PRACTICE NOTE

What Exactly Do We Mean by Audit Quality?

Prof. dr. Jere Francis

KEY TAKE-AWAYS

The concept of “audit quality” is of fundamental importance in auditing but there is little agreement on its definition or measurement. Jere Francis reviews several approaches to understanding audit quality and argue that the most meaningful measure of audit quality is based on what the auditor is legally required to do, which is to “opine” on the client’s financial statements. This has resulted in a black and white binary (pass/fail) model of the audit report. However, we know there is a continuum of quality in the audited financial statements of clients, and that much of this variation is the result of the client’s accounting policy choices, particularly accrual estimations. Yet most firms receive a standard clean opinion despite the wide variation in financial statement quality. He argues that while it is important for auditors to follow procedural rules (standards) to gather sufficient evidence, it is equally important that auditors carefully monitor and constrain, where necessary, the client’s accounting policy choices and accrual estimates. The logical consequence is that the quality of audited…

10/07/2023

Project Number:
2019E01

F AR Foundation *for* Auditing Research

FOUNDATION FOR AUDITING RESEARCH

Practice Note

"What Exactly Do We Mean by Audit Quality?"

An Essay Prepared for the Foundation for Auditing Research

by

Jere R. Francis*
Professor and Foundation for Auditing Research Chair
Maastricht University
j.francis@maastrichtuniversity.nl

July 10, 2023

Executive Summary

The concept of "audit quality" is of fundamental importance in auditing but there is little agreement on its definition or measurement. I review several approaches to understanding audit quality and argue that the most meaningful measure of audit quality is based on what the auditor is legally required to do, which is to "opine" on the client's financial statements. This has resulted in a black and white binary (pass/fail) model of the audit report. However, we know there is a continuum of quality in the audited financial statements of clients, and that much of this variation is the result of the client's accounting policy choices, particularly accrual estimations. Yet most firms receive a standard clean opinion despite the wide variation in financial statement quality. I argue that while it is important for auditors to follow procedural rules (standards) to gather sufficient evidence, it is equally important that auditors carefully monitor and constrain, where necessary, the client's accounting policy choices and accrual estimates. The logical consequence is that the quality of audited financial statements and the quality of the audit report are both continuums, fifty shades of grey. Thus, audit report quality is better understood as a spectrum rather than a simple binary pass/fail model. Going forward, the challenge is to find ways for an auditor to convey information about the quality of audited earnings that go beyond the binary model of the current audit report.

* I thank Olof Bik and Willem Buijink for their comments and suggestions on earlier drafts of this essay. I also thank the Foundation for Auditing Research (FAR) for supporting my research program and the FAR Chair at Maastricht University. The views expressed in this essay are my own and do not reflect the views of the Foundation or the audit firms supporting the Foundation.

What Exactly Do We Mean by Audit Quality?

1. Introduction

Nothing is arguably more important in auditing research, regulation and practice, than the concept of audit quality. Yet, despite its centrality to the understanding of auditing, defining it has proved elusive, and there is little consensus on the concept or the measurement of audit quality.

The conventional view of audit quality is black and white: the audit is "OK" if you follow generally acceptable auditing standards and the standards issued by the International Auditing and Assurance Standards Board, and it is not OK if you do not. This is the logic of regulator inspection report comments in which audit quality is deficient (not OK) if, in the opinion of the inspectors, the evidence gathering process was deficient. It is a procedural or process way of thinking about quality. Audit quality is good if the process is good, i.e., if you follow the standards. However, regulators also take a broader view. They are concerned with an audit firm's internal control structure for ensuring that an audit engagement complies with the firm's policies (and auditing standards) for gathering sufficient audit evidence. Finally, scholars who do empirical research are generally less interested in the procedural aspects of audits and focus instead on the quality of observable audit outcomes, namely, the audit report and the quality of client's audited financial statements.

