Hidden costs: a case study in an internal audit unit of the public sector

ABSTRACT

Objective: The objective of this paper is to identify the factors with potential to generate hidden costs in the Brazilian Army (EB) in the activities of one of its internal audit units.

Method: This is a descriptive research using a qualitative and quantitative approach applied to a single case study. Data were collected from 76 Brazilian Army units, with 139 respondents. Data analysis includes interviews with auditors, document content analysis and in loco observation, complemented by a questionnaire applied to the auditees.

Originality/Relevance: The research is relevant because it identifies from the point of view of internal auditors and audited units possible dysfunctions that generate hidden costs to the public sector. The results highlight the need for changes in EB to accompany public sector reform movements, which seeks efficiency and focus on the performance of organizations.

Results: The results reveal that the factors that generated hidden costs are related to the lack of observation of inefficiencies and fraud in the management of the audited units; the negative impact on the institution's image; and the costs resulting from the fraud investigation process that should have been avoided by the existing controls.

Theoretical/Methodological contributions: The research contributes empirically by demonstrating the relevance of strategic cost management in the public sector, especially auditing, in identifying points that generate unnecessary costs for the public treasury.

Keywords: Hidden costs; Audit; Brazilian army.
INTRODUCTION

The theme of hidden costs is related to the costs that organizations incur that are not being measured for some reason. They represent not only the failures and losses in the performance process, but also what the company failed to obtain by deciding to invest in an alternative that is causing these non-measured costs (Benin et al., 2016). One of the reasons for the non-measurement of these costs is the misuse of arbitrary prorates that camouflage some costs at the moment of measurement (Miller & Vollmann, 1985).

When the hidden costs are originated from structural flaws related to the control mechanism, audit has the potential to mitigate such dysfunctions (Martins et al., 2013). To achieve this objective, the techniques and scope of audit procedures have been expanded with technological developments in order to keep up with the complexity of a globalized world whose transactions are accounted for in real time and the governance precepts and norms which regulate the auditor's profession constantly evolve (Pinheiro & Cunha, 2003).

At the core of public organizations, the Institute of Internal Auditors (IIA) defines that the role of the auditor is important in maintaining governance in the public sector to reduce the risk of failing to meet the targets agreed with the society, enabling accountability which allows citizens and companies to follow the evolution of the management of this sector (IIA, 2012). In this context, cost management becomes strategic in the search for efficiency and effectiveness of organizations, be they public or private. Thus, the public sector, whose services are responsible for generating a large amount of value for the economy, understanding the dynamics of costs is a necessity considering the current level of demand of society.

Thus, studying strategic cost management and identifying hidden costs can add relevant information to public and private institutions, while allowing management and mitigation of organizational dysfunctions that hinder the growth and quality of public service delivery. The study of these costs is important for all types and sizes of organizations, independent of the economic sector (industry, commerce, public services, hospitals, banks and consulting offices), thus representing a strategy of differentiation in the way processes are programmed and in the way that a productive structure is conceived (Ascher, Kudlawicz & Souza, 2015).

The experience of the private sector reports that, although they are considered hidden, they are perfectly manageable costs (Cabello & Silva, 2017). Considering the recent reform movements in the Brazilian public administration, in which originally used management characteristics and practices of the private sector such as administrative decentralization, strategic planning, cost management and controllership are also part of public organizations, it is recommended that hidden costs are identified, ordered and evaluated, checking if there is an effective need for management (Souza, Ribeiro & Rodriguez, 2016).

These public sector reforms, such as New Public Management (NPM), are also believed to be aimed at increasing transparency, accountability and quality in public service delivery (Johnsen, 2019). To meet this demand, the role of internal audits is of major importance in enabling performance management, inhibiting corruption and mismanagement in the public sector (Johnsen, 2019).

Within this scope, the research problem to be answered is: What are the hidden cost drivers not captured by cost accounting? To answer this question, the objective of this research is to map, in an internal audit unit, the hidden cost generating factors not captured by the simplified and traditional cost accounting practices adopted, which, according to Souza et al. (2013), tend to cause ignorance of the waste and inefficiencies of certain processes and costs.
The research is relevant because it considers two crucial themes for control activity in the public sector: it addresses cost management, which is currently being implemented in the Brazilian public administration; and it highlights the role of internal audits, which represent an important organizational control tool, responsible for optimizing the allocation of public resources (Messias, Ferreira & Soutes, 2018). The use of cost information has been gaining relevance in the public sector, as it represents an important social control initiative and improves public decision-making, allowing the measurement of expenditure efficiency, allowing it to be compared with costs of other governmental entities. also with the values practiced by the private initiative (Messias, Ferreira & Soutes, 2018).

The unit of analysis of this research is the Brazilian Army (EB), which has been a pioneer in the Brazilian public administration in implementing a strict control of resources and public assets, working to reduce costs and expenses (Pereira & Araújo, 2016). This effort culminated in the implementation of the Sistema de Custos Gerencial - Management Costs System (SISCUSTOS) which since 2007 has sought to be in line with the growing tendency to adapt management principles of efficiency, effectiveness and performance evaluation in the public sector (Pereira & Araújo, 2016). In addition to this initiative, the institution's audit unit must also follow the conceptual framework established in the Audit Manual, which was designed based on Brazilian and international accounting and control standards in 2013 (Brazil, 2013).

