

Literature Review

Professional Skepticism and Audit Committee Support

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Overview

Professional skepticism is essential to audit quality, and enhancing auditor skepticism is of great concern to regulators, practitioners, and scholars (e.g., Nelson 2009; IAASB 2015; KPMG 2016). However, despite the acknowledged importance of professional skepticism, auditors' failure to exercise a sufficient level of skepticism continues to be a globally recognized issue. Prior research has shown that exercising skepticism may come at a cost (e.g., budget overruns and potential conflicts with management), which can form a substantial barrier to the appropriate application of skepticism. In our FAR research project, we examine whether audit committee involvement and support can reduce this barrier, and in turn, increase the professional skepticism exercised on the audit. This paper provides an overview of the literature on (1) auditor professional skepticism, divided into a general overview followed by a focus on the aforementioned barrier to skepticism, and (2) audit committee interactions with the audit team, and how these can potentially improve professional skepticism.

Professional Skepticism

There have been several syntheses of the academic research related to auditor professional skepticism (e.g., Nelson 2009; Hurtt et al. 2013; Brazel and Schaefer 2016a, 2016b, 2017). This research generally relies upon the model proposed by Nelson (2009) and the updates to that model in Hurtt et al. (2013), where auditor skepticism (skeptical judgements and actions) is a function of auditor knowledge, traits, and incentives and client characteristics. Much of the extant accounting literature focuses on auditor-specific knowledge and innate traits that may impact the application of skepticism.

Most of the research related to auditor knowledge or experience indicates a positive relationship between knowledge/expertise and professional skepticism exercised. For example, some studies have found that skepticism improves with more senior personnel as they have

deeper knowledge about the client's industry and business (Peecher et al. 2007; Knechel et al. 2010; Brewster 2012). Similarly, Rose (2007) finds that although general experience did not enhance skeptical judgments, fraud-specific experience did. These results are consistent with archival research examining the impact of industry expertise on audit quality - which finds positive effects of industry expertise on audit quality, presumably due to increases in skepticism (e.g., Balsam, Krishnan, and Yang 2003; Low 2004; Romanus et al. 2008; Reichelt and Wang 2010; Bratten, Causholli, and Myers 2017; Chen, Hou, Richardson, and Ye 2018; Stein 2019). In contrast, some studies have found more senior auditors (Shaub and Lawrence 1999; Payne and Ramsay 2005) and industry specialists (Grenier 2017) to be less skeptical. In sum, research suggests that knowledge and experience are important factors associated with professional skepticism, but knowledge or experience alone are likely not sufficient to ensure skepticism is exercised.

With regards to auditor-specific traits, Hurtt et al. (2015) find that auditors are more likely to detect inconsistencies in audit documentation when they rate higher on a measure of trait professional skepticism (e.g., the extent to which they have a questioning mind). Brown-Liburd et al. (2011) conducted an experiment simulating a negotiation between an auditor and client and found that auditors were more conservative and more resolute when they exhibited higher professional skepticism tendencies. Similarly, Quadackers et al. (2014) find that auditors are more skeptical if they measure higher on presumptive doubt as compared to neutrality, particularly in higher client risk settings. Robinson et al. (2017) examine both the state and trait components of professional skepticism. They note that as inherent risk increases (i.e., *state* professional skepticism increases), auditors with low trait professional skepticism exhibited greater increases in their skeptical behavior as compared to auditors that were high in trait professional skepticism. In sum, research has found that auditors' innate traits are associated with professional skepticism, although trait skepticism clearly interacts with state skepticism.

Recent research suggests that audit firm and engagement culture may also significantly influence the level of professional skepticism exercised on engagements, as auditors respond to the rewards and incentives they face on specific engagements and within the overall firm structure (e.g., Nelson 2009; Brazel et al. 2016, Brazel et al. 2018, Brazel et al. 2019). These findings are important because they suggest that audit firms can, at least to some extent, influence auditors' application of skepticism.

