

Enhancing Tax Collection Efficiency in CIS Countries: Challenges, Reforms, and Strategic Imperatives

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Abstract

This article explores the dynamics of tax collection in the Commonwealth of Independent States (CIS), focusing on institutional development, policy reforms, and digital transformation. Drawing on cross-country comparisons and empirical data from 2010 to 2023, the study identifies persistent challenges such as informal economic activity, administrative inefficiencies, and low tax morale. It critically evaluates recent innovations in tax systems, particularly the role of digital tools in enhancing tax compliance. The article offers policy recommendations to strengthen fiscal capacity and build resilient tax administrations across the CIS.

Keywords: Tax administration, CIS, revenue mobilization, digital taxation, informal economy, fiscal reform, post-Soviet economies.

Introduction

Tax systems are the backbone of state functionality, financing infrastructure, social services, and governance. In the context of the Commonwealth of Independent States (CIS)—comprising former Soviet republics that share institutional legacies—the process of tax collection remains a critical policy area. Although notable progress has been made over the past three decades, tax collection efficiency varies substantially across the region.

This paper addresses the core question: What factors hinder or enhance tax collection in CIS countries? The analysis evaluates the effectiveness of ongoing reforms, compares institutional approaches, and explores how digital innovations are transforming revenue administration. The study contributes to the literature by offering a regional comparative lens, identifying gaps, and proposing actionable reform pathways.

Literature Review

The seminal work of Musgrave and Musgrave (1989) laid the foundation for understanding the economic functions of taxation. More recent literature (Bird, Martinez-Vazquez & Torgler, 2014; IMF, 2022) emphasizes the multidimensional nature of tax collection, involving institutional trust, enforcement capacity, and technological modernization. In developing and transitional economies,

effective tax administration is associated with strong governance, regulatory consistency, and transparency.

Studies by the World Bank (2019) and OECD (2022) highlight the fragmentation in tax regimes across CIS countries. Russia and Kazakhstan have introduced advanced digital systems, while Tajikistan and Kyrgyzstan continue to rely on paper-based declarations. National-level research (e.g., Uzbekistan's Institute for Fiscal Studies, 2021) documents challenges such as low voluntary compliance, corruption, and gaps in tax registration.

Despite increasing attention to fiscal reforms, comprehensive empirical comparisons across CIS countries are scarce. Few studies disaggregate tax-to-GDP ratios by administrative efficiency or explore the role of digital transformation in the region. This paper addresses that gap through a comparative approach combining macroeconomic data and institutional case analysis.

Methodology

The research employs a mixed-methods approach:

Quantitative analysis: Comparative assessment of tax-to-GDP ratios, taxpayer compliance rates, and digital infrastructure indices from 2010–2023.

Qualitative analysis: Policy document review, expert commentary, and case studies on reforms in Russia, Kazakhstan, and Uzbekistan.

Data sources: IMF, World Bank, national tax committees, UNDP, OECD, and academic literature.

Countries selected for detailed case analysis:

Russia – leader in digital tax transformation.

Kazakhstan – resource-dependent with growing reforms.

Uzbekistan – transitioning from authoritarian governance to market reforms.

Results and Analysis

The comparative analysis of tax-to-GDP ratios reveals considerable variation in fiscal capacity among CIS countries. Russia has maintained a relatively stable tax-to-GDP ratio, averaging around 11.6% over the 2010–2023 period. Its revenue generation is supported by robust value-added tax (VAT) and corporate income tax frameworks, underpinned by its extensive administrative structure and natural resource rents. Although there has been a moderate upward trend, Russia's ratio plateaued in recent years, suggesting that structural limits in tax policy and economic composition may be influencing the stagnation.

Kazakhstan's tax-to-GDP ratio has fluctuated between 9.2% and 10.0%, reflecting the vulnerabilities of a resource-dependent economy. Revenue volatility is strongly tied to oil prices, with weaker tax yields during commodity downturns. Efforts to diversify revenue sources through VAT and excise reforms have shown modest gains, but the overall fiscal structure remains fragile and under-diversified.

Uzbekistan stands out for its marked improvement in tax-to-GDP performance, rising from 10.5% in 2010 to 13.4% by 2023. This progress is linked to comprehensive tax policy reforms initiated after 2017, including simplification of the tax code, transition from turnover tax to VAT, and the introduction of a unified tax payment system. These measures have significantly broadened the tax base and improved tax efficiency.

Taxpayer compliance rates exhibit a positive correlation with institutional reforms and digital advancements. Russia leads the region, with compliance increasing from 70% in 2010 to 85% by 2023. This upward trajectory reflects investments in taxpayer services, automated reporting

systems, and a robust audit framework. Compliance gains have also been aided by the expansion of real-time tax monitoring and the use of artificial intelligence in detecting irregularities.