2 THEORETICAL OVERVIEW

2.1 Hidden Costs

The hidden cost definition covers costs that are not being detected by accounting but are important to the management process. The difficulty in recognizing them lies in perceiving their origin and nature. With regard to the origin of the hidden cost, it refers to elements that may comprise administrative subprocesses, such as audit processes. In regards to its nature, it comes directly from intrinsic dysfunction of the organization that can be classified as preventable or inevitable (Ascher, Kudlawicz & Souza, 2015).

Souza et al. (2013) understand that the use of the nomenclature invisible or hidden cost, except for the different treatment of Femenick (2005), can be understood only as a semantic question. The authors observed that the approaches given by most of the literature cited in their study mentions both terms (hidden and invisible) as event costs that indicates people's behavior problems and process failures (Souza et al., 2013).

Regarding the researches that have set out to study the behavior of hidden costs in the public sector, Cabello & Silva (2017) verified their impact and representativeness on operating expenses at the Universidade de Brasília. The findings reveal that these costs can represent a considerable expense and that greater attention of public officials is necessary, as they are subject to control and through management, which may imply gains in financial efficiency for the institution (Cabello & Silva, 2017).

Sousa, Ribeiro and Rodriguez (2016) applied a survey at the Universidade Federal Fluminense to demonstrate the contribution that intellectual capital management can provide as an auxiliary tool in the detection, prevention and management of hidden costs in the public sector. The results demonstrate that a continuous investment in human capital allows a better identification of the dysfunctions stemming from the mismanagement of intellectual capital. The authors found that the mismanagement of intellectual capital contributes for the construction and perpetuation of a negative culture for the inefficiency and the lack of regulation and control (Souza, Ribeiro & Rodriguez, 2016).
This relationship of the hidden costs with behavioral characteristics of the individual was also studied by Silva and Severiano (2011). The researches verified the causality between the interaction of the organizational structure and people’s behavior. The result showed that such interaction generates dysfunctions that causes costs, often hidden, that impact the economic performance of companies. These dysfunctions can be of an individual; a group of actors; a category; and of pressure and cultural groups. The organizational structure may be of physical, technological, organizational, demographic and mental origin.

Similarly, according to Martins et al. (2013), most of the hidden costs arise from the inefficiencies related to managers' attitudes and behavior, as well as from structural problems related to entities' control mechanisms and modes of operation. The authors also infer that the non-disclosure of a contingent liability or omission or error with respect to the risk of its occurrence contribute to the generation of hidden costs (Martins et al., 2013). Such dysfunctions can also arise from inefficient accounting systems, as studied by Cokins et al. (2017). According to the authors, in management accounting, the following hidden costs can be identified: opportunity costs (costs of lost opportunities, costs of lost profits), environmental costs, quality costs, subactivity costs, among others.

In the structural and organizational aspects, Silva & Severiano Filho (2011) argue that rework is one of the most frequent failures due to the lack of a defined flowchart of procedural procedures, that is, the flow of processes that enter into the protocol it is not continuous, and there are many unnecessary movements. Therefore, identifying and tracking hidden costs is important because of the direct impact on organizational performance. Failures are caused by anomalies, disturbances or deviations between ideal and actual functioning, and identified by high absenteeism and staff turnover, quality defects and loss of productivity (Savall & Zardet, 1992). These failures lead to the emergence of hidden costs related to time, management, working conditions, application of strategies, integrated training and communication or the coordination of various activities, causing a consumption of financial resources or human resources (Cokins et al., 2017).

2.2 Hidden Costs and Auditing

In the public sector, auditing is an essential tool to provide to the legislative, audit courts, those responsible for governance and the general public with information and assessments on the management and performance of government policies, programs and operations, emphasizing principles of governance and transparency (Leitão & Dantas; 2016). According to the Tribunal de Contas da União (TCU), the role of government audits turned to the comprehensive evaluation of internal controls, with emphasis on management controls and risk management, disregarding the function of mere conformity assessor of public expenditure (Brazil, 2009).

In designing mechanisms for performance improvement in the public sector, however, the role of auditing has moved from breaking the traditional process-driven approach to a performance-based approach based on public actions and the innovativeness of the public sector (Bawole, & Ibrahim, 2015). This new role of performance-focused auditing is in line with NPM doctrine by emphasizing professional management, the use of performance measures, focus on results, and the adoption of private-sector management practices in the public sector, exposing inefficiencies in public sector management, especially in developing countries such as Brazil (Bawole & Ibrahim, 2015).

Despite the growing importance of internal audit in the public sector, studies of the added value they represent in an organization are limited. According to the literature, when
the internal audit function is performed effectively, it becomes an important element in
helping an organization achieve its objectives and improve public sector governance by
avoiding potential inefficiencies in its systems by taking the appropriate corrective action and
supporting continuous organizational improvement with the potential to prevent waste and
corruption (Baharud-din, Shokiyah & Ibrahim, 2014).

