

Practice Note: Workload allocation process within audit firms

Presented to the Foundation for Auditing Research to satisfy the requirements concerning project 2019B03: The allocation of lead auditors to clients: Large-scale evidence on the determinants and consequences of allocation decisions in audit offices (started: September 2020)

Eddy Cardinaels, Tilburg University and KU Leuven
Ruiqiong Zhang, Tilburg University
Amin Sofla, KU Leuven
Simon Dekeyser, KU Leuven

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Executive Summary

Context: Audit firms rely heavily on their intellectually skilled auditors, who manage and lead the engagement team (so-called ‘lead auditors’ in this project). To deliver high-quality audit services to their clients and to offer opportunity for auditors to learn, audit firms should try to achieve proper matching between their clients and the auditors based on compatibility between them. Appropriate matching can constitute a difficult exercise as both the lead auditors and clients may have an important stake that encourages them to intervene in the allocation process. Such interventions may affect the level of audit quality that the audit firm is able to deliver when clients and auditors are not appropriately matched.

Objective and method: The objective of this research is to understand how audit firms determine the lead auditor-client pair in terms of appropriate matching. Given that such allocations take place in a work environment where lead auditors and clients have their own demands and as such can intervene in this process, this research further aims to identify the lead auditors’ motivations for intervening in this process. We will conduct semi-structured interviews with lead auditors and planning department staff of audit firms to address our research questions.

Contribution: This research aims to open the ‘black box’ of audit firms’ human resources management strategies by zooming in on the process of lead auditor-client matching. Given the potential impact that proper matching between auditor and client has on audit quality, understanding the allocation process in terms of which auditor is assigned to which client is important to academic research and practice. Our research could give audit firms and audit regulators guidance for regulation and best practices when it comes to workload management.

Keywords: *human capital, workload allocation; lead auditor; audit quality, matching*

Research Synthesis

I. Motivation of the study

Audit firms, as all typical knowledge-intensive firms, rely on their intellectually skilled auditors who are critical for maintaining their competitive advantage and reputation (Kaiser, Kozica, Swart, & Werr, 2015; Løwendahl, Revang, & Fosstenlökken, 2001; Nordenflycht, 2010). Audit firms should properly match their clients to these auditors, who are responsible for managing and leading the audit team or signing the audit report (so-called ‘lead auditors’). This proper matching is important. On the one hand, if there is strong compatibility between the lead auditor and the client, the systematic allocation may have quality and efficiency implications (Abdel-Meguid, 2012; Brown & Knechel, 2016). Inefficient and incompatible allocation may hamper the audit quality provided by the lead auditors, which potentially affects the clients’ financial statement quality. Meanwhile, the allocation of lead auditors across clients can play a pivotal role in developing a lead auditor’s expertise and specialization. As lead auditors learn and develop various skill sets from their clients (Westermann, Bedard, & Earley, 2015), they should be matched with clients that are active in the area in which an office or a lead auditor want to acquire expertise (Løwendahl et al., 2001). This learning process can impact audit quality by influencing auditors’ capability of risk assessments and error detection (Gopal V. Krishnan, 2003; Reichelt & Wang, 2010; Taylor, 2000).

However, while the allocation decision is important for both audit quality and audit firm’s strategic development, the progress in understanding how audit firms allocate their lead auditors and whether these allocation decisions affect the performance and audit quality is still largely absent. Most studies examine the audit firms’ workload allocation processes at the office level and mainly focus on the relationship between workload leverage and audit quality in busy periods (e.g., López & Peters, 2011; López & Peters, 2012). Although prior auditing research gives us some indications of how audit firms and their clients are paired with each other (e.g., Brown & Knechel, 2016), the workload allocation process at the lead auditor level, taking into account their different working styles and incentives, still remains a black box.

The constitution of the client-lead auditor pair is a contentious exercise. Ideally, clients and auditors should be matched based on expertise level, industry specialization and other relevant factors that benefit audit efficiency and quality (so-called ‘*assortative matching*’) when audit firms aim at improving efficiency and effectiveness (Becker, 1974; Chatain & Meyer-Doyle, 2012; Durlauf & Seshadri, 2003). However, lead auditors with extensive experience and expertise are typically in a strong bargaining position (Kaiser et al., 2015; Løwendahl et al., 2001; Nordenflycht, 2010) and often have specific preferences regarding their client portfolio for their career advancement. These preferences can motivate lead auditors to intervene in the allocation processes to satisfy their personal interests, which potential conflicts with the ideal pairs constituted based on the assortative matching.

