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Perception of Chief Internal Auditors Regarding the Independence of their Department in Federal Public Companies

Percepção de Chefes de Auditoria Interna Acerca da Independência do seu Seto rem Empresas Públicas Federais

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RESUMO

O objetivo foi o de analisar a concepção de chefes auditores acerca da independência da unidade de auditoria interna de cinco empresas públicas federais. A metodologia utilizada foi a da pesquisa quantitativa, por meio de entrevista a cinco chefes de auditorias de estatais, no sentido de documentar e, consequentemente, compreender o fenômeno envolvido na concepção deles acerca do nível de independência das auditorias em empresas públicas federais. Consoante se pode compreender da realidade identificada em relação à auditoria das estatais investigadas, a partir da análise documental e da concepção dos auditores entrevistados, há a independência da auditoria interna das estatais investigadas, embora todas situadas em nível 1 do IA-CM, um dos maiores empecilhos para o comprometimento desta independência está na ausência de correspondência às Normas Internacionais, no entanto, há uma responsividade ao regime interno, reporte ao Comitê de auditoria e administração, bem como

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uma relação próxima e transparente com a alta administração. Sobre a perspectiva prática, este estudo contribui para proporcionar reflexões sobre como a independência da auditoria interna das empresas públicas está efetivamente estabelecida, como as normas externas e internas existentes influenciam a independência das unidades de auditoria interna, bem como, na percepção dos entrevistados.

Palavras-chave: Auditoria Interna. Independência. Chefe de Auditoria. Empresas Públicas.

ABSTRACT

The objective was to analyze the auditors' conception of the independence of the internal audit unit of five federal public companies. The methodology used was a quantitative research, through interviews with five state audit chiefs, with no sense of outlining a scenario, consequently, understanding the phenomenon involved in the conception of the level of independence of audits in federal public companies. Consoante it is possible to understand the reality identified in relation to the audit of the investigated states, from the documentary analysis and the conception of the two auditors interviewed, there is independence from the internal audit of the investigated states, all located at level 1 of the IA-CM, one of the greatest steps to The commitment to this independence is in the absence of correspondence to International Standards, however, there is a responsibility to the internal regime, reporting to the Audit and Administration Committee, as well as a close and transparent relationship with senior management. From a practical perspective, this study contributes by providing reflections on how the independence of internal audits in public companies is effectively established, how existing external and internal norms influence the independence of internal audit units, as perceived by the interviewees.

Keywords: Internal Audit. Independence. CAI. Audit Committee. State-Owned Company.

1. INTRODUCTION

The independence of internal audit is of fundamental importance for the governance of institutions, especially with regard to the prevention and detection of fraud and corruption. There should be no aspect of the organization that prevents internal audit from examining, while it fulfills its mandate. A truly independent internal audit is able to carry out impartial assessments, identify deficiencies in internal controls and implement corrective measures, thus strengthening corporate governance.

According to the glossary of International Standards for the Professional Practice of Internal Auditing – NIPPPI, issued by the Institute of Internal Auditors – IIA (2008), the independence means

“Freedom from conditions that threaten the ability of the internal audit activity to fulfill its internal audit responsibilities in an impartial manner” (IIA, 2008, n.p.). Furthermore, the IIA addresses the independence of internal audit in several standards, see, for example, Attribute Standards Nos. 1100, 1110, 1111 and 1130, given the great importance of the topic for the audit activity.

Previous studies have pointed to shortcomings related to the level of independence of internal auditors. For example, Christopher, Sarens, and Leung (2009) argue that if the internal audit function is used as a stepping stone to other positions within the organization, internal auditors may face difficulties in operating objectively and independently, since they will be constrained by the possibility of future career changes. Goodwin and Yeo (2001) also argue that internal auditors may resist pressure exerted by audited individuals who may become their future supervisors.

As a way to guarantee independence, Christopher, Sarens, and Leung (2009) cite that there should be interaction between internal audit and the Audit Committee, as this allows internal auditors to discuss their work with an independent party, enabling appropriate corrective action. This position is confirmed by Goodwin and Yeo (2001), who mention the importance of frequent meetings between the Internal Audit Committee and the Audit Committee. Finally, Roussy (2013) highlights the importance of internal auditors themselves exercising sensitivity and caution when evaluating the independence of auditors in their activities, since there are no clearly defined limits when it comes to this attribute.

In this sense, the assessment of independence requires a careful analysis of the specific circumstances and relationships between internal auditors and auditees, taking into account factors such as external influences, organizational pressures, and potential conflicts of interest.

In this context, the objective of this study is to analyze the conception of chief auditors regarding the independence of the internal audit unit of five federal public companies. To achieve the proposed objective, the study seeks to: a) understand the importance and legal obligations related to the activity of internal auditing in federal public companies, b) describe the structure and functioning of internal auditing within federal public companies, and c) analyze the relationship between the Head of Internal Auditing and the Audit Committee and the company's senior management to identify factors related to the independence of the internal auditing activity.

Regarding the methodological procedures to achieve the proposed objective, in addition to conducting interviews with the heads of internal audit, a document analysis was also carried out to understand how the structure and functioning of these companies impact the independence of the internal audit unit of these companies.

This research is justified by its contribution to the literature with the presentation of new empirical evidence on the independence of the internal audit of Brazilian public companies in the exercise of their functions. In this study, Brazilian federal companies were chosen for analysis, due to the public commitment to demonstrating transparency in their processes, with the role of internal audit being crucial for this aspect.

From a practical perspective, this study contributes to providing reflections on how the independence of the internal audit of public companies is effectively established, how existing external and internal standards influence the independence of internal audit units, as well as the perception of the interviewees.