The hidden costs are manifested in audit services based on the dysfunctions generated
by the interaction between people (behavior) and the organizational structure (Silva &
Severiano, 2011). These costs, which are difficult to identify by their nature, can originate in
biased professional judgments unconsciously triggered in audit work by the factors of (i)
ambiguity, (ii) common interest and (iii) approval (Bazerman, Loewenstein & Moore, 2002).
Ambiguity is characterized by the load of subjectivity contained in the accounting information
that for many users is a precise number, when in fact it is an approximation of reality. The
common interest is based on the mutual commercial relationship built on the need for the
auditors to approve the management of the payer. The approval is based on the tendency of a
bias based on the influence that the position of an auditee exercises on the opinion of an
auditor, as in the case of a recognized company in the market which tends to influence him to
a positive judgment on management (Bazerman, Loewenstein & Moore, 2002).

In order to identify the sources of hidden costs related to Internal Audit in a Federal
Public University, Moura et al. (2019) analyzed the Annual Internal Audit Activity Report
(RAIT) from 2015 to 2018. The findings show that there is no harmonization between
planning and resource use to avoid overlapping activities. The incidence of hidden costs in the
audit unit analyzed were: Lack of coordination in work development, lobbying cost, Staff
rotation, Waiting/Deadline and Lack of formalized training policy (Moura et al., 2019).

3 RESEARCH METHODOLOGY

It is a research of applied nature and aims to undertake its findings to an existing
specific situation, materialized in hidden costs by the organization and, therefore, unmanaged,
incurred in a public entity. The research is descriptive and the method adopted is partly
qualitative because it examines and reflects in a more subjective way about social and human
activities and partly quantitative because it used descriptive statistics in the examination of
information (Collis & Hussey, 2005).

The internal audit unit object of the research was preliminarily studied (pre-analysis)
seeking to understand its operation and structure integrated to the context of the federal
internal control system. To this end, publicly available legislation, manuals and studies on
internal control in the Brazilian public sector were researched (Brazil, 2000; 2001; 2009;
2013).

After the study on the researched unit and based on the reading of the documents
selected in the pre-analysis, the case study protocol was elaborated, according to Yin (2010),
which defined a questionnaire for conducting interviews with auditors (semi-structured),
another for capturing the perception of the auditees (structured), documentary data sources,
and a research schedule.

Data were collected by transcribing the interviews with 13 auditors in a content
analysis matrix, according to content analysis techniques defined by Bardin (2011), by
tabulating the responses of 139 auditees, by analyzing provided documents (public and
classified) and by in loco observation. The questions that led the interviews were elaborated
based on the theoretical framework and understanding of the modus operandi of the audit unit
obtained from the previous reading of public documents about the internal control system
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object of research and in loco observation. The questionnaire was pre-tested with members of another EB audit unit located in the northeastern region of Brazil.

The 25 questions were applied by two interviewers (one researcher and one trained assistant) in the 13 auditors of the internal audit team. Each interview lasted an average of 45 minutes and the answers given by the interviewees were typed by the interviewers in a form that was checked by the interviewee himself and agreed upon. Respondents were free to change the way their answers were transcribed by the interviewer until it reached a point considered satisfactory by the interviewed auditor.

The interviews were conducted in November 2014, according to the availability of the auditors. Prior to each interview, interviewers informed respondents of what the survey was about and its purpose, and of the researchers' commitment not to inform the identity of respondents. The auditors' answers were inserted in a content analysis matrix, according to Bardin (2011), in order to be analyzed according to the theoretical framework and were compared to the answers given by the auditors in the structured questionnaire based on Camargo (2012). Therefore, we sought to confirm to the auditees (externally) the data collected internally in the audit unit. For the content analysis, the auditors' answers were classified, seeking correspondence with the hidden cost generating factors in internal audit indicated by the literature.

After the signing of confidentiality terms by the researchers, the following documents were provided for consultation: (i) audit reports, (ii) annual reporting of audited units, (iii) annual audit activity plan of 2013 and (iv) conducted audits. It is important to note that access to such documents was facilitated because one of the researchers was, in the year preceding the survey, auditor of the studied audited unit. It is also noteworthy that all these documents are publicly accessible as prescribed by the Brazilian law (Lei de Acesso à Informação).

As stated, the confirmation and complementation of the information gathered from the interviews with the auditors, document analysis and on-site observation was made by applying a questionnaire containing 15 questions extracted from Camargo (2012) that sought to capture the auditee's perception of the Auditor competences (intellectual skills and organizational knowledge/public business management).

Table 1
Groups of Audit skills

<table>
<thead>
<tr>
<th>Skills</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual Skills</td>
<td>The intellectual skills group comprises skills that allow the auditor to identify relevant information, solve problems from the simplest to the most complex, make correct decisions and exercise good judgment in the most varied situations during the audit work.</td>
</tr>
<tr>
<td>Organizational and Business Management Skills</td>
<td>Organizational and business management skills are linked to the role of the auditor in the management of audit work and also related to a more active role of the auditor in understanding and meeting the needs presented by audited companies.</td>
</tr>
</tbody>
</table>

Source: Dutra et al. (2013).

