Why is this research important and how does it contribute to practice?
The main priority of the audit industry is to maintain and improve audit quality. While audit quality has been an important topic in both accounting academia and practice, there is still a lack of understanding of what drives audit quality. Given that people are the most valuable asset an audit firm has, we focus on examining the labor inputs as a driver of audit quality. Specifically, we argue that a key threat for audit quality that so far has been largely neglected is the loss of talent across the hierarchy. A well-known problem for audit firms is that they invest enormous resources in new professionals only to have many with talent leave (Patten, 1995; Vera-Muñoz, Ho & Chow, 2006; ACCA & ACRA, 2012). A recent survey by the Association of Chartered Certified Accountants finds that only about 38% are satisfied with their career and only 35% plan to stay beyond three years, with no significant differences across Big 4 and mid-tier firms (ACCA & ACRA, 2012). Hence, turnover rates in audit firms are exceptionally high, with estimates ranging from 22% to 28% per year (Satava, 2003; Brundage & Koziel, 2010). While audit firms are built around the up-or-out model, which relies on a certain degree of turnover, the question is whether a significant part of this turnover rate includes talented employees that would be valuable to retain. Therefore, understanding the determinants and consequences of potential talent loss within audit firms is key in achieving high audit quality and thus highly relevant to audit firms.

Talent loss occurs when talented individuals trained for a profession are not retained by the organizations that have invested in building up their workers’ human capital because this talent is not identified in a timely and/or correct fashion or, in more broader terms, this talent is not managed well. It is critical to stress how we define talent. Our definition of talent is tailored to the major topic that the Foundation for Auditing Research (FAR) attempts to address, i.e., audit quality. Thus, rather than having a very general definition of talent, we define talent as having the knowledge and skills that are relevant for achieving high audit quality. Talent loss is incredibly costly for organizations that rely on knowledge workers, because a significant part of these organizations’ value consists of intangible assets, i.e., the value of its workers’ knowledge and skills. In audit firms, highly trained employees usually leak out after the organization has incurred the major part of the training cost, thereby not only generating high replacement cost (ACCA, 2012) but also jeopardizing audit quality. Although the loss of talent is a recurring issue that has been recognized by audit firms for decades, systematic evidence on the determinants and consequences of this phenomenon, let alone possible solutions, is still scarce. In addition, a particular point of attention is the loss of female talent, also labeled the “leaking pipeline”. There are numerous reasons why employees leave the firm, including talented employees. For example, a better outside option, a personal home situation, different preferences of individuals in terms of work-life balance, etc. While these reasons are important, they are also individual-specific and not under the control of the audit firm. We take an organizational design perspective and focus on a mechanism that is under the direct control of the audit firm, i.e., the performance management and incentive system. We propose that the design of the performance management and incentive system plays a key role in reinforcing or alleviating the loss of talent problem. This is both a novel and important research question; while researchers and businesses alike have undertaken a number of measures to understand or tackle the problem, no attention has been paid to the role of the performance management process, despite it being one of the most influential components of the work environment.
Introduction to the research question

Besides the well-known motivational effect of performance management and incentive systems, there are theoretical arguments and some initial empirical evidence that these systems also have attraction and retention effects, which might have an even bigger impact on performance than the motivational effect (Banker, Lee, Potter & Srinivasan, 2001; Ittner & Larcker, 2002). Given this, we argue that a core root of the loss of talent problem, and potentially also of the solution, is the design of performance management and incentive systems, thereby bridging the gap between the performance management, human capital, and auditor competency literatures, which have largely developed independently of each other. In particular, we argue that the degree to which the loss of talent problem can be mitigated heavily depends on what type of information is incorporated in performance evaluation and promotion decisions at different hierarchical levels, as this determines (1) the type of employee behavior being incentivized and rewarded, and (2) the type of people leaving the organization. For example, while emphasizing current job performance in promotion decisions provides incentives to perform well in the current job, it ignores the knowledge and skills needed at the next level and therefore potentially passes over employees who are better suited for the next level and subsequently decide to leave.