Similarly, this study highlights the particularities of the independence of internal audit activity in public companies, vis-à-vis the practices observed in private companies in general, a subject that requires further study, especially given the relevance of the economic and social role that these companies play in the country. Regarding the organizational structure of the study,

the content was divided into five topics, in addition to this introduction. Topic 2 presents the theoretical framework, where the concept of independence within the scope of internal audit activity is discussed. The third topic describes the research method, while the fourth topic presents the data and analysis of the results. Finally, the fifth topic presents the conclusions of the study.

2. LITERATURE REVIEW

2.1 Importance of Independence for Internal Auditing

Supporting internal audit is of paramount importance to senior management, as any lack of adequate support can significantly compromise the ability of this function to achieve its missions and objectives. By failing to provide the necessary support, senior management undermines the effectiveness of internal audit, limiting its resources, undermining its credibility and independence, and preventing it from effectively contributing to the improvement of corporate governance and the mitigation of risks. Therefore, it is essential that senior management understands and values the strategic role of internal audit in order to ensure its full potential and positive impact on the organization (Ahmad; Othman; Jusoff, 2009; Ahmad; Taylor, 2009; Alzeban; Gwilliam, 2014).

In addition, the academic literature highlights that several aspects are fundamental to ensuring the independence of internal audit. Authors such as Ahmad, Othman, Othman, and Jusoff (2009) and Alzeban and Gwilliam (2014) argue that a good audit report is essential to ensure independence. In addition, the credibility of the acting auditors, the transparency in their performance, and the clear segregation of internal audit functions are also determining factors in this context. These elements contribute to establishing a relationship of trust between internal audit and stakeholders, as well as ensuring the impartiality and objectivity of the conclusions and recommendations of internal auditors.

When analyzing the literature and conducting case studies, Roussy (2013) highlights the changes in the view of internal auditors, who are now considered not only guardians but also collaborators and protectors of senior executives. This transformation of roles is attributed to factors such as the pressure for effective corporate governance and the desire to contribute to organizational success. The author also discusses the challenges faced by internal auditors in reconciling these different roles and offers insights into how organizations can optimize the value and contribution of internal auditors by promoting a more symbiotic relationship with senior management.

Another study that corroborates the importance of independence for internal auditing in the public sector was developed by Alzeban and Gwilliam (2014). The authors evaluated the factors that influence the effectiveness of internal auditing in Saudi Arabia, through the analysis of data from 203 managers and 239 internal auditors from 79 organizations. The aforementioned authors highlight that management support drives the perceived effectiveness of the internal audit function, both from the perspective of management and internal auditors. Management support is linked to the hiring of trained and experienced personnel, the provision of sufficient resources, the improvement of the relationship with external auditors, and reinforcing the existence of an independent internal audit department. The findings of Ahmad, Othman, Othman and Jusoff et al. (2009)

Alzeban and Gwilliam (2014) reinforce the considerations of Chang, Chen, Cheng, and Chi (2019), highlighting that internal auditing helps management improve internal controls over operations, reporting, and compliance. The study developed by Chang et al. (2019) in Taiwan suggests that a larger internal audit team can improve internal audit performance for both operations and compliance, while the competence of the internal auditor is positively associated with the effectiveness of internal control over compliance, but not for operations.

The IA-CM is a framework used to assess internal audit capability, considering various aspects such as competence, resources, methodologies, and processes. The study shows that organizations with greater internal audit capability tend to exhibit greater independence in their audit activities, which contributes to the effectiveness and reliability of the results obtained. Thus, the continuous improvement of internal audit capability can play a crucial role in strengthening its independence and fulfilling its responsibilities effectively.

In the national context, Lopes and José (2021) mention that internal auditing in the business environment requires total independence to ensure the impartiality of the process. However, as an integral part of the organization, internal audit also needs to receive support and be willing to relinquish some of its independence to achieve the proposed objectives.

For Ferrari, Cunha and Boff (2023), internal audit ensures that the process is reliable, since it is not tied to any sector where there may be a conflict of interest. In order to be considered adequate, internal audit needs to contribute to the company's work, the reports need to be reliable, there cannot be conflicts that prevent auditors from having an objective job, impartiality is essential to verify the parameters considered during the audit and also not compromise the auditor's judgment with the other work carried out by the company.

2.2 Factors affecting independence

Studies on independence in the context of internal auditing have significantly addressed the relevance of the interaction between internal audit, senior management, the audit committee, and those being audited. These studies have aimed to identify and analyze the main challenges faced in maintaining the independence of the internal audit function. (Cinaj, Ribaj, and Ribaj, 2020) identify issues that can affect the independence of internal auditors from bank executives, such as external/internal pressures and excessive influence of executives on internal audit activities. The article also

discusses the mechanisms and safeguards necessary to promote the independence of internal auditors, such as the adoption of audit standards and the creation of independent audit committees.

Another important component of the interaction between internal audit and independence is the audit committee. This body plays an essential role in overseeing internal audit activities and safeguarding its independence. The audit committee should be composed of independent and experienced members, capable of critically evaluating internal audit practices and ensuring that the function operates independently and free from undue influence.

In addition, studies on the independence of internal audit highlight the challenges faced in the relationship with auditees. It is necessary to establish a professional and assertive approach to dealing with potential conflicts of interest, ensuring that internal audit can carry out its activities independently, without interference or undue pressure from those being audited. Finally, it is necessary to highlight the existence of a deficit of national academic studies that specifically address the issue of internal audit independence, especially in the context of public companies.

The independence of internal audit plays a significant role in determining the level of internal audit capability in public sector organizations, and has a positive and significant impact on the overall level of IA-CM (Yusof; Haron; Ismail; Chye, 2019). The structuring of the IA-CM model originated from a recommendation issued by the IIA Public Sector Committee in 2004, for the creation of a universal capability assessment model that would reinforce the importance of internal audit for the efficiency and effectiveness of Public Administration (IIARF, 2009).

