ECONOSCITECH INTEGRATION

ISSUE 7

INTERNATIONAL SCIENTIFIC
ELECTRONIC JOURNAL

TASHKENT STATE UNIVERSITY OF ECONOMICS

American University of Technology
Powered by Arizona State University®

ISSN: 3060-5075

Acceptance of articles

PUBLISHED EVERY MONTHLY

ARTICLE CONTRIBUTORS

PROFESSORS-TEACHERS, SPECIALISTS AND SCIENTIFIC RESEARCHERS.

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ISSN INTERNATIONAL STANDARD SERIAL NUMBER DENMARK

CONTACT: +998 94 3540880 https://econoscitech-integration-journal.uz 2026

THE SCIENTIFIC-POPULAR ELECTRONIC JOURNAL **"ECONOSCITECH-INTEGRATION"** HAS BEEN REGISTERED UNDER THE NUMBER C-5669651 BY THE AGENCY FOR INFORMATION AND MASS COMMUNICATIONS (AOKA) OF THE REPUBLIC OF UZBEKISTAN, EFFECTIVE FROM OCTOBER 9, 2024.

In accordance with Resolution No. 384/6 dated April 10, 2026, issued by the Presidium of the Supreme Attestation Commission under the Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan, this journal is included in the list of recommended international scientific publications for publishing the primary research findings of doctoral dissertations in the field of Economic Sciences.

Partners: Tashkent State University of Economics / American University of Technology in Tashkent (AUT)

Electronic publication. Issue 7. 374 pages.
Approved for publication in July 2026.

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CURRENT STATE OF INTERNAL AUDIT IN COMMERCIAL BANKS OF UZBEKISTAN: AN EMPIRICAL ANALYSIS OF SYSTEMIC CHALLENGES

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Abstract. Based on data from eight leading commercial banks in Uzbekistan, this article provides an empirical assessment of the state of internal audit during 2020–2024. It examines organisational capacity, audit coverage, the implementation of recommendations, the dynamics of identified deficiencies, and the level of compliance with the relevant domains of international standards. Alongside the progress observed, the findings identify several systemic challenges, including resource constraints, partial implementation of the risk-based approach, limited digitalisation, and insufficient development of quality assurance programmes. Based on the results, recommendations are proposed for commercial banks and the supervisory authority to support the alignment of internal audit practices with international standards.

Keywords: internal audit, commercial banks, audit coverage, implementation of recommendations, international standards, compliance, audit resources, empirical analysis.

Аннотация. На основе данных восьми ведущих коммерческих банков Узбекистана в статье представлена эмпирическая оценка состояния внутреннего аудита за 2020–2024 годы. Рассматриваются организационный потенциал, охват аудитом, выполнение рекомендаций, динамика выявленных недостатков, а также уровень соответствия требованиям соответствующих областей международных стандартов. Наряду с достигнутыми положительными результатами выявлен ряд системных проблем, включая ограниченность ресурсов, частичное внедрение риск-ориентированного подхода, недостаточный уровень цифровизации и недостаточное развитие программ обеспечения качества. По результатам исследования разработаны рекомендации для коммерческих банков и надзорного органа, направленные на приведение практики внутреннего аудита в соответствие с международными стандартами.

Ключевые слова: внутренний аудит, коммерческие банки, охват аудитом, выполнение рекомендаций, международные стандарты, соответствие, аудиторские ресурсы, эмпирический анализ.

INTRODUCTION

The banking system of Uzbekistan has undergone rapid growth and fundamental transformation in recent years: the volume of assets has increased severalfold, the privatisation process of state-owned banks has begun, and digital banking services have become widespread. Presidential Decree No. PF-5992 of 12 May 2020, “On the Strategy for Reforming the Banking System of the Republic of Uzbekistan for 2020–2025” [1], and Presidential Decree No. PF-60 of 28 January 2022, “On the Development Strategy of New Uzbekistan for 2022–2026” [2], provide the broader policy framework for improving corporate governance in commercial banks and bringing banking activities into line with international standards, including the development of an independent and effective internal audit function. Under such circumstances, an objective, data-based assessment of the actual state of internal audit is necessary for determining the subsequent directions of banking-sector reform.

The urgency of the issue is reinforced by two circumstances. First, the “Global Internal Audit Standards”, which came into effect on 9 January 2025, require banks to reassess their internal audit activities in accordance with new and more stringent requirements (IIA, 2024), while the Basel Committee’s BCBS 223 document expects supervisory authorities to periodically assess the internal audit function (BCBS, 2012). Second, comprehensive, multi-year, and multi-bank empirical assessments of internal audit in Uzbek banks remain limited in the national academic literature, while existing studies have focused primarily on normative and theoretical aspects.

