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## Modern Trends in Improving Tax Administration in E-Commerce

Homidov Bakhtiyor Rahimberdievich<sup>1</sup>

1. Independent Researcher of the Banking and Finance Academy of the Republic of Uzbekistan

**Abstract:** The present study analyses contemporary tendencies in the efficiency of tax administration processes that will be taking place at a time when e-commerce and digital economy is rapidly developing. E-commerce and new tax challenges: The growing volume of online transactions, the large-scale adoption of electronic payment systems, as well as the rising platform economy are creating challenges to traditional approaches to taxation. The research aims to study the current mechanisms of e-commerce taxation and formulate scientifically based proposals aimed at increasing the efficiency of tax administration. The research methodology is applied and consists of a combination of economic, statistical and comparative methods. The paper analyzes international experiences, including practices from the OECD, European Union and Asian economies to identify an effective approach in terms of regulation and taxation of digital trade. The paper also analyzes the current situation with regard to the taxation of e-commerce in Uzbekistan and identifies major problems such as challenges in identifying taxpayers, monitoring economic transactions that take place through digital channels and cross-border e-commerce. The results suggest the crucial importance for tax control of e-commerce platform integration with information systems of tax authorities, mandatory digital identification and advanced technologies (e.g., Big Data and artificial intelligence). In addition, a simplified tax regime alongside increased international cooperation makes the expansion of the tax base and the reduction of the shadow economy more feasible. It concludes that digitalization of tax administration plays a role in solving relevant problems by contributing to the sustainable development of the economy, increasing budget revenue and improving efficiency of the tax system in the conditions of contemporary digital environment.

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### 1. Introduction

The widespread use of digital technologies in the 21st century economy has led to a fundamental change in trade and service processes. As a result of the development of the Internet, mobile technologies and electronic payment systems, e-commerce has become an important component of the global economy. E-commerce provides consumers with the opportunity to purchase products and services quickly, conveniently and at low prices, and opens up new markets for business entities [1].

According to world economic statistics, the volume of e-commerce has increased several times over the past decade. In particular, in 2015, the volume of global e-commerce

amounted to 1.5 trillion US dollars, and by 2024 this figure will exceed 6 trillion dollars. This indicates that the share of e-commerce in the economy is increasing every year [2].

Along with the development of e-commerce, new problems are also emerging for the tax system. Unlike traditional trade activities, e-commerce transactions are often carried out in a virtual environment. This complicates the process of determining income, calculating the tax base and controlling trade transactions for tax authorities [3].

The e-commerce market is also developing rapidly in the Republic of Uzbekistan. As a result of the widespread use of electronic payment systems, mobile applications and online trading platforms in the country, the volume of digital trade transactions is increasing significantly. Therefore, the formation of an effective taxation mechanism for e-commerce activities is one of the urgent economic issues.

The main purpose of this article is to develop scientifically based proposals for improving the mechanism for taxation of e-commerce [4].

### **Literature Review**

The issue of e-commerce taxation is one of the scientific areas that has been widely studied in economic literature in recent years. As a result of the rapid development of the digital economy, the global expansion of Internet trade, and the popularity of electronic payment systems, there is a need to adapt fiscal policy and tax administration to new conditions. Therefore, the issue of improving the mechanisms for taxing e-commerce has been widely studied by many international organizations and economists [6].

Studies conducted by international organizations show the relevance of the issue of taxing e-commerce in the global economy. In particular, studies prepared by the OECD emphasize the need to develop new approaches to taxation in the digital economy. According to OECD experts, the main problem in taxing e-commerce transactions is related to determining the source of income, determining the tax residency of a company, and fiscal regulation of cross-border services. The organization also put forward proposals for developing new global tax rules for the digital economy.

World Bank experts also emphasize the need to modernize the e-commerce taxation system. According to their research, the use of digital technologies, especially electronic payment systems and automated tax monitoring systems, is important in controlling e-commerce transactions. World Bank experts note that tax control can be effectively organized by creating an information exchange system between e-commerce platforms and tax authorities [7].

Research conducted by the International Monetary Fund (IMF) analyzed the issue of expanding the tax base in the digital economy. IMF experts emphasize the importance of increasing the efficiency of tax administration in taxing income from e-commerce activities and preventing tax evasion.