Auditing standards require auditors to maintain a questioning mindset and critically assess audit evidence (IAASB 2004; PCAOB 2015; 2016). Audit firms clearly recognize that appropriate levels of skepticism increase the likelihood that material misstatements are detected, which is important in promoting audit quality, investor confidence, and global financial stability. However, exercising skepticism can come at a cost when additional work is performed to obtain sufficient and appropriate evidence, such as budget overruns and potential conflicts with management (Houston 1999; Nelson 2009; Peecher et al. 2013; Curtis et al. 2019). This may be particularly prevalent because the base rate of materially misstated accounts is low, and auditors often confront a false positive paradox in which cues suggestive of a misstatement (e.g., red flags) are more likely to reflect non-misstatements than misstatements (Waller and Zimbelman 2003; Durney et al. 2014).

Surprisingly, despite concerns about insufficient skepticism, little is known about whether individual auditors experience adequate incentives to exercise skepticism (Hurt et al. 2013). However, two exceptions are the studies by Brazel et al. (2016, 2018). These studies draw on the aforementioned costs associated with exercising skepticism and demonstrate that appropriate skeptical actions are rewarded based on their outcome. Brazel et al. (2016) find that evaluators reward audit staff who exercise appropriate levels of skepticism and identify a misstatement, which is seen as a 'positive' outcome. However, when no misstatement is identified (seen as a

'negative' outcome), evaluators penalize staff who exercise appropriate levels of skepticism, suggesting the existence of an unwarranted 'outcome bias'. The study further demonstrates that when skeptical actions do not identify a misstatement: (1) they are viewed as "lost time" by more senior members of the audit engagement team, and (2) client management is more likely to convey negative information about the audit staff to the audit partner. Brazel et al. (2016) also find that auditors in the field anticipate that their superiors will be influenced by outcome knowledge when they evaluate their skeptical behavior. In sum, these findings depict an audit firm incentive system that may inadvertently discourage skepticism amongst auditors in the field. These findings are also consistent with the surveys of practitioners which suggest sources that promote defensibility or profitability like time and budget pressure, excessive workloads, and excessive documentation reduce professional skepticism amongst auditors (Lambert et al. 2017, Persellin et al. 2019, Westermann et al. 2019). In summarizing their findings, Westermann et al. (2019, 696) note the perception that "... there is little incentive to improve audit quality beyond the PCAOB's requirements (Peecher et al. 2013) as there is no public recognition of exceptional audit quality and thus no positive firm effects (e.g., increase in audit fees, reputation gains)." Thus, the research findings suggest there are opportunities for audit firms to develop incentive systems that better promote the application of professional skepticism.

Audit Committee Interactions with the Audit Team

Audit committee independence and activity level are positively associated with audit quality as measured by restatement activity (Abbott et al. 2004). Many changes have been suggested to further enhance audit committee involvement in order to improve audit firms' professional skepticism (e.g., direct audit committee communication with the PCAOB and audit committee involvement in selecting the audit partner) (e.g., Deloitte 2012; KPMG 2012; PwC 2012). However, most of these suggestions focus on the audit committee as a means for

additional oversight, typically involving a dominantly punitive approach. Although these suggestions may be beneficial, increasing the audit committee's support of the auditor (as opposed to increasing their power to punish the auditor) and reducing the barriers to skepticism may provide a less costly and more practical alternative.¹ In conducting a case study of a U.K. company, Turley and Zaman (2007) find that one of the greatest impacts of this company's audit committee was via their effect on the power relationship between the auditor and management. More specifically, the audit committee uses informal meetings with auditors and serves as the auditor's ally to influence governance outcomes.

Research suggests that audit committee support for the audit team varies substantially between engagements (Agoglia et al. 2011; Bierstaker et al. 2012; Brazel and Schmidt 2018), but generally finds that audit committees play a more active role in disputes between the auditor and management in the post-SOX era compared to pre-SOX (Brown and Popova 2016; Cohen et al. 2010; DeZoort et al. 2008). Audit committee support of the auditor in disputes with management has been found to increase under several circumstances, including when: audit committee members are more experienced/knowledgeable (DeZoort and Salterio 2001; DeZoort et al. 2003a, 2008); the audit committee members' compensation includes long-term stock options (Bierstaker et al. 2012); the accounting issue in question is the client is relatively objective (DeZoort et al. 2003a; Knapp 1987; Ng and Tan 2003; A. Wright and S. Wright 1997); the auditor has a longer tenure with the client (Rummell et al. 2019); the client's financial condition is poor (Knapp 1987); the auditor's argument for materiality includes both quantitative and qualitative factors (DeZoort et al. 2003a); and the financial report is issued annually (DeZoort et al. 2003b).

