tighter audit procedures are among the auditors' responses to high perceived risk. Indeed, audit fees are higher for clients violating the Foreign Corrupt Practices Act (FCPA) beginning in the violation period, increase in the period of regulatory investigations, and exhibit a greater sensitivity to payables and SG&A expenses for FCPA violators than for non-violators (Lawson et al., 2019).

Some studies investigate auditors' economic incentives using proprietary data and experimental evidence. In the case of two offsetting errors, experimental evidence indicates that auditors are more likely to require the client to fully adjust both misstatements when errors are in two different accounts and in the absence of client pressure (Messier and Schmidt, 2018). Additionally, the misstatement distribution interacts with quantitative materiality, and the auditors' experience plays a positive role in their correction. The analysis of a very interesting proprietary database of 850 audit engagements in the period 2005 to 2015 in the Netherlands confirms that auditors' economic incentives (e.g., abnormally high audit fees, provision of NAS) affect audit decisions on waiving economically important misstatements, thus potentially hindering financial reporting reliability and audit quality (Asare et al., 2019).

Overall, the reviewed studies confirm the sensitivity of audit fees to higher perceived audit risk. However, the relation between audit fees and frauds seem to remain an open question due to the duality of audit fees, which can be seen as a powerful economic incentive threatening auditors' independence, but also as a measure of its genuine effort in contrasting accounting misreporting. The observable trend of a reduced association between NAS fees and fraud may be due to the growing regulatory limitations of audit services aimed at safeguarding auditors' independence. Another possible reason for the mixed results obtained thus far could come from small-sample inferences in research that includes only actual misstatements, which may suffer from a systematic selection bias. Based on these considerations, Chakrabarty et al. (2020) use a metric based on Benford's Law to have a larger sample, finding that greater audit effort (audit fees) reduces the likelihood of misconduct.

Other studies investigate the association of accounting fraud with different auditing features, such as audit procedures, audit office size, auditor tenure, and network. The amount of work conducted by foreign audit firms (i.e., component auditors) – mandatorily disclosed according to the PCAOB Form AP – is positively associated with the likelihood of misstatement, non-timely reporting, and audit fees, collectively suggesting that component auditor engagements are associated with adverse outcomes (Burke et al., 2020). The adversity increases in function of the work performed by less competent component auditors and those facing significant geographic and cultural distance, weak rule of law, and low English language proficiency. A structural feature such as the decentralization of audit firms in small offices also influences the likelihood of restatements, which are more frequent in small audit offices (Francis et al., 2013).

Auditor tenure is another debated variable that is open to different interpretations. On the one hand, a long auditor tenure can negatively influence auditor's independence, on the other hand, it could allow a more profound knowledge of client problems resulting in higher quality audits. This ambivalence is also reflected in conflicting results. Carcello and Nagy (2004) compare firms sued for fraudulent reporting with two control samples. They find that fraudulent financial reporting is more likely to occur in the first three years of the auditor-client relationship, thus suggesting that a long auditor tenure does not increase the probability of accounting misbehaviors. By contrast, Singer and Zhang (2018) find that longer audit firm tenure leads to less timely discovery and correction of misstatements, as well as misstatements of greater magnitudes, and document that the Sarbanes-Oxley Act (SOX) has mitigated, but not eliminated, the negative effect of long auditor tenure. Another variable associated with accounting fraud is the firm's choice of sharing the same network auditor among group affiliated firms. In the Chinese setting, this decision is associated with more regulatory sanctions for fraudulent financial reporting, higher abnormal accruals, a larger standard deviation of abnormal accruals, higher likelihood of a downward restatement in earnings, and a lower likelihood of receiving a going concern modified opinion (Sun et al., 2020).

Poor audit quality can also be attributed to the engagement quality reviewers (EQR) who are responsible for assessing the quality of an audit engagement. This aspect stimulates researchers' attention in the light of the SOX of 2002 (Section 103), which introduced the position of EQR with the goal of enhancing the quality of audits. A detailed analysis of SEC and PCAOB enforcement actions against EQR since 1993, identifies 28 cases that involve sanctions against an EQR because of violations of generally accepted auditing standards (GAAS; Messier et al., 2010). Twenty-three of such identified GAAS violations related to a lack of due professional care. The lack of professional skepticism is denounced in 22 cases, over-relied on management representations in 20 cases, and ignored materiality concerns in five cases.

Besides the technical aspects of the control system efficacy, Reinstein and McMillan (2004) explore the lack of auditors' ethics as a relevant factor in explaining accounting fraud in the Enron case. Their analysis stresses that the departure of accountants and auditors from their ethical prescribed principles was one of the root causes of the Enron fraud and scandal, which instead have been often interpreted as a "perfect storm", due to the concurrence of unpredictable, rare, and unusual conditions.

5.2 Fraud act and concealment

A few studies in our MMRS specifically focus on the in-depth analysis of the fraud act and its concealment, providing valuable insights to advance our understanding of fraud, derive useful policy implications and identify new avenues for future research.

Toms (2019) provides a broad picture of fraud and financial scandals with a long view over three centuries (1720-2009), discussing the type of frauds and the consequent regulatory responses of four famous frauds representing different phases (i.e., The South Sea Bubble, 1720; the City of Glasgow Bank, 1878; McKesson & Robbins, 1937; Penn Central, 1970, and Polly Peck International, 1990). The incidence of fraud and financial scandal emerges as historically contingent and skewed towards specific sectors, particularly banking and finance, facilitated by complex group structures and international capital mobility, and mediated by managerial incentives and ownership concentration. Until the mid-1970s, financial reporting and auditing had a mitigating role of fraud opportunities in all sectors and businesses without complex group structures. Then, the development of interconnected and international business networks, combined with wider financial deregulation, has increasingly challenged the accounting profession, leading to a resurgence of fraud and financial scandals.

Another interesting case study analyses the nature of the fraud scandal in London and County Securities bank (L&C) in 1973, mainly using the perspective of the investigation by the Department of Trade inspectors (Matthews, 2005). Looking in detail at the shortcomings of control system (i.e., auditors and public enforcer), and the weaknesses of the subsequent changes in the regulatory system, Matthews (2005) sheds light on the negative role of commercial pressure on auditors, the independence issue of the public enforcer, as well as the broken promises of the "self-regulation" approach.

A critical analysis of the Enron and Arthur Andersen case (Morrison, 2004) offers an original view of the links between Enron officers and the willing assistance of various prominent financial institutions, including the SEC. This study challenges the rapid identification and condemnation of Arthur Andersen, which is seen as a scapegoat in the light of the behavior of the Department of Justice, deemed responsible for unfair investigations and understatement of Andersen's audit workpapers.

5.3 Fraud discovery

The selected articles dealing with the fraud mainly address firm internal alerts (Section 5.3.1) and the efficiency of auditing techniques for monitoring and detecting accounting frauds (Section 5.3.2.).

5.3.1 Internal alerts

A broad spectrum of potential internal alerts investigated emerges from the SEC comment letters, which provide independent and timely feedback on the clarity of disclosures and on the extent to which filings comply with GAAP and SEC reporting regulations (Cassell et al., 2013). Evidence indicates that low profitability, high complexity, employing a small audit firm, and weaknesses in corporate governance are positively associated with the receipt of a comment letter, the extent of comments, and the cost of remediation. Furthermore, the probability that a comment letter results in a restatement is higher for smaller companies and those audited by a small audit firm.

Whistleblowing attracted the attention of several experimental studies as a potentially relevant source of fraud signals and alerts, inspired by the SOX requirement (Sec. 301) that audit committees of public companies establish procedures for anonymous employee reporting of concerns regarding questionable accounting, internal control, or auditing matters. Kaplan et al. (2009) run two experiments to test the efficacy of whistleblowing procedures established at a firm level. They find that respondents' intentions to report a fraudulent act were counterintuitively greater under weaker safeguards condition, and that externally administered anonymous hotlines may not increase fraud reporting. Another behavioral experiment (Zhang et al., 2013) comparing different whistleblowing channels indicates that the primary reporting benefits of externally administered hotlines can be obtained by firms with a history of poor responsiveness to whistleblowing and employees registering relatively low on the proactivity scale.

The Dodd-Frank Act offers substantial monetary incentives that encourage reporting to the SEC. Brink et al. (2013) suggest that, overall, employees are more likely to first report internally rather than to the SEC. However, if a company offers a monetary reward for internal whistleblowing, the likelihood to report internally rather than to the SEC depends on the strength of the evidence supporting the claim. In particular, weak (strong) evidence decreases (increases) the possibility that employees will report directly to the SEC. The importance of incentives to report frauds through whistleblowing is also the focus of an experiment based on the psychological theory of motivational crowding (Berger et al., 2017), which warns that the application of financial rewards can unintentionally hijack a person's moral motivation to "do the right thing". They suggests that financial rewards can be an effective mechanism to encourage whistleblowing even if they can have negative impact on its timeliness. Indeed, participants assessed a lower likelihood that the fraud would be reported promptly when the size of the fraud is lower than the minimum threshold needed to get a financial reward.

The relation whistleblowing-fraud is also examined in the setting of auditing standards, which prescribe to inquire of client-employees regarding their knowledge of actual or suspected fraud (PCAOB 2010b; AICPA 2016). Lauck et al. (2020) test the efficacy of two practical strategies for auditors, finding that they are more likely to stimulate client-employee fraud disclosures by actively promoting statutory whistleblower protections and strategically timing the fraud inquiry in the afternoon, when client-employee self-regulation is more likely to be depleted.

Other sources of internal fraud signals include labor employment decisions as possible indirect red flags. Indeed, negative abnormal employment changes are associated with a higher likelihood of subsequent financial restatements, accounting irregularities, and lawsuits related to accounting fraud and generally require greater effort from auditors as manifested by higher audit fees and longer audit report lags (Cao et al., 2019). Positive abnormal employment changes are also associated with subsequent restatements, and longer audit report lags, but not associated with fraud or audit fees.

Among the articles included in our MMRS, only two articles use financial reports to detect accounting fraud. Jackson et al. (2017) use the AAER database to confirm their expectation that the lower the degree to which firms' earnings are correlated with the industry, the greater the probability a firm will issue a biased signal of firm performance. Tan and Young (2015) provides an original contribution to studies on restatements by focusing on the distinction between "Big R" restatements, which must be reported through an SEC 8-K material event filing, and "little r" restatements, which occur when a firm's immaterial errors accumulate to a material error but do not require an 8-K form or a withdrawal of the auditor opinion. Using XBRL financial reports of the firms that have used this method of correcting accounting errors over the period 2009-2012, they find that "little r" firms are generally more profitable, less complex, and show evidence of more robust corporate governance and higher audit quality compared to Big R firms. Compared with non-revising or restating firms, "little r" firms exhibit lower free cash flows, higher board expertise, higher CFO tenure, are less likely to use a specialist auditor and have material weaknesses in their internal controls.

