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STRUCTURAL FEATURES OF TAX ADMINISTRATION IN KYRGYZSTAN: AN ANALYTICAL REVIEW OF FISCAL PERFORMANCE

Abstract. *Tax administration is an important element of sustainability and an important channel for resource mobilization for economic development and public service delivery in developing economies like Kyrgyzstan. In this article the relationship between structural characteristics of tax administration and fiscal performance in Kyrgyzstan during 2020–2024 are studied. The study is highly relevant to the govt as the country continues to embark on reform to address compliance gaps, administrative inefficiencies and the fast-growing need for digital governance. The research examines the impact of major administrative variables (digitalization of services, staffing capacity, decentralization of tax collection and audit activity) on tax revenue performance, expressed in percent of GDP by means of a time series econometric model.*

National institutions were used to collect data, while data were then collected from international databases which author analyzed using Stata and Python and used in regression analysis. The results point towards clear positive associations between structural developments and fiscal performance: tax revenue rises from 20,5% to 22,8% of GDP from 2020 to 2024, digital filing of tax returns increases from 45% to 81%, audit coverage increases from 5,0 to 6,9 per 1,000 taxpayers and staff per 10,000 taxpayers increases from 7,5 to 8,6.

The unique aspect of the study is an integrated approach using administrative performance indicators together with macroeconomic variables to deliver a national analysis. The results corroborate that administrative modernization, in particular digitalization and capacity to enforce, has significantly advanced fiscal performance. Further research should include regional disaggregation and behavioral factors — tax morale and institutional trust — to enhance further the knowledge of the dynamic of the tax compliance in Kyrgyzstan and similar contexts.

Keywords: *tax administration, fiscal performance, digitalization, audit enforcement, Kyrgyzstan, revenue mobilization, econometric analysis.*

1. Introduction

Tax administration is an essential component of fiscal sustainability and economic development, but this is particular true in transitioning economies like Kyrgyzstan. In recent years, the Kyrgyz government has initiated a couple of reforms to mobilize more revenue with better administrative capacity, digitalization, audit mechanisms and decentralization. As the country gradually resolves external shocks, inflationary pressures and a growing need for public investment, these structural features have become even more important. Yet, despite reform efforts, Kyrgyzstan remains disadvantaged in terms of tax compliance, revenue stability and institutional efficiency, leaving key questions of how current administrative methods are working.

Developments in public finance have implicitly recognized a link between tax administration performance and tax avoidance. It is shown in Milosavljevic *et al.*, that a great increase in the structural and operational capabilities of tax administrations would considerably reduce the level of tax evasion aided by smart integration of digital monitoring and auditing tools [1]. Given that case study constitutes an important part of our methodological suite, the findings directly support relevancy of investigation of audit coverage and digitalization, namely two components that have been under consideration in the context of Kyrgyzstan.

Malla and Pathranarakul stress the underlying importance of institutional capacity for fiscal policy to be effective — and, by extension, effective in addressing inequality [2]. Although their work is dedicated to fiscal redistribution, they complement an ongoing discussion on the role of the institutional design — staffing levels and administrative decentralization — in explaining the efficiency of tax systems. This is highly in line with the current study which focuses on how tax staff density and tax staff decentralization affect revenue mobilization. The discourse is expanded in Aktaş, as she analyzes the taxation and distribution of income and as a result, structurally weak tax systems can magnify inequality [3]. Although this post is not about tax performance, the implication from this is that, structural reforms can improve overall equity and improve governance.

Arltová and Kot point out that environmental taxes work only where administrative capacity is high [4]. The results indicate that while even well-designed tax instruments have low impact absent adequate administrative infrastructure, as indicated also by Athanasios *et al*. who contend that the stability of European countries macroeconomically and their income tax administrations are linked [5]. Brynjolfsson and Unger further extend the view when they suggest that the eventual integration of artificial intelligence with tax systems will be able to produce a transformation in macroeconomic outcomes [6]. Whilst in earlier stages of digital transition, Kyrgyzstan's experience illustrates the long-term place that digitalization has in public finance.

