



ROLE OF ARTIFICIAL INTELLIGENCE IN THE FORMATION OF ECONOMIC AND TAX POLICY

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ABSTRACT

This article examines the potential impact of artificial intelligence on the formation of economic and tax policy in the context of ensuring sustainable economic growth and preserving the fiscal function of taxation. Artificial intelligence is considered as a modern tool of automation and analytical support that enables the processing of large volumes of data, the identification of patterns, and the improvement of the quality of managerial decision-making. The article notes that, in the future, artificial intelligence may be used to support decision-making processes and provide analytical assistance in the development of legislative initiatives in the fields of economics and taxation. The paper also discusses the possible implications of the implementation of such technologies for the economy, public institutions, and the tax sector.

KEYWORDS: Artificial Intelligence, Economic Growth, Fiscal Policy, Liberalization, Potential, Automation, Social Development.

INTRODUCTION

Economic policy represents a set of actions and decisions undertaken by the government to regulate economic processes at the macroeconomic level with the aim of achieving sustainable and balanced growth. These actions are directed toward maintaining macroeconomic stability, ensuring the efficient use of resources, and creating conditions for improving public welfare. The most important aspects of economic policy include the coordination of various economic objectives and strategies within the institutional and legal framework of the state.

The objectives of economic policy are determined by the current state of the economy, its challenges and problems, as well as long-term development prospects. It is important to note that the effectiveness of economic policy depends not only on the proper selection of instruments but also on the ability of government institutions to adapt to changing external and internal conditions.

The key elements of economic policy include:

- Monetary policy, which regulates the money supply, interest rates, and the level of liquidity in the economy. This instrument is used to control inflation, maintain the stability of the national currency, and stimulate or restrain economic activity;
- Fiscal policy, aimed at managing government expenditures and revenues through the taxation system. It plays a key role in ensuring fiscal stability, supporting the social sector, and stimulating or restraining economic growth;
- Investment policy, which is focused on attracting domestic and foreign investment to finance economic projects, innovative developments, and infrastructure initiatives. This element is particularly important for developing economies, as it contributes to production modernization and enhanced competitiveness;
- Industrial policy, aimed at stimulating and supporting key sectors of the economy through subsidies, tax incentives, infrastructure development, and technological advancement. It contributes to strengthening the country's

industrial potential, creating new jobs, and increasing export capacity;

– Trade and foreign economic policy, which creates conditions for the development of international trade, improvement of external economic relations, and protection of national interests in international markets. This policy plays a significant role in the globalization of the economy by opening opportunities for the country in the international arena.

LITERATURE REVIEW

In recent years, the application of artificial intelligence (AI) in economic and tax policy has become one of the most relevant areas of scientific research. This is due to the fact that artificial intelligence is increasingly regarded not only as a technological tool for automation but also as a mechanism for supporting decision-making, improving forecasting quality, analyzing large datasets, and enhancing government regulation.

In the study by A. Wirjo, S. Calizo Jr., G. N. Vasquez, and E. A. San Andres, artificial intelligence is considered a promising instrument of economic policy. The authors note that AI technologies can be utilized at various stages of the policy cycle, including problem identification, data analysis, the development of policy alternatives, forecasting potential outcomes, and evaluating the effectiveness of implemented measures. Of particular importance is the ability of artificial intelligence to process large volumes of information and identify patterns that may not be evident through traditional analytical methods [1].

The Organisation for Economic Co-operation and Development (OECD), in its Principles on Trustworthy Artificial Intelligence, emphasizes that the implementation of AI in public administration should be based on respect for human rights, democratic values, transparency, security, accountability, and human oversight. This is particularly important for economic and tax policy, as decisions in these areas directly affect the interests of citizens, businesses, and the state. Therefore, artificial intelligence should be viewed not as



an independent substitute for governance but as a tool that enhances the validity and accuracy of decision-making [2].