On the other hand, clients also play a key role in determining the lead auditor-client pairs. The collaboration between a lead auditor and client occurs only when both parties consider the collaboration beneficial (Li, McNichols, & Raghunandan, 2018). Clients' preferences for a certain lead auditor are often driven by recommendation and reputation concerns (Kacanski, Lusher, & Wang, 2020) and may not always focus on the desire to improve financial reporting quality (Cohen, Krishnamoorthy, & Wright, 2008; Knechel, Vanstraelen, & Zerni, 2015). To satisfy client requests, the ideal lead auditor-client pairs can also be disturbed (Jonathan Cook, Kowaleski, Minnis, Sutherland, & Zehms, 2020; Skinner & Srinivasan, 2012). In this study, we call the allocation with interventions from lead auditor or clients as *other incentives in matching*.

Given the factors, audit firms arguably face several challenges in the allocation process when balancing auditor wishes and client preferences with the audit firm's overarching goal of delivering high audit quality at every engagement. This study aims to gain detailed insights into how audit firms allocate their lead auditors across clients regarding the intervention of lead auditors and clients. To study this, we plan to conduct qualitative interviews with lead auditors and the planning team members (see methodology section).

II. Research questions development

To obtain high-quality efficient audits, audit firms develop matching strategies to deal with the relevant tradeoffs between the benefits from the allocation and its corresponding costs (e.g., Ellen. Cook & Kelley, 1988; Kelley & Seller, 1982; Masihabadi, Rajaei, Amir Shams, & Parsian, 2015). Prior research investigates audit firms' workload allocation, but mainly explores the planning of audit hours rather than the client-lead auditor pair matching¹. Specifically, prior research mainly focuses on exploring the negative effects of audit time pressures on audit quality caused by the workload allocation decisions (e.g., López & Peters, 2011, 2012). However, while time pressure can make it difficult to allocate sufficient time to clients, the assignment of new clients to auditors also puts pressure on audit hours. In particular, when assigning clients, it becomes a tedious exercise for audit firms to guarantee audit quality, as allocating sufficient time and effort to all clients becomes increasingly difficult when an auditor's workload increases (Bhattacharjee, Maletta, & Moreno, 2007; Bhattacharjee, Maletta, & Moreno, 2012; Mullis & Hatfield, 2018). Audit firms should therefore make full use of their human resources to determine the most 'optimal' client-lead auditor pairs such that high-level audit quality can be guaranteed at each individual assignment. However, although the allocation of lead auditors to clients can have important quality and efficiency implications, prior research mainly focuses on the implications of extreme levels of high workload (e.g., Bhattacharjee et al., 2012; Mullis & Hatfield, 2018) rather than studying the allocation process in more detail.

¹ Workload allocation is the process that consists of the auditing hours planning process and auditor assigning process. In this project, the term 'workload allocation strategy' refers to the auditors assigning, allocating, or pairing strategy.

Therefore, this study will focus on investigating how audit firms allocate their lead auditors across clients in a work environment where lead auditors can intervene in this process. Firstly, we will examine the matching strategies that aim at improving the audit firms' overarching priority – audit quality. Specifically, we will investigate the role of lead auditors' characteristics (e.g., expertise level, working experience, etc.) in the client allocation process in terms of their current and previous performances and assignments. In this case, we expect that workload is managed with the idea that clients and auditors are matched based on the auditors' expertise level, compatibility, or opportunities for personal development. In this workload management strategy, which we call *assortative matching*, available staff are reasonably assigned to clients to guarantee a reasonable level of audit quality at each auditor-client pair. Secondly, we will investigate *other incentives in matching* where the auditors have their own demands and try to intervene in the allocation processes to select their preferred clients. Due to certain incentives, lead auditors may steer the allocation process to their advantage such that assortative matching may not always materialize. If this happens, the appropriate matching constituted by assortative matching may be hampered, which may affect audit quality. As a methodology, we will develop interview questions that are relevant to the factors related to assortative matching and second incentives that drive lead auditors to intervene in the allocation processes.