The questions applied to the audited address competencies related to the auditor's technical knowledge. Therefore, we seek to confirm the data collected from the interviews with auditors about their competencies. Thus, in light of the statement found in the literature about the existence of auditory dysfunctions and their potential to generate hidden costs, the auditee's perception of the auditor is presented as a confirmatory and complementary source


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of information about professional knowledge gaps not evidenced in interviews with the auditors, documentary study and observation.

The population selected to respond to the questionnaire was composed of the managers who work directly with public resources in 76 units of the EB in the state of Rio Grande do Sul (administrative inspectors, financial sector heads, warehouse, acquisitions section, contract and personnel management, and personnel payment section), in an approximate universe of 760 employees (about 10 per management unit).

Of this total, 139 responses were obtained, one of which was disregarded due to the respondent's statement informing that he felt unprepared for having made only a superficial contact with the auditors. It is a random and intentional sample with approximately 20% of the population of managers who are audited and establish direct contact with their auditors.

The application of this questionnaire was made through an online form of Google Docs and was preceded by a pre-test in a unit audited by another section of audit of the EB, located in another state, concluding that they were easy to understand and did not create ambiguities in the respondents. The 5-point Likert scale was used in which the respondent evaluated the auditor's claim of certain competence as follows: (1) I totally disagree, that is, the auditor does not in any way have that competence; (2) disagree; (3) neither agree nor disagree; (4) agree; and (5) I fully agree, that is to say, there is no doubt that the auditor has that competence.

The answers were analyzed using descriptive statistics focusing on the averages that were compared to the averages found. The auditors were further divided into 2 subgroups: (i) one containing the opinion of specialists working in the financial, bidding and contracting and staffing sectors; and (ii) another subgroup with the opinion of generalists (top unit managers and division heads of personnel) about the auditors' abilities. The idea of separating into two subgroups aims at countering the perception of those who know a particular topic (public finances, bids and public contracts and payroll) and are directly addressed by auditors who have an overview of the auditor's work and whose contact is accompanied by specialists.

Figure 1 summarizes the research method used to capture the generating sources of hidden costs for the audited unit surveyed and consequently for the EB. Therefore, the data
collected from the manuals of procedures used by the audit unit, other data obtained from other documents and the responses to the interviews were opposed to the opinion of the auditors, seeking a triangulation of data that were analyzed, and discussed below.

4 RESULTS AND DISCUSSION
4.1 Results presentation

For the TCU, the internal audit activity in the public sector should not be confused with the internal control unit or agency of the Federal Executive Branch, since it integrates the internal control system of this their respective Branch (Brazil, 2009). The internal audit in the EB is attributed to the Center of Internal Control of the Army (CCIEEx), located in Brasilia-DF, carried out through the eleven Sections of Audit and Inspection of the Inspectorates of Accounting and Finance of the Army (SAF/ICFEx) distributed by the country (Guedes & Aguiar, 2014).

The unit surveyed is located in Porto Alegre, has 13 auditors responsible for auditing 76 military units with autonomy for the management of public resources, spread geographically throughout the state of Rio Grande do Sul. The analysis of the transcript of interviews, reports produced by the auditors after the audit activities and the annual plan of the audit activities found the following routine by the unit searched:

a) the prioritization of the selected units to be audited is based on a risk matrix that considers the materiality (volume of resources managed) and the relevance (type of work performed and management history);

b) the number of auditors, the number of units to be audited and the distance to be traveled (from the capital to the interior of the state) limit visits to a maximum of two per year for the units with the highest risk and at least one in two years for those of lower risk.

c) the auditors assigned to audit each unit plan work in advance (pre-audit) based on data extracted from the Federal Government Integrated Financial Management System (SIAFI) or externally collected information (complaints, information gathered from intelligence and so on);

d) In addition to the previously planned visits, special audits are carried out in order to find evidence of irregularities arising from complaints or relevant findings from regular audits;

e) EB's Audit Manual - Portaria No. 18/2013 (Brazil, 2013) - regulates all audit procedures and techniques.

Audit planning should consider only the appropriate time for the audit (1 or 2 days) and is performed according to the experience and judgment of the auditors. Eventually, when external information indicates the need to audit specific transactions, auditors are required to include it in their planning. It is important to note that due to auditors' turnover or functional independence of judgment, the choice of audited transactions does not follow a predetermined logic between the various audit visits. The analysis of the answers obtained in the interviews with the 13 auditors, the perception of the auditors collected through questionnaire and documents and the on-site observation made it possible to identify the following factors with potential for hidden costs in the EB.