In the studies of the International Monetary Fund (IMF), artificial intelligence is considered a factor capable of significantly transforming productivity, the labor market, income distribution, and the fiscal policy system. It is noted that AI can create new opportunities for economic growth while simultaneously increasing the risks of inequality and requiring the adaptation of tax policy, social protection systems, and regulatory mechanisms. Therefore, the integration of AI into economic governance should combine innovative development with measures aimed at socio-economic protection [3].

The scientific literature pays particular attention to the relationship between artificial intelligence and automation processes. While traditional automation was primarily focused on performing repetitive technical operations, modern artificial intelligence systems are capable of solving more complex cognitive tasks. They can analyze economic indicators, forecast changes in the macroeconomic environment, model various development scenarios, and generate recommendations for public authorities. This makes artificial intelligence an important tool for improving the effectiveness of economic policy.

The works of M.S. Usmanova examine issues of budget planning and its role in the socio-economic development of a country. This approach is directly related to the topic of artificial intelligence, as medium-term budget planning requires accurate forecasting of revenues and expenditures, assessment of macroeconomic risks, and analysis of large volumes of statistical information. The use of artificial intelligence in this field can contribute to improving the accuracy of budget forecasts, ensuring a more rational allocation of financial resources, and strengthening fiscal sustainability [4].

In his research, G.U. Ruziev examines issues related to improving the personal income taxation system in the Republic of Uzbekistan, including the problem of introducing a tax-free minimum income threshold. These studies are important for understanding the social orientation of tax policy. The application of artificial intelligence in this area can enable a more accurate assessment of the tax burden on different population groups, analysis of the impact of tax incentives, and the development of more targeted tax regulation mechanisms [10; 11].

Analytical reports of the World Bank on Uzbekistan indicate that the country's sustainable economic growth requires further improvement of institutions, increased effectiveness of public administration, development of the private sector, and deeper integration into the global economy. Under such conditions, the application of artificial intelligence can become one of the factors contributing to the modernization of economic policy, as it allows for faster data processing, improved forecasting quality, and enhanced coordination of decision-making processes [7].

At the same time, the literature emphasizes that the application of artificial intelligence in economic and tax policy is associated not only with advantages but also with certain risks. These include issues related to personal data protection, algorithmic bias, transparency of decisions, cybersecurity, and the preservation of human oversight. Therefore, the implementation of artificial intelligence should be

accompanied by the development of an appropriate regulatory framework, ethical standards, and institutional control mechanisms.

RESEARCH METHODOLOGY

In the preparation of this article, regulatory and legal documents, scientific literature, analytical materials of international organizations, and official statistical sources were utilized. Comparative and critical analyses of scientific and theoretical approaches, the study and generalization of international experience, systems analysis, scientific abstraction, induction, and deduction methods were applied.

ANALYSIS AND MAIN RESULTS

In the context of globalization and the integration of the world economy, the effectiveness of economic policy depends on a country's ability to adapt its strategies to changes in the global economy, as well as to technological and social trends. An important aspect is the use of innovative management methods, including artificial intelligence, to improve the accuracy of forecasting economic processes and to optimize tax and budgetary policy.

Thus, economic policy is a multifaceted and dynamic process that requires consideration of a wide range of factors, including political, social, and technological changes. The effectiveness of its implementation determines the long-term sustainability of the economy, competitiveness in the international arena, and improvements in the standard of living of the population.

Since 2017, Uzbekistan has embarked on the renewal of its economic strategy. Within the framework of the ongoing reforms, the country initiated transformations aimed at modernizing the economy, expanding market mechanisms, and developing international economic cooperation. In particular, the foreign exchange market was liberalized, opportunities for foreign economic activity were expanded, and improvements to the tax system and investment policy were launched. These changes contributed to the further development of the national economy and its integration into international economic processes [7].