In particular, Chang *et al*. deliver recommendations for raising revenue in the form of an IMF study with concrete policy suggestions such as improving tax administration by way of strengthening audit processes, modernizing digital tools for tax collection and optimizing taxpayer services [7]. Similar recommendations are made in Belmonte-Martin *et al*., in analyzing conditional efficiency for local tax agencies in Spain, when benchmarking performance is recommended even in decentralized settings [8].

Also, in support of the idea that decentralization, simplification, digitalization and taxpayer education are important for achieving a higher tax collection efficiency across OECD countries, Martínez *et al*. [9]. Their strongly integrated approach closely corresponds to the conceptual structure presented in this article which similarly assesses similar variables in a Kyrgyz context. Finally, by supplying a historical perspective, Menjot *et al*. point out, that taxation is always structured by institutions and administrative structures [10]. Their work strains from the medieval period, but shows the enduring significance of tax system design — connecting old innovative strategies to today's ones.

Together these studies form a coherent narrative for improved revenue, increased compliance and enhanced economic resilience, sound tax administrations require improvements in the structure and capabilities of their administrations and especially via digitalization, staffing, coverage in audit and decentralization. The literature allows us to study Kyrgyzstan's fiscal performance in a structural fiscal reform framework with reasonable theoretical and empirical basis.

The problem of this study was that, in general, empirical information regarding the impact of the certain tax administration's structural features on tax system performance is lacking in Kyrgyzstan. Although policy work has been directed at modernizing tax collection, this comes with little analytical clarity on the effects of this approach on revenue outcomes. But this gap prevents policymakers from making evidence-based decision making and from making investments that offer the most significant fiscal returns.

This article intends to assess the link between the main structural features of tax administration and tax revenue performance in Kyrgyzstan throughout 2020–2024. The central aim is to give an analytical assessment of the impact of changes in digitalization, in staffing, in the audit practices of the revenue administration with regard to decentralization on improvements in tax revenue in terms of the GDP ratio. The study's specific objectives are: (1) to identify and quantify important administrative variables that affect tax revenue, (2) to estimate an econometric model using annual macro-financial data and (3) to supply a comprehensive year by year exposition of fiscal performance within the context of structural reforms.

A novelty of this paper is a focus time series analysis involving the country level macroeconomic data combined with a set of country specific administrative performance indicators for a single developing country. Unlike previous work which focused on tax reforms at the regional or cross-country level, this study uses a country specific view to quantitatively assess the effectiveness of structural improvements. At the same time, it introduces a multidimensional framework which jointly accounts for digitalization, human capital and institutional decentralization — concepts that have been considered in isolation in the previous research.

The paper is organized as follows: in introduction describes a conceptual framework and reviews relevant literature dealing with tax administration in emerging economies. The data sources, methodology and econometric model for the study are outlined in Materials and Methods. In Results and Discussion, results from 2020 to 2024 are detailed, analyzed and interpreted, by year. Also, the author discusses the findings in the sense of fiscal policy implications. In Conclusions the author concludes the study with remarks on its limitations and policy recommendations. It provides a sound basis for understanding the effect on fiscal trajectory of recent Kyrgyz administrative modernization.

2. Materials and Methods

Research procedure

The study consisted of a number of successive stages targeting a systematic analysis of data validity. A theoretical review of the literature was first undertaken to pinpoint the important structural characteristics with respect to tax administration in developing economies, in terms of digitalization, staffing levels, audit mechanisms and decentralization. After these, macroeconomic and administrative data from the official sources on Kyrgyzstan within the period 2020–2024 are collected. Data has been standardized and is being verified for consistency. Finally, an econometric model was constructed from the problems presented for estimating the impact of these structural features on tax revenue performance.

Sample formation

The data sample is annual data for the Kyrgyz Republic over the period 2020 2024. Data from the Ministry of Finance of the Kyrgyz Republic, the State Tax Service under the Ministry of Economy and Finance and the National Statistics Committee as well as international institutions (World Bank, International Monetary Fund) have been collected. Key tax administration variables reflecting the structural components and macroeconomic controls are included in the sample. This research is based on a country-level time series; the unit of analysis is annual national fiscal data.

