

What Do We Know About Audit Failure So Far?

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Abstract

This article presents a comprehensive review of academic research pertaining to audit failure. This literature review is based on auditing-related articles published in leading journals during the 1976-2019 period. We organize our review around three main groups, namely (a) proxy measures of audit failure, (b) causes of audit failure, and (c) effects of audit failure. We observe that the literature uses a variety of proxies to capture audit failure, such as auditors' going concern opinions (GCOs), material misstatements, auditor communication, financial reporting quality, and perceptions. We find that there are three signals of audit failure: non-issuance of a GCO prior to a business failure, material misstatements in the last audited financial statements, and violation of the code issued by regulators. We find that audit failures reduce clients' market value and the auditor's ability to retain clients. There is also evidence that larger penalties for audit failure result in higher audit fees and overinvestment in audit effort and that increased liability decreases audit failure and reduces auditor shirking. A related objective of this paper is to shed light on audit failure by Big N and non-Big N auditors separately. We observe that the audit failure rate is lower for Big N auditors than for non-Big N auditors. Our findings have implications for government policies, regulators, auditors, investors, and academics.

Keywords: Audit failure, economic cycle, rule-checking mentality, going concern opinion, financial misstatement, and peer review report

1. INTRODUCTION

The US Securities and Exchange Act of 1934 created the Securities and Exchange Commission (SEC). Among other functions, the SEC was given authority for the promulgation of accounting standards as well as auditor oversight functions. However, it is true that auditing rules and standards have strengthened over time. Audit failure is a serious issue in the accounting field. Most failures happened around the end of the

twentieth and beginning of the twenty-first centuries. An audit failure occurs when auditors mistakenly issue an audit report that a firm's financial statements are correct when they include errors or fraud. Until the issue of audit failure was identified and investigated, it was attributed to auditors' wrongdoing. From a generally accepted accounting principles (GAAP) perspective, it means that the auditor did not follow GAAP (Francis, 2011).

The research on audit quality and audit report has a long history. As we all know, audit quality is the core of audit market since high quality audit can improve the confidence of stakeholders. However, due to some auditing scandals recently (Kizil & Kaşbaşı), the public trust in audit reports has declined. Therefore, we are determined to write this paper for have a better understanding of why these audit failures happened and how can we improve the audit quality in the future. This paper will contribute to the research of auditing and emphasize on audit failure.

The objective of this study is to conduct a comprehensive literature review of the academic research pertaining to audit failure. Understanding audit failure is important because only by understanding what causes audit failure, we can find a solution for it. A better understanding can also help tackle its effects, such as restoring confidence in auditing. Furthermore, with a deeper understanding, we can provide our own thoughts and ideas about it.

We approached the literature systematically. We searched for articles through various resources including journal databases, libraries, and professional accounting websites. To find target articles, we used terms such as audit failure, economic cycle, rule-checking mentality, going concern opinion (GCO), financial misstatement, and peer review report. We also set criteria to select the articles. For example, we reviewed manuscripts published from 1976 to 2019 in leading journals related to auditing. As studies in this area are abundant, several were found and selected for analysis. The availability of prior studies helped us choose academic research pertaining to audit failure. We organize our review around three main groups, namely (a) proxy measures of audit failure, (b) causes of audit failure, and (c) effects of audit failure.

We observe that the literature uses many proxies to capture audit failure. Some belong to audit outputs, such as GCOs. Audit outputs fall into four categories: material misstatements, auditor communication, financial reporting quality, and perceptions. We find that auditing failure is caused by two main factors. One factor is economic cycles, which put managers under heavy peer and financial pressure to achieve expectations. The other is a rule-checking mentality: financial reporting is guided by rules, not principle, so complying with GAAP rules can allow some reports to be accurate at the rule-level yet hide the true picture. We also observe three main signals that cause audit failure: non-issuance of a GCO prior to a business failure, material misstatements in the last audited financial statements, and violation of the code. We find that audit failures reduce clients' market value and auditors' ability to retain clients. There is also evidence that larger penalties for audit failure result in higher audit fees and overinvestment in auditing effort, and that increased liability decreases audit failure and reduces auditor

shirking. A related objective of this paper is to shed light on audit failure by Big N and non-Big N auditors separately. We observe that the audit failure rate appears to be lower for Big N than for non-Big N auditors.

Our study contributes to the literature in the following ways. First, we review manuscripts published during 1976-2019, thereby presenting a comprehensive review of the literature pertaining to audit failure. Second, we include studies conducted in various international settings, such as the United States, the European Union (EU), Australia, New Zealand, China, and Japan. In light of increasing global efforts to enhance audit quality, avoid future accounting scandals, and restore trust in the auditing profession, an updated literature review with an international perspective is warranted. Third, our paper sheds light on audit failure by Big N and non-Big N auditors separately. Finally, we summarize the studies' findings and offer suggestions for future research from different perspectives, which will be useful for academicians, regulators, investors, auditors, and government policymakers.

The remainder of this paper is organized as follows. In Section 2, we provide a brief introduction of some notorious auditing failure cases to provide the full picture for readers. Section 3 consider the proxies used to measure audit failure. In Section 4, we describe the causes of audit failure. In Section 5, we describe the effects of audit failure. Section 6 offers suggestions for future research followed by the theoretical implications of our review in Section 7. Section 8 concludes the paper.

2. BACKGROUND

Two audit failure cases are critical to this topic because they were so influential that they resulted in the Sarbanes-Oxley legislation, in which the U.S. legislature attempted to impose ethical behavior and limit the incidence of new reporting problems. The first case is Enron, WorldCom, and Arthur Andersen, and the second case is Kanebo and ChuoAoyama.

Enron, WorldCom, and Arthur Andersen

We can learn a lot from the most famous auditing failure event: Enron. During the 1990s, Enron grew from a relatively small domestic Texas energy company to become one of the largest U.S. corporations with an array of energy trading and utility operations worldwide. It was one of the largest companies by revenue in the U.S., and at one point its market value reached \$70 billion (Unerman & O'Dwyer, 2004). However, in October 2001, Enron shocked the stock market by announcing an accounting adjustment that resulted in a \$618 million third-quarter loss and a decrease in its reported net worth of about \$1.2 billion (BusinessWeek, 2001; Hill et al., 2001; WSJE, 2001).

Over the next few weeks, radical earnings management practices, including a Byzantine off-balance sheet system that hid large-scale losses and liabilities, were further revealed. Furthermore, its revenue and liabilities had incorrect valuations. Nevertheless, Arthur Andersen, Enron's auditor, did not reveal these problems in their audit report. In the subsequent investigation, the independence of Andersen became suspect because the firm also provided important non-audit services. It provided tax services and outsourcing for some internal audit functions for additional fees (Chaney & Philipich,

2002). It was also revealed that Andersen played an active and central role in designing the radical earnings management technology adopted by Enron. Andersen generated more fees in 2000 from selling consulting services to Enron (\$27 million) than from auditing the company's accounts (\$25 million), thereby provoking accusations of a conflict of interest (McLean, 2002; Sikka, 2002).

Had Andersen provided more professional and standardized audit procedures, Enron may not have announced bankruptcy with outstanding liabilities ranging up to \$55 billion within two months (Unerman & O'Dwyer, 2004). If Anderson's audit failures at Enron made non-experts suspicious of the credibility of expert systems, the subsequent accounting fraud revelations in June 2002 at WorldCom deepened public panic and led to widespread mistrust. On July 21, 2002, WorldCom surpassed the bankruptcy record set less than eight months earlier by Enron. This new largest ever bankruptcy followed revelations that Andersen had audited the company and that WorldCom had fraudulently capitalized \$3.85 billion of revenue expenditures as capital expenditures, which some labeled "the largest accounting fraud in history" (Unerman & O'Dwyer, 2004).

