

AUDIT CAPACITIES IN THE PUBLIC SECTOR OF THE REPUBLIC OF MOLDOVA: CHALLENGES AND OPPORTUNITIES FOR INCREASING THE EFFICIENCY OF THE INTERNAL AUDIT FUNCTION

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Abstract: This study investigates the capacities of internal audit within the public sector of the Republic of Moldova, emphasizing the critical role of organizational structure, resources, and processes in determining the effectiveness of the audit function. The research aims to address the significant challenges faced by internal audit subdivisions, including under-resourcing, insufficient staffing, and the lack of standardized procedures. These factors hinder the ability of internal audit units to provide comprehensive audit coverage, independent assurance and consulting, thus to contribute to effective risk management and internal control. By conducting a detailed analysis of various public entities, based on their annual self-assessment reports, the study uncovers substantial disparities in resource allocation, with many audit units struggling to meet their responsibilities due to limited personnel and fragmented organizational structures across various entities and levels of the administration. The findings highlight the urgent need for strategic investments in human capital, the adoption of uniform procedures, and alignment with international standards. Enhancing audit capacities is essential not only for improving audit quality and scope but also for strengthening governance, ensuring responsible public finance management, and upholding transparency and accountability in public administration. These improvements are vital for fostering greater trust and efficiency within Moldova's public sector, contributing to better public service delivery.

Keywords: Internal audit, public sector, audit capacities, risk management

JEL Classification: H83

1. Introduction

Internal audit is a fundamental component of public administration, contributing to creating a transparent and responsible control environment. In particular, audit capacities – related to organization and functioning – are crucial for ensuring an effective internal audit that can respond to emerging challenges in a continuously changing context. It is essential that audit structures are efficiently organized to improve risk management, internal control, and governance of public entities. These capacities have been continuously adjusted to adapt to new contextual challenges, digitalized and simplified processes, and to develop the necessary competencies for internal auditors.

According to the Institute of Internal Auditors, internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by applying a systematic and methodical approach to evaluate and improve the effectiveness of risk management, control, and governance processes (IIA, 2017).

In this context, this article aims to analyse internal audit in the public sector of the Republic of Moldova, exploring audit capacities related to organization and functioning and the relationship between internal audit and managerial internal control – two fundamental components for the proper functioning and credibility of public administration in the Republic of Moldova.

The Republic of Moldova has recognized internal audit as a crucial tool for maintaining the integrity and efficiency of the public sector, but greater attention is needed to ensure that audit functions adapt to new realities. From the perspective of audit capacities, it is important that the internal audit function has clear organizational structures, sufficient resources, and well-defined procedures that allow it to operate at a high level of efficiency and effectiveness. A well-organized and efficiently functioning internal audit contributes to better risk management and optimal use of resources.

In conclusion, analysing the capacity characteristics of internal audit, such as organization and functioning, and evaluating their impact on audit effectiveness provides a solid foundation for the future development of the internal audit function in the public sector of the Republic of Moldova. These capacities, if developed and adapted appropriately, can significantly contribute to strengthening public confidence and promoting values of transparency, accountability, and integrity at the national level. By achieving these objectives, the article seeks to provide a detailed perspective and a comprehensive analysis of internal audit capacities, thus contributing in a great extent to enhancing transparency and accountability in the public administration of the Republic of Moldova.

2. Materials and methods

To provide a detailed analysis of internal audit in the public sector of the Republic of Moldova and to support the arguments presented in this article, the following data sources were used:

1. The annual consolidated Report on public internal financial control for 2022: this report provides critical data on existing structures, audit processes, and procedures used,
2. Internal audit activity Reports: these reports provide qualitative and quantitative data collected from 56 public entities,
3. Scientific publications and specialized articles: a series of scientific works and specialized articles discuss aspects related to the efficient organization and functioning of internal audit, presenting international best practices, current challenges, and development opportunities in the field,
4. Reports and publications from international organizations: documents and publications developed by international organizations such as the World Bank, the International Monetary Fund, and SIGMA of the OECD underline the importance of a well-organized and functional internal audit function in ensuring sound and responsible governance.