2. A Units of Analysis Framework for Understanding Audit Quality

Francis (2011) provides a good starting point for thinking about the elements that create high-quality audits. Francis uses different units of analysis from micro to macro as a way to think about the drivers of audit quality. It predates similar (later) frameworks by Knechel et al. (2013) and the International Auditing and Assurance Standards Board (2014).

TABLE 1 (from Francis 2011)
Units of Analysis in Audit Research

Audit Inputs
- Audit tests
- Engagement team personnel

Audit Processes
- Implementation of audit tests by engagement team personnel

Accounting Firms
- Engagement teams work in accounting firms
- Accounting firms hire, train, and compensate auditors, and develop audit guidance (testing procedures)
- Audit reports are issued in name of accounting firms

Audit Industry and Audit Markets
- Accounting firms constitute an industry
- Industry structure affects markets and economic behavior

Institutions
- Institutions affect auditing and incentives for quality, e.g., State Boards of Accountancy, the AICPA,FASB, SEC, and PCAOB, as well as the broader legal system

Economic Consequences of Audit Outcomes
- Audit outcomes affect clients and users of audited accounting information

Francis (2011, p. 125) summarizes the framework in the following way:

"Audit quality is affected at each level of analysis in Table 1. Audits are of higher quality at the input level when the people implementing audit tests are competent and independent, and when the testing procedures used are capable of producing reliable and relevant evidence. The quality of audit inputs flows through to the audit process, where audits are of higher quality when the engagement team personnel make good decisions regarding the specific tests to be implemented and appropriately evaluate the evidence from these tests in leading to the audit report. Audit quality is affected by the accounting firm in which the auditors work. Firms develop the testing procedures used on audit engagements, and create incentives that affect the behavior of engagement team personnel. Last, the incentives of accounting firms and individual auditors to produce high-quality audits are affected by the institutions that regulate auditing and punish auditors and accounting firms for misconduct and low-quality audits."

The conclusion in Francis (2011) is that audit quality is not a singular concept or measurement. Instead, it is better understood as a multi-dimensional concept with multiple factors that contribute to audit quality.

3. Is Audit Quality "Audit Process" Quality?

One element of the framework in Francis (2011) is the quality of the evidence-gathering process. As noted above, firms and regulators focus on the audit process when they think about audit quality. Did the auditor follow audit standards? Did they collect sufficient evidence? Did they interpret the evidence correctly? Adhering to the standard audit process is important, and the presumption is that "audit process" deficiencies will result in low-quality audits.[1]

There are several limitations to the "audit process is audit quality" viewpoint. First, while audit standards provide general guidance for the conduct of an audit, there are very few specific procedures that auditors are required to do. Audit standards are largely principles-based and give auditors considerable flexibility in structuring the evidence-gathering process. In my view, this limits the effectiveness of inspection reviews of "the audit process" as a way to infer audit quality. There is not a single correct way to gather evidence. This makes it especially problematic for inspectors to ex-post assess the "quality" of the audit process and can easily lead to disagreements between auditors and regulators about the reasonableness (quality) of the work done by the auditor. In other words, in the absence of comprehensive and detailed standards for the audit process, the quality of the evidence-gathering process becomes a matter of considerable subjective judgment, for both the auditor and the regulator.

Second, while audit standards require that auditors must collect sufficient evidence to support the audit opinion, there is no clear stopping-rule on how much evidence is needed to support the audit opinion. Again, the standards give the auditor a great deal of flexibility in making this assessment, and again can lead to disagreements between regulators and auditors about the evidence collected.

Third, although the presumed linkage of audit process deficiencies with low-quality audit outcomes (audit failures) is logical, empirically it is more a matter of faith than established fact. In

[1] Some scholars are interested in the audit process and study it with experiments using the "judgment and decision making" (JDM) paradigm.

short, we really do not know exactly how the quality of the audit process maps to the quality of audit outcomes (i.e., the audit report and the quality of the audited financial statements).[2]

For all of the above reason, the "audit process is audit quality" viewpoint has serious limitations in terms of its ability to tell us something about the bigger issue, which is the quality of the audit report.

