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Article

Economic Efficiency of Increasing Tax Collection Through the Integration of the YAIDXP and "Soliq" Mobile Application

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Abstract: In particular, the digital transformation of tax administration in Uzbekistan has been greatly promoted by the development of the "Soliq" mobile application, which is one of the main platforms for providing electronic tax services and increasing the interaction of taxpayers with tax authorities. Even though the advent of new digital fiscal tools has been unprecedented, little empirical evidence has sought to quantify the impact of these digital tools on tax collection growth via incentive based mechanisms. This study will fill these gaps by assessing the cost effectiveness of expanding tax collection through linking the mobile application of the Soliq service with the mobile application of the Unified Interactive State Services Portal through a cashback mechanism for purchase receipts.The methods of analysis and calculation are used in the study based on the official data of the State Tax Service for 2025. It involves estimating turnover formalized through cashback payments, the annualization of short term indicators of turnover and income tax revenues, and predicting the additional tax revenues without exceeding conservatively low estimates of net fiscal efficiency. According to the results, cashback payments in the amount of more than 1.06 trillion soums provided the growth of the taxable base for the period from January to September 2025 by more than 106 trillion soums of formalized turnover. According to indicative calculations carried out using a scenario approach, such integration could increase the coverage of users in the application from 6.77 million to 13 million, as well as create additional formal turnover of about 130 trillion soums. The findings indicate that the introduction of digital platforms along with financial enticements could generate an extra 320-370 billion soums of taxes in 2026. The research paper shows that digital incentive mechanisms can improve voluntary tax compliance and therefore reduce shadow economic activity and strengthen fiscal stability with no additional administrative burden. As such, these findings can inform the adoption of digital tax policies that are both inclusive and scalable in emerging economies.

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1. Introduction

The dawn of digital technologies has redefined existing practices for public finance management across government functions, most notably among tax administrations. Tax authorities may use the full potential of digital platforms that help authorities streamline processes, reduce transaction expenses, and reinforce transparency, while citizens enjoy a more convenient access to public services [1]. This is slowly taking place in Uzbekistan with the "Soliq" mobile app and the planned integration into mobile app of the Unified

Interactive State Services Portal. Beyond mere technical services delivery, these platforms are increasingly adopted as tools of policy to shape taxpayer behavior. More specifically, the cashback-oriented mechanisms that are tied to purchase receipts are evoking more recent models of public finance that prioritize voluntary compliance, trust, and behavioral incentives rather than conventional top-down administrative coercion.

Analytically, this is a study of digital governance, fiscal transparency and voluntary tax compliance [2]. These approaches imply that taxpayers are more likely to engage formally in economic activity to the extent that they view the tax system as being simple, equitable, and enriching the economy as a whole. Previous research on electronic tax systems and e government services typically finds an increase in efficiency or user satisfaction. Yet the bulk of this literature has been descriptive or institutional oriented, presenting only limited quantitative evidence on how digital incentive mechanisms translate to greater tax collection volumes and the formalization of the economic turnover [3]. This is particularly concerning in developing and transition economies, where empirical evaluations of digital fiscal instruments are yet to become widely available.

To fill this gap, we use calculation based and analytical methods, specifically by utilising official tax statistics to measure the fiscal effect of combining digital platforms into one through a cashback system. This preliminary examination estimates formalized turnover, projects growth of user coverage, and forecasts supplementary fiscal gain under prudent assumptions [4]. The results are expected to show a significant positive correlation between integration on digital platforms and voluntary tax compliance. Data Driven Solutions for Microeconomic Stability The results are intended to demonstrate that incentive based digital solutions can significantly increase tax revenues, shrink the shadow economy, and provide greater microeconomic stability. These results provide tangible implications for policymakers who want to reform in favor of sustainable and pro-social tax administration.

2. Materials and Methods

By qualifying the economic effects of pairing Soliq mobile app with the Unified Interactive State Services Portal mobile app, a quantitative analytical perspective is adopted in this study. The analysis is based solely on official data (information) published by the State Tax Service of the Republic of Uzbekistan from January to September 2025 and believes that the reliability and objectivity of the data is in line with the national fiscal statistics.

The logic of the method is calculated — estimation-driven. The first step is to obtain the actual cashback amount which is then converted into the volume of formally recorded turnover at the fixed cashback rate of one percent. This reverse estimating enables you to approximate the value of transactions that had been officially documented through digital receipts [5]. The nine-month indicators are annualized to provide a fuller impression of the total annual fiscal effect of the mechanism.