The purpose of the study is to empirically analyse the state of internal audit activities in the leading commercial banks of Uzbekistan during 2020–2024, identify the progress achieved and systemic challenges, and develop proposals for addressing them. The tasks are to describe the context of banking system development; assess the organisational support of internal audit services; analyse the dynamics of key performance indicators, including audit coverage, implementation of recommendations, and identified deficiencies; determine the level of compliance with international standards across the relevant domains; assess structural shifts in the allocation of audit resources; generalise systemic challenges; and formulate proposals. The object of the study is the internal audit activities of the leading commercial banks of the Republic of Uzbekistan.

LITERATURE REVIEW

Empirical assessments of the state of internal audit across countries and sectors have a long tradition in the international literature. Studies conducted in emerging-market contexts are particularly valuable. A case study of the Ethiopian public sector showed that internal audit effectiveness depended on management support and the implementation of recommendations (Mihret and Yismaw, 2007). A survey of the Saudi Arabian public sector found that skilled staff, independence, and management attitudes were critical factors in ensuring effectiveness (Alzeban and Gwilliam, 2014). The interaction between internal auditor characteristics and top management support has also been empirically substantiated (Endaya and Hanefah, 2016).

Research conducted in developed markets has enriched the assessment criteria. It has been found that the extent of internal audit use depends on organisational size and risk structure (Goodwin-Stewart and Kent, 2006). Organisational drivers of effectiveness have been systematised (Arena and Azzone, 2009), an empirical model of the determinants of effectiveness has been proposed (Cohen and Sayag, 2010), and the quality of relations with the audit committee has been substantiated as a key factor (Sarens et al., 2009). A synthesis of the empirical literature shows that a unified measurement system has not yet been developed and that a multi-criteria approach to assessing the situation is therefore necessary (Lenz and Hahn, 2015). Research in the era of digitalisation has also made technological capacity an independent dimension of the assessment framework (Betti and Sarens, 2021).

In the national and CIS literature, internal audit and internal control are generally examined from methodological and organisational perspectives. At the same time, the analysis reveals the following research gaps: first, there is no quantitative, evidence-based diagnosis of the state of internal audit in Uzbek banks covering several years and several banks; second, existing assessments have not been conducted across the domains of the new Global Internal Audit Standards; and third, structural aspects, such as audit resource allocation and digitalisation, remain insufficiently examined in the national literature. This article aims to address these gaps.

RESEARCH METHODOLOGY

The study is based on an empirical and analytical research strategy. The sample consisted of eight leading commercial banks, which account for the bulk of the banking system's assets. Despite its limited size, this purposive sample provides an indicative assessment of internal audit practices in major commercial banks, although it does not represent the entire banking system. The analysis covers the period 2020–2024, while data for 2019–2025 were used to describe the macroeconomic context. Three groups of sources were combined during data collection: official statistics from the Central Bank, banks' annual reports and corporate governance documents, and data provided by internal audit services and expert assessments. The reliability of the results was supported by comparing the sources through triangulation.

The analytical methods included dynamic and compositional analysis, including growth rates and shares; comparative benchmarking, involving comparisons of national indicators with international criteria and the domains of the Global Internal Audit Standards; document content analysis to assess the compliance of internal audit systems with regulatory requirements; and generalisation. The level of compliance was assessed on a percentage scale across five domains of the Global Internal Audit Standards. A list of requirements was compiled for each domain, and the extent to which they were met in bank documents and practices was determined through expert assessment (IIA, 2024). The accuracy of the assessment was supported by directly linking the criteria to the primary source, namely the text of the standards.

ANALYSIS AND RESULTS

Development context of the banking system. Within the broader contextual period, total banking assets increased from 272 trillion soums in 2019 to 866.8 trillion soums in 2025 (Table 1). Financial stability indicators remained relatively stable overall; however, the share of non-performing loans increased from 1.5 percent in 2019 to 5.2 percent in 2021 before gradually declining to 3.7 percent in 2025. This rapid change in the banking sector's risk profile highlights the importance of the early-warning function of internal audit.