¹ Research evidence suggests strong social ties between the audit committee and the auditor can actually lead to a decrease in audit quality rather than alleviating pressure from management. However, this occurred primarily when the social ties were particularly salient, governance was poor, and/or where agency conflicts were more pronounced (He et al. 2017).

Research has not yet explored the overall frequency and consistency with which audit committees provide support to the auditor, nor has it considered *how* such support outside of just dispute mediations is communicated to the auditor. Even under conditions where the audit committee is supportive, it is unclear whether and how (if at all) support is formally expressed/made explicit to the engagement team. According to responses noted in Brazel et al. (2016), it appears that communications around audit committee support may be particularly infrequent amongst lower ranked members of the engagement team (Brazel et al. 2016), possibly because audit team meetings with the audit committee are typically held by senior members of the team, such as the partner and senior manager.

The syntheses of research related to auditor professional skepticism (e.g., Nelson 2009; Hurtt et al. 2013; Brazel and Schaefer 2016a, 2016b, 2017) also collectively indicate that very little research has examined if and how audit committees can improve auditors' application of professional skepticism. Hurtt et al. (2013, 66) explicitly note that there "is scant research examining the impact of professional skepticism of audit committee members on the effectiveness with which they discharge their responsibilities with respect to monitoring the financial reporting process." Studies that we are aware of in this area link audit committee communications/audit committee effectiveness with the likelihood that audit adjustments are recorded by client management (Libby and Kinney 2000; Ng and Tan 2003; Brown-Liburd and Wright 2011). These studies suggest that a strong audit committee can enhance the audit partner's bargaining power when audit adjustments are discussed with client management.

These findings are consistent with other recent research that points to a supportive culture as a source for potentially enhancing the application of professional skepticism (Brazel et al. 2018; Brazel et al. 2019); and regulators have, similarly, emphasized the importance of "tone at the top" in relation to skepticism (PCAOB 2012). Given the important role that costs play in the

evaluation and application of skepticism (e.g., Brazel et al. 2016, 2018), the application of professional skepticism in the field could be enhanced by signaling to audit staff that (1) additional fees for (justified) budget overruns are a possibility, and (2) audit staff are insulated from potential repercussions from client management. While the audit team in its entirety typically does not interact with the audit committee (see Brazel et al. 2016 for preliminary evidence on this), the audit committee is tasked with performing/overseeing the risk assessments and substantive tests where the appropriate application of skepticism is crucial to audit quality. Taken as a whole, the research on professional skepticism and audit committee interactions with the auditor would suggest audit committee involvement and support may be a viable means to reduce barriers to skepticism.

Conveying Audit Committee Support Effectively

Academic research has also explored the impact of several environmental factors on the application of professional skepticism, many of which may also impact the effectiveness of audit committee support interventions. Two factors that are particularly relevant may be the *source* communicating the support of the audit committee and the *characteristics* of the client. The person communicating audit committee support could vary and impact how the message is internalized by audit staff. The natural person to inform staff that they are protected from the costs of appropriate skepticism would be the *audit partner* (e.g., Bierstaker and Wright 2001). Several studies have examined the powerful impact that supervisor communications and preferences can have on subordinate judgments (e.g., Brown et al. 1999; Peecher 1996; Shankar and Tan 2006; Turner 2001; Wilks 2002; Peecher et al. 2010).

On the other hand, anecdotal evidence collected by the research team through discussions with practitioners, regulators, and audit committee members suggests that communications related to support have, at times, been conveyed directly by the *audit committee*

chair to the entire audit engagement team (including lower level auditors). It is possible that a signal of support emanating directly from the audit committee chair will have a more meaningful impact on the audit professionals testing in the field. In an experimental study with auditors, Brown & Popova (2016) find that additional communications from the audit committee opposing management's aggressive reporting choice had a significant positive impact on the auditors' professional skepticism, but only when management incentives to manage earnings were high. When management incentives to manage earnings were low, there was no impact of the audit committee communications.