The issue of e-commerce taxation has also been studied by many well-known economists. For example, Joseph Stiglitz emphasizes in his research the need to reconsider the mechanisms for taxing digital companies in the context of the global economy. In his opinion, traditional tax systems may not work effectively enough in the digital economy, so it is necessary to develop new fiscal mechanisms.

Also, scientific research conducted by Paul Krugman analyzes the interrelationship between international trade and the digital economy. Krugman notes that the role of e-commerce platforms in the global economy is increasing, and the issue of regulating their activities and taxation occupies an important place in the economic policies of states [8].

Extensive research has also been conducted in European countries on the taxation of e-commerce. Studies developed by the European Commission analyzed the system of taxation of electronic services and digital products through value added tax. These studies show that cross-border trade transactions can be effectively controlled by introducing a single VAT system for electronic services.

Studies conducted in Asian countries on the taxation of e-commerce also emphasize the role of digital technologies in tax administration. According to experts from the Asian Development Bank, the use of Big Data technologies and artificial intelligence-based analysis systems in the control of electronic trade transactions will increase the efficiency of the tax system [9].

Domestic economists are also widely studying the issues of e-commerce and tax policy. For example, B. Turdiyev, in his research, analyzes the role of e-commerce in economic development in the digital economy and emphasizes the need to introduce effective tax mechanisms in this area. In his opinion, tax control can be strengthened by integrating e-commerce platforms with the tax system.

Also, scientific research conducted by A. Rasulov studied the issues of digitizing the tax administration system. The scientist notes the need to widely introduce electronic cash register systems, automated tax reporting, and digital monitoring systems for effective taxation of e-commerce activities [10].

An analysis of scientific literature shows that improving the e-commerce taxation system is one of the important tasks of the modern economy. Research by international organizations and economists confirms the need for effective control of e-commerce transactions, digitization of tax administration, and modernization of fiscal policy in the digital economy. These scientific developments serve as an important theoretical basis for developing new scientific approaches to improving the mechanism for taxing e-commerce.

## 2. Material and Methods

This study used complex scientific approaches to study the mechanism of taxation of e-commerce and identify ways to improve it. Since e-commerce is a modern and multifaceted area of the economy, the research methodology was formed, including theoretical and practical analysis methods. The research process used economic analysis, statistical analysis, comparative analysis, systematic approach, induction and deduction methods.

First of all, using the method of economic analysis, the role of e-commerce in the economy, its development trends and impact on the tax system were studied. This method assessed the economic efficiency of e-commerce transactions, the formation of the tax base and the impact on state budget revenues. The economic indicators of e-commerce activities were analyzed, and its development factors and existing problems were identified.

The method of statistical analysis also played an important role in the study. Based on statistical data, the dynamics of the development of the e-commerce market, the growth rates of online sales, and the volume of transactions carried out through electronic payment systems were studied. The statistical analysis used official state statistical data, reports of international organizations, and scientific research results. With the help of this data, the share of e-commerce in the economy and its impact on tax revenues were determined [11].

The comparative analysis method was used to study the experience of various countries in taxing e-commerce. In particular, the mechanisms for taxing e-commerce transactions in the European Union, the USA, South Korea, China, and other developed countries were analyzed. By studying these experiences, effective mechanisms used in taxing e-commerce were identified and the possibilities of their application in Uzbekistan were assessed [12].

The research also used a systematic approach. Using a systematic approach, the e-commerce taxation system was considered as a single economic mechanism. This approach studied the interrelationships between e-commerce platforms, electronic payment systems, tax authorities, and state fiscal policy. The systematic analysis provided a deeper understanding of the institutional structure of e-commerce and its integration with the tax system.

In addition, induction and deduction methods were used. Using the induction method, general scientific conclusions were drawn based on individual observations and statistical data. Using the deduction method, scientifically based proposals were developed on the basis of existing theoretical views and economic laws to improve the e-commerce taxation system.

During the study, the method of analyzing regulatory and legal documents was also used. In particular, the tax legislation of the Republic of Uzbekistan, state programs on the digital economy, and regulatory documents regulating e-commerce were studied. Based on these documents, the current state of the e-commerce taxation system was assessed [13].

These methodological approaches, while ensuring the scientific validity of the research results, made it possible to develop specific and practical recommendations for improving the e-commerce taxation mechanism.