The research methodology includes analysing primary and secondary sources to understand the state of internal audit in the public sector of the Republic of Moldova and to identify trends and best practices. A critical and synthetic approach is used to evaluate strengths and weaknesses, combining information for a comprehensive view. Both qualitative and quantitative methods are applied to analyse data and assess audit performance. Additionally, content analysis is employed to thoroughly examine relevant themes and conclusions.

3. Essential capacity characteristics: organization and functioning

Internal audit, defined as an independent and objective activity, plays an essential role in developing governance, risk management, and control within public entities, providing added value in achieving

their objectives (Ministry of Finance, 2018). By its nature, internal audit monitors and improves the internal control environment, helping the entity identify and remedy weaknesses / risks and achieve its objectives ethically, compliantly, and effectively.

In the public sector of the Republic of Moldova, the mechanisms for conducting internal audit are diverse, allowing adaptability based on the needs and resources of the public entity. Proper organization and efficient functioning of internal audit are crucial to identifying and promptly remedying deficiencies or irregularities, thus contributing to achieving organizational objectives. A well-structured and adequately resourced internal audit subdivision can offer valuable recommendations for improving operations, optimizing resources, and strengthening the culture of integrity and responsibility within the entity (Lenz and Hahn, 2105).

Thus, at the beginning of 2023 (Ministry of Finance, 2023), it was found that 131 public entities had established internal audit subdivisions within their organizational structures. However, only 58% of these subdivisions were functional – staffed with audit personnel. This highlights the importance not only of establishing such subdivisions but also of ensuring their efficient operation.

Examining the subdivisions of various public entities reveals that, although there are 14 ministries, only 8 have functional internal audit subdivisions, with a staffing level of 50%. Other public authorities and institutions subordinated to the Government of the Republic of Moldova show a better staffing level of 61%. In contrast, public entities subordinated to central bodies and Parliament have staffing levels of 55% and 40%, respectively. Local bodies (second-level) have a staffing level of 38%, reflecting significant challenges in staffing.

Thus, the effectiveness of the internal audit function in public entities is directly influenced by the structure and organization of internal audit subdivisions. The fact that only a small proportion of subdivisions are functional highlights the challenges related to resources and organization within public administration. This not only limits the ability to conduct comprehensive and quality audits but also significantly impacts the efficiency, transparency, and accountability in managing public resources. Qualified personnel and adequate resources are essential to ensure that internal audit fulfils its role properly, thus contributing to strong governance and judicious use of public resources.

Therefore, one of the main obstacles to achieving an effective and efficient internal audit is the lack of specialized personnel. With an average staffing rate of 51% in the public sector and significant fluctuations, there is a clear need to address this issue. Among the causes of this situation are the perception of the salary system and the lack of promotion opportunities.

Similarly, the impact of the audit team's size on the quality and effectiveness of the audit is evident (Lenz and Hahn, 2105). With the current staffing level, the public sector faces challenges in attracting and retaining internal auditors. At the beginning of 2023, there were 134 internal auditors employed in the public sector – this fact, combined with a turnover rate of 9.3%, suggests an urgent need for measures to improve the attractiveness and efficiency of the internal audit profession.

An alarming aspect is that two-thirds of internal audit subdivisions consist of a single internal auditor, which significantly reduces audit capacity and process efficiency. This situation contrasts with legal requirements that stipulate a minimum number of personnel units for the respective subdivisions in the structure of certain entities. For example, entities such as ministries, social fund, and health fund should have at least three personnel units dedicated to internal audit, but these requirements are met by only a limited number of entities.

Another major challenge is the fragmented structure of internal audit in the public sector. Internal

audit subdivisions are unevenly distributed and concentrated in small structural units. Approximately 63% of internal audit subdivisions have "service" status, while 20% are individual internal auditors outside an autonomous subdivision. This limited and fragmented organization can lead to difficulties in implementing professional standards and systematically evaluating the activity areas of the public entity.

4. Results of internal audit and their operationalization

The effectiveness of internal audit is closely linked to its ability to correctly and completely identify risks and vulnerabilities. This not only ensures the integrity and reliability of organizational processes but also protects the assets of the public entity and the interests of stakeholders. Recommendations formulated following the internal audit are seen as crucial, having the capacity to guide the entity towards problem resolution and process optimization.

