

MUHANDISLIK

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ijtimoiy-iqtisodiy, innovatsion texnik,
fan va ta'limga oid ilmiy-amaliy jurnal

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ИМЕНИ Г.В. ПЛЕХАНОВА
ТАШКЕНТСКИЙ ФИЛИАЛ



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THE HIDE AND SHADOW ECONOMY IN UZBEKISTAN



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Abstract. This article examines the current state and structural characteristics of the shadow economy in the Republic of Uzbekistan within the context of ongoing economic reforms and institutional transformation. The shadow economy is analyzed as a multifaceted phenomenon influenced by regulatory, fiscal, institutional, and socio-economic factors. Particular attention is given to the scale of informal economic activities and their implications for economic growth, fiscal sustainability, and social welfare. The study outlines and systematizes methodological approaches used to assess the size and dynamics of the shadow sector, including indirect macroeconomic methods, indicator-based models, and comparative analytical techniques applied in international practice. The advantages and limitations of these methods are discussed in relation to data availability and the specific features of Uzbekistan's economy. Based on the selected methodological framework, the article evaluates recent trends in the shadow economy and identifies key drivers contributing to its persistence. The findings highlight the role of tax policy, regulatory burden, labor market informality, and institutional quality in shaping the scale of the shadow economy. The study also assesses the impact of government measures aimed at reducing informality and improving economic transparency. The results of the research may be used to support evidence-based policymaking, improve statistical measurement of informal activities, and develop targeted strategies for the gradual legalization of economic activity in the Republic of Uzbekistan.

Keywords: taxes, shadow economy, public finances, fiscal mechanism.

Annotatsiya. Ushbu maqolada O'zbekiston Respublikasida olib borilayotgan iqtisodiy islohotlar va institutsional transformatsiya sharoitida yashirin iqtisodiyotning hozirgi holati hamda uning tarkibiy xususiyatlari tahlil qilinadi. Yashirin iqtisodiyot tartibga solish, fiskal, institutsional va ijtimoiy-iqtisodiy omillar ta'sirida shakllanuvchi ko'p qirrali hodisa sifatida ko'rib chiqiladi. Tadqiqotda norasmiy iqtisodiy faoliyat ko'lamiga, uning iqtisodiy o'sish, fiskal barqarorlik va aholi farovonligiga ta'siriga alohida e'tibor qaratiladi. Maqolada yashirin sektor hajmi va dinamikasini baholashda qo'llaniladigan metodologik yondashuvlar, jumladan, bilvosita makroiqtisodiy usullar, indikatorlarga asoslangan modellar hamda xalqaro amaliyotda qo'llaniladigan taqqoslama tahlil usullari tizimlashtiriladi. Ushbu usullarning afzallik va cheklovlari ma'lumotlar mavjudligi hamda O'zbekiston iqtisodiyotining o'ziga xos xususiyatlari nuqtayi nazaridan muhokama qilinadi. Tanlangan metodologik yondashuv asosida yashirin iqtisodiyotdagi so'nggi tendensiyalar baholanib, uning saqlanib qolishiga ta'sir etuvchi asosiy omillar aniqlanadi. Tadqiqot natijalari soliq siyosati, tartibga solish yuklamasi, mehnat bozoridagi norasmiylik va institutsional sifat yashirin iqtisodiyot ko'lamini belgilovchi muhim omillar ekanligini ko'rsatadi. Shuningdek, norasmiy iqtisodiyotni qisqartirish va iqtisodiy shaffoflikni oshirishga qaratilgan davlat chora-tadbirlarining ta'siri ham baholanadi. Olingan natijalardan dalillarga asoslangan iqtisodiy siyosatni ishlab chiqishda, norasmiy faoliyatni statistik jihatdan aniqroq o'lchashda hamda O'zbekiston Respublikasida iqtisodiy faoliyatni bosqichma-bosqich legallashtirishga qaratilgan maqsadli strategiyalarni shakllantirishda foydalanish mumkin.

Kalit so'zlar: soliqlar, yashirin iqtisodiyot, davlat moliyasi, fiskal mexanizm.