Figure 1 shows the levels of the IA-CM Matrix, where the lighter part indicates less influence from internal audit in establishing or institutionalizing the macro-process, and the darker part indicates where the unit itself has the possibility of creating and institutionalizing the activity (IIARF, 2009).

FigurE 1- MatriX IA-CM

	Serviços e Papel da AI	Gerenciamento de Pessoas	Práticas Profissionais	Gerenciamento do Desempenho e prestação de contas	Cultura e Relacionamento Organizacional	Estruturas de Governança
Nível 5 Otimização	AI reconhecido como agente-chave de mudança	Liderança no envolvimento com órgãos profissionais	Aperfeiçoamento contínuo	Relatório Público sobre sua efetividade	Relações efetivas e permanentes	Independência, poder e autoridade da AI
Nível 4 Gerenciado	Asseguração da governança, gestão de riscos e controles	AI contribui para o desenvolvimento da gestão AI apoia órgãos profissionais Planejamento da mão-de-obra	Estratégia de Auditoria alavanca a gestão de risco da organização	Integração de medidas de desempenhos qualitativas e quantitativas	CAE assessora e influencia a alta gestão	Supervisão independente das atividades de AI CAE reporta-se à autoridade principal
Nível 3 Integrado	Serviços de assessoramento Auditorias de desempenho	Construção de equipes e competências Staff profissionalmente qualificado Coordenação da Mão de obra	Arcabouço de Gestão da Qualidade Planos de Auditoria Baseados em Riscos	Medidas de Desempenho Relatórios de gestão Informação sobre custos	Coordenação com outros grupos de revisão Componente integral da equipe de gestão	Supervisão gerencial da atividade da AI Mecanismos de financiamento
Nível 2 Infraestrutura	Auditoria de conformidade	Desenvolvimento profissional individual Pessoas preparadas são identificadas e recrutadas	Arcabouço de práticas profissionais e processos Plano de auditoria baseado nas prioridades da gestão e dos stakeholders	Orçamento operacional Plano de negócios	Gerenciamento dentro da atividade de AI	Acesso total às informações, ativos e pessoas da organização Fluxo de relatórios de auditoria estabelecido
Nível 1 Inicial	Ad hoc não estruturada; auditorias isoladas ou revisão de documentos e transações com finalidade de aferir conformidade; produtos dependem de habilidades específicas de indivíduos que estão nos cargos; ausência de práticas profissionais estabelecidas; falta de estrutura; falta de capacidade; inexistência de KPAs					

Source: Internal Control National Council – CONACI.

The matrix indicates four of the six elements of the activities carried out in Internal Auditing in the public service: Services and Role of Internal Auditing, People Management, Professional Practices, and Performance Management and Accountability. The other two: Organizational Culture and Relationships and Governance Structures involve the relationship of the internal audit activity with the organization it serves and with the external environment.

Two fundamental assumptions for the exercise of internal auditing are independence and objectivity, both in conducting the work and in issuing opinions. For the internal audit function to be independent, it must have technical autonomy. This means that the person responsible for the Government Internal Audit Unit – UAIG must communicate directly with the highest-ranking individuals within the Audited Unit (senior management or board, if any) to enable the UAIG to fulfill its responsibilities, free from interference in determining the scope, executing procedures, making professional judgments, and communicating results (Brazil, 2017).

3. METHODOLOGY

This study is configured as a multiple case study, characterized by better describing, analyzing, and explaining, from the point of view of internal audit chiefs, the independence of internal audit in public companies. In this sense, it is an investigation that uses a qualitative case study approach, as it allows for an empirical investigation of a contemporary phenomenon within a real-life context (Yin, 2015).

The companies were selected based on the Aggregate Report of Federal State-Owned Enterprises – RAEEF, published by the Secretariat for Coordination and Governance of Federal State-Owned Enterprises – SEST, base year 2021 (Ministry of Economy, 2021). In the first stage of sampling, companies were selected that presented the following characteristics: (1) companies that do not operate in the financial sector; (2) individual companies, that is, they do not participate in state conglomerates; and (3) companies constituted in the form of a public company.

Financial companies were excluded because they operate under their own rules established by the National Monetary Council, the Central Bank of Brazil, and the Securities and Exchange Commission. The exclusion of companies constituted as mixed-economy companies occurred due to the main differences with the modalities of public companies, since the latter are constituted with 100% of exclusively public capital, while mixed-economy companies have both public and private capital, with the portion of capital relating to voting shares belonging to the public entity.

Finally, companies that are part of conglomerates have their governance influenced by the group's controlling company, and, in some cases, the internal audit unit is unique. With this, the sample size decreased from 46 to 20 companies. To allow for a better comparison of the collected data, it was decided to select five companies with similar characteristics for the research, thus composing a non-probabilistic sample. Thus, the companies selected for analysis were: 1) Casa da Moeda do Brasil – CMB; 2) Brazilian Blood Products and Biotechnology Company – HEMOBRÁS; 3) Brazilian Military Equipment Industry – IMBEL; 4) Brazilian Nuclear Industries – INB; and 5) Nuclebrás Heavy Equipment S.A – NUCLEP.

The documents used were (1) the company's organizational chart, (2) the Annual Internal Audit Plan – PAINT (2023), (3) the Annual Internal Audit Report – RAIN (2022), (4) Minutes of Audit Committee Meetings (2023), and (5) Regulations and/or Internal Regulations of the selected companies and Internal Audit Regulations and/or Bylaws, which were obtained from the respective companies' websites, accessed in January and February 2024.