Failures to detect fraud/errors during audits generate hidden costs because an audited unit that is dealing with fraud or wasteful management generates illegal or unnecessary (wasted) expenditures. It was verified, through the auditors' interview, that the lack of knowledge in certain areas (competencies) is the cause for such dysfunction, as evidenced by
Silva and Severiano (2011). Table 3 presents the difficulty of 7 of the 13 auditors in specific areas such as health, engineering, bids and contracts and due to constant updating of standards and the inability to keep pace with changes.

Table 2  
Hidden costs and their causes in the audit unit investigated  

<table>
<thead>
<tr>
<th>Potential Hidden Cost Generators for the EB</th>
<th>Cause/Source of the Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Failure to identify frauds and inefficiencies in the management of the audited units (acquisitions with above-market value or anti-economic management practices)</td>
<td>Auditor competence does not enable him/her to perform audits in specific areas such as engineering and health</td>
</tr>
<tr>
<td>2. Negative impact on the image of the Institution (frauds and errors are later discovered through complaints, lawsuits demanded by third parties in court, actions of the TCU - external control, among others)</td>
<td>Inability of internal controls to prevent fraud / errors because the internal audit does not make them effective through advises.</td>
</tr>
<tr>
<td>3. The need to institute investigation procedures in addition to the audit planning to stop external complaints or damages to the treasury (to meet the legal demands, special accounts, among others.)</td>
<td>Incapacity of the internal audit to detect the fraud / errors through the scheduled audits, allowing a preventive action</td>
</tr>
</tbody>
</table>

Although changes in the public sector have emphasized the managerial role of government, the perception of rework generated by audit inefficiency (either in the planning or execution phase) is perceived as a limiting factor for effective assessment of results in the audited unit, because auditors prefer to emphasize controls auditing (Bawole & Ibrahim, 2015). Another potential source of hidden costs and audit inefficiency is when the public sector ceases to care about innovation and focuses exclusively on standards and manual compliance audits (Bawole & Ibrahim, 2015). Consideration should be given to whether deficiencies may result from overregulation, pointing out that appropriate measures could result in the creation of a new set of principles that govern public sector audit practices, especially in the area of performance monitoring.

The auditors' responses to the questions in Table 3 corroborate the findings of Souza, Ribeiro and Rodriguez (2016) about their contribution to reduce hidden costs in the public service through the management of intellectual capital. The solution to this problem would be to invest in training and qualification aimed at improving technical audits, regulating behaviors, eliminating atrophied structures and reducing hypertrophied dysfunctions that generate hidden costs in the public service (Souza, Ribeiro & Rodriguez, 2016). The auditees did not realize the competence gaps reported by auditors, which can be seen in Table 4.

In the international context, another possible explanation for recognizing the skills needed to perform audits is that internal audit faces problems of low technical staff proficiency and high staff turnover, which limits its ability to provide effective service (Baharud-din, Shokiyah, Ibrahim, 2014). Auditor competencies can be measured in terms of academic level, experience, skill and team effort for continuing professional development. It can then be considered that this would be a determining factor for the auditor's efficiency in establishing a systematic and disciplined approach to assess and improve the effectiveness of
financial management, as well as the governance processes of the audited units, reducing rework and hidden costs incidence.

Table 3
Lack of competence presented by the auditors

<table>
<thead>
<tr>
<th>Interview</th>
<th>Response from 7 of the 13 Interviewed Auditors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have the knowledge and skills necessary to audit the units you are scaled to?</td>
<td>In some areas I do not have all the knowledge and skills (EB Health Fund, inactive workers area, pensioners, constructions). No. Regarding hospitals, I did not attend any course or training in the health area and I do not have adequate training. No. For example, hospital audit. No. There is a lack of technical knowledge in the hospital and technical areas of civil engineering and mechanical engineering. I do not have, because of the dynamics and changes of legislation. We have little time for the required updates. No. I need more training in bidding (licitações, in brazilian portuguese). No, because hospitals require more in-depth knowledge.</td>
</tr>
</tbody>
</table>

As a counterpoint to this finding, it is clear that the auditees did not notice the competence gaps reported by the auditors, which can be seen in Table 4.

Table 4
Descriptive data of the auditees' perception of the auditor’s competences