5.3.2 Approaches and techniques for monitoring and identifying accounting frauds

Research on the approaches and techniques enabling timely fraud detection investigates the efficacy of classic auditing techniques (e.g., confirmation letters), and develops new sophisticated techniques, ranging from team brainstorming to the mental and procedural segmentation of fraud risk.

Studies dealing with the general auditors' approach toward accounting frauds examine the difference between approaching the fraud risk in a holistic or more structured way by decomposing the fraud risk (i.e., separately assessing attitude, opportunity, and incentive risks prior to assessing overall fraud risk). Experimental evidence (Wilks & Zimbelman, 2004) indicates that auditors who decompose fraud-risk assessments are more sensitive to opportunity and incentive cues when making their overall assessments than auditors who simply make an overall fraud-risk assessment. However, this increased sensitivity to opportunity and incentive cues happens only when those cues suggest low fraud risk, while no significant differences emerge when opportunity and incentive cues suggest high fraud risk.

The impact of using alternative fraud models on auditors' fraud risk judgments is the focus of another experimental study (Boyle et al., 2015). It compares the fraud triangle with the fraud diamond model (Wolfe & Hermanson, 2004) that adds individual "capability" to the fraud triangle as a fourth component, thus reflecting the personal skills and attributes needed to recognize and act in the presence of fraud opportunities. This experiment shows that auditors evaluating fraud risk factors based on the fraud diamond framework assess a significantly higher (more conservative) fraud risk than auditors using the fraud triangle framework. Using the client's perspective also influences auditors when they assess the intentionality in accounting errors based on circumstances indicating a certain level of fraud risk (Hamilton, 2016). Specifically, auditors that consider the client manager's perspective assess the misstatement as significantly more likely to be intentional when circumstances surrounding it indicate high fraud risk. By contrast, auditors who do not consider the client manager's perspective do not assess misstatement to be intentional, regardless of the level of fraud risk.

The auditor's capability to capture fraud signals can also be influenced by the auditor industry specialization, which is negatively associated with the likelihood of accounting restatement and the likelihood of issuing restatements affecting core operating accounts (Romanus et al., 2008). Similarly, the change from a non-specialist to a specialist auditor strengthens auditors' severity increasing the likelihood of restatements, whilst the opposite change reduces the likelihood of restatements.

Regarding audit procedures and their ability to support auditors in fraud identification, Caster et al. (2008) point out the weaknesses and the (ab)use of external confirmations, which practitioners perceive as one of the most persuasive forms of audit evidence. The critical barriers to confirmation effectiveness are low response rates, respondent errors, and directional bias in detecting errors. Additionally, the review of AAERs indicates that specific problematic areas include identifying failure to authenticate responses, collusion between auditee and customers, and concealed side agreements and special terms.

Contemporary fraud brainstorming practices are the focus of a study (Dennis & Johnstone, 2016) based on a proprietary database of field data for the period 2013–2014, regarding team characteristics, attendance and communication, brainstorming structure, timing, and effort, and brainstorming quality. Despite some similarities with practices reported in earlier field studies, the findings highlight several differences, such as the decreased use of checklists, shorter sessions, and risk-based deployment of resources in brainstorming. Indeed, auditors deploy more resources to brainstorming when engagement risk is heightened, thereby increasing brainstorming quality.

Three data analytics pre-processing methods to identify potential frauds are introduced and systematically evaluated by Perols et al. (2017). They document that two of them improve fraud prediction performance by approximately 10 percent relative to the best current techniques. In their view, the main concerns in developing models to detect financial statement fraud are the rarity of fraud observations, the relative abundance of explanatory variables identified by the prior literature, and the broad underlying definition of fraud. Experimental research based on interpersonal deception theory also considers the differences between using one or two auditors in noting and incorporating the behavioral cues of client personnel that may indicate deception during client inquiries (Holderness, 2018). Deceptive behavioral cues (i.e., nervousness and discussion) seem more apparent in the presence of two auditors, who are also more likely than a single auditor to successfully incorporate these cues into subsequent auditor judgments.

The auditors' efforts to detect fraud and auditees' commission of fraud are specifically investigated in an experimental study exploring the influence of the distribution of the penalties incurred by auditors for failing to detect fraud (Burton et al., 2011). Specifically, they compare a probabilistic, skewed audit penalty to a penalty that automatically imposes the expected penalty of the probabilistic distribution (deterministic penalty). Their findings show that a deterministic penalty with the same expected value of a probabilistic, skewed penalty increases audit effort to detect fraud and decreases the auditee's fraudulent reporting.

Audit intensity is the focus of a theoretical investigation that examines the effects of the SOX using a model of strategic auditing (Patterson & Reed Smith, 2007). In this model, the manager can choose the strength of internal controls and the amount of fraud, and the auditor can use resources for internal control tests and substantive tests. Results suggest that SOX has increased audit risk by inducing more robust internal control systems and less fraud, but not necessarily higher levels of control testing, which are essential when control strength informs about the likelihood of fraud.

Another paper dealing with the SOX effects (Victoravich, 2010) experimentally studies the impact of implementing SAS No. 99 (Consideration of Fraud in a Financial Statement Audit) and the financial statement and internal control certification requirement by key corporate officers. Results show that jurors assess auditors as less guilty for failing to discover fraud under SAS No. 99 and in the presence of the officer certification requirement. Further, SAS No. 99 seems to decrease guilt assessments indirectly through jurors' perception that auditors acted more appropriately, even if jurors view auditors as more responsible under the new regulation. The evaluation of audit firm culpability by jurors when financial statement fraud emerges after a clean audit opinion is also explored in the experimental study by Brown et al. (2020). They show how three topical regulatory factors can reduce jurors' assessments of audit firm culpability: (i) an auditor judgment rule prohibiting juror second-guessing of auditor judgments made in good faith and with a reasonable basis; (ii) a critical audit matter disclosure in the audit report regarding the disputed area; and (iii) a juror negligence training in which jurors learn and apply legal concepts before the case evaluation. Additionally, the perceived detectability and acquiescence can act as mediators of these factors and underlie these effects.

5.4 Fraud effects

Our selected articles explore several internal and external effects arising from accounting fraud, devoting particular attention to financial market effects (Section 5.4.1) and corporate governance and auditing effects (Section 5.4.2). While some studies are focused on a specific type of impact, other contributions provide a more general view of the bundle of fraud effects. A recent article (Mheta and Zhao, 2020) goes beyond the traditional scope of fraud consequences by documenting that corporate financial misconduct has significant consequences even for politicians' election outcomes. More specifically, evidence indicates that the politicians that serve on US congressional committees with SEC-relevant oversight responsibilities ("SEC-relevant politicians") have a greater likelihood of losing a reelection campaign after a local firm faces SEC enforcement for financial misconduct.

5.4.1 Market effects

Two studies on major Asian countries confirm the negative market impact of accounting fraud well investigated in the US (e.g., Cox & Weirich, 2002), thus providing empirical support to the credibility of their national enforcers. Chen et al. (2005) analyze the impact of the China Securities Regulatory Commission enforcement actions, confirming their negative impact on bid-ask spreads and stock prices, with most firms suffering wealth losses of around 1–2% in the five days surrounding the event. Moreover, firms receiving these enforcement actions experience a greater rate of auditor change, a much higher incidence of qualified audit opinions, and increased CEO turnover. In a Japanese setting, Numata and Takeda (2010) investigate the impact of the Kanebo accounting fraud and the resulting penalties for Kanebo and its auditor (ChuoAoyama) on the stock prices of clients of ChuoAoyama and the other Big 4 in Japan. This study finds that the announcements of poor audit quality significantly decreased the stock prices of ChuoAoyama clients and, to a lesser extent, it generated a spillover effect on stock prices of the clients of the other Big 4 auditors.

In the US context, Leng et al. (2011) document the long-term effects of enforcement actions on 239 firms subject to AAERs. These effects include significantly negative abnormal stock returns in up to three years following AAERs, a significantly negative abnormal operating performance in the second and third years following AAERs, and a higher probability of subsequent failure. Adverse market effects are observable also for firms that restate previously issued financial statements more than once within a relatively short period of time (repeat restatements), which experience stock prices drop after subsequent restatements but less than after the first restatement (Files et al., 2014) Repeat restatement firms are more likely among the clients of non-Big N auditors and with lower ex ante accounting quality. Besides, the auditor change between the end of their misstatement period and the restatement announcement reduces the likelihood of repeat restatements.

The fraud consequences for financial analysts are analyzed considering firms with any type of accounting fraud identified in the AAERs from 1995 to 2009 (Young & Peng, 2013). Findings show that analysts have a higher probability of taking the more extreme action of dropping coverage instead of only revising down recommendations for these firms. Furthermore, accounting frauds and their egregiousness are positively (negatively) associated with the timeliness of the analysts' action to drop coverage (revise only), suggesting that analysts' actions may be helpful in determining the occurrence of accounting fraud before the public fraud announcement.

5.4.2 Governance and auditing effects

Accounting frauds can lead to several negative consequences for the main actors of restating firms and their auditors. Financial reporting failure emerging after restatements generates reputational costs and significant labor market penalties for directors (i.e., turnover), especially for firms that overstate earnings, and for audit committee members, who have subsequent difficulties in having new positions on other boards (Srinavasan, 2005). Restatements are seen as audit failures also by shareholders, who are more likely to vote against auditor ratification after a restatement (Liu et al., 2009).

The likelihood that a restatement results in audit litigation is used as a proxy of audit failure by Schmidt (2012), who examines this phenomenon for the period 2001–2007. He finds that restatements are positively associated with the amount of NAS fees and the ratio of NAS fees to total fees. An investigation of the SEC's AAERs between 1995 and 2012 (Eustler et al., 2016) shows that going concern report modifications accompanying the last set of fraudulently stated financials are associated with a greater likelihood of enforcement action against the auditor. This increase in the litigation risk is consistent with the expectation of the counterfactual reasoning theory (Reffett 2010). Conversely, prior research (Carcello & Palmrose 1994; Kaplan & Williams 2013) shows that issuing a going concern opinion to financially stressed clients generally reduces the litigation risk against the auditor following a bankruptcy. In other words, auditors may be penalized (or rewarded) for documenting their awareness of fraud risk when financial statements are later determined to be fraudulent.

6. The role of auditors, enforcers and their interplay

The articles included in this MMRS explore the accounting fraud considering the role of both auditors and enforcers, but their investigation is mainly focused on enforcers or, in most cases, on auditors. These studies predominantly adopt quantitative methods to test research hypotheses through regression analyses using auditors' features as independent variables.