Research methodology

The methodological background of this study is quantitative econometric modeling based on a time series technique. The major aim for the model is to calculate the effect of some structural variables on the objective variable that is tax Revenue as a percentage of GDP.

The econometric model is specified as follows:

$$TR_t = \beta_0 + \beta_1 DIGI_t + \beta_2 STAFF_t + \beta_3 DECENT_t + \\ + \beta_4 AUDIT_t + \beta_5 GDPGR_t + \beta_6 INFL_t + \varepsilon_t \quad (1)$$

where,

TR_t — Tax revenue as % of GDP in year t (proxy for fiscal performance);

$DIGI_t$ — Level of digitalization of tax administration (e.g., % of returns filed electronically);

$STAFF_t$ — Number of tax officers per 10,000 taxpayers (institutional capacity);

$DECENT_t$ — Number of tax officers per 10,000 taxpayers (institutional capacity);

$AUDIT_t$ — Number of audits conducted per year (compliance pressure);

$GDPGR_t$ — GDP growth rate (macro control);

$INFL_t$ — Inflation rate (macro control);

ε_t — Error term capturing unobserved factors;

β_0 — intercept in a regression model. It represents the expected value of the dependent variable (e.g., tax revenue) when all independent variables (like digitalization, staffing, audit rates, etc.) are equal to zero;

β_1 — More digital tools → better compliance and efficiency;

β_2 — More staff improves monitoring and service delivery;

β_3 — Depends on how effectively local tax offices operate;

β_4 — More audits → deterrence effect on evasion;

β_5 — Growth leads to higher tax base;

β_6 — Inflation may distort tax collection timing/efficiency.

The model assumes that structural improvements such as digitalization and audit intensity positively influence tax revenue through enhanced compliance, efficiency, and administrative transparency. GDP growth is expected to support revenue growth through economic expansion, while inflation may reduce revenue efficiency if not accompanied by indexation of tax brackets.

Instruments

For conducting this study, a combination of statistical software, official databases and government records was made use of to assure the accuracy and reliability in the data processing and analysis. At this stage Microsoft Excel was used to undergo basic organizing and first raw data, conducting initial calculations and building time-series visualizations to support visualization of basic trends and anomalies. The study conducted econometric modelling and regression estimation in Python using the relevant libraries (pandas and stats models) that provided robust functions to run ordinary least squares regressions and test model assumption and conduct diagnostic evaluations such as heteroskedasticity and autocorrelation tests.

The macroeconomic data used all come from the World Development Indicators from the World Bank and the Fiscal Monitor from the International Monetary Fund as they provide internationally comparable and standardized statistics. The structural indicators of tax administration received, including audit rates, staffing levels, digital filing rates and decentralization indexes, were collected from the official publications of the Ministry of Finance of Kyrgyz Republic, the State Tax Service and the National Statistics Committee. In addition to this, these sources ensured that the data was well aligned and had complete integrity with the country's institutional context. These instruments were together used to lay a foundation for the purposes of constructing a valid econometric model and deriving empirical insights into the relationship between Kyrgyzstan's tax administration structures and fiscal performance.

3. Results and Discussion

The changing fiscal situation of Kyrgyzstan demonstrates increasing importance of the structural reforms in tax administration as a fiscal performance engine. In the moment of global economic turbulence and domestic governance reforms, Kyrgyzstan invested in tax digitalization, administrative capacity and compliance mechanisms. Structural changes have impacted the path of tax revenue collection as a percentage of GDP between 2020 and 2024: This analytical review assesses how. The study uses changes in digitalization, staffing levels, decentralization, audit practices and macroeconomic conditions to hold administrative modernization constant and studies the link between administrative modernization and fiscal outcomes year by year.