The second aforementioned factor that may impact the effectiveness of audit committee support are the characteristics of the audit client's management. The extant research in accounting demonstrates the significant influence that clients can have on professional skepticism and overall audit outcomes. For example, Shaub (1996) demonstrates the importance of situational factors and historical experience with the client in the trust that develops between auditors and the client. As mentioned above, management's incentives also matter in auditor assessments (Brown and Popova 2016). Furthermore, Bennett and Hatfield (2013) find that staff-level auditors interacting with client management exercise less professional skepticism (i.e., reduce evidence collection) to avoid interactions with management when the client is intimidating. Similarly, Olsen (2017) and Eutsler et al. (2018) find that auditors' application of professional skepticism is influenced by client personality and behavior.

Taken together, it seems that the effectiveness of audit committee support and involvement would depend upon situational factors in the environment, including how that support was communicated and by whom and also on the state of the relationship between the auditor and client, including the auditor's perceptions of the client. Our study aims to provide insights into the following questions regarding the current state of audit committee support, the

impact of different communications of such support on professional skepticism, and the impact of the auditor-client relationship on the impact of audit committee support:

RQ1: What is the current state regarding audit committee support of the audit and its effect on the application of professional skepticism? What are the best practices as well as the barriers? What potential innovations could occur in relation to audit committee support of the audit to maximize its effect on the application of professional skepticism?

RQ2: Does the expression of audit committee support to all levels of the engagement team improve auditors' application of professional skepticism?

RQ3: Does the audit committee chair directly expressing the audit committee's support in person to the audit team (vs. the partner expressing the audit committee support) enhance the application of professional skepticism?

RQ4: Does client management attitude toward the audit team affect auditors' application of professional skepticism?

Project status

At this point, we have conducted an online survey with auditors ranging from senior to partner level to examine RQ1. To examine RQ2-4, we have conducted a paper-based experiment among audit seniors during audit firm training sessions. We are currently analyzing the data and look forward to presenting our preliminary results during the upcoming FAR conference in 2020.

References

- Abbott, L.J., Parker, S. and Peters, G.F., 2004. Audit committee characteristics and restatements. *Auditing: A Journal of Practice & Theory*, 23 (1): 69-87.
- Agoglia, C. P., G. T. Tsakumis, and Douppnik, T., 2011. Principles-based versus rules-based accounting standards: The influence of standard precision and audit committee strength on financial reporting decisions. *The Accounting Review*, 86 (3): 747-767.
- Balsam, S., J. Krishnan, and Yang, J., 2003. Auditor industry specialization and earnings quality. *Auditing: A Journal of Practice & Theory*, 22 (2): 71– 97.
- Bennett, G.B. and Hatfield, R.C., 2012. The effect of the social mismatch between staff auditors and client management on the collection of audit evidence. *The Accounting Review*, 88 (1): 31-50.
- Bierstaker, J., J. Cohen, F. T. DeZoort, and Hermanson, D. R., 2012. Audit committee compensation, fairness, and the resolution of accounting disagreements. *Auditing: A Journal of Practice & Theory*, 31 (2): 131-150.
- Bierstaker, J. L., and Wright, A., 2001. The effects of fee pressure and partner pressure on audit planning decisions. *Advances in Accounting*, 18: 25-46.
- Bratten, B., Causholli, M. and Myers, L.A., 2017. Fair value exposure, auditor specialization, and banks' discretionary use of the loan loss provision. *Journal of Accounting, Auditing & Finance*, <https://doi.org/10.1177/0148558X17742567>.
- Brazel, J.F., Gimbar, C., Maksymov, E.M. and Schaefer, T.J., 2018. The outcome effect and professional skepticism: A replication and a failed attempt at mitigation. *Behavioral Research in Accounting*, 31 (2): 135-143.
- Brazel, J.F., S. B. Jackson, T. J. Schaefer, and Stewart, B. W., 2016. The outcome effect and professional skepticism. *The Accounting Review*, 91 (6): 1577–1599.
- Brazel, J. F., J. Leiby, and T. Schaefer. 2019. Do rewards encourage professional skepticism? *Working paper*.
- Brazel, J.F., and Schaefer, T.J., 2016a. Research Insights—Auditor Professional Skepticism Part I: Incentives and Time. Global Knowledge Gateway (<https://www.ifac.org/global-knowledge-gateway/audit-assurance/discussion/research-insights-auditor-professional>). International Federation of Accountants, New York, NY.
- Brazel, J.F., and Schaefer, T.J., 2016b. Research Insights—Auditor Professional Skepticism Part II: Mindset, Prompts, and Environmental and Contextual Factors. Global Knowledge Gateway (<https://www.ifac.org/global-knowledge-gateway/audit-assurance/discussion/research-insights-auditor-professional-0>). International Federation of Accountants, New York, NY.
- Brazel, J.F., and Schaefer, T.J., 2017. Research Insights—Auditor Professional Skepticism Part III: Competence (Fraud Detection), Traits, and Conclusions & Future Research. Global Knowledge Gateway (<https://www.ifac.org/global-knowledge-gateway/audit-assurance/discussion/research-insights-auditor-professional-1>). International Federation of Accountants, New York, NY.
- Brazel, J. F., and Schmidt, J., 2019. Do auditors and audit committees lower fraud risk by constraining inconsistencies between financial and nonfinancial measures? *Auditing: A Journal of Practice & Theory*, 38 (1): 103-122.