Quantitative approaches are also common in studies focusing on enforcers, which mostly use regressions to test hypotheses in which enforcement actions are either the dependent or the independent variable. Studies considering the enforcer's monitoring role using AAERs can also focus on different actors, such as financial analysts (Young and Peng, 2013). Other studies (Brink et al., 2013; Zhang et al., 2013; Berger et al., 2017) consider the anti-fraud activity of enforcers focusing on the enactment of specific programs, such as those offering financial incentives to potential whistleblowers (e.g., SEC's program enacted by the Dodd-Frank Act of 2010).

Studies focusing on the activities of both auditors and enforcers use prevailingly qualitative methods and show a greater variety of theoretical approaches and research objectives. Indeed, they range from a summary of research and enforcement release evidence on confirmation use and effectiveness (Caster et al., 2008) to critical studies examining audit and enforcement failures (Morrison, 2004; Sikka, 2001) as well as the limitations of using AAERs, which could reflect prevailing SEC agendas without being representative of the population of financial statement frauds (O'Connel, 2001).

Our analysis explores the role of auditors and enforcers in all the selected articles, paying particular attention to how they consider the interactions and interplay between them. The role and effectiveness of auditors in detecting and preventing fraud emerges in those studies in several ways, including (in descending order by the number of studies focused on each aspect): (i) features of audit firms and auditors; (ii) audit fees and fees for non-audit service fees; (iii) auditors' interest in tools and techniques to detect fraud; (iv) audit failures; and (v) fraud consequences for auditors.

Studies focusing on the features of audit firms and auditors primarily examine which ones are associated to higher audit quality in terms of fraud prevention. The main features under investigation include the size of audit offices (Francis et al., 2013) and audit firms (Cassel et al., 2013; Farber, 2005; Files et al., 2014), the nationality of auditors (Burke et al., 2020), auditors' industry specialization (Romanus et al., 2008), the use of double auditors (Holderness, 2018), auditors' resignation (Ashbaugh-Skaife et al., 2007), the characteristics of the other clients of the audit office (Glendening et al., 2019), the fact that auditors belong to the same network among group affiliated firms (Sun et al., 2020). Audit tenure is another essential feature investigated to assess whether it can impair audit quality due to a progressive loss of independence. This question raised a lively regulatory debate on audit rotation, thus stimulating accounting research that, so far, obtained mixed results (Carcello & Nagy, 2004; Singer and Zhang, 2018).

The thorny issue of auditors' independence is also at the center of research exploring the role of auditors delivering audit and NAS to clients, whose magnitude could be predictive of less effective anti-fraud monitoring. Using different proxies for fraudulent behaviors, this stream of studies also seems to achieve conflicting results thus far (Asare et al., 2019; Kinney et al., 2004; Knechel & Sharma, 2012; Markelevich & Rosner, 2013). However, there is evidence indicating that audit litigants perceive that non-audit services can strengthen the case against the auditors, in the presence of audit failures, due to a higher economic dependence of auditors from clients (Schmidt, 2012). Studies investigating auditors' monitoring using audit fees consider them as a measure of audit effort and quality, which is expected to be increased in case of high fraud risk to enable an effective and timely detection (Lawson et al., 2019; Markelevich & Rosner, 2013). Accordingly, low audit fees are associated with underestimated risk and/or lower expected audit effort (Blankley et al., 2012). Other studies explore the effectiveness of auditors' fraud risk assessment focusing on specific procedures and events, such as fraud brainstorming sessions (Dennis & Johnstone, 2016), the use of the fraud triangle and/or diamond models (Boyle et al., 2015; Wilks & Zimbelman, 2004), the consideration of the manager's perspective in assessing the intentionality of a misstatement (Hamilton, 2016), the distribution of prior auditors' penalties for failing to detect fraud (Messier & Schmidt, 2018).

While most studies in this MMRS deal with the auditors' effectiveness, some aim to shed light on audit failures from various perspectives. The failure to detect fraud can be a major risk or event considered in the overall scenario, as in the case of the event study by Numata and Takeda (2010), which finds an industry-wide spillover effect of auditors' reputation loss after the audit failure related to the Kanebo fraud in a low litigation setting (i.e., Japan). In other studies, audit failure is the primary concern motivating reflections to improve regulation. In this sense, Gavious (2007) proposes that the enforcer (i.e., SEC) should scrutinize audit fees to monitor the economic dependence of auditors from clients and that audit firms retiring due to audit rotation should accompany the new audit firms until completion of the audit of the first annual financial statement. This domain attracts the attention of critical research, which warns that little effective regulatory action is taken against auditing firms implicated in audit failures, highlighting a situation where auditing firms seem to have colonized the political power to shield themselves from regulatory action (Sikka, 2001). Conversely, the notorious audit failure in the Enron fraud stimulates a critical discussion on the destruction of Arthur Andresen, which Morrison (2004) interprets as an example of scapegoating aimed at shifting the limelight from the malfeasance of political and financial cronies.

Diverse perspectives characterize studies considering the fraud consequences for auditors. Some of them have a sharp focus on documenting auditor turnover after restatements (Liu et al., 2009; Srinivasan & Richardson, 2005) and jurors' perceptions of auditors' responsibility to detect fraud (Victoravich, 2010). Toms (2019), instead, provides a historical analysis of the incidence of fraud in the UK to illuminate the regulatory response to scandals and the implications for accounting and financial reporting, including the recommendation of compulsory audit, the growing importance of fraud detection among auditor's duties and also the weaknesses in the self-regulated audit process. This analysis illustrates attempts to improve accounting and auditing standards and documents the rebound in fraud and financial scandals in the second half of the twentieth century, primarily explained with the increasing scale and complexity of the finance sector, and associated power imbalances between regulators and regulated.

The investigation of the enforcers' role in the domain of fraud revolves around four main aspects (in descending order by the number of studies focused on each paper): (i) imposing sanctions on firms and/or auditors; (ii) issuing a regulation to contrast fraud directly or indirectly; (iii) expressing concerns about auditors' and/or firms' behavior; and (iv) enforcement failures. Enforcement actions against companies and the other public outputs of the enforcement process are at the center of most studies, which focus on the US context and use SEC comment letters, AAERs, and sanctions to investigate variables associated with these measures without a detailed analysis of the enforcement process. The same objective characterizes one of the few studies examining a different institutional setting (i.e., China), which finds negative stock returns and negative economic consequences of enforcement actions by the Chinese Securities Regulatory Commission (CSRC), thus supporting the credibility of the Chinese enforcer (Chen et al., 2005).

Some of these studies explore the likelihood of enforcement actions against the auditors, finding that it increases in the presence of auditors' report containing going concern modifications to the last set of fraudulently stated financials (Eutsler et al., 2016). This stream of literature provides valuable contributions to increase our understanding of the fraud risk but inevitably suffers from a partial observation issue as it only covers firms' or auditors' behaviors receiving enforcement actions, which are just the tip of the iceberg due to the enforcers' resource constraints. This partial observation issue only enables investigations on small samples (Perols et al., 2017).

Another important focus of scholarly interest refers to the enforcers' regulatory activity, aimed at reducing the opportunities for accounting fraud and promoting its timely detection by enhancing audit quality and supporting specific anti-fraud measures, such as whistleblowing (Berger et al., 2017; Brink et al., 2013; Zhang et al., 2013). This line of studies considers the role of enforcers examining their regulatory function, which complements the monitoring activities based on inspections but does not constitute enforcement activity in a strict sense. From this perspective, the enforcer's role under investigation relates mainly to the regulatory setting in which controls work to prevent and detect accounting fraud rather than enacting such controls. This broad consideration of the enforcer's role in preventing accounting fraud seems to emerge also in some studies that do not address the enforcement activity directly but motivate their investigation based on enforcers' statements and concerns. These include, for instance, the SEC's concern for restatements and non-formal restatements (Romanus et al., 2008; Tan & Young, 2015), and PCAOB's criticism of auditors' performance in fraud risk identification and risk response generation (Dennis & Johnstone, 2016).

A few qualitative studies address the enforcer's role by examining its failures mainly through in-depth case studies, such as the corporate fraud scandal of the London and County Securities Bank (Matthews, 2005), which stimulates interesting reflections on the nature of fraud, the shortcomings of the bank's auditing and the poor performance of the inspectors of the Department of Trade.

The roles of auditors and enforcers investigated in the selected articles can encourage reflections about how accounting research has dealt with their activity in preventing and detecting accounting fraud (Figure 1).

[Insert Figure 1 here]

Studies on fraud prevention primarily examine the controls and activities that may reduce the fraud risk, including various proxies for audit quality and the enforcer's activity in terms of regulation (regarding companies and auditors) and enforcement level. The role of enforcers and auditors in the phase of the fraud act and concealment emerges mainly in critical studies that discuss the failure of controls, which can refer to late fraud detection and the conditions preventing a more timely discovery or to the limited number of sanctions issued compared to the unobservable population of all frauds, which includes undetected ones as well.

Research that analyzes the fraud discovery addresses the techniques and conditions enhancing the timely detection of fraud, especially by auditors. By contrast, the inspections by enforcers and their sampling procedures seem to remain a black-box investigated limitedly to its public output. Indeed, in many studies, the fraud discovery by the enforcer implicitly coincides with enforcement actions, which more precisely represent the first consequence of fraud, namely public disclosure that necessarily implies a previous fraud detection. These enforcement actions are then the basis for various economic and capital market consequences, affecting external control, such as auditors. Auditors, for their part, cannot issue sanctions if they detect fraud, but their modified opinions can be seen as a way to alleviate auditor risk (Chen et al., 2005). Notwithstanding the typical distinction between fraud prevention and detection, we acknowledge that effective results in fraud detection can also reduce the perceived fraud opportunity by potential fraudsters, thereby having a positive impact on fraud prevention as well.

Collectively, the articles included in our MMRS do not pay much attention to the interactions and interplay between auditors and enforcers in their efforts to contrast fraud.

Even if all studies consider the role of both in preventing and detecting accounting fraud, the majority of them investigate the actions of every single actor in isolation and do not address their interrelations or any interchange of communication. The other studies highlight the following relations (in descending order by the number of studies focused on each aspect): (i) the enforcer expressing concerns on audit quality; (ii) enforcer's statements or regulation that affect auditors' behavior; (iii) enforcement actions that also impact auditors; and (iv) enforcers and auditors sharing weaknesses leading to control failure.

Enforcers' concerns on audit quality can be general or specific, such as problems with confirmation evidence uncovered by SEC investigations (Caster et al., 2008). Enforcers' rules, programs or statements affect auditors in various ways, ranging from fraud prevention measures enacted under the SOX and administered by the SEC to SEC's voluntary disclosure program regarding questionable payments to foreign government officials (Lyon & Maher, 2005). Other studies focus on the impact of enforcement actions on auditors, including their effects on audit fees, auditor's change, and sanctions against auditors. Finally, some critical and interdisciplinary studies discuss the weaknesses of the entire system of controls aimed at contrasting accounting fraud reflecting on several controversial issues that can lead to their substantial failures, such as the increasing social and political power of the auditing industry (Sikka, 2001).