Аннотация. В данной статье анализируется текущее состояние и структурные особенности теневой экономики в Республике Узбекистан в условиях проводимых экономических реформ и институциональной трансформации. Теневая экономика рассматривается как многогранное явление, формирующееся под воздействием регуляторных, фискальных, институциональных и социально-экономических факторов. В исследовании особое внимание уделяется масштабам неформальной экономической деятельности и её влиянию на экономический рост, фискальную устойчивость и уровень благосостояния населения. В статье систематизируются методологические подходы, применяемые для оценки объёма и динамики теневого сектора, включая косвенные макроэкономические методы, модели на основе индикаторов, а также сравнительные аналитические методы, используемые в международной практике. Преимущества и ограничения данных методов рассматриваются с учётом доступности статистической информации и специфических особенностей экономики Узбекистана. На основе выбранного методологического подхода оцениваются современные тенденции развития теневой экономики и выявляются ключевые факторы, способствующие её сохранению. Результаты исследования свидетельствуют о том, что налоговая политика, регуляторная нагрузка, неформальность на рынке труда и институциональное качество являются ключевыми детерминантами масштабов теневой экономики. Кроме того, оценивается влияние государственных мер, направленных на сокращение неформального сектора и повышение экономической прозрачности. Полученные результаты могут быть использованы при разработке экономической политики, основанной на эмпирических данных, совершенствовании статистической оценки неформальной деятельности, а также формировании целевых стратегий по поэтапной легализации экономической деятельности в Республике Узбекистан.

Ключевые слова: налоги, теневая экономика, государственные финансы, фискальный механизм.

INTRODUCTION

The shadow economy in Uzbekistan has not been reflected in global rankings over the past five years. This does not indicate the complete absence of a shadow economy in the country but rather suggests that official authorities do not participate in international assessments of this phenomenon. Despite this, the issue of illegal trade remains relevant and continues to develop.

The overall conclusion is that Uzbekistan's active participation in global rankings over the past five years is the result of the state's adopted policies. Studies on the impact of the shadow economy on Uzbekistan's GDP from 2018 to 2021 have shown that its share is approximately 40-50%.

In September 2021, the Ministry of Economic Development and Poverty Reduction held a conference on "The Shadow Economy in Uzbekistan: Assessment, Causes, and Ways of Reduction." During the event, the problems related to this phenomenon were openly discussed, highlighting its relevance and attracting the attention of many international experts. The President's statement before the High Council on this issue emphasized the importance of addressing and resolving this matter.

LITERATURE REVIEW

The integration of young people into the formal financial system by ensuring their participation contributes to a positive impact on the economy. This is due to the fact that official policymakers can effectively extend monetary policy measures. Indeed, an increased level of financial inclusion enables more efficient implementation of interest rate policies, as noted by Mehrotra, A., and Yetman, J. [1]. Research has shown that central banks can manage monetary policy more reliably and effectively when they have a broader base of agents within the formal financial system. Inclusion can also lead to more efficient allocation of investment and portfolio decisions by financial agents. Therefore, greater financial inclusion can significantly impact inflation by improving the central bank's price stabilization mechanism.

Moreover, financial inclusivity can enhance the stability of the financial system, as households and entrepreneurs can better adapt to changes in interest rates and credit conditions. Khan H.R. and Tombini, A. emphasize that higher financial inclusion rates can serve as a more sustainable and fundamental policy [2, 3]. Increased financial inclusion begins with directing cash flows from the public into bank deposits. This significantly increases the role of interest rates in operational control, as a larger portion of economic activity becomes subject to interest rate oversight. When informal sectors are large, implementing and monitoring monetary policy becomes more challenging because small businesses and entrepreneurs make independent financial decisions, unaffected by the central bank's policies. Additionally, financial inclusion can transition individuals from the informal financial sector into the banking economy, enabling them to track their financial transactions more effectively.

Mehrotra, A., and Yetman, J. highlight that as more agents are integrated into the formal financial system, output volatility decreases relative to inflation, as financial agents can better adjust their investment and portfolio decisions [1]. Thus, enhancing financial inclusion can have a significant impact on inflation by strengthening the central bank's price stabilization mechanism.



Furthermore, inflation in some countries may be determined by a benchmark core price index, though this index is sometimes selected inaccurately. Mbutor, M.O., and Uba, I.A. examined the impact of monetary policy on financial inclusion stability in Nigeria from 1980 to 2012 [4]. Loayza N. V. and Zellner M. findings confirm the critical role of high levels of financial inclusion in strengthening and improving financial stability [5, 6]. However, an increase in the number of bank branches does not necessarily yield positive results, as banks often lack full independence in deposit-related decision-making. This suggests that the primary goal of opening new bank branches may not be to improve profitability but rather to expand financial operation opportunities.

METHODOLOGY

The study employs an analytical and comparative approach to examine the shadow economy in the Republic of Uzbekistan. Secondary data from national statistical authorities, international organizations, and official policy reports are used. The size and dynamics of the shadow economy are assessed using indirect macroeconomic methods, indicator-based models, and comparative analysis. The selected methods allow for identifying key drivers of informality and evaluating recent trends in the shadow sector under ongoing economic reforms.