In particular, we expect the loss of talent to most likely occur at key career steps that involve a large change in required skills between positions, as the talents necessary and recognized for the current job are not perfectly correlated with the talents needed for the next job (Grabner & Moers, 2013). At these key career steps the Peter Principle, which in its extreme form implies that “people get promoted to their level of incompetence”, can occur when the performance management and promotion system does not take the change in skills needed for the next level into account (Grabner & Moers, 2013). The other side of the same coin is that competent people are not promoted and might risk leaking out - the problem that we investigate in this project. While Grabner and Moers (2013) provide evidence on how firms can design promotion rules to avoid the Peter Principle, the results in Bol, Estep, Moers and Peecher (2017) suggest that talent is still often misidentified in audit firms. Therefore, we hypothesize that the loss of talent occurs because performance measurement at lower levels does not adequately capture the expected competencies needed for the next job, therefore misidentifying talent, which consequently leaves the company. This is a key threat to audit quality. As a result, we address the following major research question:

RQ: How does the design of the performance management process mitigate the loss of talent (increase the retention of talent)?

What does the literature tell us?

In an audit firm, the people are the most important asset because a significant part of the organization’s value consists of the value of its workers’ knowledge and skills. In the auditing literature this is labeled auditor competency, where auditor competency refers to the auditor’s ability to deliver high audit quality, which includes knowledge and skills (DeFond & Zhang, 2014). Thus, although the audit inputs are labor, capital, and other resources, we focus on the most important component, i.e., labor (cf. O’Keefe et al., 1994), and the management of this component. More importantly, based on prior literature (Baker, Jensen & Murphy, 1988; Bol, Estep, Moers & Peecher, 2017; Borghans, Ter Weel & Weinberg, 2014; Deming, 2011; Gibbons & Waldman, 1999, 2006; Grabner & Moers, 2013, 2017; Gul, Wu & Yang, 2013; Heckman & Kautz, 2012; Heckman, Stixrud & Urzua, 2006; Knechel, Vanstraelen & Zerni, 2015; Kuhn & Weinberger, 2005; Lindqvist & Vestman, 2011; Tan & Libby, 1997; Weinberger, 2014), we identify three (interrelated) characteristics of the audit production function, and the auditing context more generally, that are crucial for managing the labor inputs to achieve audit quality.

1. Heterogeneity in auditor competencies
2. Skills are rank-specific
3. Audit quality is a product of team work

These three characteristics have the following implications.

1. Characteristic 1 ➔ Given the heterogeneity in auditor competency and the uncertainty around it, learning needs to take place, in which the beliefs about individual auditors’ competencies are updated based on signals such as observed/assessed performance. Performance management systems are the tools through which this type of information is gathered and managed. This emphasizes the crucial role of the performance management system in managing the labor inputs to audit quality.
2. Characteristic 2 ➔ The determinants of an auditor’s individual performance need to be examined by rank (hierarchical level). We know relatively little about what determines auditor performance, and how this differs per rank.
3. Characteristics 1 & 2 ➔ The identification of employees who will be successful at later career stages requires an assessment of competencies that are either not relevant or less relevant in their current rank (see also Grabner & Moers 2013). This observation again signals the importance of the performance ma-
nagement process, and the potential problem of relying on assessments of current performance for promotion decisions. It furthermore indicates the importance of knowing what determines performance at different ranks. More importantly, knowing what matters at higher ranks then triggers the question whether such information is incorporated in career decisions. The key, yet open question with respect to the loss of talent is whether talented auditors are passed over for promotion, and if so, whether they indeed (intend to) leave.

4. Characteristics 1 & 2 → The audit engagement has become a “high-skilled, difficult-to-automate job” that heavily relies on human interaction. Such jobs increasingly require social skills, which are based on tacit knowledge (Deming, 2015). Over the last decade, the economics literature has documented the growing importance of “non-cognitive” skills, including social skills and leadership skills, relative to cognitive skills (Kuhn & Weinberger, 2005; Heckman, Stixrud, & Urzua, 2006; Lindqvist & Vestman, 2011; Heckman & Kautz, 2012; Borghans, Ter Weel & Weinberg, 2014; Weinberger, 2014). This suggests that tacit knowledge has also become more important in auditing at all ranks. Consistent with this conjecture, Bol et al. (2017) find, using recent data, that audit firms to some extent start to also value tacit knowledge in relatively inexperienced auditors. While this confirms the importance of tacit knowledge and social skills in auditing, even at lower ranks, we know relatively little about their antecedents.