Kanebo and ChuoAoyama

Another case occurred in Japan, which was comparable in size and social influence to the Enron scandal. Kanebo was one of the largest cosmetics and textiles manufacturers in Japan. ChuoAoyama was a prominent audit company in Japan. It provided audit services for many well-known companies such as Toyota and Sony. ChuoAoyamawas part of the PricewaterhouseCoopers global network. The amount involved in this accounting fraud was a record high: over five fiscal years (FYs) ending in March 2004, it reached 215 billion yen. The objective of the fraud was to avoid bankruptcy because Kanebo had excessive liabilities, amounting to approximately 250 billion yen in FY 1998. (Numata & Takeda, 2010).

Kanebo's report shows that its former executives had committed accounting fraud. The company also acknowledged that it made a failed financial statement. It overstated earnings by about 200 billion yen because of its high liabilities. Ultimately, the appropriate people were punished by the government. Although ChuoAoyama itself did not receive a criminal charge, the relevant people were arrested, and the statutory auditing service of ChuoAoyama was stopped for months (Skinner & Srinivasan, 2012). Further, the announcement of poor audit quality significantly decreased the stock prices of ChuoAoyama's clients and, to a lesser extent, the stock prices of the other Big 4 auditors' clients (Numata& Takeda, 2010).

3. PROXY MEASURES OF AUDIT FAILURE

Audit failure

According to DeAngelo's (1981) definition of audit quality, "the market-assessed joint probability that a given auditor will both discover a breach in a client's accounting system and report the breach," an audit failure occurs when the auditor is unable to discover a breach in the client's accounting system or discovers a breach but fails to report it (Francis, 2011). There is abundant literature about auditor litigation, especially

for the U.S. context. Auditor litigation can be an indication of audit failure, and Big N auditors typically experience less litigation than non-Big N auditors (Palmrose, 1988). The risk of auditor litigation is increased by corporate bankruptcy (St. Pierre & Andersen, 1984). However, in some places, such as New Zealand, litigation is not common (Kabir, Su, & Rahman, 2016). Therefore, the absence of audit litigation cannot be regarded as an absence of audit failure.

Regarding the cost of audit failure in public companies, Chaney and Philipich (2002) tested the Enron audit failure's influence on the reputation of its auditor, Arthur Andersen, and the negative effect on Andersen's other clients because of the Enron audit failure. Significantly, Andersen's Houston office, which audited Enron, saw a steeper decline in abnormal returns of its clients than did clients of other Andersen offices. In addition, Numata and Takeda (2010) observed that clients of ChuoAoyama, which audited Kanebo, the Japanese cosmetics maker, and other Big N auditors suffered a sharp fall in the stock market after that fraud was discovered. In addition, the report noted that a partner of Zhongtianqin (ZTQ), China's largest audit firm, had suffered a loss of client reputation and was denied future employment after discovering that Yinguangxia (YGX), its audit client, had manipulated its profits (He et al., 2015).

Proxy measures of audit failure

We observe that the literature uses a variety of proxies to capture audit failure. Some belong to outputs of the audit process, such as auditors' going concern opinions. Audit outputs fall into four categories: material misstatements, auditor communication, financial reporting quality, and perceptions (Figure 1). According to DeFond and Zhang (2014), material misstatements or less egregious earnings management, such as high discretionary accruals (DAC), are the proxies that capture more egregious audit failures. We find that two misstatement measures, restatements and Accounting and Auditing Enforcement Releases (AAERs), are the most commonly used in the audit failure literature (e.g., Lennox & Pittman, 2010; Kinney Jr. et al., 2004; Archambeault et al., 2008; Chin & Chi, 2009; Francis et al., 2013).

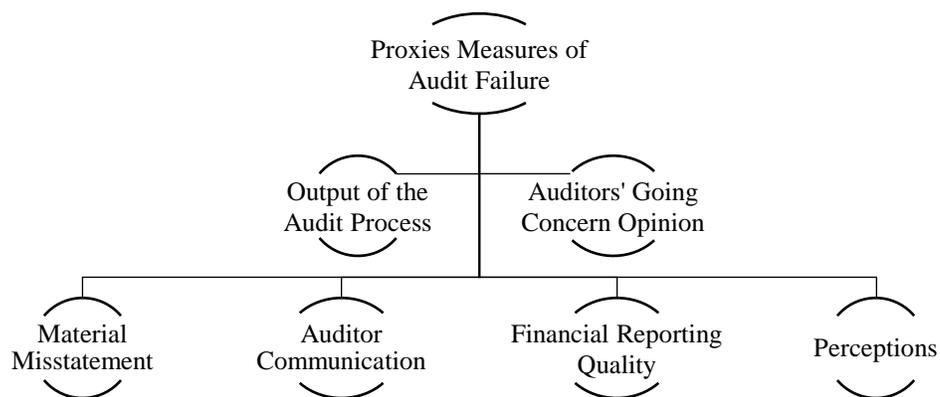


Figure 1
Proxy measures of audit failure

Audit Failure by Big N and Non-Big N Auditors Separately

In this section, we review the literature to shed light on audit failure by Big N and non-Big N auditors separately. We observe that the audit failure rate (AFR) is lower for Big N auditors than for non-Big N auditors. Tritschler (2013) finds that big audit firms provide safer audits for their clients. Kabir, Su, and Rahman (2016) also find that the AFR is lower for Big N auditors than for non-Big N auditors. Palmrose (1988) finds that Big N auditors experience less litigation than non-Big N auditors, which also suggests that the AFR is lower for Big N auditors than for non-Big N auditors. On the other hand, Lawrence et al. (2011) explored if the difference in auditing can be attributed to clients. According to their experiments using matching model, there is a big distinction between Big 4 and non-Big 4 reflecting client features. Their experiments and conclusions are based on three predetermined proxies including: discretionary accruals, the ex ante cost of capital and the preciousness of analysts' forecast. Similar as Lawrence et al. (2011), DeFond's (2017) team are also interested in the effect of client characteristics on audit quality. They use propensity score matching method to try to reduce the bias and confounding variables so that their results can be convincing. After their random combination of PSM design choices, they find that most of those design choices support Big N's audit quality. In another paper written by John (Xuefeng) Jiang (2019) also used contrast method in their research and the paper is to find if the audit quality improves after non-Big N firms are acquired by Big N. There are 331 surveyed firms that change their audit firm to Big N due to the merge. Results from their compare show a progress in those firms' audit quality. However, if the merge occurs between non-Big Ns, there isn't such effect. Researchers contribute this difference to Big N auditors' general capabilities rather than industry related knowledge. Blokdiik et al. (2006) investigate the audit quality between Big 4 and non-Big 4 in production characteristics. They find that the difference in audit quality between Big 4 and non-Big 4 can be attributed to their production features, especially the allocation of audit time and effort.

In summary, a variety of proxies to capture audit failure. Audit outputs fall into four categories: material misstatements, auditor communication, financial reporting quality, and perceptions. Compared with the audit failure by Big N and non-Big N auditors, we can find that audit failure rate (AFR) is lower for Big N auditors than for non-Big N auditors. Some scholars suspicious if the difference in auditing can be attributed to clients, and they also interested in the effect of client characteristics on audit quality. In their research, they found that most of those design choices support Big N's audit quality. Also, the audit quality improves after non-Big N firms are acquired by Big N, while the effect does not occur if the merge occurs between non-Big Ns, meaning the difference in audit quality between Big 4 and non-Big 4 can be attributed to their production features, especially the allocation of audit time and effort.