The macroeconomic dimension of tax policy encompasses issues related to the overall volume of tax revenues, which directly affects the country's economic activity. Excessive taxation may exert a restraining effect on economic growth, thereby requiring a careful approach to fiscal policy. At the same time, the microeconomic dimension of tax policy focuses on the fair and efficient distribution of the tax burden among different categories of taxpayers, thereby contributing to greater social equity and improved overall economic efficiency.

Uzbekistan's tax policy is the result of a comprehensive approach that takes into account changes in the socio-economic environment and the demands of the time. The principal legal act regulating tax relations in the country is the Tax Code of the Republic of Uzbekistan, which establishes the general principles of taxation, the types of taxes, and the procedures for fulfilling tax obligations [8].

Key taxation parameters are further specified in relevant regulatory and legal acts, which provides the tax system with the necessary flexibility.



A distinctive feature of Uzbekistan's tax legislation is the requirement to coordinate tax rates and changes in the tax system with prevailing political and economic conditions. This approach enables tax policy to be rapidly adapted to changing external and domestic economic factors. Such regulation of the tax system through presidential decrees and subordinate legislation constitutes an important element of fiscal policy, as it allows the government to respond promptly to economic challenges and ensure the flexibility of tax legislation.

Thus, Uzbekistan's tax policy is aimed at stimulating economic growth, improving the investment climate, and optimizing taxation in order to enhance social equity and economic efficiency. In the context of rapidly changing economic conditions both domestically and globally, such flexibility of the tax system becomes an important instrument for maintaining economic stability, as well as for creating favorable conditions for business development and attracting foreign investment.

Artificial intelligence provides a wide range of opportunities for optimizing the formulation and implementation of public policy, contributing to increased efficiency, improved quality of public services, and reduced time required for administrative tasks. Through the use of artificial intelligence, the quality of decision-making in public administration can be significantly enhanced, while interaction between government institutions and stakeholders can also be improved. In particular, artificial intelligence can become an important tool for developing more accurate and evidence-based policies by enabling in-depth analysis of large volumes of data and modeling various scenarios based on the information obtained.

One of the key advantages of artificial intelligence is its ability to process large volumes of data, identify hidden patterns, and generate analytical conclusions based on predefined algorithms. Such an approach makes it possible to increase the accuracy and validity of decisions, thereby improving the quality of governance. Given the availability of up-to-date data, relevant legislation, and clearly defined constraints, artificial intelligence systems can be used as an analytical support tool for developing more coherent and evidence-based decisions.

The decision-making process using artificial intelligence within the policy cycle involves applying this tool to analyze and identify key issues affecting the population. Artificial intelligence is capable of processing and analyzing large datasets, including statistical information and crowdsourcing results, enabling the identification of major trends and patterns. Based on these data, AI systems can provide recommendations and forecasts that serve as important reference points for policymakers in determining priority areas of public policy.

An example of the successful application of artificial intelligence in public policy is the experience of the Australian Government, particularly the Department of Health and Human Services of the State of Victoria. Within this project, text analytics technologies were used to process anonymized historical health data, making it possible to identify unusual patterns and assess risks to public health. This contributed to improved healthcare management and enhanced the responsiveness of authorities to potential threats.

In a similar context, artificial intelligence can assist in the analytical support of drafting regulatory and legal acts by providing data for more informed decision-making and taking into account the factors and risks that may influence potential outcomes. Artificial intelligence systems can serve as intelligent advisors to government institutions, offering alternative courses of action based on comprehensive analysis, while preserving ultimate responsibility with human decision-makers and public institutions.

Thus, artificial intelligence not only serves as a means of improving the accuracy and timeliness of political decision-making but also provides government bodies with additional opportunities for a more balanced, scientifically grounded, and comprehensive approach to public policy formulation, which ultimately contributes to the sustainable development of society.