4. Is Audit Quality Binary?

Audit quality is admittedly difficult to assess, and the framework in Francis (2011) is useful in thinking about the multiple drivers of audit quality. There is, however, a simple and straightforward way of thinking about audit quality. It starts with a basic question: what is it that auditors are required to do? What is the formal outcome of the audit? What auditors are required to do is "opine" on the client's financial statements in an audit report. So, when we talk about audit quality, what we are really talking about is the quality of the audit report, and, by implication, the quality of the audited financial statements on which the audit report opines. Complying with audit standards is important, but it does not get directly to the heart of what audit quality is really all about. It is the quality of the audit report that matters, not the audit process, per se. **My thesis is that audit quality is ultimately about the quality of the client's audited financial statements on which the auditor opines in the audit report.**

In most audits, the auditor issues a standard clean opinion, and this is probably the "correct" audit report, i.e., clients do not fail or engage in fraudulent behavior. However, there are two ways in which there are arguably low-quality audits, or what can be termed audit report failures. The first potential audit report failure occurs when the auditor issues a standard clean opinion but there is an undetected or unreported material fraud or misstatement in the audited financial statements. These cases typically make headlines and raise public doubts about the quality of audits.

The second potential audit report failure occurs when the auditor issues a standard clean opinion, but the client subsequently fails or files for bankruptcy within 12 months of the audit report date. This sometimes called a Type 2 going concern (GC) reporting error, failing to qualify when warranted. Audit standards require auditors to assess if the client firm is a viable on-going entity and to issue a warning in the form of a "going concern" audit report if there is substantial doubt the firm can continue 12 months beyond the audit report date.

We can characterize the above two cases as audit report failures. In both cases, audit report quality is binary in nature: the auditor either did or did not issue the "correct" audit report. Regulators and investors are particularly concerned with audit report failures in which the audited financial statements may be misleading and materially incorrect, but the auditor did not intervene. However, it turns out that things are not so black and white, even in these instances. Not all undetected frauds/misstatements are deemed to be audit report failures. The reason is that audits are not a 100

[2] See Gaynor et al. (2016) for a further discussion of the intertwined nature of the audit and the client's financial statements.

percent guarantee of correctness, and an auditor can in good faith have applied generally accepted auditing standards and still failed to detect client fraud and/or material misstatements.[3]

While auditors try to control and minimize their audit report risk, the fact is that audits are inherently risky and cannot achieve certainty or zero errors. A definitive audit report failure occurs only if the auditor has been negligent and grossly deficient in applying audit standards and normal testing procedures. Consistent with this, in SEC Enforcement Actions against companies in the United States for misleading reporting, the auditors of such companies are rarely named as co-defendants in SEC Enforcement Actions. More generally, the proven instances of audit report failures are quite small. Based on litigation and SEC Actions, audit report failures in which the auditor is clearly culpable are less than one percent of audits, at least in the United States.[4]

A similar situation exists respect to going concern audit reports. The auditor does not have a crystal ball and cannot predict the future with certainty. In some audits, it will be clear that the client was in the danger zone and that a going concern warning should have been issued. Failure to do so is probably an audit report failure. But, in other cases, the warning signals are not so clear in which case the auditor is unlikely to be judged guilty of failing to issue a going concern audit report. Even in the case of business failures (which are not common), Carcello and Palmrose (1994) find that the auditor is sued by investors less than 50 percent of the time when they had issued a standard clean opinion instead of a going concern report.[5]