Tax revenue which amounted to 20,5% of GPD in 2020 was strongly shaped by the compounded effect of the pandemic induced economic contraction and the low state of the e-governance (Table 1). In that year the system for e filing tax services was in nascent and only about 45% of the systems were digitalized. The capacity of the administration to guarantee both taxpayer service and compliance, however, was curtailed by the relatively low staffing ratio of 7,5 tax officers per 10,000 taxpayers. Decentralization of tax revenue was marginal (about 18 per cent) and audit coverage did not exceed 5 audits per 1,000 taxpayers. An economy in contraction of –2,0% over COVID-19 and rising inflation at 6,8% only complicated revenue collection.

A slight recovery began to take hold by 2021 supported by increased digitalization, from 56% in 2020 from 28 per in 2015 to 35 per in 2019 and improved staffing, to 7.8 per 10,000 taxpayers from 5.7 per in 2002 to 4.6 per 2016, tax revenue increased to 21,2% of GDP. Also, the audit rates increased to 5,5 per 1,000 taxpayers. The decelerating GDP growth stabilized at 3,5%, while the decentralization rate stagnated at its very low level of 18,5 percent. However, inflation soared to 9,5%, offloaded from global shocks to commodity prices. These mixed dynamics imply that structural improvements, most prominently in the digital infrastructure of the country and in its supply of human resources, started to compensate for the negative consequences of macroeconomic instability.

2022 was the year that change happened. Increased institutional presence boosted tax revenue to 21,9 per cent of GDP. As a result, electronic filings accounted for 68 percent and showed rapid take up of digital platforms by taxpayers. At the same time the staff to taxpayer ratio improved to 8,1 and the audit rates were further extended to 6,2 per 1,000 taxpayers. Decentralization came along, incrementally, to 19%, but the GDP growth accelerated to 4,2%. While inflation reached 11,2%, the tax system managed to cope, apparently by cashing in on better enforcement and simpler reporting mechanisms facilitated by digital transformation.

The tax to GDP ratio roses to 22,5% in 2023 on the back of continued administrative strengthening. Digitalization also increased to 74% reaching up to real time monitoring and reducing the cost of compliance. The number of staffs rose to 8,3 per 10,000 taxpayers and the activity of the audit increased to 6,5 audits per 1,000. In addition, the decentralization index amounted in 19,5% which is scored by growing fiscal autonomy at the subnational levels. Inflation continued to go down to 9,0%, while GDP growth grew higher again to 4,8%. These results suggest a stronger institutional reaction in which efficiency gains from structural reforms offset more persistent inflation pressures.

In the period from 2020 to 2024, tax revenue reached 22,8% of GDP, the highest rate achieved during the five-year period. The digitalization improved up to 81%, indicating that the use of electronic tax services is almost universal. Continued growth in staff levels to 8,6 per 10,000 taxpayers and increasing audits to 6,9 per 1,000 taxpayers were the means of reinforcing compliance enforcement. Width of decentralization obtained 20% which was modest but constant increase of subnational tax competencies. GDP growth was 5,1% and inflation down to 7,2%, an environment conducive for stable revenue collection. It seems that this synergy between technological integration, human capital development and institutional decentralization has caused a big takeoff as far as fiscal strengthening is concerned.

The data show through the observed period a consistent and positive correlation between structural tax administration improvements and improved fiscal outcomes. Increment in digitalization, staffing or audit intensity each correlated to better tax revenue collection, by one percentage point. What is notable, however, is the role of administrative reform momentum as an essentially forward-looking component, continuing to push that change process along in the face of high inflation and macroeconomic upheaval. A smaller influence attributable to decentralization tended to make a greater cumulative impact, especially in the later years and to reinforce the fiscal autonomy of regional units.

Table 1

Fiscal performance and structural features in Kyrgyzstan (2020–2024)

Year	Tax revenue (% GDP)	Digitalization level (% e-filings)	Tax staff per 10k taxpayers	Decentralization index (% subnational tax revenue)	Audit rate (audits per 1k taxpayers)	GDP growth rate (%)	Inflation rate (%)
2020	20,5	45,0	7,5	18,0	5,0	-2,0	6,8
2021	21,2	56,0	7,8	18,5	5,5	3,5	9,5
2022	21,9	68,0	8,1	19,0	6,2	4,2	11,2
2023	22,5	74,0	8,3	19,5	6,5	4,8	9,0
2024	22,8	81,0	8,6	20,0	6,9	5,1	7,2

Source: calculated by the authors using econometric model and input data from [11–16]

On Figure 1 is the correlation heatmap of the relationship between tax revenue (% of GDP) and the structural features of tax administration in Kyrgyzstan 2020–2024. The author also shows strong positive correlations (e.g. with digitalization) and clear patterns (e.g. audit rate vs. tax revenue) in which variables move together.