<table>
<thead>
<tr>
<th>Competencies of the Auditor</th>
<th>Descriptive Statistics and Equality Test / Difference of Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual Skills</td>
<td>Overall Average N= 138 Generalist Average N=56 Specialist Average N=82 Avarage Difference Generalist/ Specialist T Test (Student) α=0.05 Avarage of Dutra et al (Owner, Manager)</td>
</tr>
<tr>
<td>Critical reasoning</td>
<td>4,029 4.036 4.02439 0.011324 * 4.16</td>
</tr>
<tr>
<td>Research Skills</td>
<td>4,035 4.07317 0.07317 * 3.96</td>
</tr>
<tr>
<td>Data Collection Ability</td>
<td>4,152 4.095122 0.10584 * 4.11</td>
</tr>
<tr>
<td>Research Skills</td>
<td>4,137 4.207317 -0.1716 ** 3.96</td>
</tr>
<tr>
<td>Troubleshooting</td>
<td>3,869 3.768293 0.053136 ** 3.60</td>
</tr>
<tr>
<td>Ability to Make Exceptions</td>
<td>3,746 3.767857 0.03615 ** 3.71</td>
</tr>
<tr>
<td>Analytical Skills</td>
<td>3,768 3.768293 -0.0044 ** 3.69</td>
</tr>
<tr>
<td>Intelligence</td>
<td>3,920 3.926829 -0.01611 ** 3.47</td>
</tr>
<tr>
<td>Quick Reasoning</td>
<td>3,833 3.841463 -0.02003 ** 3.44</td>
</tr>
<tr>
<td>Multivariate Processing</td>
<td>3,891 3.914634 -0.05749 ** 3.60</td>
</tr>
<tr>
<td>Perception</td>
<td>3,761 3.731707 0.071864 ** 3.25</td>
</tr>
<tr>
<td>Lateral Thinking</td>
<td>3,579 3.597561 -0.04399 ** 3.03</td>
</tr>
<tr>
<td>Capacity Identif. Infor. Relevant</td>
<td>3,863 3.841463 0.051394 * 3.41</td>
</tr>
<tr>
<td>Professional judgment</td>
<td>4.05 4.071429 0.02003 ** 3.60</td>
</tr>
<tr>
<td>Organizational and business management skills</td>
<td>3,833 3.928571 3.890244 0.038328 * 3.56</td>
</tr>
</tbody>
</table>

Legend: N = Number of Respondents. Note: ** statistically significant at the p <0.05 level for the T-Test (different means for the independent generalist x specialist samples) and * for the non-normal sample.

Table 4 shows that all competences analyzed have a mean above 3.5 (scale 1-5), ranging from 3,579 for lateral thinking competence to 4,152 for "data collection ability". The skills "critical reasoning", "research ability", "ability to collect data", "research ability" and...
"professional judgment" averaged over 4.0. The other abilities averaged between 3,920 ("intelligence") and 3,746 ("ability to make exceptions").

It also reveals that there is a difference in the average between the perceptions of generalists and specialists in 9 of the 15 competences (6 of them do not have normal distribution). Therefore, even among auditees who know their functions in depth, there is no evidence of identification of knowledge gaps as reported by the auditors in the interviews. It is also verified, on average, that the perception of auditees about the auditors of the EB in the state of RS is higher than those of audited companies of Brazilian publicly-held companies on their independent auditors, according to the data from the research conducted by Dutra et al. (2013) for the most experienced group of auditors.

Therefore, from the analysis of Table 4 and based on the description of skills made by Dutra et al (2013), it was verified that auditees do not perceive the competence gaps reported by the own auditors in the interviews. Based on the finding that the auditee does not perceive the competence gaps reported by the auditors themselves, the following is inferred:

a) the auditors, despite the mentioned gaps, have a high level of critical and logical thinking, analytical capacity, according to Sarens (2009); according to the TCU (2009), they evaluate the internal controls broadly, with emphasis on management controls and risk management, executing more than the function of mere evaluator of the legal compliance of public expenditures; and therefore, according to Alves (2013), they hold all the qualifications required; or

b) because of the lack of competence, the auditors do not perform their work according to what is recommended in the literature (Sarens, 2009; TCU, 2009; Alves, 2009), which allows the occurrence of dysfunctions and consequent generation of hidden costs (Silva & Severiano, 2011; Martins, 2013). Based on the auditors’ responses, the following section discusses the key factors posed as potential hidden cost drivers in the unit surveyed.

4.2 Discussion of results and factors with potential to generate hidden costs identified in the research

The contradiction found between the auditees' approval of the auditors and the auditors' own reports acknowledging the existence of knowledge gaps and the existence of ineffective audits (Table 5) could be based on skewed professional judgments of the internal auditors, unintentionally triggered by ambiguity, common interest, approval, familiarity, discount and escalation, according to Bazerman, Loewenstein and Moore (2002).

These discrepancies between the opinion expressed by the auditor and the fraud situation found later were pointed by Moura et al. (2019) as a generator of hidden costs with the following motivating factors: Lack of coordination in the development of work; Wait/Deadline; staff rotation; Absence of Formalized Training Policy. With the exposure of these factors, it can be associated again that the lack of effectiveness of audits may be related to the lack of qualification, skill and experience of auditors (Baharud-din, Shokiyah & Ibrahim, 2014). This finding may also be supported by the fact that organizations have human resources problems - because they do not have enough personnel or they are unskilled - which makes the audit and sampling strategy unfeasible in relation to the number of units analyzed, demonstrating that possibly the public sector is not yet making enough effort to strengthen the internal audit function in the organization (Baharud-din, Shokiyah & Ibrahim, 2014).

<table>
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<tr>
<th>Interview Questions with</th>
<th>Response from the interview auditors</th>
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<td>Fraud and errors verified by external channel and not observed by internal audit</td>
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<td>Table 5</td>
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Have you ever experienced or heard of any negative situation (fraud, error, etc.) that was not verified by the audit teams, but which was subsequently verified for another reason (complaint, legal action, etc.)?