We use a coverage expansion model to assess the expected impact of application integration. Integrating user participation is expected to improve coverage, and this change is captured by a coefficient denoting the ratio between present and expected users. Using a proportional and optimistic approach between the level of user coverage and volume or turnover entering into receipt, the study then estimates the potential increase in formalized transaction volume [6]. In order not to overstate the fiscal results in this model, a conservative net fiscal efficiency factor is applied that reflects the proportion of recently formalised turnover that manifests in new revenue for the tax authority. This design is analytically balanced and policy relevant, and enables the study to measure the effect of the digital incentive on tax collection realistically.

3. Results

The introduction of the “Soliq” mobile application in Uzbekistan has become an important direction in simplifying and digitalizing interactions between taxpayers and state tax authorities. The “Soliq” mobile application is a platform that occupies a central position in the digital transformation of the tax system of Uzbekistan. It has been developed as a

convenient and reliable digital service that enables users to access all tax related services online [7]. Through the platform, declarations, payments, notifications, and refunds are carried out in electronic form. The availability of mobile and web versions has expanded its coverage and provides taxpayers with modern, fast, and transparent services.

According to experts, the “Soliq” mobile application functions not only as a tool that facilitates tax payments but also as an effective digital mechanism for combating the shadow economy and increasing civic responsibility. One of the most important functions of the platform is the 1 percent cashback system based on QR coded fiscal receipts, which encourages citizens to request receipts and, as a result, ensures that each purchase transaction is recorded under state supervision. The returned 1 percent amount is interpreted not only as a financial bonus but also as a civic contribution to a fair economy [8].

According to information from the State Tax Committee, the number of users of the “Soliq” mobile application has demonstrated a steady growth trend in recent years. While 6.6 million users were registered in 2021, this figure exceeded 14 million by 2025. At the same time, the number of tax related operations carried out through the platform has also been increasing year by year, which indicates a growing culture of using digital services among citizens (Figure 1). For creating figure 1, sources were obtained from the official website of the Tax Committee of the Republic of Uzbekistan.

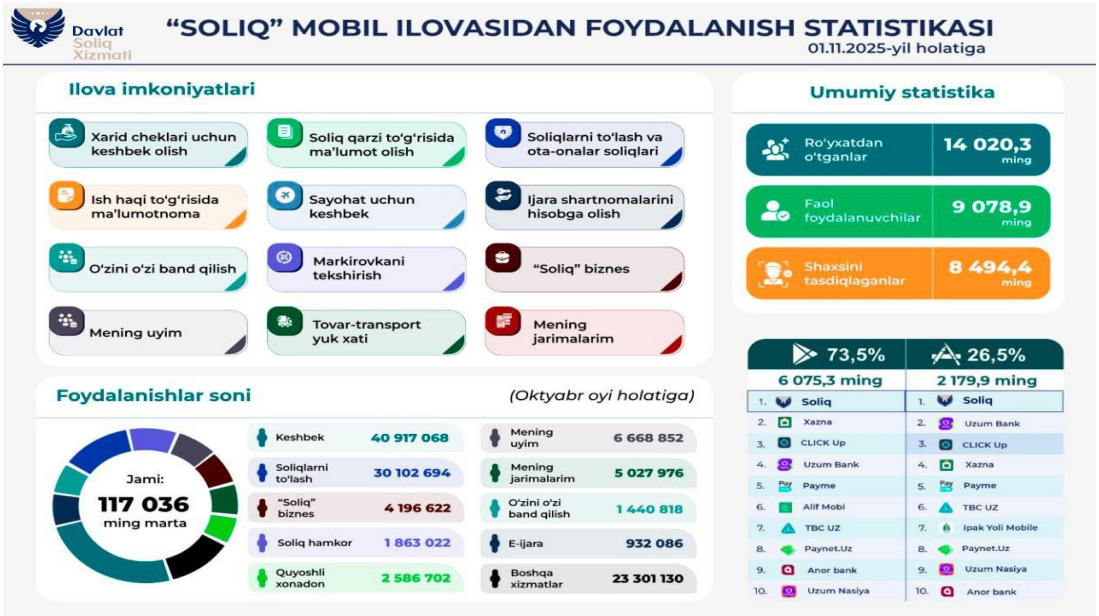


Figure 1. Statistics on the Use of the “Soliq” Mobile Application

(as of November 1, 2025)

According to data from the State Tax Service, as of November 1, 2025, the number of users of the “Soliq” mobile application reached 14 million 20.3 thousand people. Of these, 9 million 78.9 thousand users are considered active, and 8 million 494.4 thousand individuals have completed electronic identity verification. Compared to the initial user base of only 250 thousand users in 2020, this represents a 56-fold increase [9].