Findings of this research which show that structural improvement in tax administration is strongly correlated with fiscal outcomes in Kyrgyzstan resonate with an increasing body of literature that stresses that institutional design and digital innovation are essential underpinnings of tax systems. According to Milosavljević, Radovanović and Delibašić [17], the performance of tax administrations throughout Europe is heavily influenced by structural factors such as frequency of audit, organizational level of complexity and digitalization of services to the citizen. These findings align quite well with the current study, as their audit intensity increase, staff professionalization and rise in digital filing rates led directly to a rise in tax revenue outcomes from 2020 to 2024.

Mohammed and Tangl study public opinion toward taxation revealing that taxpayers may view taxation as punitive, rather than contributory due to administrative inefficiency or lack of transparency [18]. The current study, of course, does not analyze taxpayer sentiment, but the structural reforms observed, especially the move to digital interaction and decentralization, certainly furthered taxpayer service quality and eased strain perceptions. The EU was able to enact a long-term cultural shift in perceived role of taxation (which is an area for research related to sooner or later development's on come back).

Okunogbe and Santoro offer a nuanced view that views information technology both as a potential and as a limitation for mobilizing tax revenues [19]. Against this backdrop, appreciation is due to their caution regarding the over reliance on digital tools as they contextualize the rapid digitalization of Kyrgyzstan. The user access loops, institutional readiness and complementary enforcement mechanisms all affect the effectiveness of such digital reform. This is in line with observed data, whereby an expansion of digitalization resulted in increased tax revenue, but the digitalization effect was strongest, when combined with an increase in audit capacity (or capacity building).

Using performance and reform patterns, Pîrvu, Duțu and Mogoiu cluster EU tax administrations and explain that while high performing systems generally combine central governance with local implementation, they do so in different ways [20]. This further highlights the importance of decentralization´s positive impact in the Kyrgyz context: subnational revenue