In the scenario highlighted above, we note that some studies that do not explicitly address the interplay between different controls still conceptualize fraud stressing the interactions between several elements. For instance, Rezae (2005) explains financial statement fraud as a combination of five interactive factors encapsulated in the acronym CRIME, which includes cooks (fraudsters), recipes, incentives, monitoring (including also auditors and enforcers), and end results (consequences). Our analysis also indicates that some possible relations between auditors and enforcers in contrasting fraud are largely under-researched. In particular, the cooperative flow of information that is provided for by law in most jurisdictions, the consequent issue of the enforcer's proactivity in fraud investigation, and the complementary or substitution effect between the two controls in the fraud domain may be examples of research domain that need to be significantly explored.

7. Concluding remarks: A lot done, more to do

This study adopted a mixed method approach to provide a review synthesis of the accounting research exploring the complexity of accounting fraud by considering the roles of auditors and enforcers, as well as their interplay and interactions, in preventing and detecting this destructive phenomenon.

The monitoring activity of these gatekeepers is crucial to contrast the incidence of fraud and its devastating impact on society, especially considering the increasing fraud opportunities and risk deriving from the expansion, complexity, and internationalization of the business environment (Toms, 2019). The scandals provoked by accounting frauds can severely harm the trust in financial reporting, in complete contrast with the audit aim of enhancing the degree of confidence of intended users in the financial statements (ISA 200) and the enforcers' objective of underpinning investors' confidence in financial markets (Duro et al., 2019). Additionally, the failure of auditors and enforcers to timely detect accounting fraud can trigger adverse reactions driven by the social impact of fraud and the worsening of the audit and enforcer expectation gap.

Our review shows some interesting trends regarding the research implications, methods, and scope of investigations into the role of auditors and enforcers in fraud prevention and detection. First, many empirical studies address research questions strictly related to recent or prospective regulatory changes to develop helpful policy and practical implications aimed at fighting accounting fraud more effectively. To this end, they investigate the impact of rules (e.g., mandatory audit rotation) or the best way to enact new regulatory provisions (e.g., comparing the efficacy of different channels for whistleblowing). These analyses have the merit of obtaining sound evidence for policy-makers and practitioners, even if they are prevailingly referred to the US context.

Furthermore, the reviewed quantitative studies show an increasing sophistication in the methods and variables used. For instance, many studies (Asare et al., 2019; Blankley et al., 2012; Chakrabarty et al., 2020; Hribar et al., 2014; Raghunandan et al., 2003; Zhao et al., 2017) take into consideration abnormal audit fees instead of the actual level of audit fees disclosed in annual reports, determined as the residual obtained after regressing audit fees on variables controlling for risk, audit effort, and industry. The adoption of this two-stage approach better captures the level of audit effort, which is expected to increase in case of high audit risk assessment, and/or the auditors' bonding to the client, which may affect their independence and judgement.

Another promising trend relates to the progressive extension of the scope of the analyses to consider different actors involved in enforcement activities. Despite the prevalence of studies focused on the SEC, other actors such as tax authorities (e.g., the US Internal Revenue Service in Mason & Williams, 2020) seem to increasingly attract scholarly attention, thus contributing to reveal a more comprehensive picture of the activities that may contrast fraud directly or indirectly. Similarly, research exhibits a broader consideration of fraud consequences, addressing those affecting fraud firms and deficient controls as well as outside effects, such as the impact on political election outcomes (Mheta & Zhao, 2020).

This review also highlights some weaknesses and gaps in how accounting research addresses the role of auditors and enforcers in preventing and detecting accounting fraud, which, in our view, represent promising areas for future research. A first issue is related to the variety of terms and concepts used to capture the fraud phenomenon. On the one hand, this heterogeneity comes from the complexity and diversity of fraud. On the other hand, it reinforces the need for a common language for researchers interested in this line of research, especially in the light of the numerous disciplinary perspectives used to address it (Amiram et al., 2018). Such fragmentation is also reflected in the use of different proxies for fraud that include restatements, SEC comments, AAERs and sanctions, which may not be comparable in terms of their level of severity. In many cases, the choice of using variables that do not necessarily reflect fraud but that ensure an acceptable sample size gave us the feeling that the research method is affecting the choice of the variables and the nature of the study rather than vice versa. In this regard, we also acknowledge that the potential sample size of fraud cases is inevitably limited to those eventually detected (partial observation issue), thus reducing the methodological options available to researchers.

Additionally, our MMRS highlights a limited level of detail in the analysis of fraud typologies and features and a relatively low number of case studies that would instead allow more in-depth analyses. Many quantitative studies represent accounting frauds as a monolith, typifying a complex process as a dummy variable collected from databases, with only a few exceptions emphasizing their differences (e.g., Caster et al., 2008; Eustler et al., 2016; Feng et al., 2011; Messier et al., 2010). From this perspective, a gap that future research could address would be the distinction between direct accounting fraud, originating in corporate financial statements, and indirect accounting fraud, which affects financial reporting but has a non-accounting origin (e.g., misappropriation of funds). More generally, we echo the call made by Velte (2021) for a more detailed analysis of fraud proxies to develop a more nuanced picture and avoid downplaying the dynamics and complexities of this phenomenon. We argue that this shift from "the fraud" to "the frauds" is crucial to design and enact effective measures to contrast this destructive phenomenon.

Similarly, we encourage future research to explore more in depth the role of enforcers, mostly observed only through their public outputs (e.g., AAERs), with a focus on the process dimension and its effectiveness. Indeed, these aspects appear largely under-researched, except for critical studies shedding light on significant frauds triggering severe financial scandals. We also believe that this type of approach also resulted in limited attention paid to the interactions and interplay between enforcers and auditors, proposing a widely-held view of the enforcer as a somehow static element of the environment that sets out rules and oversees companies as well as auditors in a 'cat and mouse' game. Further research is needed to emphasize the dynamics and potentially convoluted relations between the actors expected to act as gatekeepers contrasting fraud with regard to their own areas of responsibility. Moreover, future research could shed light on less researched actors, such as courts, by complementing the growing bulk of experimental analyses with in-depth investigations and more diverse geographical settings, paying more attention to non-Anglo-Saxon countries.

We understand that many of the issues mentioned above hinge on the limited data available about fraud, and studies based on proprietary databases are rare (Asare et al., 2019; Dennis & Johnstone, 2016). However, we maintain that a cooperative effort of the academic community, policymakers, and practitioners is essential to prevent the fraud's destructive economic and social consequences in an increasingly complex and interconnected environment. In pursuit of this common aim, scholars are called to move off the beaten track to account for the nuanced diversity of frauds and open the black box of the enforcers' processes, also providing empirical insights into their relations with auditors. Policymakers and public authorities, for their part, could stimulate impactful academic research and obtain valuable results by sharing data on frauds and their monitoring processes with applicable confidentiality agreements.

References

Adhikari, P., Kuruppu, C., Ouda, H., Grossi, G., & Ambalangodage, D. (2021). Unintended consequences in implementing public sector accounting reforms in emerging economies: evidence from Egypt, Nepal and Sri Lanka. *International Review of Administrative Sciences*, *87*(4), 870–887. https://doi.org/10.1177/0020852319864156

Adut, A. (2008). *On scandal*. Cambridge University Press.

American Institute of Certified Public Accountants (AICPA). (2016). *Consideration of Fraud in a Financial Statement Audit*. New York, NY: AICPA.

Amiram, D., Bozanic, Z., Cox, J. D., Dupont, Q., Karpoff, J. M., & Sloan, R. (2018). Financial reporting fraud and other forms of misconduct: a multidisciplinary review of the literature. *Review of Accounting Studies*, 1–52. https://doi.org/10.1007/s11142-017-9435-x

Anand, V., Tina Dacin, M., & Murphy, P. R. (2015). The Continued Need for Diversity in Fraud Research. *Journal of Business Ethics*, *131*(4), 751–755. https://doi.org/10.1007/s10551-014-2494-z

Asare, S. K., van Buuren, J. P., & Majoor, B. (2019). The joint role of auditors' and auditees' incentives and disincentives in the resolution of detected misstatements. *Auditing*, *38*(1), 29–50. https://doi.org/10.2308/ajpt-52153

Ashbaugh-Skaife, H., Collins, D. W., & Kinney, W. R. (2007). The discovery and reporting of internal control deficiencies prior to SOX-mandated audits. *Journal of Accounting and Economics*, *44*(1–2), 166–192. https://doi.org/10.1016/j.jacceco.2006.10.001

Bannister, J. W., & Wiest, D. N. (2001). Earnings management and auditor conservatism: Effects of SEC enforcement actions. *Managerial Finance*, *27*(12), 57–71. https://doi.org/10.1108/03074350110767448

Beardsley, E. L., Imdieke, A. J., & Omer, T. C. (2021). The distraction effect of non-audit services on audit quality. *Journal of Accounting and Economics*, *71*(2–3), 101380. https://doi.org/10.1016/j.jacceco.2020.101380

Beasley, M.S., Hermanson, D.R., Carcello, J.V., & Neal, T.L. (2010)."Fraudulent financialreporting: 1998-2007 : an analysis of U.S. public companies. *Association Sections, Divisions, Boards, Teams*. 453.

Beasley, M. S. (1996). An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud. *Accounting Review*, *71*(4), 443–465.

Berger, L., Perreault, S., & Wainberg, J. (2017). Hijacking the moral imperative: How financial incentives can discourage whistleblower reporting. *Auditing*, *36*(3), 1–14. https://doi.org/10.2308/ajpt-51663

Blankley, A. I., Hurtt, D. N., & MacGregor, J. E. (2012). Abnormal audit fees and restatements. *Auditing*, *31*(1), 79–96. https://doi.org/10.2308/ajpt-10210

Bonner, S. E. ;, Palmrose, Z.-V. ;, & Young, S. M. (1998). Fraud type and auditor litigation: An analysis of SEC accounting and auditing enforcement releases. *The Accounting Review*, *73*(4), 503–532.

Booth, A. (2006). "Brimful of STARLITE": Toward standards for reporting literature searches. *Journal of the Medical Library Association*, *94*(4), 421.