4. WHAT CAUSES AUDIT FAILURE?

In this section, we review previous research that investigated the factors that cause audit failure. We classify these factors into two groups. The first groups are factors that researchers clearly identified as causing audit failure, and the second groups are indicators that have a relationship with the likelihood of audit failure (Figure 2).

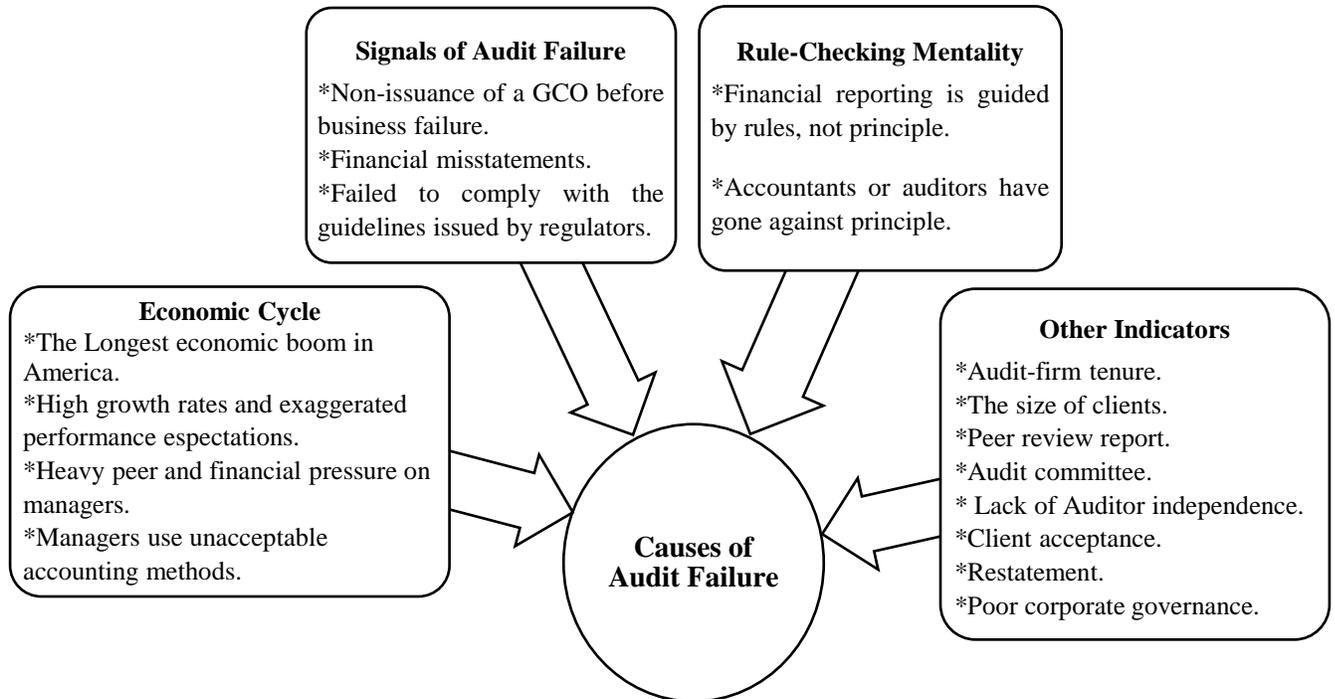


Figure 2
Causes of audit failure

Economic Cycle

One hypothesis is that the economic cycle is a major factor in audit failure (Ball, 2009). The longest economic boom in American history ended in 2001. During the boom, high growth rates and exaggerated performance expectations placed heavy peer and financial pressure on managers to pursue strong revenue and market share growth. Then, company monitors began to think that such a high growth rate is normal. After the boom busted, many managers could not meet expectations, so some tried to remedy their poor performance by using unacceptable accounting methods or fake transactions. Therefore, after a boom-bust economic cycle, the auditing profession is always bitterly criticized (DeFond & Francis, 2005). Similarly, Leone et al. (2013) investigates how auditor will behave when the economic environment are becoming flourish. To investigate their behaviors, they study going-concern opinions during the time when Internet firms prepare to be listed. During this boom in transaction orders, Big N were less likely to give going-concern opinions. Reasons are found relationships with clients and auditor independence. It means that to some extent Big N audit quality decreased during economic overheating. On the contrary, Ettredge et al. (2014) tend to research how auditors perform when the macroeconomic are under recession during 2007-2009. They calculate audit fee pressure metrics to judge the auditors' performance. The base standards are set as audit fees paid in 2008 when there isn't a recession. Finally they conclude that auditors are compromised to clients' fees. Also, fee pressure has relationship with the decrease of audit quality at the same period. At the same time, Sikka (2009) seeks to probe the audit industries under financial crisis. During that time, many companies are found cheating, so the whole market tends to question the truthfulness of unqualified audit opinions issued. It also points out that relevant auditing

administration tend to cope this trust crisis via modifying standards rather than disclosing part of the auditing work. That would be a myopic behavior which cannot eliminate root reasons.

Rule-Checking Mentality

Rule-checking mentality can be another factor that causes audit failure (Ball, 2009). In the accounting profession, a rule-checking mentality was all the rage during 2001 to 2002. From this perspective, financial reporting is guided by rules, not principle, and it is sufficient to comply with GAAP, which is rule-based. In Enron's case, investors were misguided by financial reports that technically complied with GAAP, but did not reflect the economic substance of transactions. However, to provide a fair and accurate view of a corporation's condition, accounting professionals should follow the "substance over form" principle that legal and rule aspects can be disregarded if more relevant and useful information could be presented to users of the financial statements (Meyer, 1976). Therefore, if accountants or auditors have gone against principle, although the reports will make sense at the rule-level, their true essence is hidden, and audit failure will still occur.

Three Signals of Audit Failure

We observe that there are three signals of audit failure: inaccurate judgement of a GCO, material misstatements in the last audited financial statements, and violation of the code.

Inaccurate judgement of a GCO

The first signal of audit failure is the inaccurate judgement of a GCO. The inaccurate judgements of a GCO can be categorized into two types of reporting misclassifications. A type I misclassification arises if the auditor issues a GCO and the client does not subsequently fail. A type II misclassification arises when the auditor does not issue a GCO and the client later fails (Carson, 2013). Auditors must assess the adequacy of the going concern assumptions used to prepare financial statements and their conclusions to determine whether there is material uncertainty regarding the client's ability to continue as a going concern after the date of the auditor's report, and such an assessment should cover at least 12 months. If the going concern assumption is suitable for preparing the financial statements, but there is material uncertainty as to whether the entity can continue to function as a going concern, the auditor should issue a GCO with an unmodified audit opinion to fully disclose the uncertainty in the financial notes to the report. If management does not accurately disclose the uncertainties, the auditor will, where appropriate, present qualified audit opinions or objections and indicate in the audit report that there are significant uncertainties regarding the entity's going concern status. In view of the above requirements, the failure to issue a GCO prior to business failure can be considered an audit failure (Francis, 2011). This is typically referred to as type II failure. By contrast, if the client would not be bankruptcy at all, the auditors are so conservative that they issue a GCO. For instance, Mutchler and Williams (1990) find that only 9.2 percent of manufacturing firms receiving a first-time GCO from a Big 8 firm in 1985 and 1986 failed in the following year. This is as type I failure and it also can lead the audit failure.