Assortative Matching

The audit quality relies, among other things, on the capacity of audit planning to realize a proper matching between lead auditors and their clients (Li et al., 2018; Xue, Ye, & Hong, 2013). A strong compatible matching between the lead auditor and client regarding the auditor's prior experience renders positive outcomes and efficiency implications (Brown & Knechel, 2016). Audit firms that use the principle of compatible matching can increase the potential for knowledge overlap. Such *assortative matching* can develop lead auditor's expertise and specialization (Beck & Wu, 2006; Westermann et al., 2015). It can further improve audit quality and efficiency by reducing the lead auditor's labor costs (Brown & Knechel, 2016; Hackenbrack & Knechel, 1997).

Audit firms can also control and manage their lead auditors' client portfolio by reducing or extending the client portfolio at the firm level (e.g., Hogan & Martin, 2009; Johnstone & Bedard, 2004). Specifically, a lead auditor's client portfolio might not always permit extensions when he or she is already constrained. It requires audit firms to consider each auditor's workload carefully as the increase of multi-tasking and multi-client may impair the audit quality (Bhattacharjee et al., 2007; Mullis & Hatfield, 2018). Whilst the literature shows 'optimal' matchings play a crucial role in audit quality, we have limited evidence within audit offices of how planning goes about in achieving such assortative matching.

In sum, when audit firms follow the principle of *assortative matching*, they often try to deploy better human resources to higher-value clients. They further need to ensure that the

auditor and client are matched to fully deploy their lead auditors' skills and talents. Such matching can potentially improve audit quality. This leads to the following research questions:

RQ1: *Do audit firms consider the best fit between the client (and their needs) and lead auditors? If so, how do the audit firms determine the 'optimal' pairs?*

RQ2: *What factors (e.g., expertise, workload balance, client risk, etc.) does workload planning consider when determining the lead auditor-client pair?*

Other Incentives in Matching

The nature and incentives within audit firms and the preference of autonomy can also give lead auditors considerable bargaining power to select their preferred clients (Kaiser et al., 2015; Løwendahl et al., 2001; Nordenflycht, 2010). For instance, lead auditors might want to avoid riskier clients in their portfolio (e.g., J. Krishnan & Krishnan, 1997) to maintain their reputation as high-quality audit service suppliers. Second, a higher number of clients can boost an individual's auditor's compensation or may offer auditors promotion opportunities (Knechel, Niemi, & Zerni, 2013). When lead auditors prioritize these incentives, they may be inclined to extend their client portfolio despite already having 'many' clients. Therefore, these incentives may lead to auditors to intervene in the workload allocation process and promote lead auditors to develop their portfolio management strategies. Lead auditors, for instance, might negotiate with their audit firms to be assigned to clients that they feel are important for their career. They may prefer clients they know from their network (Pittman, Qi, Zhang, & Zhao, 2021; Pittman, Wang, & Wu, 2017; Xue et al., 2013), clients that are bigger and that offer the lead auditor a strong reputation (Myers, Myers, & Omer, 2003), and clients with less audit or financial reporting risk (J. Krishnan & Krishnan, 1997).

Furthermore, these allocation processes can also be driven by client requests (Jonathan Cook et al., 2020; Skinner & Srinivasan, 2012). Kacanski et al. (2020) illustrate that clients' decision-making on auditor selection is a product of personal preferences driven by recommendation and reputation based on networks. This type of information may incentivize clients to intervene in the workload allocation process. For example, clients may demand audit firms to allocate them to reputable auditors (Gong, Xiao, Xu, & Gong, 2019; Kacanski et al., 2020) for reputation purposes or have certain incentives to avoid retaining the service of a particular (more critical) auditor.