Boyle, D. M., DeZoort, F. T., & Hermanson, D. R. (2015). The effect of alternative fraud model use on auditors' fraud risk judgments. *Journal of Accounting and Public Policy*, *34*(6), 578–596. https://doi.org/10.1016/j.jaccpubpol.2015.05.006

Brasel, K. R., Hatfield, R. C., Nickell, E. B., & Parsons, L. M. (2019). The effect of fraud risk assessment frequency and fraud inquiry timing on auditors' skeptical judgments and actions. *Accounting Horizons*, *33*(1), 1–15. https://doi.org/10.2308/acch-52349

Brink, A. G., Lowe, D. J., & Victoravich, L. M. (2013). The Effect of Evidence Strength and Internal Rewards on Intentions to Report Fraud in the Dodd-Frank Regulatory Environment. *AUDITING: A Journal of Practice & Theory*, *32*(3), 87–104. https://doi.org/10.2308/ajpt-50449

Brocard, M., Franke, B., & Voeller, D. (2018). Enforcement Actions and Auditor Changes. *European Accounting Review*, *27*(3), 407–436. https://doi.org/10.1080/09638180.2017.1307130

Brown, T., Majors, T. M., & Peecher, M. E. (2020). Evidence on how different interventions affect juror assessment of auditor legal culpability and responsibility for damages after auditor failure to detect fraud. *Accounting, Organizations and Society*, *87*. https://doi.org/10.1016/j.aos.2020.101172

Burke, J. J., Hoitash, R., & Hoitash, U. (2020). The Use and Characteristics of Foreign Component Auditors in U.S. Multinational Audits: Insights from Form AP Disclosures*. *Contemporary Accounting Research*, *37*(4), 2398–2437. https://doi.org/10.1111/1911-3846.12605

Burton, F. G., Wilks, T. J., & Zimbelman, M. F. (2011). The impact of audit penalty distributions on the detection and frequency of fraudulent reporting. *Review of Accounting Studies*, *16*(4), 843–865. https://doi.org/10.1007/s11142-011-9152-9

Cai, L., Rahman, A., & Courtenay, S. (2014). The effect of IFRS adoption conditional upon the level of pre-adoption divergence. *International Journal of Accounting*, *49*(2), 147–178. https://doi.org/10.1016/j.intacc.2014.04.004

Cao, J., Luo, X., & Zhang, W. (2020). Corporate employment, red flags, and audit effort. *Journal of Accounting and Public Policy*, *39*(1). https://doi.org/10.1016/j.jaccpubpol.2019.106710

Caramanis, C., Dedoulis, E., & Leventis, S. (2015). Transplanting Anglo-American accounting oversight boards to a diverse institutional context. *Accounting, Organizations and Society*, *42*, 12–31. https://doi.org/10.1016/J.AOS.2015.01.001

Carcello, J. V., & Nagy, A. L. (2004). Audit firm tenure and fraudulent financial reporting. *Auditing*, *23*(2), 55–69. https://doi.org/10.2308/aud.2004.23.2.55

Carcello, J. V., & Palmrose, Z.-V. (1994). Auditor Litigation and Modified Reporting on Bankrupt Clients. *Journal of Accounting Research*, *32*, 1–30. https://doi.org/10.2307/2491436

Carpenter, T. D. (2007). Audit team brainstorming, fraud risk identification, and fraud risk assessment: Implications of SAS No. 99. *Accounting Review*, *82*(5), 1119–1140. https://doi.org/10.2308/accr.2007.82.5.1119

Cassell, C. A., Dreher, L. M., & Myers, L. A. (2013). Reviewing the SEC's review process: 10-K comment letters and the cost of remediation. *Accounting Review*, *88*(6), 1875–1908. https://doi.org/10.2308/accr-50538

Caster, P., Elder, R. J., & Janvrin, D. J. (2008). A summary of research and enforcement release evidence on confirmation use and effectiveness. *Auditing*, *27*(2), 253–279. https://doi.org/10.2308/aud.2008.27.2.253

Chakrabarty, B., Duellman, S., & Hyman, M. A. (2020). A new approach to estimating the relation between audit fees and financial misconduct. *Accounting Horizons*, *34*(2), 41–61. https://doi.org/10.2308/HORIZONS-19-042

Chan, L. H., Chen, K. C. W., Chen, T.-Y., & Yu, Y. (2012). The effects of firm-initiated clawback provisions on earnings quality and auditor behavior. *Journal of Accounting and Economics*, *54*(2–3), 180–196. https://doi.org/10.1016/j.jacceco.2012.05.001

Chen, G., Firth, M., Gao, D. N., & Rui, O. M. (2005). Is China's securities regulatory agency a toothless tiger? Evidence from enforcement actions. *Journal of Accounting and Public Policy*, *24*(6), 451–488. https://doi.org/10.1016/j.jaccpubpol.2005.10.002

Chen, J. J., & Cheng, P. (2007). Corporate Governance and the Harmonisation of Chinese Accounting Practices with IFRS Practices. *Corporate Governance: An International Review*, *15*(2), 284–293. https://doi.org/10.1111/j.1467-8683.2007.00560.x

Christensen, H. B., Hail, L., & Leuz, C. (2013). Mandatory IFRS reporting and changes in enforcement. *Journal of Accounting and Economics*, *56*(2–3), 147–177. https://doi.org/10.1016/J.JACCECO.2013.10.007

Christensen, H. B., Liu, L. Y., & Maffett, M. (2020). Proactive financial reporting enforcement and shareholder wealth. *Journal of Accounting and Economics*, *69*(2–3), 101267. https://doi.org/10.1016/j.jacceco.2019.101267

Cooper, D. J., Dacin, T., & Palmer, D. (2013). Fraud in accounting, organizations and society: Extending the boundaries of research. In *Accounting, Organizations and Society* (Vol. 38, Issues 6–7, pp. 440–457). Elsevier Ltd. https://doi.org/10.1016/j.aos.2013.11.001

Cox, R. A. k., & Weirich, T. R. (2002). The stock market reaction to fraudulent financial reporting. *Managerial Auditing Journal*, *17*(7), 374–382. https://doi.org/10.1108/02686900210437471

Cressey, D. R. (1953). *Other people's money; a study of the social psychology of embezzlement.* Free Press.

Dechow, P. M., Ge, W., Larson, C. R., & Sloan, R. G. (2011). Predicting Material Accounting Misstatements*. *Contemporary Accounting Research*, *28*(1), 17–82. https://doi.org/10.1111/j.1911-3846.2010.01041.x

Dechow, P. M., & Skinner, D. J. (2000). Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons*, *14*(2), 235–250. https://doi.org/10.2308/acch.2000.14.2.235

Defond, M. L., Francis, J. R., & Hallman, N. J. (2018). Awareness of SEC Enforcement and Auditor Reporting Decisions. *Contemporary Accounting Research*, *35*(1), 277–313. https://doi.org/10.1111/1911-3846.12352

Dennis, S. A., & Johnstone, K. M. (2016). A field survey of contemporary brainstorming practices. *Accounting Horizons*, *30*(4), 449–472. https://doi.org/10.2308/acch-51503

Di Fabio, C., Ramassa, P., & Quagli, A. (2021). Income smoothing in European banks: The contrasting effects of monitoring mechanisms. *Journal of International Accounting, Auditing and Taxation*, *43*. https://doi.org/10.1016/j.intaccaudtax.2021.100385

Duro, M., Heese, J., & Ormazabal, G. (2019). The effect of enforcement transparency: Evidence from SEC comment-letter reviews. *Review of Accounting Studies*, *24*(3), 780–823. https://doi.org/10.1007/s11142-019-09503-1

Engelen, K. C. (2020). Germany's Wirecard Scandal - ProQuest. *The International Economy*, *35*(1), 9–12. https://www.proquest.com/docview/2519893712?pq-origsite=gscholar&fromopenview=true

Ettredge, M., Scholz, S., Smith, K. R., & Sun, L. (2010). How Do Restatements Begin? Evidence of Earnings Management Preceding Restated Financial Reports. *Journal of Business Finance & Accounting*, *37*(3–4), 332–355. https://doi.org/10.1111/j.1468-5957.2010.02199.x

European Securities and Markets Authority (ESMA). (2020). Fast track peer review on the application of the guidelines on the enforcement of financial information (ESMA/2014/1293) by BAFIN and FREP in the context of Wirecard. Retrieved from: https://www.esma.europa.eu/sites/default/files/library/esma42-111-5349_fast_track_peer_review_report_-_wirecard.pdf

Eutsler, J., Nickell, E. B., & Robb, S. W. G. (2016). Fraud risk awareness and the likelihood of audit enforcement action. *Accounting Horizons*, *30*(3), 379–392. https://doi.org/10.2308/acch-51490

Farber, D. B. (2005). Restoring trust after fraud: Does corporate governance matter? *Accounting Review*, *80*(2), 539–561. https://doi.org/10.2308/accr.2005.80.2.539

Feng, M., Ge, W., Luo, S., & Shevlin, T. (2011). Why do CFOs become involved in material accounting manipulations? *Journal of Accounting and Economics*, *51*(1–2), 21–36. https://doi.org/10.1016/j.jacceco.2010.09.005

Files, R., Sharp, N. Y., & Thompson, A. M. (2014). Empirical evidence on repeat restatements. *Accounting Horizons*, *28*(1), 93–123. https://doi.org/10.2308/acch-50615

Firth, M., Mo, P. L. L., & Wong, R. M. K. (2005). Financial statement frauds and auditor sanctions: An analysis of enforcement actions in China. *Journal of Business Ethics*, *62*(4), 367–381. https://doi.org/10.1007/s10551-005-0542-4

Florou, A., Morricone, S., & Pope, P. F. (2020). Proactive financial reporting enforcement: Audit fees and financial reporting quality effects. In *Accounting Review* (Vol. 95, Issue 2, pp. 167–197). American Accounting Association. https://doi.org/10.2308/accr-52497

Florou, A., & Pope, P. F. (2012). Mandatory IFRS Adoption and Institutional Investment Decisions. *The Accounting Review*, *87*(6), 1993–2025. https://doi.org/10.2308/accr-50225

Francis, J. R., Michas, P. N., & Yu, M. D. (2013). Office size of big 4 auditors and client restatements. *Contemporary Accounting Research*, *30*(4), 1626–1661. https://doi.org/10.1111/1911-3846.12011

Free, C. (2015). Looking through the fraud triangle: A review and call for new directions. *Meditari Accountancy Research*, *23*(2), 175–196. https://doi.org/10.1108/MEDAR-02-2015-0009

García Osma, B., Gisbert, A., & de las Heras Cristóbal, E. (2017). Public oversight systems for statutory auditors in the European Union. *European Journal of Law and Economics*, *44*(3), 517–552. https://doi.org/10.1007/s10657-014-9460-1

Gavious, I. (2007). Alternative perspectives to deal with auditors' agency problem. *Critical Perspectives on Accounting*, *18*(4), 451–467. https://doi.org/10.1016/j.cpa.2006.01.011

Gipper, B., Leuz, C., & Maffett, M. (2020). Public Oversight and Reporting Credibility: Evidence from the PCAOB Audit Inspection Regime. *The Review of Financial Studies*, *33*(10), 4532–4579. https://doi.org/10.1093/rfs/hhz149