To conclude, most audit reports are standard clean opinions, and are probably the correct report. Potential audit report failures occur when there are unreported/undetected client frauds and misstatements, and when the client fails within 12 months of the audit report. However, we see that even in these cases, there is no clear-cut auditor negligence, hence there is not necessarily a reporting failure for which the auditor is culpable. While the binary model of audit report quality seems intuitive, it is actually quite difficult to determine if there is an audit report failure, given that audits are not guarantees of certainty. There is an inherent residual risk that the "wrong" audit report might be being issued, even though the auditor has conducted the audit in an acceptable manner.[6]

---

[3] The idea that audits can (or should) have zero errors is patently ridiculous. For example, society does not have a zero error tolerance for something for more serious than audits, and that is whether patients live or die in surgery. It is understood that there are risks in surgery, and sometimes, even though surgeons have been competent, patients die.

[4] It is possible that other undetected audit report failures exist, but there were no publicized adverse client events like client fraud or business collapse to bring the problem to light. For example, Dyck, Morse, and Zingales (2023) estimate the real rate of corporate fraud is around 10 percent for large, listed US firms, about three times greater than known/reported frauds. Even so, this does not necessarily mean there are more audit report failures since most instances of corporate fraud do not involve auditor negligence.

[5] An auditor could avoid this problem by always issuing a going concern audit report. Of course, this would result in inaccurate audit reports in most instances (over-qualifying) and are called Type 1 reporting errors (qualifying when unwarranted).

[6] This residual risk is termed *audit risk* in audit standards, which is the risk an auditor incorrectly issues a standard clean audit report on the audited financial statements. The standards do not dictate zero audit risk in planning audits.

5. Audit Report Quality: 50 Shades of Grey?

Summarizing the above discussion, the black and white (binary) model of audit quality report is not particularly useful in delineating good and bad audits, even when there is client fraud and potential bankruptcy risk.

Most audit reports are standard clean opinions, and technically these are the "correct" report. However, we know that there is wide variation in the quality of audited financial statements, particularly the quality of audited earnings, yet all of these financial statements receive the same standard clean audit report. There is a spectrum or continuum of quality in audited financial statements because of the managerial discretion, choices, judgments, and accrual estimations that exist in applying accounting standards. The binary pass/fail audit report treats all firms on the spectrum as if they are same, yet we know they are not the same.

A large body of research investigates the quality of audited earnings. Nissim (2022) provides a compressive review of this literature. Briefly, research finds that earnings are of higher quality if they are more persistent (sustainable), more predictive of future earnings and future cash flows, if they have lower levels of unexpected (abnormal) accruals, are less likely to be restated in subsequent periods, are not aggressively managed to meet benchmark earnings targets (such as analysts' forecasts) and have greater value-relevance for stock prices (for listed firms). More generally, firms with high levels of accruals are more likely to fail, more likely to have material misstatements and frauds, and are more likely to have restatements and regulator sanctions (Dechow et al, 1996; Dechow et al., 2010).

The presumption I make is that the auditor should play a crucial role in monitoring the quality of the discretionary accounting policy choices and accrual estimates made by the client in applying accounting standards – even if these policies and estimates do not technically violate the accounting standards.

Arthur Levitt, Chief Accountant of the Securities and Exchange Commission in the United States, was highly critical of firms using this discretion to aggressively manage reported earnings to meet earnings targets such as analysts' forecasts. In a widely cited speech titled "The Numbers Game" he argued that even though firms might be in technical compliance with accounting standards, at some point aggressively managed earnings become misleading to investors about the true performance of firms and may be tantamount to fraud (Levitt 1998).

A "good" auditor should constrain overly aggressive accounting choices by a client, while a "lax" auditor might not. In my view, these judgments by auditors are of fundamental importance in shaping the quality of the client's audited financial statements. While following the standards in the audit process is important, even more important is the role of the auditor in monitoring the reasonableness of the client's accounting policy choices and accrual estimates, and, where needed, to put on the brakes and constrain aggressive choices made by the client.[7]

[7] Examples of aggressive accounting would include certain revenue recognition policies such as "bill and hold" sales in the software industry, unusually low rates of bad debt expense and depreciation expense, and a reluctance to record asset impairments in a timely manner. Conservative accounting would be the opposite of these policies.