Financial misstatement

Financial misstatement is the second signal of audit failure. Whether a misstatement was made through fraud or error, it is necessary to identify and evaluate the risk of material misstatements. Adequate, high-quality audit evidence is needed to determine whether material misstatements exist. In addition, the purpose of an audit is to obtain reasonable assurance as to whether the financial statements are without material misstatements. Therefore, misstatements in the most recent audited financial statements indicate an audit failure (DeFond& Zhang, 2014). On the contrary, Hennes et al. (2014) studying this field finds the relationship between restatements and its consequences. They find that severe restatements will almost lead to dismissal of external auditors, but this occurs more often to non-Big 4 rather than Big 4. Though restatements raises the frequency of rotation and costs of switching, the market reactions are positive. Meanwhile, by replacing auditors firms tend to rebuild their financial credibility. In this way, the risk of audit failure can be reduced. Mande and Son (2013) hold similar point with Hennes et al (2014). Pressure from capital market to those firms with restatements tends to dismiss their current auditors to increase audit quality in the hope for reducing lost from shock market. They find that there is a positive relationship between restatements and auditor turnover rates. Finally, they also indicate that stock market consider auditor switching as a positive signal for previous firms holding restatements.

Failure to comply with the guidelines issued by regulators

The third signal of audit failure is a failure to comply with the guidelines issued by regulators. The guidelines issued by regulators set out five basic principles and set the minimum standards of professional conduct expected of all CPAs. The principles are competence, integrity, objectivity, quality performance, and professional behavior. All aspects of the professional and ethical behavior expected of members are included in the code. All CPAs must abide by the code, and they must be able to demonstrate that their actions and conduct comply with the code. CPAs will be penalized by regulators if they fail to comply with the code, which constitutes an audit failure (Kabir, Su, & Rahman, 2016).

Indicators of Audit Failure

There are many studies on the relationship between the likelihood of audit failure and certain factors. Although a number of studies can prove that relationships exist, some cannot explain the reason for the relationship. In addition, some papers reach an opposite conclusion for the same factor.

Audit-firm tenure

Many researchers have studied the relationship between the length of audit-firm tenure and the likelihood of audit failure. A widely held view of the connection between audit-firm tenure and audit failure is that long audit partner tenure can diminish audit quality. In the opinion of Carey and Simnett (2006), rotation of audit partners to limit their tenure may preserve audit quality. They use “auditor’s propensity to issue a going concern audit opinion for distressed companies” to measure audit quality, and their results

confirm that long tenure has a negative effect on audit quality. Deis and Giroux (1992) present the same conclusion. They find that audit quality decreases as auditor tenure increases.

In contrast, according to Johnson, Khurana, and Reynolds (2002), short audit-firm tenure (two to three years) and medium audit-firm tenure (four to eight years) are associated with lower quality financial reports. However, they do not find evidence of a reduction in financial report quality for long audit-firm tenure (nine or more years). Similarly, Geiger and Raghunandan (2002) argue that auditors may be more influenced by newly obtained clients in the early years of an engagement, which means that short tenure affects auditors' decisions and long tenure is not associated with reporting failure. A study by Carcello et al. (2004) states that fraudulent financial reporting is more likely to occur in the first three years of an engagement but does not find evidence of a relationship between financial report flaws and long tenure.

The size of clients and auditor offices

Another concern is whether client size affects the quality of audit reports and whether the size of the audit firm affects audit quality. The reason for this concern is that large clients create an eco-dependence that may cause auditors to compromise their independence and issue favorable reports to retain valuable clients. Reynolds and Francis (2000) find that larger clients are more likely to receive going concern audit reports. They explain that larger clients have more potential audit risk and thus audit firms may suffer greater loss of reputation and auditors may be sanctioned, so auditors report more conservatively for larger clients. A number of empirical studies find an association between audit/non-audit fee dependence and lower earnings quality in the U.S. (Frankel et al., 2002) and Australia (Gul et al., 2003). The findings of these studies suggest that auditors have strong incentives to avoid egregious failures for economically important clients. However, Deis and Giroux (1992) argue that powerful clients can put pressure on an auditor to violate auditing standards. Moreover, a large and financially healthy client can replace the auditor. They also find that audit quality improves when auditors know their work will be reviewed by third parties, and audit quality increases with the number of clients.

The results of the above research may only apply to small audit firms because larger offices provide higher quality audits, and Big 4 firms will not differentiate between large and small clients (Francis & Yu, 2009). Moreover, larger offices are more likely to issue going concern audit reports. Large audit firms are SEC registrants with rich work experience and are able to issue high-quality reports. In addition, clients in larger offices show less aggressive earnings management behavior (Bédard, Chtourou, & Courteau, 2004).

Peer review report

The purpose of peer review reports is to examine a firm's system of quality controls for its accounting and auditing practices and provide reasonable assurance that the firm is in compliance with professional standards (Payne, 2003). Casterella, Jensen, and Knechel (2009) investigate the data obtained from an insurance company and find

evidence that peer review findings are useful in predicting audit failure. The same results were found in other research (Deis & Giroux, 1992, Giroux et al., 1995, Krishnan & Schauer, 2000). All of these researchers point out that peer review improves the quality of service provided by firms and that the likelihood of audit failure is positively associated with the number of weaknesses identified in a peer review report. This means that, with the help of peer reviews, audit companies can strictly comply with standards and reduce wrongdoing and thus reduce the possibility of audit failure.

Audit committee

Audit committees are another factor that contributes to audit failure. An important role of audit committees is to protect external auditors from dismissal after the issuance of an unfavorable report. However, because audit committees are made up of independent members of the board of directors of the company being audited, directors can still have a significant influence on the audit opinion. Carcello and Neal (2000) find that the greater the percentage of affiliated directors on an audit committee, the lower the likelihood of receiving a going concern report. This means that auditors are more likely to make erroneous reports that lead to audit failure. Their later research (Carcello & Neal, 2003) further elaborates on this viewpoint. They suggest that when affiliated directors dominate an audit committee, management can not only pressure the auditor to issue an unmodified report despite going-concern issues but also dismiss the auditor if the auditor refuses to issue an unmodified report. It also suggests that audit committees with greater independence, greater governance expertise, and lower stockholdings are more effective in shielding auditors from dismissal after the issuance of a going concern report. Also, we contribute to the increasing literature on the consequences of the Board's expertise in the quality of financial reporting (Xie, Davidson, and Bodealt 2003; Bedard, Chtourow, and Courteau 2004; Agrawal and Chadha 2005; J. Krishnan 2005). The prior research shows that if the audit committee be more expertise, it is more likely to have a favorable influence on the quality of the audit reports. What's more, the status in the audit committees is also likely to influence the quality of financial report. In order to influence the results of financial reporting, the board needs the ability and authority to be respected by managers. Relative status has a direct impact on how managers view the audit committee, as status enhances perceived ability and commands authority and respect. (D'Aveni, 1990; Pollock et al., 2010). In sum, it is reasonable to believe that the probability of audit failure can be reduced by improving the independence, expertise and status of the audit committee.

Lack of auditor independence

Lack of auditor independence is another factor that can affect audit failure. Klott (1984) reports that the audit industry appears to be under intense competitive pressure to reduce the cost of audits while business transactions are becoming more difficult to track and evaluate. There is also concern that competitive pressures could erode auditor independence. The battle for clients can force auditors to change their views in irrelevant situations to back the client and endorse a company's finances rather than risk losing the client.