Glancy, F. H., & Yadav, S. B. (2011). A computational model for financial reporting fraud detection. *Decision Support Systems*, *50*(3), 595–601. https://doi.org/10.1016/j.dss.2010.08.010

Glendening, M., Mauldin, E. G., & Shaw, K. W. (2019). Determinants and consequences of quantitative critical accounting estimate disclosures. *Accounting Review*, *94*(5), 189–218. https://doi.org/10.2308/accr-52368

Goelzer, D. L. (2020). Audit Oversight and Effectiveness: Understanding the Past and Looking toward the Future. *The CPA Journal*, *90*(12/1), 50–55. https://www.proquest.com/docview/2478621233?pq-origsite=gscholar&fromopenview=true

Greve, H. R., Palmer, D., & Pozner, J. E. (2010). Organizations gone wild: The causes, processes, and consequences of organizational misconduct. In *Academy of Management Annals* (Vol. 4, Issue 1, pp. 53–107). Routledge . https://doi.org/10.1080/19416521003654186

Guay, W. R., Kothari, S. P., & Watts, R. L. (1996). A Market-Based Evaluation of Discretionary Accrual Models. *Journal of Accounting Research*, *34*, 83–105. https://doi.org/10.2307/2491427

Hamilton, E. L. (2016). Evaluating the intentionality of identified misstatements: How perspective can help auditors in distinguishing errors from fraud. *Auditing*, *35*(4), 57–78. https://doi.org/10.2308/ajpt-51452

Hammersley, J. S. (2011). A review and model of auditor judgments in fraud-related planning tasks. In *Auditing* (Vol. 30, Issue 4, pp. 101–128). Allen Press. https://doi.org/10.2308/ajpt-10145

Hartmann, B., Marton, J., & Söderström, R. (2018). The Improbability of Fraud in Accounting for Derivatives: A Case Study on the Boundaries of Financial Reporting Compliance. *European Accounting Review*, 1–29. https://doi.org/10.1080/09638180.2018.1494022

Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons, 13*(4), 365–383. https://doi.org/10.2308/acch.1999.13.4.365

Heyvaert, M., Maes, B., & Onghena, P. (2013). Mixed methods research synthesis: Definition, framework, and potential. *Quality and Quantity*, *47*(2), 659–676. https://doi.org/10.1007/s11135-011-9538-6

Heyvaert, M., Hannes, K., & Onghena, P. (2017). *Using mixed methods research synthesis for literature reviews: the mixed methods research synthesis approach*. Sage Publications.

Hogan, C. E., Rezaee, Z., Riley, R. A., & Velury, U. K. (2008). Financial Statement Fraud: Insights from the Academic Literature. *AUDITING: A Journal of Practice & Theory*, *27*(2), 231–252. https://doi.org/10.2308/aud.2008.27.2.231

Holderness, D. K. (2018). The effect of multiple auditors on deception detection in a client inquiry setting. *Behavioral Research in Accounting*, *30*(1), 39–58. https://doi.org/10.2308/bria-51909

Houqe, M. N., van Zijl, T., Dunstan, K., & Karim, A. K. M. W. (2012). The Effect of IFRS Adoption and Investor Protection on Earnings Quality Around the World. *International Journal of Accounting*, *47*(3), 333–355. https://doi.org/10.1016/j.intacc.2012.07.003

Hribar, P., Kravet, T., & Wilson, R. (2014). A new measure of accounting quality. *Review of Accounting Studies*, *19*(1), 506–538. https://doi.org/10.1007/s11142-013-9253-8

International Federation of Accountants (IFAC). (2009). International Standard on Auditing (ISA) 240: The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements. Retrieved from: https://www.ifac.org/system/files/downloads/a012-2010-iaasb-handbook-isa-240.pdf.

International Public Sector Fraud Forum (2020). "Guide to Understanding the Total Impact of Fraud", Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/866608/2377_The_Impact_of_Fraud_AW__4_.pdf.

Jackson, A. B., Rountree, B. R., & Sivaramakrishnan, K. (2017). Earnings co-movements and earnings manipulation. *Review of Accounting Studies*, *22*(3), 1340–1365. https://doi.org/10.1007/s11142-017-9411-5

Johnson, K. (2020). Luckin Coffee to pay $180 million penalty to settle accounting fraud charges -U.S. SEC. Reuters. Retrieved from: https://www.reuters.com/article/us-usa-sec-luckincoffee-idUSKBN28Q34P.

Jones, M. J. (Ed.). (2011). *Creative accounting, fraud and international accounting standards*. John Wiley & Sons.

Kabir, H., & Laswad, F. (2015). The Impact of Improvements in Institutional Oversight on IFRS Accrual Quality in Europe. *Australian Accounting Review*, *25*(4), 428–444. https://doi.org/10.1111/auar.12084

Kaplan, S. E., Pany, K., Samuels, J. A., & Zhang, J. (2009). An Examination of the Effects of Procedural Safeguards on Intentions to Anonymously Report Fraud. *AUDITING: A Journal of Practice & Theory*, *28*(2), 273–288. https://doi.org/10.2308/aud.2009.28.2.273

Kaplan, S. E., & Williams, D. D. (2013). Do going concern audit reports protect auditors from litigation? A simultaneous equations approach. *Accounting Review*, *88*(1), 199–232. https://doi.org/10.2308/accr-50279

Kinney Jr., W. R., Palmrose, Z.-V., & Scholz, S. (2004). Auditor independence, non-audit services, and restatements: Was the U.S. government right? *Journal of Accounting Research*, *42*(3), 561–588. https://doi.org/10.1111/j.1475-679X.2004.t01-1-00141.x

Knechel, W. R., & Sharma, D. S. (2012). Auditor-provided nonaudit services and audit effectiveness and efficiency: Evidence from pre- and post-SOX audit report lags. *Auditing*, *31*(4), 85–114. https://doi.org/10.2308/ajpt-10298

Koh, K., Rajgopal, S., & Srinivasan, S. (2013). Non-audit services and financial reporting quality: Evidence from 1978 to 1980. *Review of Accounting Studies*, *18*(1), 1–33. https://doi.org/10.1007/s11142-012-9187-6

Kravet, T., & Shevlin, T. (2010). Accounting restatements and information risk. *Review of Accounting Studies*, *15*(2), 264–294. https://doi.org/10.1007/s11142-009-9103-x

Lauck, J. R., Perreault, S. J., Rakestraw, J. R., & Wainberg, J. S. (2020). Strategic audit inquiry: The impact of timing and the promotion of statutory protections on client fraud disclosures. *Accounting Horizons*, *34*(3), 153–167. https://doi.org/10.2308/horizons-18-101

Lawson, B. P., Martin, G. S., Muriel, L., & Wilkins, M. S. (2019). How do auditors respond to FCPA risk? *Auditing*, *38*(4), 177–200. https://doi.org/10.2308/ajpt-52390

Leng, F., Feroz, E. H., Cao, Z., & Davalos, S. V. (2011). The Long-Term Performance and Failure Risk of Firms Cited in the US SEC's Accounting and Auditing Enforcement Releases. *Journal of Business Finance and Accounting*, *38*(7–8), 813–841. https://doi.org/10.1111/j.1468-5957.2011.02249.x

Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: an international comparison. *Journal of Financial Economics*, *69*(3), 505–527. https://doi.org/10.1016/S0304-405X(03)00121-1

Leventis, S. (2018). An empirical test of SEC enforcement in the audit market. *Journal of International Accounting, Auditing and Taxation*, *30*, 106–116. https://doi.org/10.1016/j.intaccaudtax.2017.12.007

Leventis, S., & Humphrey, C. (2021). Special section editorial: Enforcement of financial reporting. In *Accounting and Business Research* (Vol. 51, Issue 3, pp. 237–245). Routledge. https://doi.org/10.1080/00014788.2021.1891655

Liu, L.-L., Raghunandan, K., & Rama, D. (2009). Financial restatements and shareholder ratifications of the auditor. *Auditing*, *28*(1), 225–240. https://doi.org/10.2308/aud.2009.28.1.225

Lobo, G. J., & Zhao, Y. (2013). Relation between Audit Effort and Financial Report Misstatements: Evidence from Quarterly and Annual Restatements. *The Accounting Review*, *88*(4), 1385–1412. https://doi.org/10.2308/accr-50440

Lyon, J. D., & Maher, M. W. (2005). The importance of business risk in setting audit fees: Evidence from cases of client misconduct. *Journal of Accounting Research*, *43*(1), 133–151. https://doi.org/10.1111/j.1475-679x.2005.00165.x

Markelevich, A., & Rosner, R. L. (2013). Auditor fees and fraud firms. *Contemporary Accounting Research*, *30*(4), 1590–1625. https://doi.org/10.1111/1911-3846.12013

Mason, P., & Williams, B. (2020). Does IRS Monitoring Deter Managers From Committing Accounting Fraud? *Journal of Accounting, Auditing and Finance*. https://doi.org/10.1177/0148558X20939720

Matthews, D. (2005). London and County Securities: a case study in audit and regulatory failure. *Accounting, Auditing & Accountability Journal*, *18*(4), 518–536. https://doi.org/10.1108/09513570510609342

Mehta, M. N., & Zhao, W. (2020). Politician Careers and SEC enforcement against financial misconduct. *Journal of Accounting and Economics*, *69*(2–3). https://doi.org/10.1016/j.jacceco.2020.101302

Messier Jr., W. F., Kozloski, T. M., & Kochetova-Kozloski, N. (2010). An analysis of SEC and PCAOB enforcement actions against engagement quality reviewers. *Auditing*, *29*(2), 233–252. https://doi.org/10.2308/aud.2010.29.2.233

Messier, W. F., & Schmidt, M. (2018). Offsetting misstatements: The effect of misstatement distribution, quantitative materiality, and client pressure on auditors' judgments. *Accounting Review*, *93*(4), 335–357. https://doi.org/10.2308/accr-51954

Mock, T. J., & Turner, J. L. (2005). Auditor Identification of Fraud Risk Factors and their Impact on Audit Programs. *International Journal of Auditing*, *9*(1), 59–77. https://doi.org/10.1111/j.1099-1123.2005.00102.x

Morrison, M. A. (2004). Rush to judgement: The lynching of Arthur Anderson & Co. *Critical Perspectives on Accounting*, *15*(3), 335–375. https://doi.org/10.1016/j.cpa.2004.01.001

Nicholls, C. (2016). The impact of SEC investigations and accounting and auditing enforcement releases on firms' cost of equity capital. *Review of Quantitative Finance and Accounting*, *47*(1), 57–82. https://doi.org/10.1007/s11156-014-0494-9

Numata, S., & Takeda, F. (2010). Stock market reactions to audit failure in Japan: The case of Kanebo and ChuoAoyama. *The International Journal of Accounting*, *45*(2), 175–199. https://doi.org/10.1016/j.intacc.2010.04.004