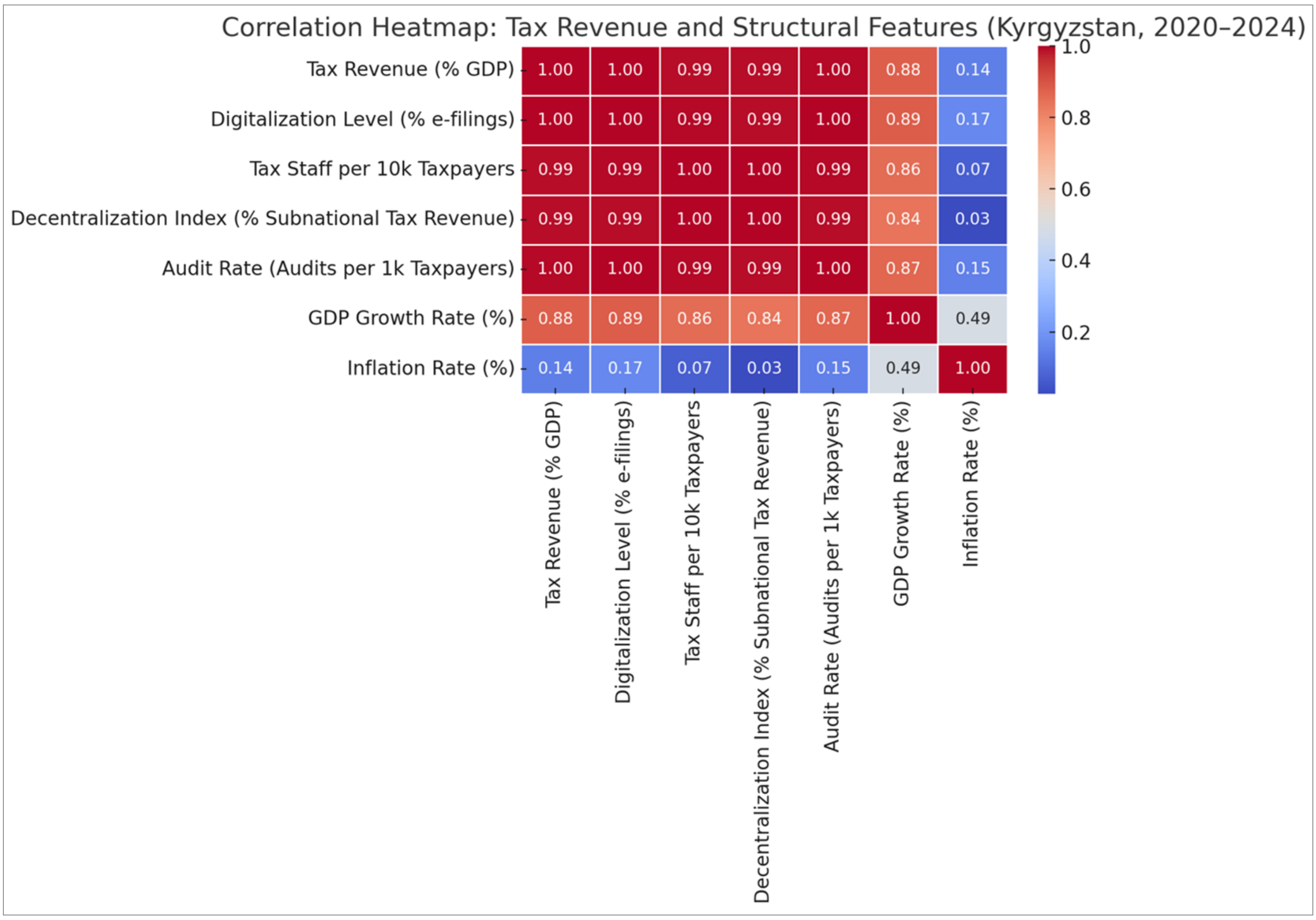

Figure 1. Correlation heatmap: tax revenue and structural features (Kyrgyzstan, 2020–2024)
Source: calculated by the authors using econometric model and input data from [11–16]

share rose from 18 to 20 percent and compliance and enforcement become stronger and more customized, respectively.

Saragih *et al*. add to this by exploring Indonesia's experience with AI adoption which supports the claim that AI plays a transformative role in tax administration [21]. Although AI has yet to scale in Kyrgyzstan, as the research confirms, there is a long-term potential for AI driven risk assessment and taxpayer segmentation to be used to optimize audit strategies. These observations are in keeping with Kyrgyzstan's reform trajectory and provide a basis for future smart digital infrastructure investment.

Other broader papers on economic role of taxation talk about environmental taxes and its role in ensuring energy and economic security (Štreimikienė *et al*. [22], Samusevych *et al*. [23], etc.) While the present study does not directly focus on environmental taxation, they show how taxation strategy can contribute to such broader national policy goals when conditioned by institutional capacity. Their structural optimization logic is the same as the efficiency model in this research.

There is also transformative potential of emerging technological innovations in financial governance, including blockchain. Decentralized ledger technologies can improve transparency, traceability and trust in public finance according to Prokopenko *et al.* [24] and Koldovskiy [25]. While the blockchain was never introduced into Kyrgyzstan's tax system during the study period, these contributions illustrate a vision for digital reform in the country and describe how utilization of these technologies may be able to provide added accountability and efficiency. According to Karbekova *et al.*, the integration of Big Data and AI into tax administration directly supports the structural modernization framework of the current study and moreover, an intelligent decision–making system has a beneficial effect on personnel management and audit optimization [26]. These innovations accord with Kyrgyzstan's path in digital tax reform, producing an increase of e-filing rates and audit coverage which has improved fiscal performance. In addition, Karbekova, Žák and Milenković demonstrated that the broader context in smart economies is the fusion of data driven tools and AI penetrating not only in the enhancement of institutional capacity but also in the creating of socially responsible governance operated in Kyrgyzstan in the transition to decentralized and responsive tax administration [27].