- Brewster, B. E. 2012. An Experimental Investigation of Delayed Persuasion During Analytical Procedures: Are Auditors Susceptible to the Sleeper Effect? Working paper, The University of Texas at Arlington.
- Brown, C.E., Peecher, M.E. and Solomon, I., 1999. Auditors' hypothesis testing in diagnostic inference tasks. *Journal of Accounting Research*, 37 (1): 1-26.
- Brown, J.O. and Popova, V.K., 2015. The interplay of management incentives and audit committee communication on auditor judgment. *Behavioral Research in Accounting*, 28 (1): 27-40.
- Brown-Liburd, H. L., and Wright, A., 2011. The effect of past relationship and strength of audit committee on auditor negotiations. *Auditing: A Journal of Practice & Theory*, 30 (4): 51-69.
- Chen, F., Y. Hou, G. Richardson, and Ye, M., 2018. Auditor experience and the timeliness of litigation loss contingency disclosures. *Contemporary Accounting Research*, 35 (2): 956- 979.
- Cohen, J., Krishnamoorthy, G. and Wright, A., 2010. Corporate governance in the post-Sarbanes-Oxley era: Auditors' experiences. *Contemporary Accounting Research*, 27 (3): 751-786.
- Deloitte LLP (Deloitte). 2012. Comment letter on the board's concept release on auditor independence and audit firm rotation. Delivered at PCAOB public meeting. March 21. Available at: http://pcaobus.org/Rules/Rulemaking/Docket037/ps_Echevarria.pdf.
- DeZoort, F.T., Hermanson, D.R. and Houston, R.W., 2003a. Audit committee support for auditors: The effects of materiality justification and accounting precision. *Journal of Accounting and Public Policy*, 22 (2): 175-199.
- DeZoort, F.T., Hermanson, D.R. and Houston, R.W., 2008. Audit committee member support for proposed audit adjustments: Pre-SOX versus post-SOX judgments. *Auditing: A Journal of Practice & Theory*, 27 (1): 85-104.
- DeZoort, F., Houston, R. and Hermanson, D. 2003b. Audit committee member support for proposed audit adjustments: A source credibility perspective. *Auditing: A Journal of Practice & Theory*, 22 (2): 189-205.
- DeZoort, F.T. and Salterio, S.E., 2001. The effects of corporate governance experience and financial-reporting and audit knowledge on audit committee members' judgments. *Auditing: A Journal of Practice & Theory*, 20 (2): 31-47.
- Durney, M., R. Elder, and Glover, S., 2014. Field data on accounting error rates and audit sampling. *Auditing: A Journal of Practice & Theory*, 33 (2): 79-110.
- Eutsler, J., A. E. Norris, and Trompeter, G. M., 2018. A live simulation-based investigation: Interactions with clients and their effect on audit judgment and professional skepticism. *Auditing: A Journal of Practice & Theory*, 37 (3): 145-162.
- Grenier, J.H., 2017. Encouraging professional skepticism in the industry specialization era. *Journal of Business Ethics*, 142 (2): 241-256.
- Houston, R. W. 1999. The Effects of Fee Pressure and Client Risk on Audit Seniors' Time Budget Decisions. *Auditing: A Journal of Practice & Theory*, 18: 70-86.
- He, X., Pittman, J.A., Rui, O.M. and Wu, D., 2017. Do social ties between external auditors and audit committee members affect audit quality? *The Accounting Review*, 92 (5): 61-87.
- Houston, R.W., 1999. The effects of fee pressure and client risk on audit seniors' time budget decisions. *Auditing: A Journal of Practice & Theory*, 18 (2), 70-86.