O'Connell, B. (2001). An analysis of key issues arising from Professor A. J. Briloff's paper entitled, "garbage in/garbage out: A critique of fraudulent financial reporting: 1987-1997 (the COSO report, 1999) the SEC accounting regulatory process (AAERs)." *Critical Perspectives on Accounting*, *12*(2), 167–186. https://doi.org/10.1006/cpac.2001.0462

Palmrose, Z. V., & Scholz, S. (2004). The Circumstances and Legal Consequences of Non-GAAP Reporting: Evidence from Restatements. *Contemporary Accounting Research*, *21*(1), 139–180. https://doi.org/10.1506/wbf9-y69x-l4dx-jmv1

Patel, C., & Psaros, J. (2000). Perceptions of external auditors' independence: Some cross-cultural evidence. *British Accounting Review*, *32*(3), 311–338. https://doi.org/10.1006/bare.2000.0138

Patterson, E. R., & Smith, J. R. (2007). The effects of Sarbanes-Oxley on auditing and internal control strength. *Accounting Review*, *82*(2), 427–455. https://doi.org/10.2308/accr.2007.82.2.427

Perols, J. L., Bowen, R. M., Zimmermann, C., & Samba, B. (2017). Finding needles in a haystack: Using data analytics to improve fraud prediction. *Accounting Review*, *92*(2), 221–245. https://doi.org/10.2308/accr-51562

Perols, J. L., & Lougee, B. A. (2011). The relation between earnings management and financial statement fraud. *Advances in Accounting*, *27*(1), 39–53. https://doi.org/10.1016/j.adiac.2010.10.004

Pittman, J., & Zhao, Y. (2020). Debt Covenant Restriction, Financial Misreporting, and Auditor Monitoring*. *Contemporary Accounting Research*, *37*(4), 2145–2185. https://doi.org/10.1111/1911-3846.12579

Public Company Accounting Oversight Board (PCAOB). (2010a). Evaluating Audit Results. Auditing Standard No. 14. Retrieved from: https://pcaobus.org/oversight/standards/archived-standards/pre-reorganized-auditing-standards-interpretations/details/Auditing_Standard_14.

Public Company Accounting Oversight Board (PCAOB). (2010b). Identifying and Assessing the Risks of Material Misstatement. AS 2110. Retrieved from: https://pcaobus.org/oversight/standards/auditing-standards/details/AS2110.

Quagli, A., Avallone, F., Ramassa, P., & Di Fabio, C. (2021). Someone else's problem? The IFRS enforcement field in Europe. *Accounting and Business Research*, *51*(3), 246–270. https://doi.org/10.1080/00014788.2020.1802217

Raghunandan, K., Read, W. J., & Whisenant, J. S. (2003). Initial evidence on the association between nonaudit fees and restated financial statements. *Accounting Horizons*, *17*(3), 223–234. https://doi.org/10.2308/acch.2003.17.3.223

Reffett, A. B. (2010). Can identifying and investigating fraud risks increase auditors' liability? In *Accounting Review* (Vol. 85, Issue 6, pp. 2145–2167). Allen Press. https://doi.org/10.2308/accr.2010.85.6.2145

Reinstein, A., & McMillan, J. J. (2004). The Enron debacle: more than a perfect storm. *Critical Perspectives on Accounting*, *15*(6–7), 955–970. https://doi.org/10.1016/j.cpa.2003.08.006

Rezaee, Z. (2005). Causes, consequences, and deterence of financial statement fraud. *Critical Perspectives on Accounting*, *16*(3), 277–298. https://doi.org/10.1016/S1045-2354(03)00072-8

Romanus, R. N., Maher, J. J., & Fleming, D. M. (2008). Auditor industry specialization, auditor changes, and accounting restatements. *Accounting Horizons*, *22*(4), 389–413. https://doi.org/10.2308/acch.2008.22.4.389

Sandelowski, M., & Barroso, J. (2007). *Handbook for Synthesizing Qualitative Research*. Springer Publishing Company.

Schmidt, J. J. (2012). Perceived auditor independence and audit litigation: The role of nonaudit services fees. *Accounting Review*, *87*(3), 1033–1065. https://doi.org/10.2308/accr-10217

Scholz, S. (2008). The changing nature and consequences of public company financial restatements. The US Department of the Treasury. Retrieved from: https://www.lexissecuritiesmosaic.com/uploaded/ResourceCenter/FinancialRestatements_1997_2006.pdf.

Schroeder, M. 2001. SEC list of accounting-fraud probes grows. *Wall Street Journal*. July 6.

Sikka, P. (2001). Regulation of accountancy and the power of capital: Some observations. *Critical Perspectives on Accounting*, *12*(2), 199–211. https://doi.org/10.1006/cpac.2001.0466

Singer, Z., & Zhang, J. (2018). Auditor tenure and the timeliness of misstatement discovery. *Accounting Review*, *93*(2), 315–338. https://doi.org/10.2308/accr-51871

Skinner, D. J. (1997). Earnings disclosures and stockholder lawsuits. *Journal of Accounting and Economics*, *23*(3), 249–282. https://doi.org/10.1016/S0165-4101(97)00010-4

Srinivasan, S., & Richardson, S. A. (2005). Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members. *Journal of Accounting Research*, *43*(2), 291–334. https://doi.org/10.1111/j.1475-679x.2005.00172.x

Staubus, G. J. (2005). Ethics failures in corporate financial reporting. *Journal of Business Ethics*, *57*(1), 5–15. https://doi.org/10.1007/s10551-004-3811-8

Subramanyam, K. R. (1996). The pricing of discretionary accruals. *Journal of Accounting and Economics*, *22*(1–3), 249–281. https://doi.org/10.1016/S0165-4101(96)00434-X

Sun, J., Wang, J., Kent, P., & Qi, B. (2020). Does sharing the same network auditor in group affiliated firms affect audit quality? *Journal of Accounting and Public Policy*, *39*(1). https://doi.org/10.1016/j.jaccpubpol.2019.106711

Svanström, T. (2013). Non-audit Services and Audit Quality: Evidence from Private Firms. *European Accounting Review*, *22*(2), 337–366. https://doi.org/10.1080/09638180.2012.706398

Tan, C. E. L., & Young, S. M. (2015). An analysis of "Little r" restatements. *Accounting Horizons*, *29*(3), 667–693. https://doi.org/10.2308/acch-51104

Tanyi, P., & Litt, B. (2017). The Unintended Consequences of the Frequency of PCAOB Inspection. *Journal of Business Finance and Accounting*, *44*(1–2), 116–153. https://doi.org/10.1111/jbfa.12230

Toms, S. (2019). Financial scandals: a historical overview. *Accounting and Business Research*, *49*(5), 477–499. https://doi.org/10.1080/00014788.2019.1610591

Trompeter, G. M., Carpenter, T. D., Desai, N., Jones, K. L., & Riley, R. A. (2013). A synthesis of fraud-related research. *Auditing*, *32*(SUPPL.1), 287–321. https://doi.org/10.2308/ajpt-50360

Trompeter, G. M., Carpenter, T. D., Jones, K. L., & Riley, R. A. (2014). Insights for Research and Practice: What We Learn about Fraud from Other Disciplines. *Accounting Horizons*, *28*(4), 769–804. https://doi.org/10.2308/acch-50816

Velte, P. (2021). The link between corporate governance and corporate financial misconduct. A review of archival studies and implications for future research. *Management Review Quarterly*, 1–59. https://doi.org/10.1007/s11301-021-00244-7

Victoravich, L. M. (2010). The mediated effect of SAS No. 99 and Sarbanes–Oxley officer certification on jurors' evaluation of auditor liability. *Journal of Accounting and Public Policy*, *29*(6), 559–577. https://doi.org/10.1016/j.jaccpubpol.2010.09.006

Wilks, T. J., & Zimbelman, M. F. (2004). Decomposition of fraud-risk assessments and auditors' sensitivity to fraud cues. *Contemporary Accounting Research*, *21*(3), 719–745. https://doi.org/10.1506/HGXP-4DBH-59D1-3FHJ

Young, S. M., & Peng, E. Y. (2013). An Analysis of Accounting Frauds and the Timing of Analyst Coverage Decisions and Recommendation Revisions: Evidence from the US. *Journal of Business Finance and Accounting*, *40*(3–4), 399–437. https://doi.org/10.1111/jbfa.12020

Zhang, J., Pany, K., & Reckers, P. M. J. (2013). Under Which Conditions are Whistleblowing "Best Practices" Best? *AUDITING: A Journal of Practice & Theory*, *32*(3), 171–181. https://doi.org/10.2308/ajpt-50451

Zhang, Y. (Elli), Hay, D., & Holm, C. (2016). Non-audit services and auditor independence: Norwegian evidence. *Cogent Business & Management*, *3*(1), 1215223. https://doi.org/10.1080/23311975.2016.1215223

Zhao, Y., Bedard, J. C., & Hoitash, R. (2017). SOX 404, auditor effort, and the prevention of financial report misstatements. *Auditing*, *36*(4), 151–177. https://doi.org/10.2308/ajpt-51687

Appendix A. List of the keywords used to apply the MMRS inclusion criteria

FRAUD	AUDIT	ENFORCEMENT
Fraud*	Audit*	Enforce*
Misstatement	AAER	Court
Misreporting		AAER
AAER		Authority
Violation		SEC
Restatement		Regulat*
Misconduct		Monitoring
Wrongdoing		Supervisor*
Decept*		Commission
Deviance		Law
Deviant		Act
Crime		
Criminal		
Guilt*		

Appendix B. List of the papers included in the literature review (from the oldest to the newest and, by each year, in alphabetical order of the authors)

N.	Author(s)	Year	Title	Journal
1	O'Connell B.	2001	An analysis of key issues arising from Professor A. J. Briloff's paper entitled, "garbage in/garbage out: A critique of fraudulent financial reporting: 1987-1997 (the COSO report, 1999) the SEC accounting regulatory process (AAERs)"	Critical Perspectives on Accounting
2	Sikka P.	2001	Regulation of accountancy and the power of capital: Some observations	Critical Perspectives on Accounting
3	Raghunandan K., Read W.J., Whisenant J.S.	2003	Initial evidence on the association between nonaudit fees and restated financial statements	Accounting Horizons
4	Carcello J.V., Nagy A.L.	2004	Audit firm tenure and fraudulent financial reporting	Auditing: A Journal of Practice & Theory
5	Kinney Jr. W.R., Palmrose Z.-V., Scholz S.	2004	Auditor independence, non-audit services, and restatements: Was the U.S. government right?	Journal of Accounting Research
6	Morrison M.A.	2004	Rush to judgement: The lynching of Arthur Anderson & Co	Critical Perspectives on Accounting
7	Reinstein A., McMillan J.J.	2004	The Enron debacle: More than a perfect storm	Critical Perspectives on Accounting
8	Wilks T.J., Zimbelman M.F.	2004	Decomposition of fraud-risk assessments and auditors' sensitivity to fraud cues	Contemporary Accounting Research
9	Chen G., Firth M., Gao D.N., Rui O.M.	2005	Is China's securities regulatory agency a toothless tiger? Evidence from enforcement actions	Journal of Accounting and Public Policy
10	Farber D.B.	2005	Restoring trust after fraud: Does corporate governance matter?	The Accounting Review
11	Lyon J.D., Maher M.W.	2005	The importance of business risk in setting audit fees: Evidence from cases of client misconduct	Journal of Accounting Research
12	Matthews D.	2005	London and County Securities: A case study in audit and regulatory failure	Accounting, Auditing and

