ABSTRACT

Governance codes in public sector legislation in South Africa have contributed considerably to accelerated growth in public sector internal auditing in national departments. In consequence, accounting officers (AOs), who are the heads of department (HoDs) of national departments, have been tasked with establishing and/or improving the staffing of public sector internal audit functions (IAFs), in order to enable the IAFs to fulfil the role of public sector internal auditing, as stipulated by South African legislation and professional standards.

The objectives of the study reported in this article were to determine the staffing situation in public sector IAFs, and whether there was a statistically significant gap between the numbers of filled internal auditor posts by staff level, compared to the ideal number of internal auditors’ posts at these public sector IAFs, as perceived by the chief audit executives (CAEs). The research methodology followed was a quantitative descriptive method combined with statistical analysis to analyse and interpret the data. The research instrument used to obtain the research data was a quantitative research questionnaire distributed to the CAEs of national departments of the South African government.

The survey revealed that the number of internal auditors’ posts filled (staffing levels and posts) at public sector IAFs was inadequate, according to CAEs perceptions regarding the ideal number of posts to be filled. However, when the perceived ideal staffing complement was compared to the approved staffing complement of public sector IAFs, no significant difference between the two variables was found. The article concludes that deficiencies in the current staffing complement of public sector IAFs can be attributed to a lack of human resources planning, particularly in respect of succession planning, as shown by the large percentages of vacant internal auditors’ posts at three of the four internal auditor levels.
INTRODUCTION

Since 1994, South Africa has undergone substantial changes towards a fully democratic political dispensation. In addition to and resulting from the birth of the new South Africa, a new constitution was promulgated in 1996 (RSA 1996; Van der Waldt and Du Toit 2005:104). Furthermore, in order to “regulate financial management in the national and provincial government”, in other words, to ensure transparency and sound financial management in the public service, the Public Finance Management Act (PFMA), 1 of 1999 (RSA 1999) was promulgated. Since the inception of the PFMA on 1 April 2000, public sector internal auditing has become compulsory for national departments (RSA 1999). Section 38(a)(ii) of the PFMA requires accounting officers (AOs) at national departments to ensure that each department establishes a “system of internal audit under the control and direction of an audit committee” (RSA 1999).

Treasury Regulations for departments, trading entities, constitutional institutions and public entities (hereafter referred to as Treasury Regulations) have been issued in terms of section 76 of the PFMA (RSA 1999; National Treasury 2005). According to Treasury Regulations 3.2.5 and 3.2.6 (National Treasury 2005), the administration and management of a public sector internal audit function (IAF) must be conducted in accordance with the Institute of Internal Auditors’ (IIA’s) definition of internal auditing, and internal audit engagements must be conducted in terms of the IIA Standards.

These legislative requirements have resulted in accelerated growth in public sector internal auditing in South Africa over the last two decades. This rapid growth has emphasised the need for establishing effective and efficient public sector IAFs in South Africa to harness increased internal audit resources. As a result, AOs had to establish public sector IAFs with the required resources, including adequate staffing, in a relatively short time.

Against this background, the objectives of this article were, firstly, to determine the status quo in the staffing complements of public sector IAFs, and secondly, to determine whether there was a statistically significant gap between the numbers of internal auditor posts filled, by staff level, and the ideal number of internal auditor posts to be filled for these public sector IAFs, as perceived by the chief audit executives (CAEs).

In line with the objectives of the article, the next section briefly explains the challenges that AOs and CAEs face in establishing and improving public sector IAFs in South Africa.

ESTABLISHING AND IMPROVING INTERNAL PUBLIC SECTOR AUDIT FUNCTIONS

Challenges in respect of the staffing of public sector IAFs

The reform of the South African public sector left the AOs of national departments with the daunting task of having to establish public sector IAFs that would be able to respond to challenges and demands regarding transparency, accountability and effectiveness (RSA 1999). Internationally, similar changes resulted in similar demands and requirements (Coupland 1993:4; Diamond 2002; La Point 2004; Paape 2007). These changes in the demands and expectations in the public sector have subsequently contributed to accelerated
growth of the internal audit profession, both globally and in South Africa (Gualter and O’Loughlin 2012:4), where it was largely fuelled by the requirements of section 38(1)(ii) of the PFMA, namely that all national departments must have an IAF (RSA 1999). Resulting from this accelerated growth of the internal audit profession in the public sector, a need arose to improve existing public sector IAFs, and, where public sector IAFs did not exist, to establish them.