Client acceptance

Before conducting an audit, audit partners must decide whether to accept a client. According to Johnstone and Bedard (2004), in the process of signing new and renewing old clients, investment audit companies try to avoid risks by shedding the riskier clients in their portfolios and accepting new clients that are less risky than their continuing clients. However, we have no evidence suggesting a strong connection between client acceptance and audit failure. According to Casterella, Jensen, and Knechel (2009), client acceptance is not associated with audit failure.

Restatements

Restatements refer to the revision of a company's previous financial statements to correct an error. Auditors must decide whether a past error is material enough to issue a restatement. Theoretically, it seems that the more restatements that are issued, the lower the audit quality. According to a study by Lobo and Zhao (2013), after eliminating the effect of auditor risk adjustment behavior and considering unaudited statements, there is a negative relation between audit effort and restatements.

Form of audit firms

The form of audit firms is an interesting topic in audit failure. Firth et al. (2012) study the effects of partnerships and limited liability companies on audit quality and find that auditors in partnership firms are more cautious than those in limited liability firms. Lennox and Li (2012) study the effect of transformations from partnerships to LLPs on audit quality and find that it does not reduce audit quality. In addition, some scholars argue that in limited liability accounting firms, shareholders and auditors' maximum loss is their investment in the firm. As their risk is limited, they are more likely to spend less time and effort in the auditing process or to meet the inappropriate requests of a client to keep them, which can lead to lower audit quality (Dye, 1993; Chan & Pae, 1998).

Monitoring

For nearly 25 years, audit firms were only subject to self-regulation under peer review. However, the surge in prominent financial reporting failures in the early twenty-first century renewed concerns about the effectiveness of self-regulation. The Sarbanes-Oxley Act of 2002 (SOX) was a direct reaction to this problem. SOX replaced self-regulation with the Public Company Accounting Oversight Board (PCAOB) to ensure high-quality auditing reports. Nevertheless, recent research, which analyzes audit-firm supervision since the PCAOB began conducting inspections, does not show that external monitoring has a positive effect on auditing (Lennox & Pittman, 2010b). They point out that audit clients do not consider the supervision of the PCAOB to have greatly improved audit quality or as valuable for signaling.

Poor corporate governance

In every industry, corporate governance is important. Corporate governance refers to a set of rules and incentives by which company management is directed and controlled. Hence, good corporate governance maximizes the profitability and long-term value of a firm for shareholders. However, when corporate governance is not effective, internal

controls are flawed and fraud can happen. In addition, there is a link between accounting failures or fraud and poor corporate governance (Ramaswamy, 2005). As Ramaswamy suggests, poor corporate governance is a leading factor in poor auditing performance. Using a matched sample of 808 failed and non-failed firms, Muñoz-Izquierdo et al. (2019) found that audit report disclosures significantly explain the causes of business failure. Based on Spanish data De Fuentes & Porcuna (2019) found that audit failure likelihood increases when the probability of financial distress is higher, the auditor is permissive of upward earnings management, and the audit report is signed by an individual auditor.

In summary, there are three main factors that cause audit failure: Economic cycle, rule-checking mentality, three signals of audit failure. Economic cycle is thought a major factor in audit failure. During the boom, company monitors think that such a high growth rate is normal, so they cannot accept the bad auditing report even after the boom busted. Therefore, some tried to remedy their poor performance by using unacceptable accounting methods or fake transactions. On the one hand, Big N audit quality decreased during economic overheating because during this boom in transaction orders, Big N were less likely to give going-concern opinions. On the other hand, when the macroeconomic are under recession during 2007-2009, audit quality also decreased because of the fee pressure. Besides, it would be a myopic behavior that relevant auditing administration tends to cope this trust crisis via modifying standards rather than disclosing part of the auditing work because it cannot eliminate root reasons. Rule-checking mentality can be another factor that causes audit failure. If accountants or auditors have gone against principle, although the reports will make sense at the rule-level, their true essence is hidden, and audit failure will still occur. There are three signals of audit failure: inaccurate judgement of a GCO, material misstatements in the last audited financial statements, and violation of the code. Each of them can lead audit failure. Finally, there are other indicators that can influence the auditing quality can lead audit failure. For instance, the audit-firm tenure, the size of clients, peer review report, influence of audit committee, lack of Auditor independence, client acceptance, restatement, and the poor corporate governance.

5. THE EFFECTS OF AUDIT FAILURE

In this section, we discuss the influence of audit failure. We develop this section in three parts. The first part discusses the effects of audit failure on the auditing company. The second part discusses audit failure's effect on policy and regulation. The third part discusses the effect of audit failure on clients and the market (Figure 3).

Effects of Audit Failure on the Auditing Company

Audit failure has a negative effect on auditing firms. Based on previous studies, we divide the effects on auditing firms into two aspects. The first is the effect on an auditing firm's reputation. The second is the contagion effect.

The effects of audit failure on audit companies' reputation

Several studies investigate the reputational effects of audit failure by examining whether the failure of Enron imposed costs on other clients audited by Andersen. Following Enron, several studies find a negative market reaction, such as purchases of large non-

audit services (NAS) and oil price changes (Chaney & Philipich, 2002; Cahan et al., 2009; Cahan et al., 2011; Krishnamurthy et al., 2006; Nelson et al., 2008). We find two studies that investigate audit failure outside the U.S. in low litigation jurisdictions. Following a major publicized accounting scandal involving a public company (ComROAD AG) in Germany, Weber et al. (2008) find that a KPMG affiliate lost clients, and its clients experienced a decline in share prices. Similarly, Skinner and Srinivasan (2012) find that a PwC affiliate lost clients after a major audit failure in Japan.

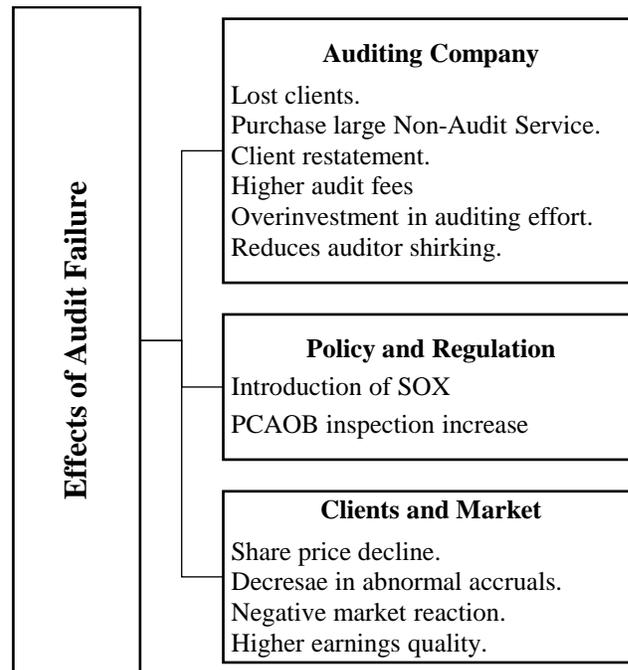


Figure 3
Effects of audit failure

Contagion effect

Francis and Michasin (2012) research the contagion effect and low-quality audits. They consider downward restatements and the contagion effect as important factors in their evaluation of audit failure. The contagion effect is when an adverse event for one company transfers negatively to other companies. According to their results, audit companies are included in this phenomenon. If an audit company has experienced a client restatement, it is likely to experience another client restatement in the next several (up to five) years. However, large companies and those with rich audit experience can reduce the influence of this effect. We find that audit failure reduces client market value and the auditor's ability to retain clients. There is also evidence that larger penalties for audit failure result in higher audit fees (Newman, Patterson, & Smith, 2005) and overinvestment in auditing effort (Pae and Yoo, 2001) and that increased liability decreases audit failure (Deng et al., 2012) and reduces auditor shirking (Zhang, 2007).