5. Characteristics 1 & 2 → Deming (2015) shows that the percentage of women being employed in social skill-intensive jobs has increased significantly over the last 30 years. This suggests that there are gender differences in social skills and specifically that females have a comparative advantage in social skill-intensive jobs. This social skill differential is of fundamental importance to the auditing industry. While entry-level male and female auditors are hired at an equal rate, women leak out at a rate two or three times faster than men once they have reached the mid-career manager level, resulting in a continuously low percentage of female partners (e.g., PwC, 2008). Audit firms struggle with the “leaking pipeline”, i.e., the disproportionately high loss of female talent up the hierarchy, and face pressure from the public to address the problem. Maybe even more important than the external pressure is the above observation that females might have skills that are crucial for audit quality, which makes the leaking pipeline a threat to audit quality. There is limited empirical evidence of the (importance of the) social skill differential in general, and specifically in the auditing context, an important gap that this project intends to fill.

6. Characteristic 3 → In a team production setting the question arises whether team composition matters. Of particular importance here is whether the impact of the knowledge and skills of an individual auditor on audit quality is inhibited or strengthened by the knowledge and skills of other auditors on the team. Having this insight is crucial for managing audit quality in general, but also for the information value of individual performance assessments. Updating one’s beliefs about an individual auditor’s competencies is difficult when his/her potential is positively or negatively affected by the other team members. Little, if anything is known about the relevance of team composition in an auditing setting and whether an individual auditor’s performance (assessment) is affected by who is on the team.

4  Key messages

Our project will provide insights into:
1. What personal characteristics, knowledge, and skills of a manager contributes to audit quality, i.e., what the definition of talent is within the audit industry;
2. The extent to which the performance management system affects the loss of talent, and female talent in particular, across the hierarchy; and

Although we have no answers to these questions yet, we expect that the relevance of some of the knowledge and skills that increase audit quality (point 1) might be insufficiently and/or inadequately taken into account when evaluating the performance of staff and seniors (point 2). This implies that a mechanism that is under the direct control of the audit firm is one of the causes of the loss of talent. Our results thus provide insights into how the performance management system can be redesigned to limit talent loss as much as possible. We further expect, given the team nature of the auditing function and that people are affected by their peers, that the composition of the team can strengthen or weaken the development of individuals (point 3). These results provide insights into making well-informed staffing decisions that maximize individual and team performance.

5  Possible implications for practice

Undoubtedly, the development and retention of talent is a key concern of audit firms. This is best reflected in the strategic importance each audit firm puts on talent management, as documented by most audit firms’ business models. Some audit firms even classify the retention of talent as one of the key risks where they can improve its focus, including more resource allocation to this area of highest impact to the organization (see e.g. the websites of each of the Big4 audit firms).
We focus in our project on a mechanism for minimizing the talent loss that is under the direct control of the audit firm, i.e., the performance management and incentive system. As stated before, there are numerous reasons why employees leave the firm like a better outside option or a personal home situation, but all these reasons are individual-specific and not under the control of the audit firm. Thus, the audit firm can try to deal with these reasons, but not influence them. The performance management and incentive system is, however, under the direct control of the audit firm, and the way it is designed has important consequences for the motivation and retention of different types of employees. Our project provides evidence of the extent to which the performance management and incentive system in place affects talent loss and why this is the case. For example, the relevance of some of the knowledge and skills that increase audit quality might be insufficiently and/or inadequately taken into account when evaluating the performance of staff and seniors, which potentially provides the wrong signal of the ones who are more or less talented. Our results thus provide insights into how the performance management and incentive system can be redesigned to limit talent loss as much as possible. Consequently, our results will provide organizations in general, and audit firms in particular with guidelines to take action to tackle the problems. More concrete:

• The project increases our understanding of the main cognitive abilities, skills, etc. that drive audit quality and whether these drivers are adequately captured in the current performance management and incentive system. These insights will allow audit firms to reconsider their performance management practices and trade-off the benefits of their current systems with the costs these systems create with respect to the loss of talent in general, and the leaking pipeline in particular, and adjust them accordingly.

• A better understanding of the determinants of auditor performance at different hierarchical levels, as well as the root of performance differences between (male and female) auditors gives audit firms the opportunity to reconsider their promotion practices. This helps them mitigate the loss of talent due to the misidentification of talent triggered by the performance management and incentive system in place. Similarly, the results will help audit firms to identify the employee types that are most likely to become partners, and even more important, the characteristics of highly talented auditors (in terms of audit quality) that risk to leak out to start a successful alternative career. These insights allow audit firms to adjust their recruiting practices, and develop strategies to retain the group of “voluntary terminators”.

• With respect to team composition, our results will allow audit firms to make well-informed staffing decisions that maximize individual and team performance, put management attention to those projects that for some other reasons cannot be staffed in the optimal manner, and manage high-potentials by putting them in “the right team”, and thus make it more likely to retain them.