The interviews were conducted using a structured questionnaire, developed based on two questionnaires from previous studies. The first questionnaire was that of Christopher, Sarens, and Leung (2009), which addresses the independence of internal audit, and the second questionnaire was that of Sancovski et al. (2020), which segmented the questionnaire into six main parts: company data, respondent data, internal control structure, functioning of the internal control system, and changes in the internal control system.

The interview script was divided into four blocks: (A) Respondent Characteristics (B) Internal Audit Structure,

(C) Internal Audit Functioning (D) Internal Audit Capability Model (IA-CM). The interview script has open-ended responses and totaled twenty-three questions.

Block D of the questionnaire seeks to identify the level of maturity of the IA-CM at which the company is located, which is fundamental to evaluating performance, identifying gaps, establishing goals and priorities, conducting benchmarking, and strengthening the corporate governance of the internal audit function. This information is essential to improve internal audit practices and processes and ensure their effectiveness in assessing and mitigating risks within the organization.

In general, the interview analysis followed the process described by Yin (2016, p. 202), where 5 (five) interviews were conducted with heads of internal audit from the selected companies.

To define the independence of internal audits, the study by Paula, Ferreira and Gouveia (2023) was considered, where the authors took into account the Internal Audit Capability Model (IA-CM), which analyzes the company based on processes considered key, from the English Key Process Areas (KPA's). From this, the practices and procedures performed by the company's internal audit unit are identified, thus defining degrees for these companies.

4 RESULTS

4.1 Casa da Moeda do Brazil (Brazilian Mint) - CMB

4.1.1 Organizational Structure of Internal Audit

The structure of CMB's Internal Audit includes, in addition to the CAI (Audit Committee), three managers and seven operational auditors. The management positions are distributed across the following sections: accounting, financial, and operational audit section; planning, coordination, and monitoring of internal activities section; and governance, compliance, risk, and IT section. Regarding the guidelines and requirements related to the independence of the Internal Audit Unit, the position of internal audit within the organizational structure is adequate to guarantee its independence, since, according to CMB's organizational chart, internal audit is linked to the Audit Committee, as well as CMB's Articles of Association.

4.1.2 Operation of the internal audit

When consulting documents regarding the organizational structure of the internal audit unit, it is identified that the description of who is responsible for hiring and dismissing the Head of Audit is found in the POL- Policy-G5000/001: Selection of Heads of Governance Units, with the objective that the nominees possess the technical capacity and experience necessary to perform their duties; in addition, the nominee will be subject to approval by the Board of Directors – CONSAD.

In the Audit Committee meetings, several topics related to governance and organizational efficiency are discussed. Among these topics, the most frequently mentioned point was internal auditing, specifically the follow-up on pending recommendations. In addition, the execution of the Annual Internal Audit Plan (PAINT) was supervised, ensuring that the planned activities are being carried out according to the established schedule and objectives.

The 2022 RAIN report indicated that the internal audit carried out 27 (twenty-seven) examinations, of which 19 (nineteen) were planned (five mandatory and fourteen based on risk assessment) in the Annual Internal Audit Activity Plan (PAINT), 7 (seven) were special examinations requested externally, and 1 (one) was carried over from 2021. Monitoring of recommendations was included in the agendas of the Board Meetings, which resulted in a smaller number of pending recommendations at the end of 2022, even with the issuance of 79 (seventy-nine) new recommendations.

4.2 Brazilian Company of Blood Products and Biotechnology - HEMOBRAS

4.2.1 Organizational Structure of Internal Audit

The internal audit has 4 (four) professionals, where one is the General Auditor and the other three are administrative analysts, and one intern on staff. According to the Minutes of the 1st Extraordinary General Meeting of June 14, 2018, where the Articles of Association were approved, it establishes that the company will have an Audit Committee. The Articles of Association also define the structure, requirements and responsibilities, as well as that the committee is elected and dismissed by the Board of Directors and is composed of three members.

Regarding the duties of the Board of Directors, in relation to internal audit, it is responsible for approving the Annual Internal Audit Activities Plan (PAINT) and the Annual Internal Audit Activities Report (RAIN), without the presence of the company's President (item XVIII).

4.2.2 Operation of the internal audit

According to the minutes of the HEMO-BRÁS Audit Committee, the CAI participated in 11 of the 27 meetings held in 2023. The Audit Committee (COAUD) meetings addressed essential topics to ensure the integrity and efficiency of internal operations. Among the main issues, the monitoring of compliance with internal audit recommendations stands out, ensuring that corrective actions are effectively implemented.

The discussion of the Annual Internal Audit Plan (PAINT) ensures that audits are well planned and executed as planned. The evaluation of the Annual Internal Audit Report (RAIN) allows for a comprehensive analysis of the results and impacts of the audits carried out during the year. In addition, special mention should be made of the subject of minutes 16, the Internal Audit report (AUDIN) on its independence from other areas of HEMOBRÁS, with this presentation being made without the presence of management to ensure the impartiality and transparency of the process.

4.3 Brazilian Military Equipment Industry - IMBEL

4.3.1 Organizational Structure Internal Audit

The Internal Audit unit of IMBEL has 4 (four) professionals: 1 (one) Head, 1 (one) Advisor and 2 (two) Coordinators (PAINT, 2022). According to the Bylaws, dated 12/01/2005, in its sole paragraph of Article 12, "IMBEL will have an internal audit, linked to the Board of Directors, in accordance with current legislation." This linkage is reinforced in the Internal Regulations of IMBEL's Internal Audit, dated 27/05/2021, in its Article 3, "The Internal Audit is linked to the Board of Directors, to whom it must report directly." (IMBEL, 2022)

4.3.2 Operation of the internal audit

According to the Internal Audit Regulations of IMBEL, item IX of Article 6, it is the responsibility of IMBEL's Internal Audit to: "keep the Audit Committee informed of the work carried out by the Internal Audit, through meetings, audit visit reports and quarterly audit reports".