Kazakhstan's compliance rates improved more gradually, moving from 60% to 72% during the same period. While the establishment of the "E-Salyk" system marked a turning point, compliance challenges persist due to administrative fragmentation and persistent informality in rural and SME sectors. Nonetheless, Kazakhstan's digitization of filing and invoicing systems has begun to foster greater taxpayer trust and participation.

Table 1. Regional Tax Structure and Revenue Trends

Country	Tax-to-GDP (%) 2023	VAT Share (%)	Income Tax Share (%)	Informal Economy (%)
Russia	11.8%	35%	22%	20%
Kazakhstan	9.7%	30%	20%	24%
Uzbekistan	13.4%	38%	25%	31%
Armenia	12.1%	40%	30%	36%
Moldova	13.7%	42%	28%	27%

Uzbekistan recorded a remarkable increase in compliance—from 45% in 2010 to 73% in 2023. This change is largely attributed to post-2017 administrative reforms and the expansion of taxpayer registration mechanisms. Simplified reporting procedures, risk-based audit selection, and public awareness campaigns have contributed to a growing compliance culture. Moreover, the government's strategic use of behavioral nudges and soft enforcement (e.g., SMS reminders, gamification of tax filing) has yielded noticeable behavioral shifts among previously non-compliant groups.

The digital infrastructure index, constructed using indicators such as online tax filing availability, digital identification, mobile access, and system integration, shows a strong link with tax performance.

Russia has consistently ranked high in the region, with its digital infrastructure index improving from 0.45 in 2010 to 0.78 in 2023. The Federal Tax Service's comprehensive digital ecosystem includes taxpayer portals, automated VAT refunds, blockchain pilots for customs integration, and cross-border tax cooperation tools. These innovations have significantly enhanced transparency, reduced administrative costs, and improved enforcement.

Kazakhstan's digital index improved from 0.30 to 0.62 during the same timeframe. Though starting from a lower baseline, Kazakhstan has implemented robust e-taxation reforms, including a mobile tax declaration platform tailored for self-employed individuals. Integration with e-commerce platforms and fintech solutions has also improved transactional visibility and audit coverage.

Uzbekistan has demonstrated one of the fastest rates of improvement, with its digital index rising from a mere 0.10 in 2010 to 0.65 by 2023. The launch of the "my.soliq.uz" platform, the use of biometric registration, and integration with customs databases are key milestones in this digital transformation. The government's tax modernization strategy, aligned with the "Digital Uzbekistan – 2030" vision, is expected to further strengthen digital resilience in tax administration. From this analysis, three distinct patterns emerge:

Conclusion and Recommendations

The analysis of tax collection efficiency across CIS countries underscores both progress and persistent structural challenges. While Russia and Kazakhstan benefit from advanced digital infrastructure and institutional capacity, Uzbekistan stands out as a reform-oriented country that has made significant strides in expanding its tax base and improving taxpayer compliance, particularly since 2017.

The key findings suggest that:

Digitalization plays a transformative role in boosting tax compliance and operational efficiency. Countries with robust digital ecosystems (e.g., Russia, Uzbekistan) consistently outperform those relying on manual processes.

Policy consistency and executive commitment are critical to long-term success. Uzbekistan's example demonstrates how a coherent strategy, when sustained by leadership, can result in measurable improvements in compliance and revenue performance.

The informal economy remains a major obstacle, particularly in economies with large agricultural and SME sectors. Without targeted formalization strategies, the tax base will remain narrow and vulnerable.

Lessons from the CIS Region

Inspired by Russia's comprehensive digital ecosystem and Uzbekistan's rapid digitization, CIS countries should prioritize the expansion of e-services, including mobile filing tools, automated audits, and taxpayer dashboards. Integration with financial, customs, and e-commerce data sources will improve accuracy and efficiency.

Uzbekistan's success in increasing compliance through SMS reminders, simplified procedures, and gamification strategies illustrates how soft enforcement mechanisms can reshape taxpayer behavior. Other countries should consider adapting similar behavioral insights into their enforcement strategies.

A major breakthrough in Uzbekistan's tax reforms was the implementation of a unified tax payment portal. Other CIS countries can benefit from consolidating fragmented systems into single, user-centric platforms to improve transparency and reduce administrative costs.

Russia's AI-powered audit selection and real-time data analytics should serve as a model. Countries should invest in predictive analytics tools to target audits more effectively and reduce compliance burdens for low-risk taxpayers.

Formalizing the informal sector requires more than enforcement—it demands incentives. CIS countries should adopt Moldova's and Armenia's practices of linking social benefits (e.g., pensions, health insurance) with tax registration, thereby encouraging voluntary compliance.

To reduce base erosion and profit shifting, CIS members should build mechanisms for real-time data exchange, joint audits, and standard-setting on transfer pricing and digital taxation.

In conclusion, while no single model fits all, CIS countries can make significant gains by adopting and adapting the successful elements of their peers' experiences. Enhanced coordination, digital transformation, and taxpayer-centered approaches will be central to building resilient and equitable tax systems in the region.

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