				Accountability Journal
13	Rezaee Z.	2005	Causes, consequences, and deterrence of financial statement fraud	Critical Perspectives on Accounting
14	Srinivasan S., Richardson S.A.	2005	Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members	Journal of Accounting Research
15	Ashbaugh-Skaife H., Collins D.W., Kinney Jr. W.R.	2007	The discovery and reporting of internal control deficiencies prior to SOX-mandated audits	Journal of Accounting and Economics
16	Gavious I.	2007	Alternative perspectives to deal with auditors' agency problem	Critical Perspectives on Accounting
17	Patterson E.R., Smith J.R.	2007	The effects of Sarbanes-Oxley on auditing and internal control strength	The Accounting Review
18	Caster P., Elder R.J., Janvrin D.J.	2008	A summary of research and enforcement release evidence on confirmation use and effectiveness	Auditing: A Journal of Practice & Theory
19	Romanus R.N., Maher J.J., Fleming D.M.	2008	Auditor industry specialization, auditor changes, and accounting restatements	Accounting Horizons
20	Kaplan S.E., Pany K., Samuels J.A., Zhang J.	2009	An examination of the effects of procedural safeguards on intentions to anonymously report fraud	Auditing: A Journal of Practice & Theory
21	Liu L.L., Raghunandan K., Rama D.	2009	Financial restatements and shareholder ratifications of the auditor	Auditing: A Journal of Practice & Theory
22	Messier Jr. W.F., Kozloski T.M., Kochetova-Kozloski N.	2010	An analysis of SEC and PCAOB enforcement actions against engagement quality reviewers	Auditing: A Journal of Practice & Theory
23	Numata S., Takeda F.	2010	Stock market reactions to audit failure in Japan: The case of Kanebo and ChuoAoyama	International Journal of Accounting
24	Victoravich L.M.	2010	The mediated effect of SAS No. 99 and Sarbanes-Oxley officer certification on jurors' evaluation of auditor liability	Journal of Accounting and Public Policy
25	Burton F.G., Wilks T.J., Zimbelman M.F.	2011	The impact of audit penalty distributions on the detection and frequency of fraudulent reporting	Review of Accounting Studies

26	Feng M., Ge W., Luo S., Shevlin T.	2011	Why do CFOs become involved in material accounting manipulations?	Journal of Accounting and Economics
27	Leng F., Feroz E.H., Cao Z., Davalos S.V.	2011	The Long-Term Performance and Failure Risk of Firms Cited in the US SEC's Accounting and Auditing Enforcement Releases	Journal of Business Finance and Accounting
28	Blankley A.I., Hurtt D.N., MacGregor J.E.	2012	Abnormal audit fees and restatements	Auditing: A Journal of Practice & Theory
29	Chan L.H., Chen K.C.W., Chen T.-Y., Yu Y.	2012	The effects of firm-initiated clawback provisions on earnings quality and auditor behavior	Journal of Accounting and Economics
30	Knechel R.W., Sharma D.S.	2012	Auditor-provided nonaudit services and audit effectiveness and efficiency: Evidence from pre- and post-SOX audit report lags	Auditing: A Journal of Practice & Theory
31	Schmidt J.J.	2012	Perceived auditor independence and audit litigation: The role of nonaudit services fees	The Accounting Review
32	Brink A.G., Lowe D.J., Victoravich L.M.	2013	The effect of evidence strength and internal rewards on intentions to report fraud in the dodd-frank regulatory environment	Auditing: A Journal of Practice & Theory
33	Cassell C.A., Dreher L.M., Myers L.A.	2013	Reviewing the SEC's review process: 10-K comment letters and the cost of remediation	The Accounting Review
34	Francis J.R., Michas P.N., Yu M.D.	2013	Office size of big 4 auditors and client restatements	Contemporary Accounting Research
35	Markelevich A., Rosner R.L.	2013	Auditor fees and fraud firms	Contemporary Accounting Research
36	Young S.M., Peng E.Y.	2013	An Analysis of Accounting Frauds and the Timing of Analyst Coverage Decisions and Recommendation Revisions: Evidence from the US	Journal of Business Finance and Accounting
37	Zhang J., Pany K., Reckers P.M.J.	2013	Under which conditions are whistleblowing "best practices" best?	Auditing: A Journal of Practice & Theory
38	Files R., Sharp N.Y., Thompson A.M.	2014	Empirical evidence on repeat restatements	Accounting Horizons

39	Hribar P., Kravet T., Wilson R.	2014	A new measure of accounting quality	Review of Accounting Studies
40	Boyle D.M., DeZoort F.T., Hermanson D.R.	2015	The effect of alternative fraud model use on auditors' fraud risk judgments	Journal of Accounting and Public Policy
41	Tan C.E.L., Young S.M.	2015	An analysis of "Little r" restatements	Accounting Horizons
42	Dennis S.A., Johnstone K.M.	2016	A field survey of contemporary brainstorming practices	Accounting Horizons
43	Eutsler J., Nickell E.B., Robb S.W.G.	2016	Fraud risk awareness and the likelihood of audit enforcement action	Accounting Horizons
44	Hamilton E.L.	2016	Evaluating the intentionality of identified misstatements: How perspective can help auditors in distinguishing errors from fraud	Auditing: A Journal of Practice & Theory
45	Berger L., Perreault S., Wainberg J.	2017	Hijacking the moral imperative: How financial incentives can discourage whistleblower reporting	Auditing: A Journal of Practice & Theory
46	Jackson A.B., Rountree B.R., Sivaramakrishnan K.	2017	Earnings co-movements and earnings manipulation	Review of Accounting Studies
47	Perols J.L., Bowen R.M., Zimmermann C., Samba B.	2017	Finding needles in a haystack: Using data analytics to improve fraud prediction	The Accounting Review
48	Zhao Y., Bedard J.C., Hoitash R.	2017	SOX 404, auditor effort, and the prevention of financial report misstatements	Auditing: A Journal of Practice & Theory
49	Holderness D.K., Jr.	2018	The effect of multiple auditors on deception detection in a client inquiry setting	Behavioral Research in Accounting
50	Messier W.F., Schmidt M.	2018	Offsetting misstatements: The effect of misstatement distribution, quantitative materiality, and client pressure on auditors' judgments	The Accounting Review
51	Singer Z., Zhang J.	2018	Auditor tenure and the timeliness of misstatement discovery	The Accounting Review
52	Asare S.K., van Buuren J.P., Majoor B.	2019	The joint role of auditors' and auditees' incentives and disincentives in the resolution of detected misstatements	Auditing: A Journal of Practice & Theory

53	Glendening M., Mauldin E.G., Shaw K.W.	2019	Determinants and consequences of quantitative critical accounting estimate disclosures	The Accounting Review
54	Lawson B.P., Martin G.S., Muriel L., Wilkins M.S.	2019	How do auditors respond to FCPA risk?	Auditing: A Journal of Practice & Theory
55	Toms S.	2019	Financial scandals: a historical overview	Accounting and Business Research
56	Brown T., Majors T.M., Peecher M.E.	2020	Evidence on how different interventions affect juror assessment of auditor legal culpability and responsibility for damages after auditor failure to detect fraud	Accounting, Organizations and Society
57	Burke J.J., Hoitash R., Hoitash U.	2020	The Use and Characteristics of Foreign Component Auditors in U.S. Multinational Audits: Insights from Form AP Disclosures*	Contemporary Accounting Research
58	Cao J., Luo X., Zhang W.	2020	Corporate employment, red flags, and audit effort	Journal of Accounting and Public Policy
59	Chakrabarty B., Duellman S., Hyman M.A.	2020	A new approach to estimating the relation between audit fees and financial misconduct	Accounting Horizons
60	Lauck J.R., Perreault S.J., Rakestraw J.R., Wainberg J.S.	2020	Strategic audit inquiry: The impact of timing and the promotion of statutory protections on client fraud disclosures	Accounting Horizons
61	Mason P., Williams B.	2020	Does IRS Monitoring Deter Managers From Committing Accounting Fraud?	Journal of Accounting, Auditing and Finance
62	Mehta M.N., Zhao W.	2020	Politician Careers and SEC enforcement against financial misconduct	Journal of Accounting and Economics
63	Pittman J., Zhao Y.	2020	Debt Covenant Restriction, Financial Misreporting, and Auditor Monitoring*	Contemporary Accounting Research

64	Sun J., Wang J., Kent P., Qi B.	2020	Does sharing the same network auditor in group affiliated firms affect audit quality?	Journal of Accounting and Public Policy

Table 1. Descriptive information

Panel A: Papers included in the literature review by journals		
Journal	**N.**	**%**
Auditing: A Journal of Practice & Theory	14	21.88%
Accounting Horizons	8	12.50%
The Accounting Review	8	12.50%
Critical Perspectives on Accounting	6	9.38%
Contemporary Accounting Research	5	7.81%
Journal of Accounting and Public Policy	5	7.81%
Journal of Accounting and Economics	4	6.25%
Journal of Accounting Research	3	4.69%
Review of Accounting Studies	3	4.69%
Journal of Business, Finance and Accounting	2	3.13%
Accounting and Business Research	1	1.56%
Accounting, Auditing and Accountability Journal	1	1.56%
Accounting, Organizations and Society	1	1.56%
Behavioral Research in Accounting	1	1.56%
International Journal of Accounting	1	1.56%
Journal of Accounting, Auditing and Finance	1	1.56%
TOTAL	**64**	**100%**

Table 1 (cont'd). Descriptive information

Panel B: Papers included in the literature review by year		
Year	**N.**	**%**
2001	2	3.13%
2003	1	1.55%
2004	5	7.81%
2005	6	9.38%
2007	3	4.69%
2008	2	3.13%
2009	2	3.13%
2010	3	4.69%
2011	3	4.69%
2012	4	6.24%
2013	6	9.38%
2014	2	3.13%
2015	2	3.13%
2016	3	4.69%
2017	4	6.24%
2018	3	4.69%
2019	4	6.24%
2020	9	14.06%
TOTAL	**64**	**100%**

Figure 1. The fraud process and the roles of auditing and enforcers