The Effect of Audit Failure on Policy and Regulation

Traditionally, regulators get involved after high profile audit failures. A recent example is the passage of the Sarbanes-Oxley Act (SOX). After a remarkable series of audit failures, to avoid future accounting scandals and restore trust in the auditing profession, the United States passed a law known SOX. This law became effective on July 30, 2002. All U.S. and foreign companies registered on American stock exchanges must comply with SOX. To avoid audit failures, policymakers attempt to improve audit quality. For example, PCAOB inspections attempt to improve auditor competency. One motivation for the inspections is the peer review reports that predict audit failures and auditor-client realignment (Casterella et al., 2009; Hilary & Lennox, 2005; Lennox & Pittman, 2010).

The Effect of Audit Failure on Clients and the Market

When a company experiences an audit failure, its clients are affected. Cahan and Zhang (2006) examine whether after Arthur Andersen's departure, successor auditors required more conservative accounting for former Andersen clients to minimize litigation risk. After controlling clients audited by a Big 4 auditor in 2001 and 2002, they find that former Andersen clients had lower levels of and larger decreases in abnormal accruals in 2002. This result is consistent with auditor conservatism and suggests that successor auditors viewed a former Andersen client audit as a unique source of litigation risk.

Chaney and Philipich (2002) investigate the effect of the Enron audit failure on auditor reputation. They examine Andersen clients' stock prices surrounding the dates on which Andersen's audit procedures and independence came under severe scrutiny. On the three days following Andersen's admission that documents had been shredded, they find that Andersen's other clients experienced a statistically negative market reaction, suggesting that investors downgraded the quality of Andersen audits. They also find that clients of Andersen's Houston office suffered a more severe decline in abnormal returns on this date. However, Nelson, Price, and Rountree (2008) demonstrate a different effect. Negative client stock returns around the shredding admission were due to confounding effects as opposed to Andersen's audit failure. The study did not suggest that auditor reputation is unrelated to the capital market but emphasized the difficulty of identifying reputation effects based on an event study with confounding factors.

Using a sample from 12 non-U.S. countries, Srinidhi, Hossain, and Lim (2012) find that following Andersen's failure in the U.S., successor Big-N auditors charged an audit fee premium for former Andersen clients compared to their existing clients and non-Andersen switch-ins. They also find that former Andersen clients exhibit higher earnings quality after the switch than do ongoing clients and other switch-ins. These results suggest that the audit fee premium is attributable to auditor conservatism. Furthermore, they find that risk assessments for former Andersen clients are higher in countries with weak legal and extra-legal institutions.

In summary, we can conclude that audit failure influences the auditing company, the policy and regulation, and the clients and the market. First, audit failure has a negative effect on auditing firms. This negative impact mainly focusses on two expects—one is

the auditing firm's reputation, the other is the contagion effect. After being discovered, the auditing firm will lose their clients, and the adverse event will transfer negatively from one company to other companies. Second, usually, regulators get involved after high profile audit failures just as the launch of SOX. After a remarkable series of audit failures, the United States passes SOX to avoid future accounting scandals and restore trust in the auditing profession. Third, the audit failure also influences the clients and market. Traditionally, it will lead customer's share price falls. Besides, the auditing market will under pressure.

6. SUGGESTED AREAS FOR FURTHER RESEARCH

The literature has examined the causes and effects of audit failure and revealed several relevant factors. Some studies identify causes of audit failure from the economic cycle or rule-checking mentality perspectives. In addition, the literature briefly discusses other factors related to audit failure. Some studies focus on the effects of audit failure, such as the effect on the auditing company, the effect on policy and regulation, and the effect on clients and markets. However, this literature review needs to covers other crucial areas.

Industry expertise

Further research is needed to explore the relationship between auditing industry expertise and audit failure. When auditors first contact a new entity to be audited, they often do not understand its specific business processes, and audit quality and efficiency are not guaranteed. Unfortunately, limited research has been conducted in this area. Therefore, this is an area for future research.

Defects of professional ethics

Due to the increasing number of corporations and companies, the demand for auditors has increased. This leads to uneven professional ethics in the auditing industry. Some CPAs fail to recognize their role in the economy beyond making money. They fail to strictly abide by the principle of independence and lack the professional caution appropriate to audit work, and some of them easily accept the explanations given by business managers. For CPAs, a lack of basic professional ethics is clearly a cause of audit failure. Future research can provide more evidence regarding this factor.

Audit object and scope

The expansion of audit objects and scope leads to increasing audit risk and the probability of audit failure. With continuous expansion of an economic unit under review, the accounting object method becomes increasingly complex. This is especially affected by the development of the knowledge economy and information networks, including the growth of intellectually intensive enterprises, such as online and simulation companies. The rise of virtual entities has expanded the types of entities being examined and increased the corresponding audit content, such as human resources audits, non-financial statement information audits, corporate merger audits, and multinational business audits. The audit content has been expanded to varying degrees, increasing the difficulty of auditing, which also increases the likelihood of audit failure. Future researchers can explore this field due to the current lack of relevant research.

Audit failure in private firms

All European private companies that meet certain size criteria are required to have their financial statements audited. The statutory auditor is expected to provide different stakeholders of the company with assurance concerning the accuracy of the financial statements, the non-existence of financial statement fraud, and the going concern status. It can be argued that agency conflicts may be weaker in private compared with public firms because ownership and control are less separated, possibly reducing the demand for financial statements and high-quality audits to monitor managers (Fama & Jensen, 1983). However, high-quality audits are also required in the private sector for the following reasons. First, many private companies have proxy conflicts when not fully managed by the owner-manager (Ang et al., 2000), and proxy conflicts may exist between bankers and owners or management (Vander Bauwhede & Willekens, 2004). In addition, tax authorities determine taxable income based on financial statements, especially in countries where financial reporting and tax accounting are highly consistent. Having high quality auditors means better quality financial reporting and may prevent strict tax audits. Finally, private companies may want suppliers, customers, or employees to believe in the credibility of their financial statements. Therefore, this is a good topic for future research regarding audit failure in private firms.

7. THEORETICAL CONTRIBUTION

We discuss our theoretical contribution based on its incremental and practically useful aspects. It is well known that Audit failure is not a positive event and is followed by many destructive effects. However, details of the causes and effects are not well known. We have summarized the causes and effects of audit failure based on previous research. Our paper will help readers understand audit failure from many perspectives. First, we briefly introduce some notorious auditing failure cases to provide a complete picture. Then, we discuss the causes of audit failure, which include economic recession and accounting profession violation of the substance over form principle. In addition, we identify several factors related to the likelihood of audit failure, such as audit-firm tenure, client and audit-firm size, and other factors. Regarding the effect of audit failure, we classify the previous research into three types: the effect on the audit company (reputation and contagion effect), the effect on regulations, and the effect on clients and the market, respectively. Our paper is the first to focus on a summary of the causes and effects of audit failure, and it can support further research in this area. It also reminds auditors and managers not to ignore the details in the process of auditing. Thus, they can continuously improve their personal skills and self-discipline.