Yes. Yes. After an audit work there was a complaint and we had to go back. Yes. Auditing is a process of constant learning that includes frauds that came to our attention because of a complaint and was not on our sample. Yes. Sometimes there is a divergence between the opinion of the internal control and the TCU, which can modify it or even observe an error. Yes. The audit carries out the activities by sampling, and the mentioned cases may occur. Yes, because the work is conducted by sampling. Yes, and mainly because the audit is by sampling and the number of auditors is reduced.

Regarding these problems with human resources and quality of service, Subramanian, Ng & Carey (2004) identified the reasons that led to outsourcing of internal audit activities in Queensland (Australia), listing insufficient technological and innovation capacity as the main failures that caused outsourcing of the function. The authors report that more than half of the respondents interviewed revealed to consider an improvement in the services provided, attributing this to the fact that auditors are more independent to perform their tasks.

In this case, the auditors of the unit surveyed, due to the aforementioned biases, would be approving the accounts based on dysfunctions born from behavioral factors that also reverberate on the auditees. The factors that would be biasing the judgment of the auditors are based on the need for the auditors to approve the management of those who remunerate them and with whom they live professionally (common interest and familiarity); and in the influence of an institution with a high social trust index, according to IBOPE (2015) (approval). Another hidden cost-generating factor observed was the negative impact on the EB's image due to fraud and inefficiencies discovered through external channels of the Institution, such as press reports, lawsuits, and the TCU.

It should also be noted that in Table 5, unlike the reasons given in Table 2, the auditors credited the hidden cost of the negative impact on the Institution's image to the volume of audited data. This large volume requires the use of the sampling technique and the frauds and errors not observed would be outside the transactions selected in the sample. It was possible to verify in the interviews that the discovery of frauds and errors by external source passes an idea of lack of control and, according to Snieska, Daunoriene and Zekeviciene (2013), negatively impacts the internal image and the executives and leaders of the organization.

Concerning the sampling problem, Leitão and Dantas (2017) affirm that there is a problem in defining a consensus of materiality for audits applied to the public sector, and that this lack of definition of what would be material for government auditing occurs because auditors have increased status pressure from public accountability; greater "power" in the collection of evidence; and interests of public stakeholders, which hinders the development of guidelines on materiality and consequently a satisfactory sampling.

The analysis of the information collected also shows that the loss related to the frauds and errors discovered by the audit unit investigated, it must be added the costs of the suspensions of personnel in the course of the investigative process, sick leaves due to exhaustion during the processes, internal discipline problems, external sanctions and the replacement of permanent staff, according to Button (2015). In addition, the large number of state-owned decentralized public management units favors lower-value fraud, which, according to Button (2015), creates hidden costs that can exceed the fraudulent value itself.

From an accounting point of view, identifying a hidden cost resulting from the ineffectiveness of audits, which is not seen or goes unnoticed, can represent a considerable expense when accounted for in a longer projection, contributing significantly to allocative
decisions (Cabello & Silva, 2017). Therefore, although they are hidden, the costs arising from the ineffectiveness of the audits performed can be treated as perfectly manageable costs and can be properly evaluated in the economic approach to transaction costs, opportunity costs, among others (Cabello & Silva, 2017).

From the point of view of the effectiveness of the audit units analyzed, the validity of questioning public servants and their ability to mitigate hidden costs existing in the auditing organizations is highlighted. Such questioning, applied to the Queensland State Government (Australia), led to outsourcing 83% of internal audit services and proved to be a measure capable of generating efficiency and effectiveness. Long-term efficiency in terms of staff costs and effectiveness in the expertise required by certain audit areas (Subramanian; Ng & Carey, 2004).

In this way, it is evident that the impact of hidden costs on the performance of a public organization must be constantly monitored expecting to eliminate them or, being this impossible, to reduce them, because, according to Cabello and Silva (2017), they can be significant. Although the identification of hidden costs appears to be a complex activity at first, their routinization with the audit processes in order to optimize them has the potential to generate budget surpluses capable of making possible the investment in training and new hires.

5 FINAL CONSIDERATIONS

Cost management is necessary for the sustainability of organizations, even in public activities, because increasing transparency associated with the evolution of technological means allows greater control to society. In this context, public organizations should seek strategic management in which costs are identified and analyzed in a number of ways, including those of difficult identification such as hidden ones. The productive process of organizations with audit assignments is based on services with a high concentration of knowledge, which makes it difficult to identify and evaluate the costs that make up their products.

This paper sought to identify, through an interview with the auditors of one of the internal audit units of the Brazilian Army, and compare with a questionnaire applied to the auditees, the existence and the causes generating the hidden costs. The factors that have generated hidden costs are related to the failure to observe inefficiencies and frauds in the management of the audited units, to the negative impact on the institution's image and to the costs resulting from the fraud investigation process that should have been avoided by the existing controls. The cause of these hidden costs is related to the dysfunctions (Silva & Severiano, 2011), sometimes caused by inefficiencies related to managers' attitudes and behavior, and also from structural problems related to entities' control mechanisms and modes of operation (Martins et al., 2013).