According to the Minutes of the Board of Directors, the CAI participated in 11 of the 24 meetings that took place during the year 2023. In the meetings of the Audit Committee (COAUD), the main topics addressed include, most frequently, the quarterly opinions that the internal audit performs on the Financial Statements, ensuring the conformity and accuracy of the financial information. In addition, the audit reports carried out were discussed in detail, where findings and recommendations for improvements are evaluated. The monitoring of the execution of the Annual Internal Audit Plan (PAINT) was also addressed by COAUD, ensuring that the planned activities are implemented as foreseen, contributing to the effectiveness and transparency of internal operations.

The RAIN 2022 indicates that in that year 98% of the established tasks were completed, where 15 (fifteen) activities were evaluated by the audit (eleven by risk assessment and 4 as mandatory). From these reports, 48 (forty-eight) recommendations were generated, with 45 (forty-five) implemented, 1 (one) partially implemented and 2 (two) still under analysis to verify the possibility of implementation. Although not all recommendations were met, the audit did not identify negative impacts and detected as a positive impact the amount of resources available for work.

4.4 Nuclear Industries of Brazil - INB

4.4.1 Organizational Structure of Internal Audit

To carry out its activities, the Internal Audit currently consists of a team of 8 (eight) auditors, including 1 (one) Manager, in addition to 1 (one) administrative assistant to support the area. The Articles of Association of Brazilian Nuclear Industries (INB), dated April 27, 2022, establish in its articles the duties and structure of the Statutory Audit Committee and the Internal Audit of the company.

4.4.2 Internal audit operation

According to the minutes of the Statutory Audit Committee (CAE), in its 24 meetings held in 2023, four were attended by the Internal Audit Manager. On those occasions, important topics were discussed, such as the reports of the 2023 Annual Internal Audit Plan (PAINT) and the Internal Audit Annual Report (RAIN) of 2022, which describe in details the activities carried out and the results achieved.

The 2022 RAIN T indicated 8 completed tasks foreseen in the PAINT, highlighting the change in scope of the Budget work due to INB's exit from the Fiscal Budget and the workforce expended for the preliminary assessment of the Corporate Risk Matrix in order to assist in defining the tasks planned for the 2023 PAINT (RAINT, 2022).

The Internal Audit Regulations of INB, dated December 13, 2023, establish a formal independence policy for Internal Audit. As described in the regulations, Internal Audit must carry out its activities independently and objectively, auditing business processes in order to improve the effectiveness of internal controls and assisting in the decision-making of administrators. In addition, the regulations ensure that the activities of Internal Audit are carried out without any type of external influence.

4.5 Nuclebrás Equipamentos Pesados S.A - NUCLEP

4.5.1 Organizational Structure of Internal Audit

The 2023 PAINT (Annual Internal Audit Plan) clarifies that there is 1 (one) general auditor, 4 (four) internal auditors, and 1 (one) intern in NUCLEP's internal audit department. According to NUCLEP's Articles of Association, the link between Internal Audit and the Board of Directors, either directly or through the Statutory Audit Committee, is stipulated in Article 112. The minutes of the Audit Committee meetings must be published by the Company. However, if the Board of Directors considers that the publication of the minutes could jeopardize a legitimate interest of the Company, only an extract of the minutes will be published. Among the responsibilities of the Statutory Audit Committee, the supervision of activities developed in the area of internal audit stands out, ensuring the effectiveness and compliance of operations with applicable regulations and standards; in addition to approving the PAINT and RAIN T (Annual Internal Audit Report), without the presence of the President of NUCLEP, demonstrating yet another way the company is concerned with the independence of internal audit.

4.5.2 Operation of the internal audit

Regarding the functioning of the internal audit, the Articles of Association place the authority to approve the appointments and dismissals of the heads of the Internal Audit to the Board of Directors, in addition to submitting them to the approval of the Comptroller General of the Union.

In the 24 meetings of the Audit Committee (COAUD) held in 2023, as recorded in its minutes, five of them were attended by the head of internal audit. During these meetings, several issues were addressed, including the evaluation of the 2022 Annual Internal Audit Report (RAIN T), which analyzes the performance and findings of the audits carried out in the previous year. In addition, monitoring the recommendations of the internal audit was a central topic, aiming to ensure the effective implementation of the suggested corrective actions.

Finally, the 2022 RAIN T report provided all the information regarding the internal audit work carried out that year, where at least 95% of the actions planned for the year were completed, demonstrating the level of organization that the documentation relevant to the area is capable of bringing to the results.

4.6 Interview Results

4.6.1 Block A: Characteristics of the respondents

Regarding the first section, "Characteristics of the respondents," three of the interviewees have a degree in Accounting Sciences, one in Logistics, and the last in Electrical Engineering. Concerning the length of time the professionals have been working in internal auditing, it is noted that two of the interviewees have been in the role for six years, one for eight years, and another for 16 years. Finally, the last professional has been in the role for five years.

4.6.2 Block B: Internal Audit Structure

Regarding block B, concerning the structure of internal auditing, it is evident that the companies differ from each other, in which one of them maintains the position of chief auditor accompanied by three collaborators. Another company has a structure of one chief auditor and four analysts, unlike another company, which is composed of a superintendency position, represented by the chief auditor and three management positions (audit examinations, IT management and risk, and audit planning). The fourth state-owned company has the chief auditor and two auditors, and finally, the last state-owned company, in addition to the position of chief auditor, maintains a structure with an assistant, four internal auditors, and an intern.