A key point of the study is that effectiveness is not measured solely by the number of identified problems. The quality of recommendations, as well as their relevance and applicability in the specific context of the entity, is also essential. An efficient audit, as highlighted in the study, will directly influence the quality of internal control and contribute to the continuous improvement of organizational processes.

An independent set of variables (factors) regarding audit capacities is analysed according to the following study areas, a set selected based on the data sources used.

Essential capacity characteristics of internal audit

Resources, procedures, and audit techniques used are vital for conducting an efficient and effective internal audit. The final list of rows from the dataset related to audit capacities extracted from individual reports of public entities is as follows, along with their names:

Table 1. List of factors for the "Audit capacities" characteristic

Factor	Name
<i>CAP_0</i>	<i>Name of the public entity</i>
<i>CAP_1</i>	Number of subordinate entities
<i>CAP_2</i>	Number of subordinate entities that have established an internal audit subdivision
<i>CAP_3</i>	Personnel units provided according to the staffing headcount
<i>CAP_4</i>	Persons who were effectively active as of December 31
<i>CAP_5</i>	Internal audit subdivision sized based on the volume of activity
<i>CAP_6</i>	Degree of coverage of the entire internal audit object
<i>CAP_7</i>	Procedures for conducting internal audit activities developed and approved
<i>CAP_8</i>	Planning involves systematic auditing of the entire internal audit object
<i>CAP_9</i>	Planning involves assessing exposure to risks, including risks of fraud and corruption
<i>CAP_10</i>	Planning involves determining the required and available resources
<i>CAP_11</i>	Planning involves coordination with stakeholders
<i>CAP_12</i>	The internal audit subdivision has a strategic plan
<i>CAP_13</i>	The internal audit subdivision has an annual plan
<i>CAP_14</i>	Proportion of time resources allocated for conducting internal audit missions in the total available resources
<i>CAP_15</i>	The internal audit subdivision has a quality assurance and improvement program
<i>CAP_16</i>	The internal audit subdivision has established key performance indicators

Source: own work

Another set of dependent variables (efficiency and/or outcome indicators) is analysed in the following research areas, a set selected based on the information sources.

Results of internal audit and their impact on managerial internal control

When conducted correctly, internal audit provides a series of essential recommendations for the public entity. These recommendations serve as the basis for managerial decisions and the initiation of corrective actions. Moreover, the effectiveness and quality of these recommendations are directly influenced by the essential characteristics of internal audit, among which audit capacities are evident. The final list of rows from the dataset related to audit results extracted from individual reports of public entities is as follows, along with their names:

Table 2. List of result indicators

Indicator	Name
REZ_0	<i>Name of the public entity</i>
REZ_1	Total planned internal audit missions
REZ_2	Planned assurance missions
REZ_3	Planned consulting missions
REZ_4	Total completed internal audit missions
REZ_5	Completed ad-hoc missions
REZ_6	Planned missions that were not completed
REZ_7	Compliance audits
REZ_8	System audits
REZ_9	Financial audits
REZ_10	Performance audits
REZ_11	IT audits
REZ_12	Period of the last financial-accounting mission
REZ_13	Period of the last public procurement mission
REZ_14	Period of the last asset management mission
REZ_15	Period of the last IT mission
REZ_16	The internal audit subdivision conducted internal audits in subordinate entities
REZ_17	Positive findings reflected in internal audit reports
REZ_18	Conclusions and recommendations reflected in internal audit reports
REZ_19	Number of audit recommendations provided
REZ_20	Total number of audit recommendations followed up
REZ_21	Audit recommendations implemented on time
REZ_22	Audit recommendations implemented after the deadline
REZ_23	Partially implemented audit recommendations
REZ_24	Unimplemented audit recommendations
REZ_25	Degree of implementation of the annual internal audit plan
REZ_26	Proportion of audit missions completed on time
REZ_27	Satisfaction level of audited units

Source: own work

The effectiveness of internal control is evident in how internal audit identifies deficiencies or vulnerabilities. Findings made within the internal audit can signal the need for reviewing or improving internal control. Thus, there is a symbiosis between internal audit and internal control. An effective internal audit can lead to significant improvements in internal control, while a robust internal control

can facilitate and enhance the audit process. In the specific context of our analysis, we chose to use Spearman and Pearson correlations to evaluate the relationships between variables in the CAP and REZ datasets, which reflect aspects of audit capacities and audit results. Thus, the analysis of the factors and indicators mentioned in the previous section led to the following results.