8. CONCLUDING REMARKS

The objective of this study is to conduct a comprehensive literature review of the academic research pertaining to audit failure. We review manuscripts published from 1976 to 2019 in leading journals related to auditing. We organize our review around three main groups, namely (a) proxies to measure of audit failure, (b) causes of audit failure, and (c) effects of audit failure. We also offer suggestions for future research from various perspectives, which will be useful for academicians, regulators, investors, and financial analysts.

We observe that the literature uses a large number of proxies to capture audit failure. Some of the proxies belong to audit process outputs, such as GCOs. Outputs of the audit process further fall into four categories: material misstatements, auditor communication, financial reporting quality, and perceptions. Material misstatements or relatively less egregious earnings management, such as measured by high discretionary accruals (DAC) are the proxies that capture more egregious audit failures. We find that two misstatement measures, restatements and Accounting and Auditing Enforcement Releases (AAERs), are the most commonly used in audit failure literature.

We find that auditing failure is caused by several factors. First, there are two understandable and obvious causes of audit failure, as concluded from the scandals in the U.S. during 2001 to 2002. One is the economic cycle, which puts managers under heavy peer and financial pressure to achieve expectations. The other is the rule-checking mentality. Financial reporting is guided by rules, not principle. As such, it is sufficient to comply with GAAP, which is rule-based, and allow for reports that make sense at the rule-level, but hide the true essence of the situation. In addition, there is much research on the relationship between the likelihood of audit failure and other factors showing that relationships exist, but the research cannot explain the reason for those relationships. Some papers reach opposite conclusions for the same factor. We observe three signals that cause audit failure. First is the non-issuance of a GCO prior to business failure. Second is material misstatements in the last audited financial statements, and third is the failure to comply with the guidelines issued by regulators. We also find some important indicators that might cause audit failure. Audit-firm tenure is one such indicator, and it is generally believed that long audit partner tenure can cause diminution of audit quality. However, other researchers believe that short tenure affects the decisions of auditors and that long tenure is not associated with reporting failure. The size of clients and audit offices is another important indicator. Researchers find that larger clients are more likely to receive going concern audit reports. In addition, there are preventive measures, such as that audit quality improves when the auditors know that their work will be reviewed by third parties, and audit quality increases with the number of clients. Finally, other factors affect audit failure, such as the number of weaknesses identified in a peer review report, whether there are audit committee members affiliated with the company, and the type of audit firm.

In this review, we also discuss the influence of audit failure. There are three main aspects. The first is the effect of audit failure on the auditing company. This can be further divided into two parts: the effect on the auditing company's reputation and the contagion effect. Regarding the effects of audit failure on the auditing company's reputation, we conclude that audit failure damages the auditing firm's reputation. Regarding the contagion effect, the audit failure of a company will transfer negatively to other companies. Second, there are effects of audit failure on policy and regulation. As shown by President Bush's reaction to audit failures, scandals can cause policy and regulation changes. Third, audit failure also affects clients and the market. From the Andersen-Enron example, we can infer that an audit failure affects the other clients of the audit firm. However, there is research that emphasizes the difficulty of identifying the reputation effect based on an event study with confounding factors, demonstrating a different view.

Based on our review, we conclude that understanding audit failure is very important. First, understanding the causes of audit failure allows us to seek the corresponding solutions. In addition, it can help in tackling the effects it causes, such as restoring confidence in auditing. Furthermore, with a solid understanding of this topic, we can provide our own thoughts and ideas about it. However, it is important to note that the purpose of a literature review is not just to summarize what is currently known about a topic but also to provide a detailed justification for the previous research. However, this review may not be sufficiently critical.

APPENDIX

List of Leading Journals

1. *Auditing: A Journal of Practice & Theory*
2. *Contemporary Accounting Research*
3. *Journal of Accounting Research*
4. *Journal of Accounting and Economics*
5. *The Accounting Review*
6. *The Journal of Finance*
7. *Journal of political Economy*
8. *Journal of Law and Economics*
9. *Journal of Financial Economics*
10. *Journal of Financial Economics*
11. *European Accounting Review*
12. *Journal of Business Ethics*
13. *The International Journal of Accounting*
14. *Critical Perspectives on Accounting*

Summary of Articles

<i>Proxy measures of audit failure</i>				
S. No.	Author(s)	Year	Title	Key Findings
1.	DeFond and Zhang	2014	A review of archival auditing research	Material misstatements or less egregious earnings management, such as high discretionary accruals (DAC), are the proxies that capture more egregious audit failures.
2.	Lennox and Pittman	2010	Auditing the auditors: Evidence on the recent reforms to the external monitoring of audit firms.	Restatements and Accounting and Auditing Enforcement Releases (AAERs) are the proxies that capture audit failures.
3.	Kinney et al.	2004	Auditing the auditors: Evidence on the recent reforms to the external monitoring of audit firms	
4.	Chin and Chi	2009	Auditor independence, non-audit services, and restatements: Was the US government right?	
5.	Francis et al.	2013	Office size of Big 4 auditors and client restatements	
<i>Audit Failure by Big N and Non-Big N Auditors Separately</i>				
6.	Tritschler	2013	Audit Quality: Association between published reporting errors and audit firm characteristics	Big audit firms provide safer audits for their clients.
7.	Kabir et al.	2016	Audit failure of New Zealand finance companies—an exploratory investigation	The audit failure rate (AFR) is lower for Big N auditors than for non-Big N auditors.
8.	Palmrose	1988	An analysis of auditor litigation and audit service quality	Big N auditors experience less litigation than non-Big N auditors, which also suggests that the AFR is lower for Big N auditors than for non-Big N auditors.
9.	Lawrence et al.	2011	Can Big 4 versus Non-Big 4 Differences in Audit-Quality Proxies Be Attributed to Client Characteristics?	By designing three audit proxies, author examines the clients' characteristics effect on audit quality.
10.	Jiang et al.	2018	Big N Auditors and Audit Quality: New Evidence from Quasi-Experiments	Contrasting firms' performance after merged by Big N, researchers find that increase of audit quality coming from auditor's general competence.
11.	DeFond et al	2017	Do Client Characteristics Really Drive the Big N Audit Quality Effect? New Evidence from Propensity Score Matching	Due to some researches suggests PSM may eliminate the Big N effect on audit quality, authors launched a series of investigations in such field and find that Big N will affect the quality of audit.
12.	Blokdijk et al	2006	An Analysis of Cross Differences in Big and Non Public Accounting Firms' Audit Programs	Difference of audit quality lies in the production characteristics including time allocation and audit effort.