This discussion gives rise to the idea of using financial statement quality, especially earnings quality, as a way "to infer" the quality of the auditor and the audit report. In other words, financial statement (earnings) quality is a spectrum, fifty shades of grey, rather than a black and white binary model of correctness. The same is true of audit quality: it is not black and white.

This idea also underlies archival research on audit quality, in which certain auditor attributes are expected *a priori* to be associated with better quality audits (e.g., auditor industry expertise), and are tested for their association with the spectrum of financial statement quality. Better auditors are expected to be positively associated with better earnings quality. The implication is that a continuum measure of audit report quality can be inferred from the continuum of the quality of audited financial statements. Empirically, a large body of research in auditing supports this linkage between auditor attributes that predict auditor quality, such as audit firm size or industry expertise, and the continuum of earnings quality (Francis, 2023).

6. More on Accruals and Earnings

It is important to elaborate on the importance of accrual estimates in the financial statements, and why they should play a central role in the auditor's assessment of the client. The client's financial statement earnings numbers are a combination of relatively straightforward factual data such as the cash flows from the purchase and sale of inventory, and more complex forecasts and estimations of items which are called "accruals." A simple example of an accrual is a sale made on credit, with the payment to be received at some point in the future. The sale is recognized before cash is collected. Then, at the end of the fiscal year, the accounting system makes an accrual estimate of the balance of credit sales that is unlikely to be collected, called a bad debt expense.

Most accruals are more complex such the estimation of pension expense for a defined benefit pension plan linked to future salaries; the fair market value of assets for which there is no external market price; assessing if there is a decline in the value of a firm's assets (asset impairments); the amount of executive compensation arising from the issuance of stock options; estimated future warranty costs related to current-period sales; and the valuation of complex financial instruments such as derivatives.

Research shows that accrual-based earnings are a better measure of an organization's operating performance than operating cash flows, and are more informative to investors (Dechow, 1994). However, accruals also introduce uncertainty that can potentially reduce the quality of earnings. There are no black and white accounting standards for accrual estimations. Instead, they are the subjective judgments and estimates of managers who can have personal incentives to use these accrual estimates to "distort" or "manage" earnings numbers. Manager's might do this to achieve their own self-serving objectives, such as meeting earnings targets for performance bonuses, or managing earnings to meet forecasted earnings targets. For this reason, the careful audit and review of accruals is where the audit can potentially have an important effect on the quality of audited accounting information, by providing a check on the reasonableness of managerial discretion with respect to accruals estimations.

Auditors are now required to report on what are called "key" or "critical" audit matters in their audit report, which are areas of the audit that were especially difficult. Not surprisingly, most of

these disclosures relate to accrual estimates such as revenue recognition, asset impairments (including goodwill), and fair market values (Audit Analytics, 2021).

The magnitude of accruals in earnings will vary from firm to firm, depending on the industry and the nature of a firm's operations. Accruals can be quite small for some organizations, and very large for others. I calculated the distribution of accruals for around 6,000 US listed firms on the Compustat database for the period 2000 to 2021. Total accruals are defined as: Total Accruals = Net Income – Operating Cash Flows. For most firms, total accruals have a negative sign, meaning they are expenses and reduce earnings. Examples are Depreciation Expense and Bad Debt Expense. The median value of accruals is 17 percent of revenues. Another way of measuring accruals is their size relative to operating cash flows: the median ratio is 67%, with an inter-quartile range of 35% to 147%. Accruals are clearly a large and significant component of earnings.[8]

Given the above discussion of accruals, it is not surprising that research on financial statement quality has focused primarily on earnings quality, where there is a deep and extensive literature. Research also as shows that firms with low-quality earnings are more likely to have misreported earnings, and to be the subject of regulator investigations and sanctions (Dechow et al., 1996; Dechow et al., 2010). Further, as noted above, unusually high levels of accruals are typically found in firms that have misreported earnings.