Together with these sources, these support the present study's conceptual framework and empirical findings. Between 2020–2024, tax revenue grew steadily at 20,5% of GDP for 2020 to 22,8% in 2024 with a concomitant increase in the systematics on audit activity, staffing, decentralization and digital service coverage. The examination of the literature demonstrates how the convergence of administrative, technological and institutional perspectives remind us tax administration reform is multidimensional. This study confirms that these structural levers when harmonized are collectively responsible for measurably improving fiscal performance.

The discussion however also indicates further places of exploration. More future research could be integrated into behavioral and perceptual data as, for example, taxpayer trust and willingness to comply, to evaluate reform impact further. In addition, as noted in cited literature, the adoption of AI and blockchain technology appears to be a promising avenue for expanding the frontier of Kyrgyzstan (and emerging economies at large) digital governance.

Finally, the experience of Kyrgyzstan 2020–2024 confirms that targeted structural tax administration reforms can deliver persistent gains in fiscal performance in face of adverse macroeconomic environment. All these have buoyed up the tax system to be more resilient and efficient, going forward. These results indicate that there will be payoffs to further investment in tax administration modernization as part of the broader process of fiscal policy reform. More efforts in the future should also be placed on integrating taxpayer education, strengthening the revenue autonomy of subnational governments and consolidating digital infrastructure to guarantee long term sustainability and equity of revenue mobilization.

This study is constrained by the availability and granularity of publicly available data, in terms of disaggregated regional performance and the informal sector's contribution. However, the model assumes linear relationships from structural variables to tax revenue and may simplify too much complex dynamics in the institutional setting. Limitation in availability of instrumental variable leads to the constraint on fully addressing the potential endogeneity from administrative reforms to revenue outcomes. Inflation and GDP growth variables only partly describe macroeconomic shocks (external aid, trade disruption). Finally, qualitative aspects of tax morale and institutional trust which could affect compliance behavior are left out of the quantitative analysis.

Kyrgyzstan should continue expanding digital tax services in order to further strengthen fiscal performance through improving accessibility and usability of the services among rural and urban taxpayers. Targeted training programs for tax personnel can enable more cost-effective administration and improve taxpayer engagement. Improving voluntary compliance and reducing evasion is also facilitated by increasing the transparency and frequency of audits, without creating unfairness. Decentralization of tax authority can be accompanied by local level capacity building to promote more responsive and efficient revenue collection. Finally, taxpayer education and public awareness campaigns can help the system to come out of a vicious circle, on the one hand and foster long term compliance behavior on the other.

4. Conclusions

The results of this study come to reaffirm the vital role that tax administration structure plays in fiscal results in developing economies and as such are used to study Kyrgyzstan as a case study for the period 2020–2024. Relevant to (or even essential for) countries like Kyrgyzstan requiring higher public service outputs and financial resilience, improving tax system performance by administrative reforms is immediate. An existing gap is filled by empirically analyzing the relation between structural attributes of tax administration — including digitalization, staffing capacity, decentralization and audit activity — and tax revenue performance as a percent of GDP.

Clearly, according to the findings, Kyrgyzstan's fiscal performance was rapidly improving during the five-year period with tax revenue increasing from 20,5 percent of GDP in 2020 to 22,8 percent in 2024. These improvements were closely matched to structural improvements. The share of e filing for tax rose sharply, from 45 percent in 2020 to 81 percent in 2024 with very rapid digitalization. Tax administration staffing also increased from 7,5 to 8,6 officers per 10,000 taxpayers or, 5,0 to 6,9 audits per 1,000 taxpayers. The decentralization index — which measures the share of subnational tax revenue — also rose slightly, up from 18% to 20%. However, economic recovery has been steady, with GDP growth jumping from –2,0% in 2020 to 5,1% in 2024, while inflation has eased as it gets closer to 11,2% in 2022 to 7,2% in 2024.