One of these dysfunctions, found in the researched audit unit, is the short time to perform the audit (field work) which requires the selection of small samples. This dysfunction can be easily solved by means of a plan that requires greater audit time per unit audited. Such a measure, due to the small number of auditors, would only be feasible with the decrease in the number of visits to the audited units, which could be done through planning considering the risk. There are proposals of models of effective risk matrices in the literature, made from diffuse logic, according to Antunes (2006).

Another possible dysfunction studied, reported by the auditors themselves, is the knowledge gap in specific areas, such as engineering. Despite the reports collected through
the interviews with the auditors, such dysfunction is not perceived by auditees. Auditees’
answers about the skills related to the auditor's technical knowledge, according to Dutra et al.
(2013), obtained an average above 3.579 in a maximum of 5.0 which shows that the auditees
do not perceive such a gap. This dysfunction can be overcome without the need to train all the
auditors, but only by building qualified teams in the audited subjects.

On the other hand, the research infers that auditors’ failure to observe fraud and errors
can be based on the factors studied by Bazerman, Loewenstein and Moore (2002) which cause
the "skewed view of the auditor". Such a phenomenon can be generated by the "common
interest" aspects (the auditor is remunerated and professionally valued by the institution that
he/she audits), "approval" (the institution has prestige in society) and "familiarity" (auditors
and auditees are professionals with a common military background) (Bazerman, Loewenstein
& Moore, 2002). In the long run, failure to observe the inefficiencies in the management of
audited units may negatively impact the institution’s image, according to Snieska, Daunoriene
and Zekeviciene (2013). Such impact has the potential to reduce the generation of revenues
from the public budget or from partnerships with other entities.

This study complements the research gap on hidden costs in public sector audit
activities identified by Benin et al. (2016), who analyzed the characteristics of hidden cost
publications in national accounting journals from 2000 to 2015, and did not identify any
association or application of the theme to public sector organizations in Brazil. Additionally,
this research highlights from the view of internal auditors and those responsible for the
audited institution the perception of possible dysfunctions such as lack of auditors’
knowledge, lack of time to perform audits and rework for fraud verification. These reports
lead to consider a flaw in the way internal control through its audits has been playing its role,
leaving it to be desired from the viewpoint of NPM, which preaches efficiency in managing
and controlling costs in the public sector.

The results found can help public managers in improving processes and the search for
efficiency by considering them in their cost accounting systems and audit processes. It is
hoped to contribute with the research on the strategic cost management, especially in the
public sector and in the military area, for its limited collection of papers when compared to
the private sector and for the difficulty of access to the information because it is inserted in an
institution of the area of defense.

As a limitation of this research, there is the fact that the analysis is restricted to
descriptive data of a single institution, and it is not possible to generalize results or make
inferences. In addition to this limiting factor, the research considered the opinion of auditors
and auditees without relating the results found with the institution’s performance.

Due to the lack of empirical studies that deal with the identification and management
of hidden and intangible costs, especially in the public sector, it is suggested that this research
be replicated in other public agencies or that it goes beyond the identification and measure
and monitor them, presenting alternatives to mitigate such costs. It is also suggested that
studies be carried out to minimize such hidden costs through the creation of effective and
efficient risk matrices that can be adapted to the public sector.

REFERENCES

ensaio teórico. Anais Congresso Nacional de Administração e Contabilidade, VI.


Hidden costs: a case study in an internal audit unit of the public sector


RESUMO

Objetivo: este trabalho teve por objetivo identificar os fatores com potencial de geração de custos ocultos no Exército Brasileiro (EB) em atividades de uma de suas unidades de auditoria interna.

Método: trata-se de pesquisa descritiva com uso de técnica qualitativa e quantitativa, aplicada a estudo de caso único. Os dados foram coletados em 76 unidades do Exército Brasileiro, contando com 139 respondentes. A análise dos dados inclui entrevistas com auditores, análise de conteúdo de documentos e observação in loco, complementados por questionário aplicado aos auditados.

Originalidade/Relevância: a pesquisa é relevante por identificar, sob o ponto de vista de auditores internos e unidades auditadas, possíveis disfunções que geram custos ocultos para o setor público. Os resultados encontrados reforçam a necessidade de mudanças no EB para acompanhar os movimentos de reforma no setor público, que pregam a eficiência e o foco no desempenho das organizações.

Resultados: os resultados revelam que os fatores que geraram custos ocultos estão relacionados à falta de observação de ineficiências e fraudes na gestão das unidades auditadas, ao impacto negativo na imagem da instituição e aos custos resultantes do processo de investigação de fraudes, que deveriam ter sido evitados pelos controles existentes.

Contribuições teóricas/metodológicas: a pesquisa contribui, empíricamente, ao demonstrar a relevância do gerenciamento estratégico de custos no setor público, principalmente da auditoria, para identificar pontos que geram custos desnecessários aos cofres públicos.

Palavras-chave: Custos ocultos; Auditoria; Exército Brasileiro.