Following the inception of the PFMA, together with accelerated growth in the internal audit profession, the AOs of national departments thus had to take responsibility for the staffing of public sector IAFs. The staffing of these IAFs, based on the requirements of the PFMA (RSA 1999) and the associated Treasury Regulations 3.2.5 and 3.2.6 (National Treasury 2005), forced AOs to consider the key roles of an IAF according to the IIA's definition of internal auditing, which requires internal auditing to “improve the entity's governance, risk management, and internal control processes, and thereby add value to the organisation” (IIA-Global 2014). These key roles are supported by the study Supplemental guidance: Implementing a new internal audit function in the public sector, conducted by Gualter and O’Loughlin (2012:4).

The staffing of public sector IAFs necessitated the determination of the capability needs of internal auditors at all levels. These capability needs were arrived at by considering the IIA-defined roles of public sector IAFs, as well as the operational complexity and size of a particular national department. Based on the requirements of the PFMA (RSA 1999) and the Treasury Regulations 3.2.5 and 3.2.6 (National Treasury 2005), as explained above, AOs were therefore guided by the IIA Standards, specifically in respect of the attributes of public sector IAFs (Nagy and Cenker 2002; National Treasury 2005). The IIA Standards require public sector IAFs, for example, to be independent and objective (IIA-Global 2014). In addition, CAEs are responsible for ensuring that internal audit engagements are carried out with due professional care, by appropriately qualified and competent internal audit staff.

The sourcing of adequately skilled CAEs for public sector IAFs in South Africa is jeopardised by the fact that there is a limited pool of individuals that can contribute to competent public sector internal audit human resources (Coetzee, Fourie, Plant and Barac 2013; Fourie, Plant, Coetzee and Van Staden 2013; Gualter and O’Loughlin 2012:6; Plant, Coetzee, Fourie and Steyn 2013). Potential public sector internal audit staff, which are typically sourced from private sector organisations, often have limited public sector internal audit experience (Gualter and O’Loughlin 2012:12–13; IIARF 2007, 2010).

Other challenges in improving and establishing public sector IAFs are that AOs have to address and manage the ever-present demand for efficiency and service delivery by their departments. In some instances, political pressures could even jeopardise the objectivity and independence of AOs in respect of the staffing of their public sector IAFs (Coupland 1993:4; Gualter and O’Loughlin 2012:6). In addition, AOs must meet the challenges of staffing public sector IAFs that arise due to operational differences in the complexity and size of individual national departments. There may thus be varying capability needs for different national departments (Carhill and Kincaid 1989:51; Van Gansbergh 2005:70). The differences in size and complexity between national departments typically originate from the legislation guiding the operations of a particular department, as well as factors associated with the political mandates of the government of the day. These differences and complexities are
important factors to bear in mind in the process of establishing and improving, and especially staffing, public sector IAFs.

**Guidance in respect of establishing public sector IAFs**

In addition to the IIA Standards, the Institute of Internal Auditors Research Foundation (IIARF) in 2012 published the *Supplemental guidance: Implementing a new internal audit function in the public sector* guidance pronouncement (Gualter and O’Loughlin 2012), which provided CAEs with useful key points and steps to consider when establishing (and improving) public sector IAFs. AOs and CAEs could consult this guidance pronouncement for guidance to make progress in existing public sector IAFs from the lowest level of capability (Level 1) to a higher capability levels (Level 2 or higher) of the IIA’s Internal Audit Capability Model (IA-CM) (Andersen 2001; Gualter and O’Loughlin 2012; IIARF 2009). The IA-CM consists of five capability levels that public sector IAFs can aspire to, namely 1) Initial, 2) Infrastructure, 3) Integrated, 4) Managed, and 5) Optimised (Gualter and O’Loughlin 2012:7).