In addition, regarding the computerized system for conducting internal audits, three institutions use the system provided by the General Comptroller's Office of the Union (e-Aud), while the others use internally developed systems, all of which have functionalities geared towards conducting internal audits.

4.6.3 Block C: Operation of the internal audit

• Company 1

Concerning the functioning of the internal audit, it is evident that Company 1 maintains 22 macro-processes that are subject to audit and that involve the entire cycle, as well as work that is focused on its core activity. Likewise, external auditing is contracted for the verification of the accounting balance sheet. It should be noted that the institution described does not provide consulting services.

Regarding the work carried out by the internal audit, it is commented: So, we have 4 directorates here in the company, the administrative directorate, the nuclear fuel element directorate, the uranium enrichment directorate and the mineral resources directorate. These 22 auditable processes are linked to the macros, let's say, to AA, this main process, which would be the fuel element cycle. So, within these 22, we always try to look within a 1-year period.

Furthermore, it is worth noting that the relationship with Senior Management is considered good; however, being a state-owned company, it becomes susceptible to political interference, since changes in political management require the head auditor to constantly adapt to new demands. It is evident that there is no high turnover among audit professionals and that the frequency of CAE meetings with senior management in the last year was quarterly.

Regarding the approval of PAINT and RAIN T, it is highlighted that it is carried out by the Audit Committee; in addition, requests from other areas are received, such as from the Presidency and the Audit Committee, however, this is quite restricted.

As for the audit results, in relation to the reporting of results, there is a computerized system that contributes optimally to the process, in addition to on-site presence.

However, the reports are prepared by the head of auditing and, after all doubts have been clarified in meetings with those involved, they are approved by the chief auditor herself/himself.

- **Company 2**

Regarding the relationship between internal audit and other areas, especially senior management, despite an initial period of skepticism, the current environment is one of transparency, in which the work of the audit department is valued, and both the board and the management team demonstrate commitment to its activities.

[...] when I arrived at the company, we had a very hostile atmosphere, and thank God we managed to reverse that and today we have a very good environment, an environment of transparency.

As to the reporting of internal audit results, it is carried out by the auditors who performed it, maintaining a state of transparency with the audited area, enabling means to make any and all situations evident, so that in the end, there are no doubts, and efforts are made to seek solutions to the problems. Finally, the Internal Audit Regulations provide for the independence of the internal audit, in accordance with the CGU (Brazilian Federal Comptroller General).

Regarding personnel transfers, there is occasionally personnel mobility to other sectors of the company, mainly to the governance sector, which prioritizes audit personnel, in addition to a voluntary dismissal program that led to the loss of two auditors. It should be noted that the company does not have a specific budget for conducting internal audits, as it is included in the company's own budget. In addition, the head of auditing maintains regular contact with the audit committee, where the president and individual members meet every two months, in addition to occasional contacts with free access.

- **Company 3**

As for the functioning of internal auditing, its work is divided into operational and compliance activities, as foreseen in the annual activity plan, developed based on risk analysis, and not solely on the specific regulatory framework of the federal public administration. Some of these activities are carried out periodically, especially those of a mandatory nature. In addition, the unit also performs consulting work, with the PAINT (Annual Internal Audit Plan) stipulating at least one consulting activity per year.

audit

Generally, these are operational and compliance audits. We have an annual internal audit activity plan, which is entirely risk-based, not because there's a whole regulatory framework. There are tasks performed periodically. The characteristics already answered that for me, which are the mandatory ones. The unit does indeed perform consulting work.

In reference with the relationship with senior management, the company is linked to the Board of Directors; therefore, all reports are submitted to the directors. Periodically, at three-month intervals, the auditor-general presents a management report to the board members. The company has a statutory audit committee, which works collaboratively; however, it provides input at meetings held in Brasília or Recife, where data is reported.

Every three months, the auditor-general presents them with a management report, which is a summary of all those reports and technical notes that have been issued. So, obviously, with a focus on strategic findings, and we have a statutory audit committee. That's how it is hierarchically; we're not directly linked to them, but they are an instance that works with us, that we provide information to; it's the most frequent contact.

The reporting of internal audit results is presented by the auditors themselves who carry them out; it is standard practice for the auditor who signs the report to present the results.

It should be noted that changes are only granted by the internal auditors who performed the audit. In addition, the state-owned company's internal regulations ensure the independence of the internal audit in several provisions, as the company's own structure ensures the internal audit as independent.

- **Company 4**

With respect to the work carried out by the fourth state-owned company, it is discussed that these are audits of relevant risk issues that may impact the achievement of the organization's objectives, based on planning, more specifically, communication of results and monitoring. Regarding the relationship of the state-owned company's audit with other areas, specifically Senior Management, according to the interviewee, it is an optimized condition, mainly with the Board of Directors, with which contact is constant, in the same way with the Audit Committee, with meetings held practically weekly.

In relation to the documents, the PAINT (Annual Action Plan) is proposed by the internal audit, analyzed by the Fiscal Council and Audit Committee, approved by the Board of Directors, other unforeseen actions, such as requests from other areas, are only received upon request to the Board of Directors, which evaluates and determines and authorizes the internal audit to carry out something that was not foreseen in the plan.

The PAINT (Annual Audit Plan) is proposed by internal audit, as I mentioned, analyzed and carried out by the fiscal council and the audit committee, and it is approved by the board of directors at an ordinary meeting.

The audit report approved by the audit team (without indication of a preliminary report) is signed by the head of audit and sent to the Chairman of the board of directors, who is the first to become aware of the results. Then, after authorization, it is sent to the Fiscal Council, the Audit Committee, and the management of the state-owned company.