One way to analyze economic progress over the past century and a half is to examine it in the context of automation, which has significantly transformed production and economic systems. Beginning with the Industrial Revolution, when steam power and later electricity were used to mechanize many production processes, a continuous development of technological solutions can be observed. This trend continued with the introduction of relays, transistors, and semiconductors, leading to the creation of increasingly sophisticated control systems. Artificial intelligence represents a continuation of this evolutionary path rather than an isolated technological breakthrough. It may be regarded as the next phase of automation, enabling the transition from basic mechanisms to more complex and highly autonomous systems [1].

A significant aspect of the use of artificial intelligence is its ability not only to automate routine and mechanical tasks but also to support the performance of complex cognitive processes that previously required a high level of qualification and expert knowledge. Unlike traditional automation, which is primarily associated with repetitive operations, artificial intelligence can be applied to the analysis of large datasets, forecasting, and solving problems that require comprehensive evaluation. This creates new opportunities for automation in areas where traditional mechanisms could not be effectively applied [1].

The economy of Uzbekistan is among the dynamically developing economies of Central Asia. Despite the consequences of the COVID-19 pandemic, the country maintained positive economic momentum: real GDP growth amounted to 1.9% in 2020, while economic activity recovered to 7.4% in 2021. According to estimates by the World Bank, Uzbekistan's real GDP growth reached 7.7% in 2025, confirming the resilience of the country's economic performance [5; 7].

With a population of more than 38 million people, Uzbekistan represents a significant domestic market that serves both for the consumption of a wide range of goods and services and as a gateway to the markets of other Central Asian countries, the CIS, and neighboring states. This makes the country's economy strategically important at both regional and international levels and creates opportunities for expanding trade and investment ties.

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Uzbekistan's economic resilience is supported by strong fiscal and external buffers. Public debt remains at a relatively low level, accounting for less than 40% of GDP, which is a positive indicator of financial stability. In 2025, the country's international reserves amounted to USD 66.3 billion, reflecting a high level of liquidity and resilience against external shocks.

Inflation in Uzbekistan has gradually slowed in recent years. According to the Central Bank of the Republic of Uzbekistan, annual inflation at the end of December stood at 11.1% in 2020, 10.0% in 2021, 12.3% in 2022, 8.8% in 2023, 9.8% in 2024, and 7.3% in 2025. This indicates the continuation of the disinflationary trend and highlights the growing importance of a stable monetary policy framework [6].

Thus, Uzbekistan demonstrates the ability to respond effectively to economic challenges and maintain sustainable growth under conditions of global change. Strategic management of macroeconomic indicators, combined with a focus on economic diversification and modernization, enables the country to sustain high rates of economic development and strengthen its position in the international arena.

Table 1

Selected Macroeconomic Indicators of Uzbekistan for 2020–2025 [5; 6; 7]

Indicators	2020	2021	2022	2023	2024	2025
Real GDP Growth, %	1,9	7,4	5,7	6,0	6,7	7,7
Inflation, %	11,1	10,0	12,3	8,8	9,8	7,3

Over the past several years, Uzbekistan's economy has demonstrated growth across a number of key economic indicators. Particularly notable is the trend observed in 2024–2025: according to World Bank estimates, real GDP growth increased from 6.7% in 2024 to 7.7% in 2025. This indicates the preservation of high economic activity and the formation of a more sustainable development trajectory [7].

One of the important directions for further development is improving the quality of public administration, digitalizing analytical processes, and enhancing forecasting mechanisms. Under these conditions, artificial intelligence can be used as a tool for processing big data, modeling alternative scenarios, and assessing the potential consequences of economic decisions.

An important indicator of stabilization is the decline in inflation: according to Central Bank data, annual inflation at the end of the period decreased from 12.3% in 2022 to 7.3% in December 2025. This creates more favorable conditions for investment activity, increases the predictability of the business environment, and strengthens macroeconomic stability [6].