These figures confirm that in recent years the “Soliq” mobile application has become the fastest developing digital fiscal platform within the tax system of Uzbekistan.

The “Soliq” application provides users with more than 15 types of digital services, the main ones including:
receiving cashback for purchase receipts;
obtaining information on tax debts and obligations;
payment of taxes and parental taxes;
“Soliq Business”, e leasing, and self employment modules;
verification of marking labels;
registration of lease agreements;
services such as consignment notes and “My Home”.
These services comprehensively cover individuals, entrepreneurs, and representatives of small businesses, thereby forming an inclusive digital model of the tax system [10]. In particular, the self-employment module plays an important role in legalizing the informal labor market and reducing the shadow economy.

Table 1

Indicators of Use of the “Soliq” Mobile Application

(as of October 2025)

No.	Indicator Name	Number of Uses (times)	Share (%)
1	Cashback	40,917,068	34.9
2	Tax payments	30,102,694	25.7
3	“Soliq Business”	4,196,622	3.6
4	Soliq Partner	1,863,022	1.6
5	Solar Household	2,586,702	2.2
6	My Home	6,668,852	5.7
7	My Fines	5,027,976	4.3
8	Self Employment	1,440,818	1.2
9	E Lease	932,086	0.8
10	Other services	23,301,130	19.9
Total		**117,036,000**	**100**

The table given above shows that among digital services, cashback and tax payment services are the most frequently used functions of the “Soliq” mobile application and it was prepared by the author based on data from the Tax Committee (Table 1). This situation indicates an increase in tax discipline and fiscal culture among the population, as well as growing trust in mobile payment systems [11]. The fact that more than 117 million transactions were carried out through the application in October 2025 alone demonstrates that digital tax services have been implemented on a mass scale in Uzbekistan.

In addition, 73.5 percent of users access the system via Android (Play Market), while 26.5 percent use iOS (App Store). This ratio corresponds to the segmentation of the mobile device market in Uzbekistan and indicates that fiscal services are technically optimized.

The mobile application is integrated with the most widely used payment systems: for Android users: Soliq, Xazna, CLICK Up, Payme, Uzum Bank, and TBC UZ; for iOS users: Uzum Bank, Soliq, Payme, CLICK Up, and TBC UZ.

This integration has enabled users to pay taxes instantly and has minimized payment delays.

The "Soliq" mobile application has been established as a digital model for increasing tax collection within the tax system of Uzbekistan.

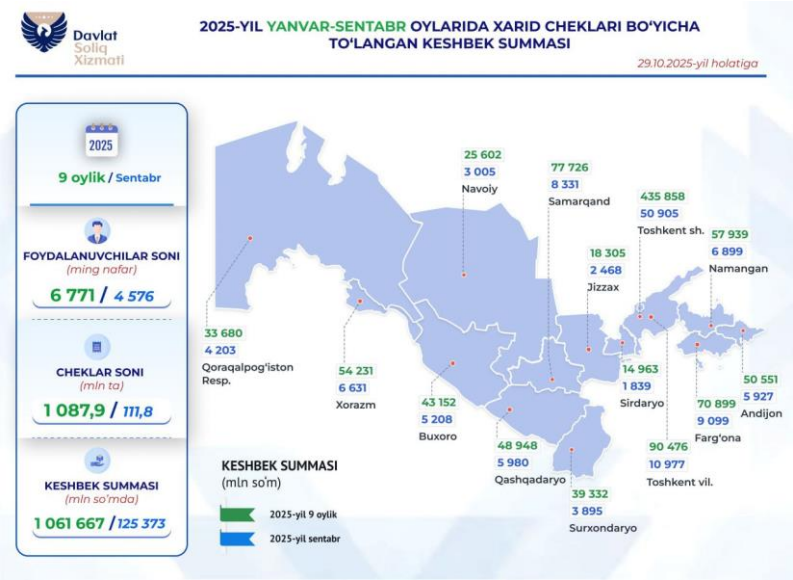


Figure 2. Amount of Cashback Paid for Purchase Receipts in January–September 2025

Data on cashback operations for January–September 2025 published by the State Tax Service clearly demonstrate the practical effectiveness of digital tax administration in the country [12]. According to the results of the analysis, the cashback system is emerging as an important factor in increasing tax discipline among the population, shaping a culture of requesting purchase receipts, and reducing the size of the shadow economy (Figure 2).