While we have focused our discussion on the implications of our results for audit firms, they also apply to any other type of organization that heavily relies on human capital and/or teamwork, such as, but not limited to, other professional service firms (e.g., consulting or legal services), financial services (e.g., banking and insurance), or creativity-dependent firms (e.g., advertising and media).

In even more general terms, our theoretical and empirical contributions to the fields of accounting and economics will lead to a better understanding of the role of performance management and incentive systems in the attraction and retention of talent, which will be of interest to decision makers in the corporate world. We will provide insights into what features of performance management and incentive systems are most crucial for employees’ career choices and what the consequences are of neglecting these issues. These insights will emphasize the benefits of integrating performance management and human capital management – company functions that from previous experience are often working in isolation – and can trigger changes in corporate performance management and promotion policies and maybe even changes in organizational structures in firms that neglect this integration. Given the well-known problem of the Peter Principle triggering the loss of talent, and the significant costs to firms that face this problem, the insights from our project contribute to solve one of the trickiest problems of today’s human capital managers: The identification of talent and maybe even more important, their retention.

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Notes

- Tacit knowledge is a form of procedural knowledge, i.e., “how to” rules, skills, and strategies, that people acquire, often subconsciously, from daily social learning experiences (Bol et al., 2017). Tacit knowledge is different from technical knowledge in that it is difficult to verbalize and typically not acquired from formal instruction. Tacit knowledge is assumed to make people better at managing themselves, managing others, and managing socially complex tasks (Hedlund & Sternberg, 2000; Sternberg, 1999).

References

“The most important input in audit firms are the people” (Frank Moers).

The turnover rate is exceptionally high in the audit sector compared to other industries. Although talent loss is an issue that firms are struggling with for over a decade, professor Moers poses several reasons why this research topic remains relevant. For one, the profession is changing. Developments such as more automation change the profession and require different skill-sets. These changes make the profession less attractive, and if less people are attracted to the profession the high turnover rate becomes more problematic than it was before. Another reason for this research is that the people component is crucial in an audit, as is the need for further understanding the link between input (people) and output (audit quality). Moreover, nowadays talented people do not just transfer from one firm to another firm; they leave the profession all together. This trend is underlined by KPMG assurance leader and FAR board member Egbert Eefink. In his closing remarks he states: “A key issue we face more today than 10 years ago is the competition for talent, and the skills required because of the automation of audit work”. Another conference attendant attests to the brain drain the industry is facing: ‘students right out of college choose to work outside the industry’. Another attendant underlines this statement by sharing that more than 40% of Dutch CPA’s do not work in audit firms.

Pursuant, an attendant asked Moers for advice: a dilemma the sector is struggling with is the balance between learning and sanctioning. “Nowadays the focus is more on sanctioning (fueled by tightened regulation) instead of stimulating learning with as a consequence that we lose talent. What can we do?” Moers replies that sanctioning indeed hinders learning, and that talented people focus on learning. Hence, Moers expects that a focus on sanctioning creates an environment that might push talented people out of the profession.

Performance management systems influence whether or not talent is identified. For example, the value of non-cognitive skills is not always recognized in individuals. Consequently, it happens that both the ‘wrong’ individuals are promoted as well as that the individuals whose skills are not recognized eventually leave. Moers notes that “talent decision making may currently be affected by incomplete or inaccurate information systems”. In the discussion it becomes clear that there are differences between firms. One of the attendants points out the importance of situational characteristics: “Are you going to talk to people? Because the institutional context influences how individuals behave […] you have different examples of different firms”. Moers replies: “That is also why this platform between practice and science is so important so that we get the context right”. Another attendant shares that within PwC USA employees need to clearly demonstrate they are ready for the next job level. “I remember that I had many talks about non-cognitive skills with my performance coach”. So according to him it hardly occurs that people are promoted who are not ready.

Since the research has a gender-angle an attendant asks how Moers is going to control for other reasons why women leave, reasons such as the work-life balance. Moers replies that the research is not so much about men versus women, it is about talented individuals leaving the organization. Misidentified talent. According to him reasons like the work-life balance fall under individual-specific reasons for leaving. However, one of the conference attendants points out that several of those individual-specific reasons might not be gender neutral. For example, women might not have another option to leave, or maybe it is not very stimulating to be at the top of an auditing firm as a woman. Hence the question is raised whether individual-specific reasons for leaving a firm are the same for men and women.