Table 1
Dynamics of the main indicators of the banking system[1]

Index	2019	2021	2023	2024	2025
Total assets, trillion soums	272	444	642	740	866.8
Capital adequacy (CAR), %	23.5	17.5	17.4	17.8	18.2
Return on assets (ROA), %	2.2	1.7	1.8	2.0	2.1
Return on equity (ROE), %	12.5	8.5	9.5	10.7	11.8
Non-performing loans (NPL), %	1.5	5.2	4.2	4.0	3.7

Organisational support. All the banks studied have an internal audit service and an audit committee under the supervisory board. The functional subordination of internal audit services is formalised in accordance with Resolution No. 3/2 of the Board of the Central Bank of the Republic of Uzbekistan dated 16 April 2021, "On Approval of the Regulation on Requirements for Internal Audit in Commercial Banks", registered by the Ministry of Justice of the Republic of Uzbekistan on 7 May 2021 under No. 3302 [3]. This represents a significant organisational achievement. However, resource provision varies considerably across banks: the number of internal audit staff ranges from 7 to 18 employees (Figure 1), while differences in the volume of bank assets are relatively smaller. As a result, some banks face a relatively high audit workload per auditor, which may adversely affect audit coverage and quality. The impact of resource constraints on internal audit effectiveness has also been confirmed in international empirical studies (Alzeban and Gwilliam, 2014; Cohen and Sayag, 2010).

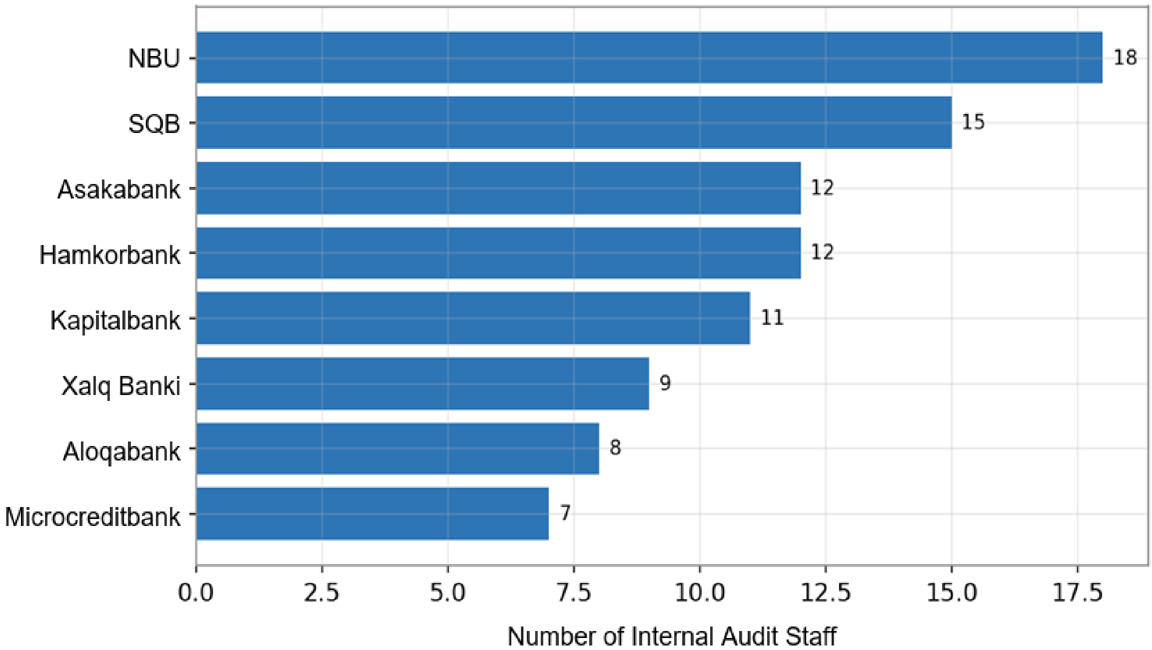

Figure 1. Number of internal audit staff in leading banks, 2024[2]

1 Source: compiled by the author based on data from the Central Bank of the Republic of Uzbekistan
2 *Source: compiled by the author based on bank data.*

Dynamics of performance indicators. The main performance indicators show a stable positive trend (Table 2): audit coverage increased from 55 percent to 68 percent over five years, the implementation rate of recommendations rose from 54 percent to 68 percent, and the internal audit quality score increased from 3.2 to 3.8 on a five-point scale. At the same time, both indicators remain below the target level of 80 percent adopted for the purposes of this study. At the current rate of improvement, reaching this benchmark may require several more years.