Here are the top 9 Spearman correlations identified between audit capacity columns and audit results:

CAP_3 and REZ_20: 0.64 CAP_4 and REZ_21: 0.56 CAP_1 and REZ_16: -0.50
 CAP_15 and REZ_21: -0.54 CAP_3 and REZ_2: 0.52 CAP_15 and REZ_20: -0.50
 CAP_3 and REZ_1: 0.52 CAP_3 and REZ_21: 0.50 CAP_4 and REZ_20: 0.48

It is interpreted that there is a positive correlation between the number of available personnel (both planned and actual) and the implementation of audit recommendations. This suggests that the availability of adequate human resources is crucial for the efficiency of the audit process.

There is a negative correlation between the timely implementation of audit recommendations and the existence of a quality assurance and improvement program. This may indicate that the presence of such a program may delay the implementation of recommendations, possibly due to more rigorous review and approval processes.

The relevant correlations highlight the importance of human resources and quality processes in internal audit. To improve the efficiency of internal audit and ensure the effective implementation of audit recommendations, it is essential to pay attention to the available human resources and balance the rigor of quality processes with the need for agility in implementing improvements.

The respective results according to Spearman can also be visualized in the following figure as a heatmap.

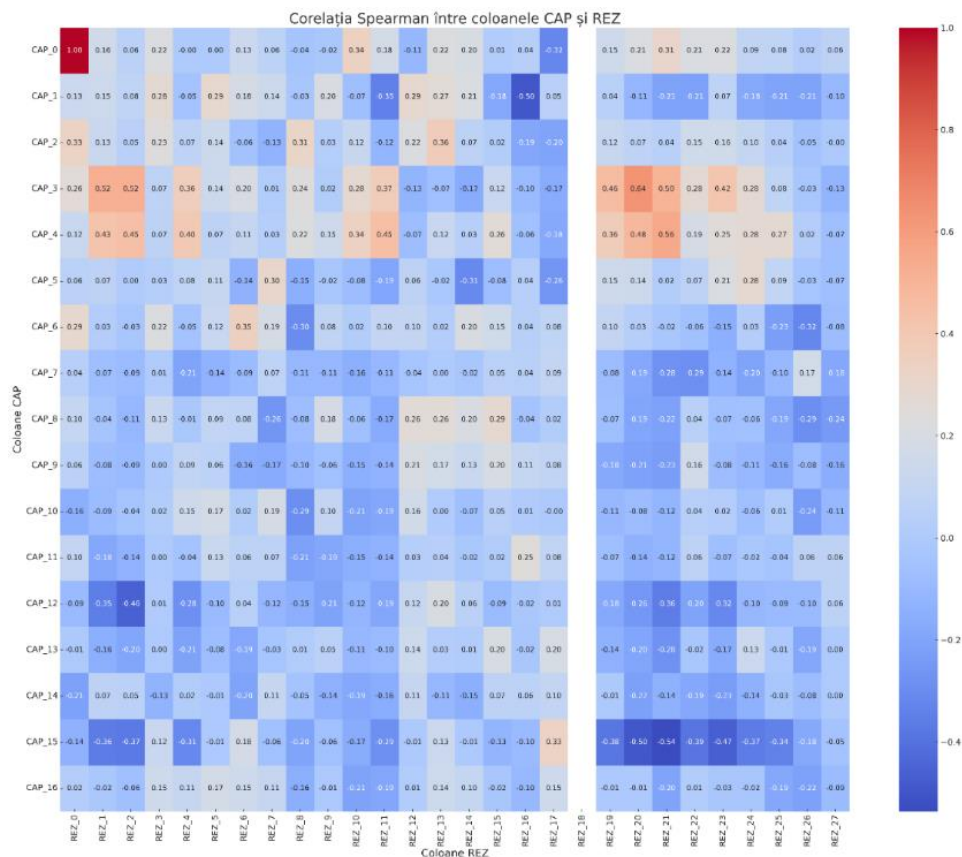


Figure 1. Heatmap on capacity factors according to Spearman

Source: own study

Here are the top 10 Pearson correlations between capacity and result columns:

CAP_3 and REZ_22: 0.7607	CAP_3 and REZ_20: 0.7477
CAP_4 and REZ_4: 0.6479	CAP_4 and REZ_21: 0.6288
CAP_3 and REZ_4: 0.5901	CAP_3 and REZ_21: 0.5791
CAP_1 and REZ_22: 0.5538	CAP_3 and REZ_19: 0.5082
CAP_4 and REZ_20: 0.4990	CAP_3 and REZ_23: 0.4974

An immediate interpretation denotes that the correlations are positive, indicating that as the values of one variable increase, the values of the other variable tend to increase as well. The closer the correlation coefficient is to 1, the stronger the relationship between the two variables.

For example, CAP_3 has a strong positive correlation with REZ_22, REZ_20, REZ_4, REZ_21, REZ_19, and REZ_23, suggesting that an increase in CAP_3 is associated with an increase in these REZ variables.

However, it is essential to analyse the context and specific content of each variable to understand the practical significance of this correlation. A high correlation coefficient does not necessarily imply causality. In other words, even if two variables are strongly correlated, it does not necessarily mean that one variable causes the change in the other. There may also be unobserved variables that influence both variables.

These correlations can be used to identify potential relationships between different aspects of the data and to develop additional hypotheses for further analysis or predictive modelling.

A heatmap generated visually demonstrates Pearson correlations, as seen in figure 2.

In general interpretation, the following is identified after analysing and interpreting each correlation:

- CAP_3 (Personnel units provided according to staffing headcount) and REZ_22 (Audit recommendations implemented after the deadline): 0.7607
 - o This strong correlation suggests that the number of personnel units allocated according to the staffing chart is closely related to the implementation of audit recommendations after the deadline. The more personnel allocated, the more likely it is that the recommendations will be delayed, which requires a detailed analysis to identify the causes and the effect on resource allocation.
- CAP_3 (Personnel units provided according to staffing headcount) and REZ_20 (Total number of audit recommendations followed up): 0.7477
 - o A significant correlation indicates that personnel allocation is correlated with the total number of audit recommendations tracked. It is essential to analyse how the efficient allocation of personnel can be optimized to maximize the tracking and implementation of audit recommendations.