During the first nine months of 2025, a total of 1 billion 87.9 million receipts were officially registered through the "Soliq" mobile application, and cashback payments amounting to 1 trillion 61 billion 667 million soums were made. Compared to the same period in 2024, this represents a 47 percent increase, indicating a sharp rise in public participation in digital tax compliance. The number of users reached 6.77 million, including 4.57 million active users. This shows that the digital transformation of the tax system is being strengthened not only at the technical level but also at the level of social awareness.

Results by region reveal significant differences in the volume of cashback payments. The highest amounts were recorded in the city of Tashkent (435.9 billion soums), Tashkent region (90.4 billion soums), Samarkand (77.7 billion soums), and Fergana (70.9 billion soums) [13]. These four regions account for 63 percent of total cashback payments, indicating that a stable culture of digital payments has formed in the capital and economically active regions.

At the same time, lower levels of cashback operations are observed in Syrdarya (14.9 billion soums), Jizzakh (18.3 billion soums), and Navoi (25.6 billion soums) regions. This may be due to relatively smaller population sizes, insufficient development of digital

infrastructure and internet networks in remote areas, as well as lower levels of digital literacy.

Overall, since 2023, the development of the cashback mechanism has increased citizens' culture of requesting receipts and complying with tax obligations. Purchases made through this system expand the tax base and have a direct impact on increasing budget revenues. The cashback system encourages individuals to formalize their economic activities, enabling tax authorities to identify informal trade turnover and strengthen fiscal control.

In addition, the cashback system contributes to simplifying tax administration under digital economy conditions and strengthening mutual trust between taxpayers and state authorities. By requesting receipts for every purchase, citizens actively participate in shaping a transparent economic environment.

As a result, the cashback system on the "Soliq.uz" platform has become one of the most effective and socially oriented tools of digital tax control. Along with increasing economic activity among the population, it encourages voluntary compliance with tax discipline [14]. Regional disparities indicate the need to further expand the digital coverage of the tax system and balance infrastructure development across regions.

The further development of the cashback mechanism remains a strategic direction for increasing tax collection, reducing the share of shadow trade, and strengthening fiscal stability in Uzbekistan.

Launching a system for returning one percent of the value of purchased goods and services to individuals in the mobile application of the Unified Interactive State Services Portal is also considered one of the digital incentive mechanisms aimed at increasing tax collection. By encouraging consumers to request receipts, this mechanism helps formalize trade operations, increase the share of cashless payments, and ultimately stabilize indirect tax revenues, particularly value added tax.

This proposal is reflected in paragraph 42 of Annex 6 to Resolution No. PQ–286 of the President of the Republic of Uzbekistan dated September 16, 2025, "On measures to further accelerate the introduction of digital technologies in the regions, sectors, and industries of the Republic," which stipulates that the cashback service will be launched in the YAIDXP mobile application in May 2026.

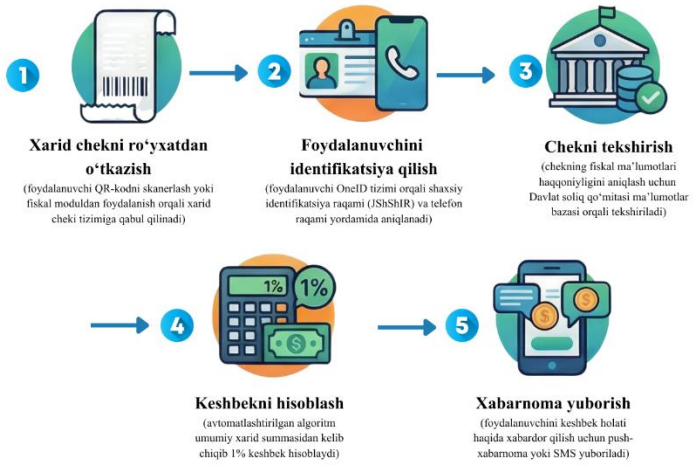


Figure 3. Technological Model for Implementing the Cashback Mechanism Based on Purchase Receipts through the YAIDXP Mobile Application

During the same period, the number of users of the system amounted to 6.77 million, while the number of registered receipts reached 1.09 billion units. These indicators show an

increase of 18 percent in the number of receipts and 20 percent in the cashback amount (Figure 3).