7. Is Audit Quality Unobservable?

In the essay, I have been critical of the way that auditors and regulators think about audit quality. I now turn my criticism to academics who might read this essay. It has become almost a "matter of faith" to repeat the dictum that audit quality is unobservable. This idea is probably traceable to DeAngelo (1981) who argued that it is costly or even impossible for outsiders (investors) to assess audit quality, and for this reason outsiders use publicly observable proxies for audit quality such as the size or reputation of the audit firm.[9]

It is true that outsiders cannot observe the audit process, the gathering and interpretation of evidence by the auditor. However, outsiders can assess the outcome of an audit – the auditor's report and the quality of the audited financial statements – in exactly the ways I have described in this essay. It is even the case that sophisticated investors have developed stock trading strategies based on the quality of a firm's earnings and accruals that builds on the scholarly work of Sloan (1996) and others. So, it is lazy thinking for academics and others to perpetuate the myth that audit quality is "unobservable." It is observable.

[8] To illustrate, consider the 2021 global earnings of British-based Shell PLC (in US dollars). Net income was $20.6 billion, consisting of $45.1 billion in operating cash flows, less net accruals (expenses) of $24.5 billion. Net accruals are 54 percent of operating cash flows (24.5/45.1).

[9] Causholli and Knechel (2012) build on DeAngelo (1981) and suggest that audits are a "credence" good whose credibility(quality) is conditional on the audit provider's reputation.

8. Conclusion

To recap, the framework in Francis (2011) discusses the building blocks of high-quality audits and should help firms and regulators in assessing the many different dimensions that can potentially drive audit quality. In particular the inputs to an audit (the quality of people and testing procedures) are important in understanding the quality of the audit process of gathering and interpreting evidence.

The binary model of a correct or incorrect audit report is simple, but it is not a particularly useful (or accurate) way of thinking about and measuring audit quality. We know there is wide variation in the quality of audited financial statements, yet most receive the same standard clean audit report. There is a spectrum of audited earnings quality, but there is no comment on this in the standard clean report.

A "better quality" auditor should press their clients to make better accounting policy choices and accrual estimates that improve earnings quality, while a "lesser quality" auditor is more likely to allow the client greater discretion to make choices and estimates that can lower the quality of audited earnings. So, earning quality becomes a way to make a more nuanced assessment of audit report quality, than the simple binary (pass/fail) report. The 50 shades of grey in the spectrum of the quality of audited financial statements (especially earnings) also means there are 50 shades of grey in the quality of the audit reports on the client's financial statements. Given the limits of binary audit report, earnings quality is *de facto* a better measure of audit report quality.

Finally, is it possible for the audit report to say more about the quality of the client's audited earnings? In some respects, this is what the disclosures of "key" or "critical" accounting matters do. They do so in a qualitative rather than empirical way, but they alert the reader to potential problem areas in the financial statements.

A bolder, more informative audit report might tell the reader if the firm's accounting policies and accrual estimates differ significantly from industry averages or historical norms. Are earnings reflective of typical choices and accrual estimates in the industry? Or do earnings contain more aggressive choices than the industry average/norm (resulting in larger earnings). Alternatively, are the earnings and accrual estimates more conservative than the industry norm (resulting in smaller earnings)?

Such an audit report could include an additional paragraph after the expression of the auditor's opinion. Here is a hypothetical example of what such a paragraph might look like:

"While we believe the financial statements are prepared in accordance with the accounting standards of the IASB, they also reflect management's accounting policy choices and estimates. In our opinion, these choices and estimates are (choose one):

a) Typical of the historical norms in the client's industry;
b) More aggressive than the historical norms of the client's industry, which results in earnings that are likely to be larger relative to these historical norms; or

c) More conservative than the historical norms of the client's industry, which results in earnings that are likely to be smaller relative to these historical norms."