To guide public sector IAFs in South Africa in fulfilling their roles, the National Treasury (2009) issued the *Internal Audit Framework*, which is in line with the definition of internal auditing and internal audit standards (IIA-Global 2014; National Treasury 2005:3.2.5 and 3.2.6; RSA 1999: section 38(a)(ii)). It states that it is the responsibility of CAEs to assess and report on the effectiveness and efficiency of risk management, internal control systems, and governance and performance management systems. The *PFMA* and the Treasury Regulations as encompassed in the National Treasury’s *Internal Audit Framework* provide guidance to AOs, setting high standards in respect of the quality and efficiency of public sector IAFs and resulting in the challenges for AOs and CAEs, as mentioned above. These are challenges in respect of staffing (sourcing and recruiting capable human resources) to ensure that public sector IAFs can fulfil their role in the country (National Treasury 2009).

**Internal audit staffing levels in public sector IAFs**

The internal audit staffing levels discussed in this article consist of the four positions in the IAFs. Firstly, the highest position, the head of the IAF, is the CAE (Level 4). The most junior level (Level 1) is the Auditor level, followed by Level 2, Senior Auditors, and Level 3, Audit Managers. Staffing levels, according to the IIA’s *Internal Auditor Competency Framework* (IACF), are comprised of three levels, namely Staff, Manager and CAE (IIARF 2010; IIA-Global 2013:5-16). For the purposes of this article, the Staff level is divided into two levels (Auditor and Senior Auditor), in line with the current staffing practices of public sector IAFs in South Africa. The staffing of public sector IAFs with appropriately skilled internal auditors is thus critical in ensuring that an IAF can fulfil its role in terms of the *PFMA* and the associated Treasury Regulations, emphasising the importance and potential value of this research.

The next section explains the research methods followed in order to give effect to the objectives of this article, and discusses the limitations and value of the research.
RESEARCH METHODS, LIMITATIONS AND VALUE OF THE STUDY

Research methods

The results of and conclusions reached by the research described in this article are based on a quantitative descriptive research methodology. A quantitative research questionnaire was used to obtain the data. The questionnaire was distributed to CAEs at all national departments of the South African national government. The questionnaire was designed, in consultation with the National Treasury, as part of a larger research study on the standing of and demand for internal auditing in the South African public sector.

Research items of the questionnaire elicited data in respect of the biographical details of the participants (Part A) and a range of constructs (themes), namely internal auditing (Part B); governance, fraud and reportable wasteful, irregular and unauthorised expenditure (Part C); risk management (Part D); demand (Part E); and audit committee effectiveness (Part F).

The questionnaires completed by 31 national department CAEs were returned to the researchers. The data were captured on Microsoft Excel, after which statistical analyses of the data were performed using the IBM Statistical Package for the Social Sciences 2013 Version 21, IBM SPSS Statistics (IBM SPSS 2013). In line with the objectives of the article, descriptive statistical analyses were performed on the data in respect of the status quo in public sector IAFs, and paired-sample t-tests were performed on the two variables (the current number of filled posts and the ideal number of internal auditor posts at public sector IAFs), to determine the statistical significance of the mean differences (gap) between the two variables. In addition, the Cohen’s $d$ score of the statistically significant mean differences was used to show the effect-size (meaningfulness) of the significant mean differences (Cohen 1988; Walker 2008).

Limitations of the research

In line with the objectives of the article, and based on the literature consulted and discussed above, the focus of the research was limited to the human resources (staffing) component of public sector IAFs, with specific reference to South African national departments. The statistical analyses of the data were limited to research items (questions) from Part E (Demand) of the research questionnaire that specifically related to staffing matters in public sector IAFs. These questions were relevant to the research objectives of this article, as the responses provided the data in respect of the perceived current and ideal numbers of internal auditor posts for the four levels referred to in this study. A further limitation is that the views and perceptions of only CAEs of existing public sector IAFs were obtained with regard to the staffing of these IAFs.

The value of the research

The South African National Treasury can benefit from the results of the research described in this article, because valuable scientific information in respect of the number of internal auditor posts filled and staffing gaps (differences between current and ideal staffing...
complements) at public sector IAFs in national departments are made available. In addition, the CAEs of national departments can benefit from this article, because they can use the scientifically founded results of the research as a benchmarking tool against which the staffing complement of their own IAFs can be gauged. A further benefit of the research is that the professional body of the internal audit profession, the IIA (both in South Africa and global) can use the scientifically founded findings on the staffing needs of the public sector component of their members in South Africa.

Areas for further research

The internal auditing staffing needs of the South African public sector can be compared with those of other developing countries. In addition, the reasons for the vacancies in the approved internal auditor posts should be investigated.