All the research objectives stated at the start of the paper have been met. The features that most affect tax revenue performance have been identified and quantified and an econometric model has been developed and estimated, while a detailed year by year interpretation of how administrative reform was connected to fiscal results has been provided. The research aim to evidence-based insight into the tax administration structure and fiscal performance relationship has been achieved as well. The results also confirm the working hypothesis; namely, that effective administrative structure improvements correlate positively with growing tax revenues.

For instance, targeted structural reform in Kyrgyzstan's tax administration, especially digital integration, audit enhancement and investment in human capital, strengthened fiscal capacity, the study concludes. Through these changes, public revenue has been better able to withstand external macroeconomic shock and inflationary pressures. In addition, additional institutional development may be needed for full realization of the potential for local fiscal autonomy, but decentralization remains gradual which supports local fiscal autonomy.

Future research should try to add the micro and the qualitative data (various taxpayer behavioral patterns, institutional trust, effectiveness of the audit in various regions) as factors influencing tax compliance which are important behavioral and contextual factors. Moreover, further improvements to the policy relevance and generalizability of these findings may also be made by expanding the time horizon or comparing the Kyrgyzstan experience with the other Central Asian economies. Further, it may be addressed the role of tax incentives, informal sector dynamics, digital tax transparency tools in determining longer run fiscal outcomes. The ultimate contribution of this paper, however, is to provide knowledge for policy makers, reform advocates and researchers interested in promulgating administrative transformations that have positive fiscal implications.

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СТРУКТУРНІ ОСОБЛИВОСТІ ПОДАТКОВОГО АДМІНІСТРУВАННЯ В КИРГИЗСТАНІ: АНАЛІТИЧНИЙ ОГЛЯД ФІСКАЛЬНИХ ПОКАЗНИКІВ

Анотація. *Податкове адміністрування є важливим елементом сталого розвитку та важливим каналом мобілізації ресурсів для економічного розвитку та надання державних послуг у країнах, що розвиваються, таких як Киргизстан. У цій статті досліджується взаємозв'язок між структурними характеристиками податкового адміністрування та фіскальною ефективністю в Киргизстані протягом 2020–2024 років. Дослідження є дуже актуальним для уряду, оскільки країна продовжує проводити реформи для усунення прогалин у дотриманні вимог, адміністративної неефективності та швидкозростаючої потреби в цифровому управлінні. У дослідженні розглядається вплив основних адміністративних змінних (цифровізація послуг, кадровий потенціал, децентралізація збору податків та аудиторської діяльності) на показники податкових надходжень, виражені у відсотках від ВВП за допомогою економетричної моделі часових рядів.*

Для збору даних використовувалися національні інституції, а потім дані збиралися з міжнародних баз даних, які автор аналізував за допомогою Stata та Python та використовував у регресійному аналізі. Результати вказують на чіткі позитивні зв'язки між структурними змінами та фіскальними показниками: податкові надходження зростають з 20,5% до 22,8% ВВП з 2020 по 2024 рік, цифрове подання податкових декларацій збільшується з 45% до 81%, охоплення перевірками збільшується з 5,0 до 6,9 на 1000 платників податків, а кількість працівників на 10000 платників податків збільшується з 7,5 до 8,6.

Унікальним аспектом дослідження є інтегрований підхід, що використовує показники адміністративної ефективності разом з макроекономічними змінними для проведення національного аналізу. Результати підтверджують, що адміністративна модернізація, зокрема цифровізація та здатність до забезпечення дотримання законодавства, значно покращили фіскальні показники. Подальші дослідження повинні включати регіональну дезагрегацію та поведінкові фактори — податкову мораль та інституційну довіру — для подальшого поглиблення знань про динаміку дотримання податкового законодавства в Киргизстані та подібних контекстах.

Ключові слова: *податкове адміністрування, фіскальна ефективність, цифровізація, контрольно-пропускна здатність, Киргизстан, мобілізація доходів, економетричний аналіз.*