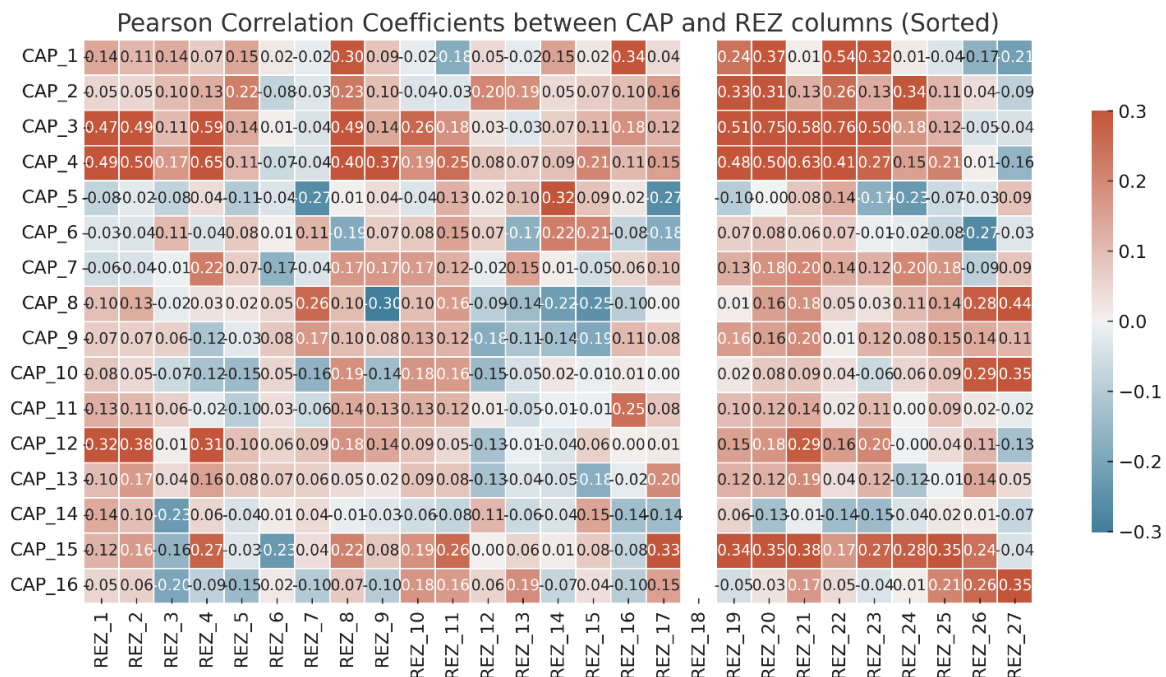


Figure 2. Heatmap on capacity factors according to Pearson
Source: own study

Each set of correlations provides a detailed view of the relationship between different characteristics and internal audit results. An in-depth analysis of each correlation and understanding of their context and implications can significantly contribute to the continuous improvement and optimization of internal audit processes. In this context, the effectiveness of internal audit and its quality prove to be direct reflections of this internal control.

5. Conclusions

Challenges associated with the organization and functioning of internal audit are exacerbated by the establishment of undersized internal administrative structures at central and local authorities. This restricts the ability to systematically and comprehensively evaluate all aspects of the activities of public entities and implement professional standards to ensure the quality of internal audit activities. In this situation, senior managers in public entities cannot fully assess the importance and capacity of internal audit to strengthen internal control systems and achieve institutional objectives. Attention to resource allocation for internal audit is reduced, a circumstance that is not conducive to establishing competent and responsible public financial management.

Compliance with standards and norms, both nationally and internationally, remains a constant challenge. Adapting to ever-evolving requirements and ensuring that internal audit practices are aligned with global best practices requires continuous vigilance and adaptability. Moreover, the approval of new Global Internal Audit Standards, which will come into force starting from 01.01.2025, is mentioned.

The relationship between essential characteristics and audit results illustrates a symbiosis between these factors, highlighting the interdependence between effective internal audit and robust internal control. This mosaic of conclusions brings to the fore the complexity and multidimensionality of internal audit

in the public sector, emphasizing the need for an integrated and adaptable approach to navigate a continuously changing landscape and to support organizational integrity, efficiency, and resilience. Based on these, a series of recommendations are outlined in the following areas of interest:

1. Innovation and effective adaptation:

In the digital era in which we live, adopting innovative and adaptable strategies is essential. A revolution is needed in how internal audit is perceived and implemented. Exploiting technology and digitalization to optimize audit processes and ensure a rapid response to changes in the external environment is no longer a luxury but a necessity.

2. Refining audit processes:

Internal audit processes must be not only efficient but also adaptable to the complexity and dynamics of the public sector. Continuous review and optimization of these processes will ensure that they remain relevant, efficient, and capable of providing accurate and objective assessments.

3. Effective inter-institutional partnership:

Collaboration and knowledge-sharing among different entities and agencies will not only improve the quality of internal audit but will also stimulate innovation and efficiency at the national level.

4. Optimizing audit resources and capacities:

Addressing the challenges associated with the under-sizing of internal audit subdivisions and the proper allocation of resources is essential. In this context, it is imperative to strengthen the capacities and competencies of the personnel, thus ensuring that internal audit is equipped to provide precise, objective, and valuable assessments.

These recommendations are formulated to guide critical improvements needed in internal audit practices, thereby enhancing the effectiveness and accountability of public financial management in the Republic of Moldova. Through the strategic incorporation of innovation and continuous refinement and by paying meticulous attention to quality and efficiency, the public sector can successfully manage in a complex and dynamic context, achieving a significant positive impact on public administration.

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