Table 2
Dynamics of the main indicators of internal audit activity[3]

Index	2020	2021	2022	2023	2024
Audit coverage, %	55	58	61	65	68
Implementation of recommendations, %	54	58	62	65	68
Internal assessment of audit quality (5 points)	3.2	3.4	3.5	3.7	3.8

The dynamics of identified deficiencies also support this conclusion (Figure 2). The number of identified deficiencies increased from 405 to 432 over three years, indicating greater capacity to identify deficiencies, while the remediation rate improved from 68 percent to 74 percent. However, one in four deficiencies remained unresolved at the end of the year, creating a risk of recurring findings and accumulation of unresolved risk. Strong monitoring of the implementation of recommendations is also identified as a key factor in the empirical literature (Mihret and Yismaw, 2007).

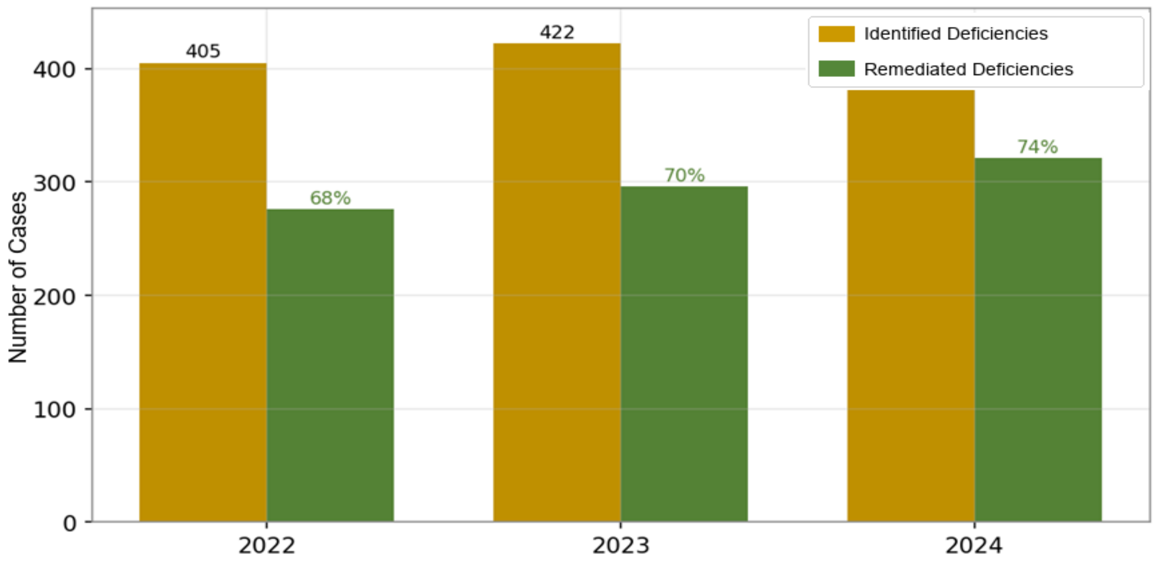

Figure 2. Dynamics of deficiencies identified and remediated by internal audit[4]

Compliance with the domains of international standards. The assessment across the five domains of the Global Internal Audit Standards revealed uneven levels of compliance (Figure 3). The assessed levels for "Purpose of Internal Auditing" and "Ethics and Professionalism" were relatively high, at 78 percent and 82 percent, respectively. Lower levels were observed in areas relating to risk-based planning, resource management, methodology, and the performance of internal audit services. The overall average was approximately 70 percent. These findings indicate that banks have made progress in formalising internal regulations and professional requirements, while practical planning and implementation processes require further development.

3 Source: calculations by the author based on data from the selected banks.
4 *Source: compiled by the author based on bank data.*