Below, a step-by-step calculation of the additional tax revenue expected in 2026 as a result of launching the cashback system in the YAIDXP mobile application is presented.

1. Baseline indicators (9 months of 2025).

Cashback amount returned (January–September 2025): CB_9 = 1 061,7 billion soums;

Cashback rate: r = 1% = 0,01;

Number of users (9 months): U_1 = 6,77 mln;

Projected Coverage After Integration of the YAIDXP and Soliq Applications: U_2 = 13,0 mln.

2. Determining formal turnover based on cashback.

Since cashback is 1 percent, the value of purchases documented by receipts for which cashback was paid is calculated as follows:

$$A_9 = \frac{CB_9}{r}, \quad A_9 = \frac{1\,061{,}7}{0{,}01} = 106\,170 \text{ billion soums}$$

Thus, during the nine months of 2025, the formal turnover based on receipts that received cashback amounted to 106,170 billion soums.

3. Converting the nine month turnover to an annual equivalent.

$$A_{year} = A_9 * \frac{12}{9}, \quad A_{year}\ 106\ 170 * \frac{12}{9} = 141560 \text{ billion soums}$$

Accordingly, within the framework of the cashback mechanism, the annual receipt-based turnover is estimated to be approximately 141,560 billion soums.

4. Coverage coefficient after integration with the YAIDXP mobile application.

Taking repeated users into account, coverage is projected to expand from 6.77 million to 13 million users. The coverage coefficient is calculated as::

$$k = \frac{U_2}{U_1} = \frac{13}{6{,}77} = 1{,}92$$

Thus, after integration, coverage is expected to expand by approximately 1.92 times.

5. Calculation of additional formalized turnover.

Based on the proportionality assumption that receipt based turnover increases with expanded coverage, the additional turnover is calculated as:

$$\Delta A = A_{year} * (k - 1)$$

$$\Delta A = 141560 * (1{,}92 - 1) = 141560 \times 0.92 = 130269 \text{ billion soums}$$

Therefore, as a result of launching cashback in the YAIDXP mobile application, the additional receipt based formal turnover may amount to approximately 130,269 billion soums.

6. Calculation of additional tax revenue.

An important point is that not all of ΔA constitutes new tax revenue, since part of the turnover may have already been formal. Therefore, in practical assessments, a net fiscal efficiency share (α) is applied:

$$\Delta T = \Delta A * \alpha$$

If α is conservatively assumed to be in the range of 0.246 percent to 0.284 percent, then:

Minimum forecast: $\Delta T_{min} = 130269 \times 0.00246 \approx 320$ billion soums;

Maximum forecast: $\Delta T_{max} = 130269 \times 0.00284 \approx 370$ *billion soums*

Thus, as a result of introducing cashback in the YAIDXP mobile application, additional tax revenues of approximately 320 to 370 billion soums to the state budget are projected for 2026.

The calculations show that integrating the cashback service into the YAIDXP mobile application expands user coverage from 6.77 million to 13 million and significantly increases receipt-based turnover [15]. In this case, the additional formalized turnover may amount to approximately 130.3 trillion soums, and with a conservative assessment of net fiscal efficiency, it may generate additional state budget revenues of 320 to 370 billion soums in 2026. This mechanism demonstrates itself as an effective method of increasing tax collection not through administrative pressure, but through digital incentives and voluntary engagement in formal settlements.

4. Conclusion

The novelty of this study is that it presents an integrated digital instrument to increase tax collection in Uzbekistan through incentive-based mechanisms rather than administrative enforcement, by deploying the mobile application, Soliq, in integration with the Unified Interactive State Services Portal. The study finds that the cashback system has markedly enlarged receipt-based formal turnover, reinforced voluntary tax compliance with the system and, in turn, has promoted the attraction of economic activity registered in the shadow. An empirical calculation shows that if the coverage of users is expanded through application integration, this could lead to a large additional formalization of turnover, which could lead to an additional 320–370 billion soums of tax revenues to the state budget in 2026. These results validate our hypothesis that behavioral incentives, used in concert with digital platforms, promote fiscal efficiency at the same time as increasing taxpayer trust and engagement. The results have significant policy ramifications, as they imply that scalable digital incentives can provide a more sustainable model for tax administration reform in the context of economies undergoing digital transformation. Regional variations in usage also underscore the need for more equitable digital infrastructure investment and more tailored digital literacy programs. More work is needed to study the lasting behavioral consequences of cashback, the effects on a broader set of taxpayers and regions, and whether similar digital fiscal models can be applied to other areas of public finance.