The research findings obtained through the research methods explained above are outlined in the next section.

RESULTS AND DISCUSSION OF THE RESEARCH

The objectives of the study reported in this article were to determine the status quo in the staffing of public sector IAFs, and to determine whether there was a statistically significant gap between the numbers of internal auditor posts filled by staff level, compared to the ideal number of internal auditor posts for these public sector IAFs, as perceived by the CAEs. In order to give effect to these objectives, the current number of internal auditor posts filled at public sector IAFs was determined. The average number of vacant positions was analysed and interpreted.

Number of filled internal auditor posts at public sector IAFs

The number of internal auditor posts filled at public sector IAFs refers to the current average number of posts filled per staff level for an average IAF. This section provides descriptive information on the number of internal auditor posts filled with regard to the approved internal auditor posts per staff level.

Table 1 depicts the number of internal auditor posts filled at national department public sector IAFs and the average number of internal auditor vacancies by staff level. The two highest mean numbers of vacancies are shown for the first two levels, Level 1: Auditors (30.0%) and Level 2: Senior Auditors (33.3%). In respect of the remaining two levels, on average, one position was vacant for Level 3: Audit Managers (25.0%), while no vacancies were reported for Level 4: CAEs.

The high percentage of vacancies at the first three levels shows that the current actual staffing complement of public sector IAFs is inadequate. This shortage of posts filled could result in a decrease in the quality of internal audit engagements conducted, because entry level internal audit staff (at Level 1) should receive guidance and supervision from Senior Auditors (Level 2), while Audit Managers are responsible for the management of internal audit engagements, as well as the training and development of internal auditors at the first
two levels. It is thus imperative that all approved posts be filled with adequately skilled internal auditors in order for public sector IAFs to fulfil their tasks and roles. The results in respect of Level 4: CAEs, where no vacancies exist, is attributable to the fact that CAEs were requested to fill in the questionnaires and that, at the time of the survey, these posts were actually filled.

On average, a public sector IAF is composed of the following approved number of internal auditors per staff level: one CAE (Level 4), four Audit Managers (Level 3), nine Senior Auditors (Level 2) and ten Auditors (Level 1). These approved internal auditor posts are usually filled as follows: one CAE (Level 4), three Audit Managers (Level 3), six Senior Auditors (Level 2) and seven Auditors (Level 1). In comparison with the results of a similar study conducted in respect of JSE listed companies in South Africa, the average composition of IAFs (positions filled) in the listed companies comprise one CAE (Level 4), seven Audit

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<tr>
<th>Table 1: Internal auditor posts at public sector IAFs by staff level</th>
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<td>Level 1: Auditors</td>
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<td>No</td>
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<td>Current number of filled full-time internal auditor posts (mean)*</td>
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<td>Total number of approved staff (mean)</td>
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* Figures are rounded off.

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<th>Table 2: Comparison of current* and ideal numbers of staffing positions at public sector IAFs – mean differences</th>
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<td>Internal auditor level</td>
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<td>Level 1: Auditors</td>
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<td>Level 4: CAEs</td>
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* Figures shown in the Current column represent the number of positions filled by full-time internal auditors.
** Where d = 0.2 to 0.49, the effect size is considered small; where d = 0.5 to 0.79, the effect size is medium; and where d > 0.80, the effect size is large.
Managers (Level 3), 18 Senior Auditors, and 14 Auditors (Level 1) (Barac et al. 2010:65). The total current staff complement at these listed companies’ IAFs thus consists of 40 internal auditor posts, which is more than double the average number of positions (18) currently filled in public sector IAFs.

**Existence of a gap between the current and perceived ideal IAF staffing levels**

CAEs were requested to indicate their perceived preferences in respect of an ideal national department IAF in the South African public sector with regard to the current and ideal staffing complement of such an IAF. Table 2 shows the results of the statistical analysis of the responses of the CAEs with regard to the current and ideal internal auditor levels and number of posts per level. The results of the t-tests performed on the said variables to determine the differences (gap) between the current and ideal perceived staffing complements of public sector IAFs are reported below.

In respect of Level 1: Auditors, a significant mean difference (p < 0.001) was found between the current and ideal staffing complements, which resulted in a large effect size. The mean difference between the current and ideal staffing complements for Level 2: Senior Auditors was not significant (p > 0.05). With regard to Audit Managers (Level 3), the mean difference was significant (p = 0.032), resulting in a small effect size. The perceived mean difference between the variables in question for Level 4: CAEs was not significant (p > 0.05).