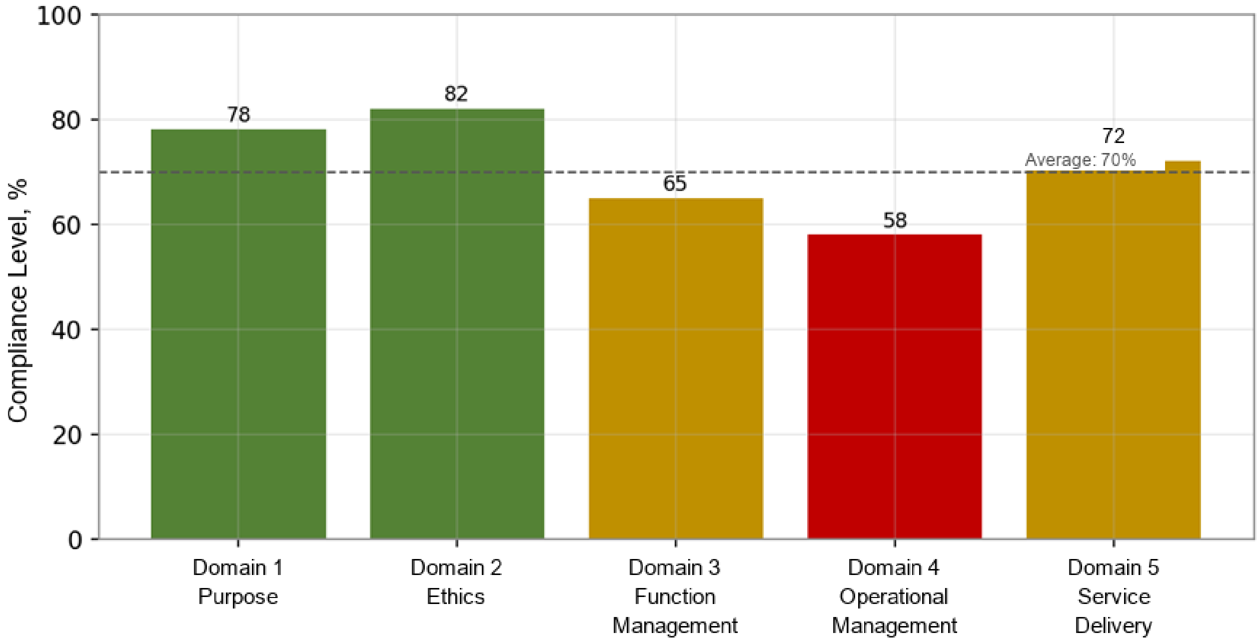

Figure 3. Degree of compliance with the domains of the Global Internal Audit Standards, percent[5]

Structural shifts in the allocation of audit resources. A positive trend is the gradual adjustment of audit resource allocation in response to changes in banks' risk profiles (Figure 4). The share of resources allocated to credit risk decreased from 45 percent in 2020 to 32 percent in 2024, while the share devoted to cybersecurity audits increased from 4 percent to 10 percent and the share allocated to liquidity risk rose from 8 percent to 12 percent. These changes indicate a gradual transition towards a risk-based approach, although its implementation remains incomplete. Approximately 45 percent of the banks systematically apply risk-based planning. The use of digital technologies also remains uneven: data analytics tools are used by 38 percent of the banks, robotic process automation by 22 percent, and artificial intelligence tools by 15 percent. Given that technological capability represents an important dimension of internal audit maturity (Betti and Sarens, 2021), further development in this area requires strategic attention.

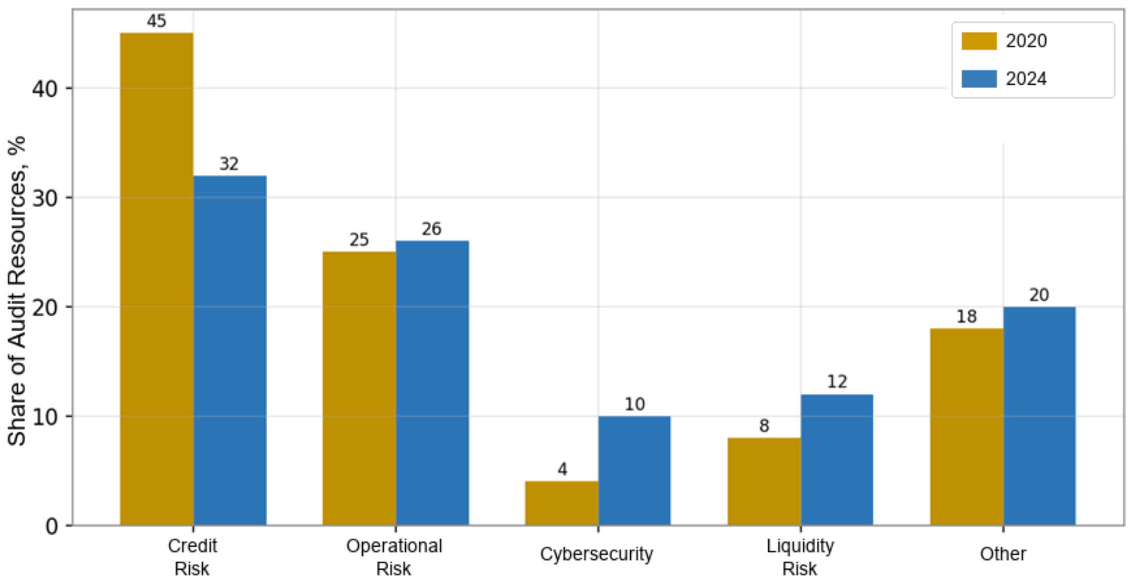

Figure 4. Distribution of audit resources by risk type, 2020 and 2024[6]