Taking into account current achievements and prospects for economic growth, the integration of artificial intelligence into the country's economy may accelerate this process. If artificial intelligence is trained on historical data and current economic indicators, its ability to analyze and process large volumes of information can contribute to improving the quality of forecasting and governance. Artificial intelligence is capable not only of accelerating automation processes but also of introducing innovative management and forecasting methods, which may enhance the efficiency of various sectors of the economy.

The introduction of artificial intelligence into the economy resembles the early stages of the spread of computer technologies, which significantly transformed production, management, and other areas of human activity. Similarly, the use of artificial intelligence can automate analytical processes, optimize resource allocation, and forecast economic trends. This, in turn, may enhance the country's competitiveness on the international stage and open new prospects for the innovative development of Uzbekistan's economy.

Artificial intelligence algorithms are capable of processing and analyzing large datasets, enabling them to identify complex interrelationships and hidden patterns. By utilizing these analytical capabilities, artificial intelligence can not only forecast economic trends and changes but also provide precise recommendations for optimizing various processes, including the tax system.

In particular, artificial intelligence can be used to identify tax risks, analyze tax burdens, and prepare alternative solutions to tax-related issues within the framework of existing legislation. This allows for improved accuracy and efficiency in tax administration, reduces the likelihood of errors, and enhances interaction between government authorities and taxpayers.

In addition, artificial intelligence can be applied in the development of new mechanisms for the automated collection and analysis of taxation data, which would help minimize the risks of tax violations and improve the quality of tax revenue forecasting. In the long term, this may also contribute to strengthening trust between the state and the business sector and increasing the effectiveness of tax policy.

Thus, the integration of artificial intelligence into the tax system has the potential not only to improve the quality of tax administration but also to create more efficient and adaptive mechanisms for macroeconomic governance.

CONCLUSIONS AND RECOMMENDATIONS

This article examines the potential implications of introducing artificial intelligence into the process of formulating economic and tax policy in order to ensure sustainable economic growth and the effective fulfillment of the fiscal function of taxes. It analyzes how artificial intelligence can contribute to the development of more evidence-based decisions in the field of economic and tax policy, and also provides examples of the limited use of such technologies in certain countries. Special attention is given to the evolution of Uzbekistan's economic policy and the measures aimed at creating favorable conditions for sustainable economic growth.

Analyzing Uzbekistan's economic growth in 2020–2025, it can be noted that the integration of artificial



intelligence technologies is capable of supporting the country's economic development, ensuring more efficient resource management, and optimizing tax processes. The use of artificial intelligence in economic governance requires a cautious approach; however, new technologies should not be perceived solely as a source of risks. When properly applied, innovations can provide Uzbekistan with additional opportunities to enhance the efficiency of public administration and strengthen its competitiveness.

There is a well-founded need for the cautious introduction of artificial intelligence into the strategic management of the economy, which is associated with potential risks to confidentiality, data security, and social equity. Nevertheless, the proper use of artificial intelligence can improve forecasting accuracy and optimize real-time decision-making. It is important to understand that artificial intelligence is not a substitute for human oversight but rather a tool that can be used to improve the quality and speed of analytical processes. This requires not only technological innovation but also the creation of regulatory mechanisms that ensure fairness, transparency, and the ethical nature of decisions made with the help of artificial intelligence.

Artificial intelligence-based systems can have a significant impact on taxation by automating the processes of collecting and analyzing tax information, thereby reducing the number of errors and lowering the risks of tax evasion. It is important to emphasize that the use of artificial intelligence in economic policy should be associated with flexible and adaptive governance structures that allow for timely responses to changing economic conditions and the adjustment of policy direction based on new data.

The application of artificial intelligence in economic management and tax policy represents a powerful tool for improving efficiency and achieving sustainable growth. However, its use requires caution in order to minimize risks related to data confidentiality and possible social consequences. In the long term, artificial intelligence may become not only a catalyst for economic growth but also an important factor in creating more equitable, inclusive, and adaptive economic systems.

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