<i>What causes audit failure?</i>				
13.	Ball	2009	Market and political/regulatory perspectives on the recent accounting scandals	Economic cycle and rule-checking mentality are the two major factors that causes audit failure.
14.	Leone et al.	2012	How Do Auditors Behave During Periods of Market Euphoria? The Case of Internet IPOs	Auditors' performance seems to be influenced by macroeconomic overheating trends.
15.	Ettredge et al.	2013	Fee Pressure and Audit Quality	Fee pressure are related with reduced audit quality in economic recession.
16.	Sikka	2009	Financial crisis and the silence of the auditors	Auditors tend to shed drawbacks of their clients to earn fees under financial crisis.
17.	Farber	2005	Restoring trust after fraud: Does corporate governance matter?	The first signal of audit failure is the non-issuance of a going concern opinion (GCO) before business failure.
18.	Francis	2011	A framework for understanding and researching audit quality	The failure to issue a GCO prior to business failure can be considered an audit failure.
19.	DeFond& Zhang	2014	A review of archival auditing research	Misstatements in the most recent audited financial statements indicate an audit failure.
20.	Hennes et al	2014	Determinants and Market Consequences of Auditor Dismissals after Accounting Restatements	Restatements will increase switching costs, but market hold positive attitudes to this and it can also reduce the risk of audit failure.
21.	Mande& Son	2013	Do Financial Restatements Lead to Auditor Changes?	Restatements given by auditors can lead to a positive capital market response.
22.	Kabir et al.	2016	Audit failure of New Zealand finance companies—an exploratory investigation	Failure to comply with the guidelines issued by regulators which constitutes an audit failure.
23.	Carey and Simnett	2006	Audit partner tenure and audit quality	Long tenure has a negative effect on audit quality.
24.	Deis and Giroux	1992	Determinants of audit quality in the public sector	Audit quality decreases as auditor tenure increases.
25.	Johnson et al.	2002	Audit-firm tenure and the quality of financial reports	Short audit-firm tenure (two to three years) and medium audit-firm tenure (four to eight years) are associated with lower quality financial reports.
26.	Geiger and Raghunandan	2002	Auditor tenure and audit reporting failures	Short tenure affects auditors' decisions and long tenure is not associated with reporting failure.
27.	Carcello et al.	2004	Audit firm tenure and fraudulent financial reporting	Fraudulent financial reporting is more likely to occur in the first three years of an engagement.
28.	Reynolds and Francis	2000	Does size matter? The influence of large clients on office-level auditor reporting decisions.	Larger clients have more potential audit risk and thus audit firms may suffer greater loss of reputation and auditors may be sanctioned, so auditors report more conservatively for larger clients.
29.	Frankel et al.	2002	The relation between auditors' fees for nonaudit services and earnings management	Auditors have strong incentives to avoid egregious failures for economically important clients.
30.	Gul et al.	2003	Discretionary accounting	

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			accruals, managers' incentives, and audit fees.	
31.	Deis and Giroux	1992	Determinants of audit quality in the public sector	Powerful clients can put pressure on an auditor to violate auditing standards.
32.	Bédard et al.	2004	The effect of audit committee expertise, independence, and activity on aggressive earnings management.	Clients in larger offices show less aggressive earnings management behavior.
33.	Casterella et al.	2009	Is self-regulated peer review effective at signaling audit quality?	Peer review findings are useful in predicting audit failure.
34.	Deis & Giroux	1992	Determinants of audit quality in the public sector	
35.	Krishnan & Schauer	2000	The differentiation of quality among auditors: Evidence from the not-for-profit sector	
36.	Carcello and Neal	2000	Audit committee composition and auditor reporting	The greater the percentage of affiliated directors on an audit committee, the lower the likelihood of receiving a going concern report.
37.	Klott	1984	Auditors Feel the Heat of a New Scrutiny	Lack of auditor independence is another factor that can affect audit failure.
38.	Casterella et al.	2009		Client acceptance is not associated with audit failure.
39.	Lobo and Zhao	2013	Relation between audit effort and financial report misstatements: Evidence from quarterly and annual restatements.	There is a negative relation between audit effort and restatements.
40.	Firth et al.	2012	Auditors' organizational form, legal liability, and reporting conservatism: Evidence from China.	Auditors in partnership firms are more cautious than those in limited liability firms.
41.	Lennox and Li	2012	The consequences of protecting audit partners' personal assets from the threat of liability	Study the effect of transformations from partnerships to LLPs on audit quality and find that it does not reduce audit quality.
42.	Lennox & Pittman	2010	Auditing the auditors: Evidence on the recent reforms to the external monitoring of audit firms.	Audit clients do not consider the supervision of the PCAOB to have greatly improved audit quality or as valuable for signaling.
43.	Ramaswamy	2005		There is a link between accounting failures or fraud and poor corporate governance.
44.	De Fuentes & Porcuna	2019	Predicting audit failure: evidence from auditing enforcement releases.	Audit failure likelihood increases when the probability of financial distress is higher, the auditor is permissive of upward earnings management, and the audit report is signed by an individual auditor.
45.	Muñoz-Izquierdo et al.	2019	Explaining the causes of business failure using audit report disclosures.	Audit report disclosures significantly explain the causes of business failure.
<i>The effects of audit failure</i>				
46.	Chaney & Philipich	2002	Shredded reputation: The cost of audit failure	
47.	Cahan et al.	2009	Are the reputations of the large	

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			accounting firms really international? Evidence from the Andersen-Enron affair.	Following Enron, several studies find a negative market reaction, such as purchases of large non-audit services (NAS) and oil price changes.
48.	Cahan et al.	2011	Did the Waste Management Audit Failures Signal Lower Firm-Wide Audit Quality at Arthur Andersen?	
49.	Krishnamurthy et al.	2006	Auditor reputation, auditor independence, and the stock-market impact of Andersen's indictment on its client firms	
50.	Nelson et al.	2008	The market reaction to Arthur Andersen's role in the Enron scandal: Loss of reputation or confounding effects?	
51.	Weber et al.	2008	Does auditor reputation matter? The case of KPMG Germany and ComROAD AG.	A KPMG affiliate lost clients, and its clients experienced a decline in share prices in Germany.
52.	Skinner and Srinivasan	2012	Audit quality and auditor reputation: Evidence from Japan	A PwC affiliate lost clients after a major audit failure in Japan.
53.	Francis and Michasin	2012	The contagion effect of low-quality audits	They consider downward restatements and the contagion effect as important factors in their evaluation of audit failure.
54.	Newman et al.	2005	The role of auditing in investor protection	There is also evidence that larger penalties for audit failure result in higher audit fees and overinvestment in auditing effort and that increased liability decreases audit failure and reduces auditor shirking.
55.	Pae and Yoo	2001	Strategic interaction in auditing: an analysis of auditors' legal liability, internal control system quality, and audit effort	
56.	Deng et al.	2012	Auditors' Liability, Investments, and Capital Markets: A Potential Unintended Consequence of the Sarbanes-Oxley Act.	
57.	Zhang,	2007	The impact of the public's expectations of auditors on audit quality and auditing standards compliance.	
58.	Casterella et al.	2009	Is self-regulated peer review effective at signaling audit quality?	
59.	Hilary & Lennox	2005	The credibility of self-regulation: Evidence from the accounting profession's peer review program.	To avoid audit failures, policymakers attempt to improve audit quality. For example, PCAOB inspections attempt to improve auditor competency. One motivation for the inspections is the peer review reports that predict audit failures and auditor-client realignment
60.	Lennox & Pittman	2010	Big Five audits and accounting fraud	
61.	Cahan and Zhang	2006	After Enron: Auditor conservatism and ex-Andersen clients	Former Andersen clients had lower levels of and larger decreases in abnormal accruals in 2002.
62.	Chaney and Philipich	2002	Shredded reputation: The cost of audit failure.	Andersen's other clients experienced a statistically negative market reaction, suggesting that investors downgraded the quality of Andersen audits
63.	Nelson et al.	2008	The market reaction to Arthur Andersen's role in the Enron	Negative client stock returns around the shredding admission were due to

			scandal: Loss of reputation or confounding effects?	confounding effects as opposed to Andersen's audit failure
64.	Srinidhi et al.	2012	The Effect of Arthur Andersen's Demise on Clients' Audit Fees and Auditor Conservatism: International Evidence.	Following Andersen's failure in the U.S., successor Big-N auditors charged an audit fee premium for former Andersen clients compared to their existing clients and non-Andersen switch-ins.

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