ANALYSIS AND RESULTS

If a request were made to the International Monetary Fund to assess the level of economic development in Uzbekistan based on the criteria of the World Monetary Organization, similar conditions could be found in countries such as Ukraine and some World Bank members, including Gambia, Belize, Congo, Honduras, and others. As highlighted above, there are several methods for determining the level of economic development, and we apply them to assess Uzbekistan's economic development.

In this study, the Gutmann method, based on the relationship between cash and deposits, was used. Using this method, from 1997 to 2018, the volume of cash in deposits was adjusted to determine the volume of the developing economy. For each year, the volume of the developing economy was calculated using a modified cash flow adjustment method based on a standard formula. The base year was 1997, in which the level of economic development was set at zero. The model starts with a zero volume of the developing economy in 1997 and forecasts its growth. The ratio of cash to deposits was adjusted using the modified cash and deposit method from 1997 to 2018.

It is worth noting that changes in the volume of cash and deposits are not a condition for changes in demand, as they already account for the effects of inflation and population changes. The coefficient of change in the cash-to-deposit ratio was calculated using a standard formula applied to adjusted cash before deposit demand was met. This calculation showed that from 2009 to 2018, 39.7 percent of the developing economy was created in Uzbekistan.

Thus, overall, it can be said that the volume of the developing economy in Uzbekistan increased from 33.7 percent of the IMF level in 2009 to 48 percent in 2018.

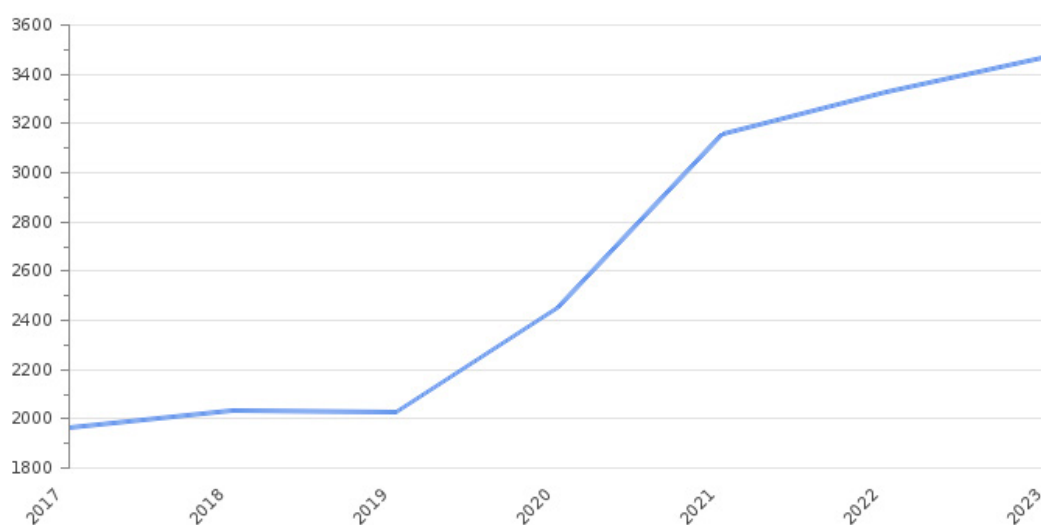


Figure 1. Based on data reflecting the relationship between cash and deposits, the exact amount of the developing economy has been determined.

The information presented in the figure above shows that Uzbekistan's economy has demonstrated a growth trend over the past few years. According to data from the Ministry of Economic Development and Poverty Reduction, the volume of the developing economy accounted for 50% of the Gross Domestic Product (GDP) in 2022.

Research results indicate that since 2017, there has been a significant increase in the volume of the developing economy, associated with the growth of cash and deposits. The supply of cash in the economy increased from 4.8% to 5.9% of GDP, while the share of cash in the total money supply rose from 24.9% in 2017 to 28.2% in 2018. It should be noted that in 2020, the volume of the developing economy declined from 56.9% in 2018 to 48%. This also affected the dynamics of the money supply and its distribution. Thus, research results confirm that Uzbekistan has experienced a steady increase in cash transactions in the economy since 2017.

It is also important to highlight that changes in the ratio of cash to deposits, based on simple relationships, are key indicators of the effectiveness of monetary policy. Therefore, the study shows that the average volume of the developing economy in Uzbekistan is 40% of GDP.

Another factor influencing the volume of the developing economy is the additional amount of added value. The benefits provided by this additional amount of added value depend on the capabilities of enterprises operating in this sector. Furthermore, the refinancing rate in Uzbekistan is significantly lower than in neighboring countries. For example, in Kyrgyzstan and Tajikistan, it is 12%, while in Uzbekistan, this indicator is much lower. This is because Uzbek manufacturers have greater opportunities in this regard. Hence, we analyze the relationship between these two indicators.