- Hurtt, R. K., H. Brown-Liburd, C. E. Earley, and Krishnamoorthy, G., 2013. Research on auditor professional skepticism: Literature synthesis and opportunities for future research. *Auditing: A Journal of Practice & Theory*, 32 (Supplement): 45–97.
- Hurtt, K., Eining, M.M. and Plumlee, D., 2008. An experimental examination of professional skepticism. Available at SSRN 1140267.
- International Auditing and Assurance Standards Board (IAASB). 2004. Objective and general principles governing an audit of financial statements. International Standard on Auditing 200 (ISA 200). New York, NY: IFAC.
- International Auditing and Assurance Standards Board (IAASB). 2015. Invitation to comment: Enhancing audit quality in the public interest: A focus on professional skepticism, quality control and group audits. New York, NY: IFAC.
- Knapp, M.C., 1987. An empirical study of audit committee support for auditors involved in technical disputes with client management. *Accounting Review*, 62 (3): 578-588.
- Knechel, W. R., S. E. Salterio, and Kochetova-Kozloski, N., 2010. The effect of benchmarked performance measures and strategic analysis on auditors' risk assessments and mental models. *Accounting, Organizations and Society*, 35: 316–333.
- KPMG LLP (KPMG). 2012. Comment letter on the board's concept release on auditor independence and audit firm rotation. Delivered at PCAOB public meeting. March 21. Available at: http://pcaobus.org/Rules/Rulemaking/Docket037/ps_veihmeyer.pdf.
- KPMG LLP (KPMG). 2016. Transparency Report 2016. KPMG Professional Services.
- Lambert, T.A., Jones, K.L., Brazel, J.F. and Showalter, D.S., 2017. Audit time pressure and earnings quality: An examination of accelerated filings. *Accounting, Organizations and Society*, 58: 50-66.
- Libby, R., and Kinney, W. R., 2000. Does mandated audit communication reduce opportunistic corrections to manage earnings to forecasts? *The Accounting Review*, 75 (4): 383–404.
- Low, K. Y. 2004. The effects of industry specialization on audit risk assessments and audit planning decisions. *The Accounting Review*, 79: 201–219.
- Nelson, M.W. 2009. A model and literature review of professional skepticism in auditing. *Auditing: A Journal of Practice & Theory*, 28 (2): 1-34.
- Ng, T. B.-P., and Tan, H.T., 2003. Effects of authoritative guidance availability and audit committee effectiveness on auditors' judgments in an auditor-client negotiation context. *The Accounting Review*, 78 (3): 801–818.
- Olsen, C., 2017. A study of professional skepticism. Springer International Publishing.
- Payne, E. A., and Ramsay, R. J., 2005. Fraud risk assessments and auditors' professional skepticism. *Managerial Auditing Journal*, 20 (3): 321–330.
- Peecher, M.E., 1996. The influence of auditors' justification processes on their decisions: A cognitive model and experimental evidence. *Journal of Accounting Research*, 34 (1): 125-140.
- Peecher, M.E., Piercey, M.D., Rich, J.S. and Tubbs, R.M., 2010. The effects of a supervisor's active intervention in subordinates' judgments, directional goals, and perceived technical knowledge advantage on audit team judgments. *The Accounting Review*, 85 (5): 1763-1786.
- Peecher, M. E., I. Solomon, and Trotman, K.T., 2013. An Accountability Framework for Financial Statement Auditors and Related Research Questions. *Accounting, Organizations and Society*, 38: 596-620.