This type of expanded audit report could be an experimental first step in moving beyond the binary audit report model. My prediction is that this such an audit reporting requirement would lead to a race to the top. The reason is that most companies would want to avoid being called out as "aggressive," and would prefer instead to be seen to be "typical" or even "conservative" relative to historical industry norms. It is also possible that the audit itself would become better if auditors were required to make this kind of qualitative assessment of the client's earnings relative to industry averages and historical norms.

To conclude, audit quality is more than "audit process" quality, and audit quality is more nuanced than the "binary model" of audit report quality. The ultimate outcome of the audit is a report on the client's audited financial statements, and we know financial statements (especially earnings) are best understood as a spectrum of quality within the broad parameters of accounting standards. It follows logically that the quality of the audit report would be enhanced if it said something about where a client's audited earnings are on this spectrum relative to the historical norms of the client's industry.

References

Audit Analytics. 2021. 'Serving Their Purpose? Insights on Critical + Key Audit Matters." Available online at: WWW.AUDITANALYTICS.COM.

Carcello, J., and Z. Palmrose. 1994. "Auditor Litigation and Modified Reporting on Bankrupt Clients." *Journal of Accounting Research* (Volume 32, Studies on Accounting, Disclosures and the Law): 1-30.

Causholli, M., and W. Knechel. 2012. "An Examination of the Credence Attributes of an Audit." *Accounting Horizons* 26 (4)" 631-656.

DeAngelo, L. 1981. "Auditor Size and Audit Quality." *Journal of Accounting and Economics* 3 (3): 183-199.

Dechow. P. 1994. "Accounting Earnings and Cash Flows as Measures of Firm Performance: The Role of Accounting Accruals." *Journal of Accounting and Economics* 18 (1): 3-42.

Dechow, P., W. Ge, C. Larson, and R. Sloan. 2010. "Predicting Material Accounting Misstatements." *Contemporary Accounting Research* 29 (1):17–82.

Dechow, P., R. Sloan, and A. Sweeney. 1996. Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC. *Contemporary Accounting Research* 13(1), 1–36.

Dyck, A., A. Morse, and L. Zingales. 2023. How Pervasive is Corporate Fraud? *Review of Accounting Studies* (forthcoming). https://doi.org/10.1007/s11142-022-09738-5

Francis, J. 2011. "A Framework for Understanding and Researching Audit Quality." *Auditing: A Journal of Practice and Theory* 30 (2): 125-152.

Francis, J. 2023. "Going Big, Going Small: A Perspective on Strategies for Researching Audit Quality." *The British Accounting Review* 55 (March 2023): 1-15.

Gaynor, L., M. Mercer, and T. Yohn. 2016. "Understanding the Relation between Financial Reporting Quality and Audit Quality." *Auditing: A Journal of Practice and Theory* 35 (4): 1-22.

International Auditing and Assurance Standards Board. 2014. "A Framework for Audit Quality: Key Elements that Create an Environment for Audit Quality." Elements of the framework are also in International Auditing and Assurance Standards Board (2020), "Quality Management for an Audit of Financial Statements," and in *ISA 220 (Revised)*.

Knechel, R., G. Krishnan, M. Pevzner, L. Bhaskar, and U. Velury. 2013. Audit quality: Insights from the Academic Literature. *Auditing: A Journal of Practice & Theory, 32* (Supplement 1): 385–421.

Levitt, A. 1998. *The Numbers Game*. Available on the internet at: https://www.sec.gov/news/speech/speecharchive/1998/spch220.txt

Nissim, D. 2022. "Earnings Quality." Working Paper (Columbia University). Available on SSRN at: https://papers.ssrn.com/abstract_id=37943.

Sloan, R. 1996. "Do Stock Prices Reflect Information in Accruals and Cash Flows About Future Earnings?" *The Accounting Review* 71 (3): 289-315.