Thus, what constitutes the beneficial audit collaboration among lead auditors, clients, and audit firms is debatable. While audit firms could ask their lead auditors to contribute to collaborations that can improve overall audit office quality, many incentives (e.g., lead auditors' pursuit of big or avoid risky clients, or clients' motive to avoid critical auditors) can hamper the 'optimal' matching. When such incentives make it difficult to assign auditors to clients based on their expertise level where some auditors take up many more clients than what is reasonable, audit quality may be at stake. We call these *other incentives in matching*, whereby

both auditors and clients try to intervene such that ‘optimal allocations’ based on assortative matching may not always be realized. Hence, we develop the following research questions:

RQ3: *Who is the primary decision-maker in the allocation process?*

RQ4: *Do the lead auditors or clients intervene in the workload allocation process? If yes, how? and what is the bargaining power of lead auditors in selecting clients?*

RQ5: *What factors drive the conflicts between the pursuit of lead auditors and the allocation decisions that audit firms like to pursue?*

RQ6: *What are the demands or preferences of clients for the lead auditors, and how do these demands and preferences affect the allocation process?*

III. Methodology

As noted, research on the determinants of the decision to allocate lead auditors in individuals among clients is still a black box. Thus, to tackle the research questions developed in the prior sections, we will conduct semi-structured interviews from different angles (Adams, 2015; Yin, 2016). In these semi-structure interviews, we use a set of open-ended questions and themes to be explored. However, the order in which these themes are questioned is flexible and guided by the interviewee’s own thoughts and answers. Follow-up questions to deepen an interviewee’s answer to a specific question are possible. We classify interview questions in a demand-supply framework depending on the different parties involved.

Classification of the Semi-structured Interviews

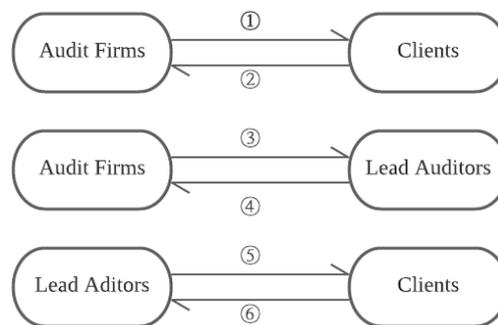


Figure 1 Supply-demand relationship considered in the workload allocation process

Our main questions will be largely focused on the allocation of lead auditors to clients. Specifically, we focus on the type of incentives that drive auditors and clients to intervene in the allocations. These allocations are determined and managed by the audit firms who are responsible for guaranteeing the audit quality of each audit engagement (Link 5 and 6). However, as discussed in previous sections, audit firms’ workload decisions may be obstructed by the interference of lead auditors and clients (Link 3 to 4).

Furthermore, we also develop interview questions to investigate client acceptance and continuation process (CACP)² in audit firms, and focus on how collaborations between audit

² Sofla (2016, p. 10) asserts that “The lead auditor’s client portfolio is the product of the ‘client acceptance and continuation

firms and clients are established before the allocation process kicks in (Link 1 and 2). These collaborations occur only if both audit firms and clients find the collaborations to be mutually beneficial (Li et al., 2018). Both audit firms and clients should consider the trade-offs between risks and potential returns when they decide to conclude the contract. For example, audit firms may prefer to accept large commercial and industrial clients who may have significant audit or financial risks to maintain their reputation level and thereby extend their client portfolios; clients, on the other hand, may be in need of reputable firms or advocate for firms that are expected to have a different opinion compared with the previous auditor they worked with.

Interview Design

To consider different viewpoints in the workload allocation process, we will organize online interviews for both lead auditors and planning team members. While sample size still needs to be determined, this study plans to sample more lead auditors than planning team members (ratio 2:1) to obtain different sentiments about the workload allocation process from different lead auditors. The interview participants, who are auditors and staff members from the planning departments, will be selected from the big four firms or larger audit offices in the Netherlands³. We will have different questions for the planning team staff members than for the lead auditors. In particular, interviews with planning department staff need to assess the picture of the allocation process. The specific focuses will be on the lead auditors' and clients' characteristics that are considered to determine the 'optimal' client-lead auditor pair. Overall, these interviews with planning department staff are aimed to understand the source of information relevant to each step in the workload decision-making process (Link 1 to 4). Ideally, the assortative matching that refers to audit firms' overarching priority of audit quality will be pictured from the interview with planning department staff.