REFERENCES

[1] OECD, "Tax Administration 3.0: The Digital Transformation of Tax Administration," Organisation for Economic Co-operation and Development, 2020. [Online]. Available: https://www.oecd.org/content/dam/oecd/en/publications/reports/2020/12/tax-administration-3-0-the-digital-transformation-of-tax-administration_886337a7/ca274cc5-en.pdf

[2] OECD, "Tax Administration Digitalisation and Digital Transformation Initiatives," Organisation for Economic Co-operation and Development, Jun. 2025. [Online]. Available: https://www.oecd.org/content/dam/oecd/en/publications/reports/2025/06/tax-administration-digitalisation-and-digital-transformation-initiatives_87f43a78/c076d776-en.pdf

[3] OECD, "Behavioural Insights for Better Tax Administration: A Toolkit for Tax Administrations," Organisation for Economic Co-operation and Development, Sep. 2021. [Online]. Available: https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/09/behavioural-insights-for-better-tax-administration_e2c6901a/582c283e-en.pdf

[4] World Bank, "Behavioral Insights for Tax Compliance," World Bank, Feb. 2021. [Online]. Available: https://documents1.worldbank.org/curated/en/472181576511865338/pdf/Behavioral-Insights-for-Tax-Compliance.pdf

[5] D. Pomeranz, "No Taxation without Information: Deterrence and Self-Enforcement in the Value Added Tax," *Am. Econ. Rev.*, vol. 105, no. 8, pp. 2539–2569, 2015, doi: 10.1257/aer.20130393.

[6] J. Slemrod, "Tax Compliance and Enforcement," *J. Econ. Lit.*, vol. 57, no. 4, pp. 904–954, 2019, doi: 10.1257/jel.20181437.

[7] J. Fooken and T. Herrmann, "Improving VAT Compliance: Random Awards for Tax Compliance," European Commission, Directorate-General Taxation and Customs Union, 51, 2015. [Online]. Available: https://taxation-customs.ec.europa.eu/system/files/2016-09/taxation_paper_51.pdf

[8] J. Naritomi, "Consumers as Tax Auditors," International Institute of Public Finance, 2015. [Online]. Available: https://www.iipf.org/papers/Naritomi-Consumers_as_tax_auditors-151.pdf

[9] M. Nose, "Leveraging Digital Technologies in Boosting Tax Collection," International Monetary Fund, IMF Working Paper, 2025. [Online]. Available: https://www.imf.org/-/media/files/publications/wp/2025/english/wpiea2025089-print-pdf.pdf

[10] State Tax Committee of the Republic of Uzbekistan, "Soliq Mobile Application." [Online]. Available: https://mobile.soliq.uz/

[11] Government of the Republic of Uzbekistan, "Decision of the President of the Republic of Uzbekistan No. PQ-286 (PDF publication)." Oct. 2025. [Online]. Available: https://api-portal.gov.uz/uploads/48/2025/10/30/61549ed0-5c40-b65e-de52-605de42461be_media_.pdf

[12] Ministry of Digital Technologies of the Republic of Uzbekistan, "Prezident qarori: mamlakatda raqamli texnologiyalar joriy etilishini yanada jadallashtirish chora-tadbirlari to'g'risida (PQ-286)." Sep. 2025. [Online]. Available: https://www.digital.gov.uz/oz/news/view/86313

[13] UzDaily, "Uzbekistan's tax committee clarifies the process for earning 1% cashback." Jan. 2025. [Online]. Available: https://www.uzdaily.uz/en/uzbekistans-tax-committee-clarifies-the-process-for-earning-1-cashback/

[14] R. R. Moeller, *COSO Internal Control: Understanding and Implementing the New Framework*. Hoboken, NJ, USA: John Wiley & Sons, 2014.

[15] International Monetary Fund, "Global Financial Stability Report: Durable Financial Stability," *IMF*, 2011.