Regarding internal audit regulations, the state-owned company has regulations that demonstrate the independence of internal audit, which highlight a specific career path for internal auditors, including new hires, employee transfers, and post-internal regulations issued, which contribute to ensuring the independence of the unit.

- **Company 5**

Finally, regarding the services provided by the fifth state-owned company, it can be observed that it performs auditing and consulting services, in which audits are carried out annually, and consulting services are also standard practice.

Concerning the relationship with Senior Management, transparency with information and an absence of interference in the company's internal audit are observed. Regarding the transfer

of internal audit staff to other functions, it is observed that this does not occur, since these staff members are hired through competitive examinations. Furthermore, concerning the internal audit budget, there is no specific allocation; however, annual staff training and development is requested.

As per the head of audit's contact with private contacts and the audit committee, it is explained that this is done quarterly, with reports sent to the Audit Committee. Meetings with the Statutory Audit Committee and senior management in the last year are continuous or whenever necessary, and the Board of Directors submits reports to them.

In terms of internal audit reports, the approval of the PAINT and RAIN is carried out by the Board of Directors in the presence of the Chairman. Regarding external requests for changes to the PAINT during the fiscal year, these are made if conditions allow. In addition, the PAINT has a risk mapping of the entire company for planning purposes.

4.6.4 Block D: IA-CM

Block D deals with the analysis of the Internal Audit Capability Model (IA-CM) of the internal audit of the investigated state-owned company. The first question refers to the level at which the company is in this classification.

The first state-owned company is at level 1 (as shown in Figure 1). However, to move to level 2 or 3, the necessary interventions are beyond the scope of the audit. Many of the needs depended on senior management. As a result, there was an accommodation, and the company remained at the level.

Regarding the second state-owned company, like the previous one, it is at level 1. To reach level 2, it basically depended on approval, since it met all the necessary requirements. However, there was a need for approval by the Audit Committee of documentation, which was not done. This situation will be resumed by the end of 2024.

Regarding the third state-owned company, like the others, it is at level 1 of the IA-CM, however, some indicators were specifically set by the CGU. Furthermore, the fourth and fifth state-owned companies are also at this level. Regarding this scenario, despite the importance of this classification, one of the factors that contributes to the absence of higher levels can be observed in the reduced number of people working in audit activities.

Finally, in this subsection, the data obtained from the interview, taking into account the blocks of questions included, allows us to outline a subjective position regarding the auditors' conception of the independence of the internal audit of the investigated state-owned companies, whose information makes it possible to understand and explain the scenario that the state-owned companies experience in relation to the independence of the internal audit.

5. ANALYSIS OF RESULTS

After analyzing the case studies of the observed institutions, it is concluded that for the total independence and authority of internal auditing, there should be no aspect of the organization that it can be prevented from examining while fulfilling its mandate. Furthermore, the independence of the auditor, in particular, implies the absence of influence or control regarding the auditor's conduct, actions, and opinions.

In this line of thought, independence allows internal auditors to issue impartial judgments that are essential for the proper conduct of their work, in which the independence of the audit

must be viewed within the totality of corporate governance and the responsibilities of organizations towards their stakeholders. This implicitly incorporates the public interest, whatever its definition may be (Khimoto, 2014).

Literature warns of the risk of decreased independence of internal audit when the appointment and dismissal of the CAI are managed by senior management, as pointed out by Goldman and Barlev (1974), Christopher, Sarens and Leung (2009). However, in all five public companies analyzed, the internal regulations establish that both the appointment and dismissal of the CAI are the responsibility of the Board of Directors, after approval by the Comptroller General of the Union (CGU), reinforcing the autonomy of this process.

When comparing the institutions analyzed, it is possible to mention that the number of members of the COAUD, the control body, does not directly impact the independence of internal audit, and it is up to them to act with integrity. Regarding the members of internal audit, it was possible to verify that in some of these institutions, there is a reassignment of personnel, which fluctuates the structure of internal audit. In all the institutions investigated, it is verified that there is a provision for the independence of internal audit in the aforementioned internal regulations. Based on the document analysis, the interviews were analyzed, and in this sense, considering the Internal Audit Capability Model, it is evident that all are at level 1.

Regarding the mobility of professionals, it is observed that they were identified in many of the realities. This condition, in addition to the lack of personnel and lack of training, often implies a compromise in the independence of the audit. Regarding this condition, Rodrigues (2017) advocates that for an effective and independent internal audit, the presence of qualified professionals is necessary, as it tends to enhance the quality of the audit report, optimize skills and procedure management.

Another point observed is the information regarding the absence of a specific budget for the execution of internal audit activities for some of the investigated companies, as well as evidence of political interference. In addition, most audits are submitted to the Board of Directors of the State-owned company, as is the presentation of the audit report, which is also submitted to the Board. Furthermore, it is observed that there is no strong concern on the part of state-owned companies to elevate the audit to the next level of the IA-CM.

6. CONCLUSION

It is understood that the independence of internal audit must ensure that its functions are not affected by conflicts of interest and pressures motivated by personal or professional ties, the external environment, or institutional predispositions. In this context, the head of internal audit is of paramount importance in promoting a structure that develops its activities effectively in achieving institutional objectives.

Therefore, to achieve the proposed objective, a qualitative research approach was developed through multiple case studies in five state-owned companies, in which institutional documents were triangulated with interviews conducted with the heads of internal audit.

Regarding the results, the scenario found indicates that the state-owned companies analyzed have an internal audit classified at level 1 of the IA-CM. In this context, supported by previous literature, it can be inferred that this scenario limits the total independence of audit activities. However, it was found that in

certain circumstances, such as the existence of internal regulations that provide for the independence of internal audit, the reporting of results to the audit committee and management, as well as a good relationship with senior management, make its independence relative.