- Peecher, M. E., R. Schwartz, and Solomon, I., 2007. It's all about audit quality: Perspectives on strategic systems auditing. *Accounting, Organizations and Society*, 32: 463–485.
- Persellin, J., Schmidt, J.J., Vandervelde, S.D. and Wilkins, M.S., 2019. Auditor Perceptions of Audit Workloads, Audit Quality, and Job Satisfaction. Working Paper.
- Pricewaterhousecoopers LLP (PWC). 2012. Written testimony of Robert E. Moritz. Delivered at PCAOB public meeting. March 21. Available at: http://pcaobus.org/Rules/Rulemaking/Docket037/ps_moritz.pdf.
- Public Company Accounting Oversight Board (PCAOB). 2012. Maintaining and applying professional skepticism in audits. Staff Audit Practice Alert No. 10 (SAPA 10). Washington, D.C.: PCAOB.
- Public Company Accounting Oversight Board (PCAOB). 2015. Due Professional Care in the Performance of Work: Auditing standard 1015. Washington, DC: PCAOB.
- Public Company Accounting Oversight Board (PCAOB). 2016. Consideration of fraud in a financial statement audit: Auditing standard 2401. Washington, DC: PCAOB.
- Quadackers, L., Groot, T. and Wright, A., 2014. Auditors' professional skepticism: Neutrality versus presumptive doubt. *Contemporary Accounting Research*, 31 (3): 639-657.
- Reichelt, K., and Wang, D., 2010. National and office-specific measures of auditor industry expertise and effects on audit quality. *Journal of Accounting Research*, 48 (3): 647– 686.
- Robinson, S.N., Curtis, M.B. and Robertson, J.C., 2017. Disentangling the trait and state components of professional skepticism: Specifying a process for state scale development. *Auditing: A Journal of Practice & Theory*, 37 (1): 215-235.
- Romanus, R. N., J. J. Maher, and Fleming, D. M., 2008. Auditor industry specialization, auditor changes, and accounting restatements. *Accounting Horizons*, 22 (4): 389–413.
- Rose, J. M. 2007. Attention to evidence of aggressive financial reporting and intentional misstatement judgments: Effects of experience and trust. *Behavioral Research in Accounting*, 19: 215–229.
- Rummell, J.E., DeZoort, F.T. and Hermanson, D.R., 2018. Does Audit Firm Tenure Matter to Audit Committee Members? Evidence from an Accounting Dispute. *Accounting Horizons*, 33 (2): 25-41.
- Shankar, P.G. and Tan, H.T., 2006. Determinants of audit preparers' workpaper justifications. *The Accounting Review*, 81 (2): 473-495.
- Shaub, M.K., 1996. Trust and suspicion; the effects of situational and dispositional factors on auditors' trust of clients. *Behavioral Research in Accounting*, 8: 154-174.
- Shaub, M. K., and Lawrence, J. E., 1999. Differences in auditors' professional skepticism across career levels in the firm. *Advances in Accounting Behavioral Research*, 2: 61–83.
- Stein, S.E., 2019. Auditor industry specialization and accounting estimates: Evidence from asset impairments. *Auditing: A Journal of Practice & Theory*, 38 (2): 207-234.
- Turley, S. and Zaman, M., 2007. Audit committee effectiveness: informal processes and behavioural effects. *Accounting, Auditing & Accountability Journal*, 20 (5): 765-788.
- Turner, C.W., 2001. Accountability demands and the auditor's evidence search strategy: The influence of reviewer preferences and the nature of the response (belief vs. action). *Journal of Accounting Research*, 39 (3): 683-706.
- Waller, W., and Zimbelman, M., 2003. A cognitive footprint in archival data: Generalizing the dilution effect from laboratory to field settings. *Organizational Behavior and Human Decision Processes*, 91 (2): 254–268.

- Westermann, K.D., Cohen, J. and Trompeter, G., 2019. PCAOB inspections: Public accounting firms on "trial". *Contemporary Accounting Research*, 36 (2): 694-731.
- Wilks, T.J., 2002. Predecisional distortion of evidence as a consequence of real-time audit review. *The Accounting Review*, 77 (1): 51-71.
- Wright, A. and Wright, S., 1997. An examination of factors affecting the decision to waive audit adjustments. *Journal of Accounting, Auditing & Finance*, 12 (1): 15-36.