5 *Source: author's assessment.*
6 *Source: compiled by the author based on bank data.*

Generalisation of systemic challenges. The results of the analysis made it possible to identify six interrelated systemic challenges (Table 3). Their common feature is that none represents an isolated shortcoming of a single bank; rather, all of them recur to varying degrees across most of the selected banks. This indicates that solutions should be developed at the system level.

Table 3
Identified Systemic Challenges, Their Manifestations, and Consequences[7]

Problem	Manifestation	Consequence
1. Resource and staffing constraints	Internal audit staffing levels are not always aligned with the scale and risk profile of the bank; the number of internationally certified specialists remains limited	Reduced audit coverage and potential pressure on audit quality
2. Partial implementation of the risk-based approach	Audit plans remain partly based on cyclical coverage, while risk-assessment procedures are not always sufficiently documented	Audit resources may be allocated to areas with comparatively lower risk
3. Limited digitalisation	Data analytics, automation, and artificial intelligence tools are used to a limited extent	Reduced capacity for continuous monitoring and timely anomaly detection
4. Insufficient development of quality assurance programmes	Internal and external quality assessments are not conducted regularly in all banks	Recurring deficiencies and limited continuous improvement
5. Insufficient monitoring of recommendations	Approximately one quarter of recommendations remain unimplemented by the end of the reporting period	Recurring findings and accumulation of unresolved risks
6. Limited development of the advisory function	Internal audit activities remain focused mainly on compliance reviews	Limited realisation of the strategic and advisory value of internal audit

The discussion shows that the identified pattern is consistent with empirical findings from emerging markets: resource availability and management support (Alzeban and Gwilliam, 2014; Endaya and Hanefah, 2016), the implementation of recommendations (Mihret and Yismaw, 2007), and the quality of relationships with audit committees (Sarens et al., 2009) represent key constraints on internal audit effectiveness in transition economies. A distinctive feature of the situation in Uzbekistan is that the organisational and regulatory framework has developed relatively rapidly, while practical and methodological dimensions, including risk-based planning, technological capacity, and quality assurance systems, have developed more gradually. This diagnosis provides a clear direction for further reform and may serve as a reference point for periodic reassessment of the state of internal audit.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the research, the following conclusions and proposals were formulated:

During the analysis period, the organisational foundations of internal audit in the leading commercial banks of Uzbekistan were established, while the main performance indicators showed steady improvement. Audit coverage increased from 55 percent to 68 percent, the implementation rate of recommendations rose from 54 percent to 68 percent, and the remediation rate for identified deficiencies increased to 74 percent.

At the same time, the key indicators remain below the target level of 80 percent adopted for the purposes of this study. Average compliance across the assessed domains of the Global Internal Audit Standards was approximately 70 percent, with the lowest assessed level relating to risk-based planning, resources, and methodology.

Six systemic challenges were identified: resource and staffing constraints, partial implementation of the risk-based approach, limited adoption of digital technologies, insufficient development of quality assurance programmes, gaps in the monitoring of recommendations, and limited development of the advisory function.

Commercial banks are advised to align internal audit staffing levels with the scale and risk profile of each bank; involve employees in international certification programmes; base annual audit plans on documented risk

7 Source: developed by the author based on the research findings.

assessments; automate the monitoring of recommendation implementation; introduce quality assurance and improvement programmes; and invest gradually in data analytics and process automation tools.

It is proposed that the Central Bank strengthen the regulatory and supervisory framework for internal audit by aligning national requirements with the Global Internal Audit Standards and introducing a system for periodic assessment and comparative reporting across commercial banks.

Future research should focus on developing solutions to address the identified problems, including risk-based planning algorithms, integrated performance measurement systems, and mechanisms for digitalising internal audit processes. Periodic reassessment of the state of internal audit and evaluation of the impact of reforms should also be considered important directions for further research.

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