In addition, it is argued that the allocation of budget for activities aimed at staff training tends to contribute to strengthening the independence of internal audit. In this sense, this allocation can contribute to risk management, control effectiveness, and the governance process. No less important, this measure contributes to raising the maturity levels proposed by the IA-CM.

With regard to the public sector, it is concluded that internal audits need more support and training from relevant stakeholders to fulfill their responsibilities effectively, considering that the objectives of the public sector are generally broad, complex, and difficult to measure compared to those of the private sector. In line with this, in the public sector, the importance of internal audits has increased to reduce the risk of

corruption.

Therefore, maintaining an independent internal audit becomes fundamental for the effectiveness and optimization of service delivery.

Regarding the contributions from this study, in addition to presenting new evidence to the literature, the study may present deficiencies that prevent higher levels of maturity in internal audit activities. In view of this, suggestions for actions that can contribute to the improvement of the processes and activities of internal auditing are presented. In addition, it contributes to state-owned companies seeking to comply with international standards, in order to raise the level of certification and, consequently, the independence of internal auditing. In this sense, the objectives established in the internal audit reports were implemented, which suggests that the internal audits of the institutions analyzed are independent.

Finally, for future research, a more comprehensive approach is suggested that includes a greater diversity of theoretical and methodological perspectives, as well as new investigations that encompass companies that are at least at level 2 of the IA-CM and higher.

REFERENCES

- AHMAD, Nasibah; OTHMAN, Radiah; OTHMAN, Rohana; JUSOFF, Kamaruzaman. The effectiveness of internal audit in Malaysian public sector. **Journal of Modern Accounting and Auditing**, v. 5, n. 9, 2009.
- AHMAD, Z.; TAYLOR, D. Commitment to independence by internal auditors: the effects of role ambiguity and role conflict. **Managerial Auditing Journal**, v. 24, n. 9, p. 899-925, 2009.
- ALZEBAN, A.; GWILLIAM, D. Factors affecting the internal audit effectiveness: A survey of the Saudi public sector. **Journal of International Accounting, Auditing and Taxation**, v. 23, n. 2, p. 74-86, 2014.
- BRASIL. Ministério da Transparência e Controladoria-Geral da União. **Manual de Orientações técnicas da atividade de auditoria interna governamental do Poder Executivo Federal**. Brasília, DF: Ministério da Transparência e Controladoria-Geral da União, 2017. 149 p.
- CHANG, Y. T, CHEN, H., CHENG, R. K., CHI, W. The impact of internal audit attributes on the effectiveness of internal control over operations and compliance. **Journal of Contemporary Accounting & Economics**, v. 15, n. 1, p. 1-19, 2019.
- CHRISTOPHER, J.; SARENS, G.; LEUNG, P. A critical analysis of the independence of the internal audit function: evidence from Australia. **Accounting, Auditing & Accountability Journal**, v. 22, n. 2, p. 200-220, 26 jan. 2009.
- CINAJ, V.; RIBAJ, A.; RIBAJ, R. The Independence of Banks Internal Auditors from Banks' Executives. **Ovidius University Annals, Economic Sciences Series**, v. 20, n. 2, p. 846-852, 2020.
- FERRARI, A.; CUNHA, P. R.; BOFF, M. L. Estilo de gestão na auditoria interna: influência entre fatores pessoais e conflito de papéis. **Revista Contabilidade & Finanças**, v. 34, p. 1710, 2023.
- GOLDMAN, A.; BARLEV, B. The Auditor-Firm Conflict of Interests: its implications for independence. **The Accounting Review**, v. 49, n. 4, p. 707-718, 1974.
- GOODWIN, J.; YEO, T. Y. Two Factors Affecting Internal Audit Independence and Objectivity: evidence from Singapore. **International Journal of Auditing**, v. 5, n. 2, p. 107-125, 2001.
- INSTITUTE OF INTERNAL AUDITORS (IIA). **Standards for the professional practice of internal auditing**. Institute of Internal Auditors, Incorporated, 2008.
- KHIMOTO, T.N. Factors Affecting Internal Audit Independence: a case study of technical university of Mombasa. **European Journal of Business and Management**. v.6, n.6, 2014.
- LOPES, S. J.; JOSÉ, H. A Importância da Auditoria Interna nas Empresas: a importância da auditoria interna nas empresas. **Revista de Estudos Interdisciplinares do Vale do Araguaia - REIVA**, v. 4, n. 03, p. 12, 29 jun. 2021.
- RODRIGUES, R. C. **A atuação da auditoria interna nas universidades federais brasileiras. 177f.** Dissertação (Mestrado) - Programa de Pós-graduação em Administração e Controladoria, Universidade Federal do Ceará, Fortaleza, 2017. Disponível em: <https://www.repositoriobib.ufc.br/000040/000040c4.pdf>. Acesso em: 03 nov. 2023.

ROUSSY, M. Internal auditors' roles: from watchdogs to helpers and protectors of the top manager. **Critical Perspectives on Accounting**, v. 24, n. 7-8, p. 550–571, nov. 2013.

SANCOVSCHI, M.; COUTINHO E SILVA, A.H.; RIBEIRO, R.D.; AGOSTINHO, TB. Mudanças no sistema de controle interno de uma empresa brasileira do setor elétrico. **Pensar Contábil**, v. 21, n. 76, 2020. YIN, R. **Estudo de Caso: planejamento e métodos**. 5. ed. Porto Alegre: Bookman, 2015.

YUSOF, N. A. Z. M., HARON, H., ISMAIL, I., CHYE, OH. Independence of internal audit unit influence the internal audit capability of Malaysian public sector organizations. **KnE Social Sciences**, 2019.