From the graph presented above, it is evident that the volume of state budget revenues from Value Added Tax (VAT) has shown a growing trend over the five-year period. The reduction in the VAT rate from 20% to 15% had a significant impact on tax revenues.

In this section of our monograph, we will conduct an empirical analysis to determine whether an increase in VAT revenue leads to economic growth or a decline. We will attempt to analyze this issue without conducting a regression analysis. To identify the relationship between these indicators, we will examine the correlation coefficient.

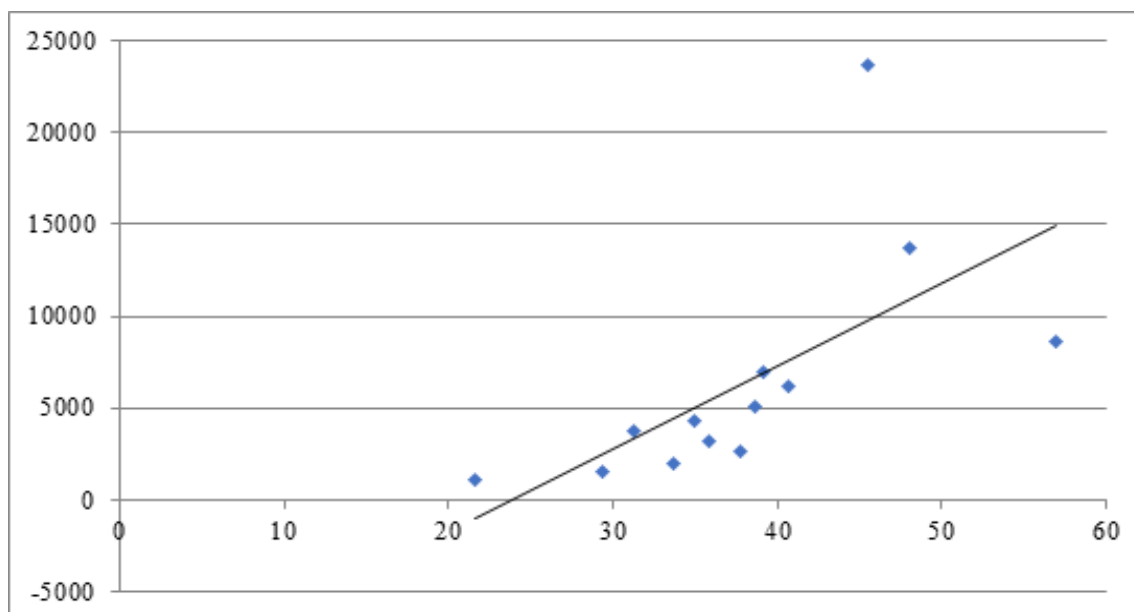


Figure 2. The relationship between Value Added Tax (VAT) collection and the level of the shadow economy.

These indicators point to a strong positive correlation between them, meaning that an increase in Value Added Tax (VAT) collection is accompanied by the growth of the shadow economy. We can assume that there is a positive relationship between the VAT rate and the size of the shadow economy, indicating that higher tax collection is associated with an expansion of the informal sector.

At the same time, it is essential to consider that some transactions in the shadow sector may remain unrecorded due to limitations in the VAT accounting and collection mechanisms. Additionally, this policy may encourage formal entrepreneurial activity in sectors with a wide variety of economic activities, where increasing VAT through restrictions could stimulate official business initiatives.



This policy may be particularly effective when it promotes the growth of the tax-paying capacity of market participants, as entrepreneurs increase their demand through higher consumption of goods and services. However, if the demand for goods and services does not grow or grows only slightly as a result of such an increase in VAT, the policy will not be effective.

In this context, tax authorities should assess how changes in VAT rates will affect price fluctuations based on the level of demand for goods and services.

CONCLUSION AND RECOMMENDATIONS

In the Republic of Uzbekistan, there is a positive correlation between Value Added Tax (VAT) revenues and the size of the shadow economy. Information asymmetry also plays a significant role, as businesses may underreport their income by providing less accurate or even misleading financial statements, ultimately reducing their tax liabilities. This, in turn, can hinder companies from accessing bank loans, thereby limiting their growth potential.

In the shadow economy, entrepreneurs actively conceal their income and structure their financial reports in a way that allows them to avoid paying taxes and social contributions. The transaction transparency index also affects the level of the shadow economy, as an increase in this index is associated with a rise in informal economic activities.

Tax revenues influence the size of the shadow economy, with higher tax collections often correlating with its expansion. However, excessively high taxes do not always encourage businesses to operate in the informal sector—if post-tax income remains insufficiently attractive, some enterprises may opt to move into the unofficial economy. Therefore, policymakers must carefully balance tax policies to promote economic growth while minimizing incentives for businesses to shift into the shadow sector.

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