Table 3 shows the results of paired-sample t-tests performed on the variables named approved number of posts and the ideal number of posts (by internal auditor level). The

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<th>Table 3: Comparison of the number of approved staffing positions with that of ideal staffing positions at public sector IAFs – mean differences</th>
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<td><strong>Staffing</strong></td>
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<td>Audit Managers</td>
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<td>CAEs</td>
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* Where d = 0.2 to 0.49, the effect size is considered small; where d = 0.5 to 0.79, the effect size is medium; and where d > 0.80, the effect size is large. ** Figures are rounded to the nearest whole number in the explanation of the findings. The conclusions reached from the statistical analysis are summarised below.
results of these tests show that there were no significant mean differences ($p > 0.05$) between the approved number of posts as compared to the ideal number of posts, as perceived by CAEs, for the Auditor, Senior Auditor and Audit Manager staffing levels in public sector IAFs. In respect of the CAE level, a significant negative mean difference was noted ($p = 0.03$). The results also showed that CAEs perceived the mean ideal staffing level for CAEs (mean = 0.84) to be on a lower level than the number of approved posts (mean = 1.03). The two mean values for approved and ideal posts both resulted in a value of one CAE per IAF when these statistical results were rounded to the nearest whole value.

**CONCLUSIONS AND RECOMMENDATIONS**

The objectives of this article were to determine the status quo in the staffing of public sector IAFs, and to determine whether there was a statistically significant gap between the numbers of internal auditor posts filled by staff level, compared to the ideal number of internal auditor posts for these public sector IAFs, as perceived by CAEs.

With regard to the status quo (the number of internal auditor posts filled) in national department public sector IAFs in South Africa, the staffing complement, on average, of these IAFs consisted of 24 approved full-time internal auditor posts. Of the 24 internal auditors, one was the CAE, four were Audit Managers, nine were Senior Auditors and 10 were Auditors. These positions were not all filled and vacancies were reported for the lower three levels. The CAE level is currently perceived to be at a 100% staffing level.

The statistical analyses of the findings revealed statistically significant gaps (mean differences) in respect of the perceived current staffing complement compared to the ideal staffing complement for two of the four internal auditor levels of the public sector IAF staffing structure. These levels are Level 1: Auditors and Level 3: Audit Managers. The CAE respondents were satisfied with the current staffing complements in respect of CAEs and Senior Auditors (Level 4 and Level 2, respectively).

These results may possibly be attributable to the fact that Level 1: Auditors are promoted to Level 2: Senior Auditors too soon, and with inadequate succession planning in respect of substitute internal auditors for the positions that become vacant as a result of such promotions. In addition, Level 3: Audit Managers could have been promoted to (or head-hunted for) CAE positions, leaving vacancies at this staff level as a result of inadequate human resources planning. These findings were supported by the average continuous staff turnover rate over the three-year period preceding the collection of the data.

The results of the statistical analyses performed on the approved staffing levels and posts (in respect of number of positions) when compared to the ideal (desired) staffing complements reveal that there are no statistically significant differences, substantiating that the approved staffing levels and number of posts at IAFs in the national departments of the South African public sector (on average) are perceived as inadequate by CAE respondents.

On the basis of the findings and conclusions reported in this article, it is recommended that CAEs, in cooperation with their AOs, and in consultation with the CACs, do extensive human resources (staffing) planning in order to prevent situations where internal auditor posts are vacant for excessive periods. In respect of the positions of Level 3: Audit managers and Level 4: CAEs, succession planning and career planning should be considered.
It is also recommended that internal auditors at all levels should remain at specific staffing levels until they reach a satisfactory level of maturity and capability before consideration is given to promotion. To this end, it is recommended that the National Treasury, in consultation with CAEs, CACs and the Institute of Internal Auditors South Africa (IIA SA), consider introducing a formal process to gauge the capabilities of internal auditors before promotions to higher levels are considered. Alignment of Level 1: Auditors and Level 2: Senior Auditors with the Professional Training Programme of the IIA SA’s Internal Audit Technician (IAT) and Professional Internal Auditor (PIA), respectively, could be considered.

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