Simultaneously, the interviews with lead auditors will help us to understand whether and how they intervene in the workload allocation process. We want to assess the drivers for individual client acceptances or refusals. First, it is crucial to explore the relations of lead auditors with their audit firms. We want to explore whether certain incentives (e.g., career paths, promotion opportunities, incentives) lead auditors to use their negotiation power to turn allocations to their advantage. They may use their wiggle room to advocate for large commercial and industrial clients or for clients that may constitute less risk (Link 3 to 6). The overall goal is to get some insights into whether certain lead auditors use their influence to be

process' (CACP)". He indicates that "The CACP usually starts with the 'practice development', the objective of which is to cultivate potential clients (Asare, Hackenbrack, & Knechel, 1994). The 'practice development' process is followed by the 'client acceptance analysis' in which an auditor performs a series of procedures to evaluate whether he or she wants to submit a proposal to a client or stop the process. If an auditor makes such a proposal to a client and the client agrees to the offer, the auditor can start to perform the audit (Asare et al., 1994). The final stage in the CACP is the continuation analysis, in which an auditor decides whether to continue with the current client or not (Asare et al., 1994). Decisions about client acceptance or continuation involve a number of criteria (Johnstone & Bedard, 2003; Simunic & Stein, 1990)".

³ In the interview, the planning team staff members should have at least two years of working experience.

matched to their preferred clients (*Other Incentives in Matching*). Also, the clients' demands for specific auditors will be the subject of our research. Overall, interviews with lead auditors aim to define the influence of lead auditors in the allocation process by capturing characteristics associated with the conflicts between audit firms' workload decisions and that of lead auditors and their clients.

Two members of the researcher team will be present for each interview⁴. The interviews for both planning team staff members and lead auditors will follow a semi-structured format that allows researchers to question certain concepts further and gather specific evidence on issues that are not directly covered in the initial set of questions (Adams, 2015; Foddy, 1993). In addition, the interview questions are expected to guide us in the development of a survey. In the further survey, we will zoom into characteristics of auditors (e.g., commercial-orientated, professional skepticism, and cognitive capacity) that affect their different client acceptance decisions and their delegation decisions in workload management.

IV. Practical Relevance

This study will deliver substantial and meaningful insights to both practitioners and regulators in the auditing context by progressing towards an understanding of the workload allocation process within audit offices. Ideally, to guarantee sufficient audit quality for each audit engagement, audit firms should strive for the 'optimal' matching between clients and their lead auditors in their local audit firms. However, various incentives may occur that intervene in this workload allocation process.

This study will contribute to the literature in several ways. First, it opens up the 'black box' of audit firms' human resources management strategies by zooming in on the processes of auditor-client assignments. This study is not just limited to research on the characteristics of clients but concentrates on the characteristics of lead auditors as human players within the audit firms. Ideally, individuals within audit firms should strive for successful value creation for their audit firms. Nevertheless, personal motives might trigger these lead auditors to intervene in the workload allocation process to select their preferred clients, which can hamper the constitution of the 'optimal' client-lead auditor pair, and potentially impact audit quality. Therefore, our results could stimulate discussion on how the workload of lead auditors could best be determined by allocating clients to satisfy different parties with their own unique incentives, strengths, and limitations. These findings can be further explored in future archival studies to understand how different allocation processes affect audit outcomes.

Secondly, depending on the outcome of the interviews, our findings could give audit standard setters and regulators guidance for regulation and best practices when it comes to workload management in audit firms. Regulators might consider the number and the diversity of engagements for particular auditors. While they cannot control the workload allocation

⁴ Before the interview, an electronic consent form will be provided to the participants via Qualtrics links.

process, which happens at the audit firm level, they can derive guidance on best practices on workload management to improve audit efficiency and quality (Bhattacharjee et al., 2007; Bhattacharjee et al., 2012; Mullis & Hatfield, 2018). Also, cooling-off periods or restrictions on non-audit services may reduce auditor's incentives and ability to influence the workload allocation process.

Finally, the study's findings will also benefit audit firms for developing audit controls and audit training regarding workload management. Insights into what auditors prefer when being matched with clients and the type of auditors that prefer to learn from their client engagements can further guide audit firms' recruitment decisions. For example, skeptic auditors might prefer such learning opportunities over other incentives that give them status in the audit firms. Also, policies about incentive system design might change such that people are also rewarded for referring clients to their colleagues. Policies that help to better share the workload among colleagues or a culture that values cooperation, may lead to significant changes to the way how clients are allocated to lead auditors.

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