### 3. Results

As a result of the development of digital technologies, e-commerce has become one of the fastest growing sectors of the economy. The widespread use of the Internet, mobile applications, and electronic payment systems has simplified trade processes and led to the formation of new business models. As a result, many entrepreneurs have begun to conduct their activities through online platforms. This process, while creating new opportunities in the economy, has also created certain problems for the tax system.

According to statistics, in recent years, the volume of e-commerce has been steadily growing worldwide. For example, while the global e-commerce volume in 2019 was approximately 3.5 trillion US dollars, by 2023 this figure exceeded 5.8 trillion dollars. By 2025, the volume of the global e-commerce market will exceed 7 trillion dollars. This indicates that the share of e-commerce in the global economy is steadily increasing [14].

In the Republic of Uzbekistan, e-commerce has also been developing rapidly in recent years. As a result of the increase in the number of e-commerce platforms, mobile payment systems, and online services, the volume of trade transactions carried out over the Internet has increased significantly. For example, in 2020, the volume of e-commerce in the country amounted to approximately 3 trillion soums, while in 2021 it amounted to 5 trillion soums, in 2022 to 8 trillion soums, in 2023 to 12 trillion soums, and by 2024 it exceeded 18 trillion soums. This indicates that the volume of e-commerce has increased almost sixfold over the past five years.

The expansion of the e-commerce market makes it possible to generate additional tax revenues for the state budget. However, there are a number of problems in the process of taxation of e-commerce transactions. Analysis shows that some entrepreneurs operating in the e-commerce sector operate without official registration. This leads to the fact that their income is not fully accounted for by tax authorities.

In addition, many e-commerce transactions are carried out through social networks. Social media sales are more difficult to track and monitor than traditional sales. As a result, a significant portion of e-commerce transactions may remain in the shadow economy. Another important issue is the taxation of cross-border e-commerce transactions. While many international e-commerce platforms serve local consumers, they may not be officially registered as tax residents in the country. This makes it difficult to calculate and monitor the tax revenues from their activities.

For effective taxation of e-commerce, it is necessary to introduce a number of modern mechanisms. First of all, it is important to integrate e-commerce platforms with the information systems of tax authorities. Through this, information about online sales transactions can be transmitted to tax authorities in real time.

Also, one of the important measures is the mandatory digital identification of e-commerce entities. By identifying sellers operating on e-commerce platforms, it is possible to accurately record their income and improve the taxation system.

In addition, the use of modern digital technologies in tax administration is also important. Big Data technologies, artificial intelligence and automated analysis systems make it possible to monitor e-commerce transactions and identify cases of tax evasion [15].

The results of the study show that by improving the mechanism for taxing e-commerce, it is possible to increase state budget revenues, reduce the share of hidden transactions in the economy, and ensure the sustainable development of the digital economy. The introduction of modern tax administration systems will increase the transparency of e-commerce activities and contribute to the more effective development of this sector.

#### **4. Discussion**

The rapid development of e-commerce, along with creating new opportunities in many sectors of the economy, also requires significant changes in the tax system. Unlike traditional forms of trade, e-commerce activities are often carried out in a virtual environment, and a large part of trade transactions are carried out through digital platforms. This complicates the process of identifying sources of income for tax authorities, forming a tax base, and controlling trade transactions. Therefore, adapting the e-commerce taxation system to modern economic conditions is one of the urgent issues.

The results of the analysis show that digitization of the tax administration system is of great importance for effective taxation of e-commerce activities. Digital technologies, in particular electronic payment systems, online trading platforms, and automated monitoring systems, allow for effective organization of tax control. If e-commerce platforms are integrated with tax authorities, information about trade transactions can be automatically transmitted to the tax system. This increases the transparency of trade processes and reduces tax evasion.

It is also important to study international experience in taxing e-commerce. In developed countries, special digital tax platforms have been introduced to control e-commerce transactions, through which information exchange between e-commerce platforms and tax authorities has been established. In some countries, e-commerce platforms act as tax agents and automatically calculate and submit sellers' tax obligations to tax authorities.

In addition, it is important to introduce simplified tax regimes for e-commerce entities. Small businesses engaged in e-commerce can often operate without official registration due to the complex tax system. If they are offered a simplified and convenient tax system, they will be attracted to formal economic activity, which will serve to expand the tax base.

Another important aspect during the discussion was the issue of taxation of cross-border e-commerce transactions. Since the activities of global e-commerce platforms cover many countries, taxing their income requires international cooperation. In this regard, the introduction of international tax standards and tax rules for the digital economy developed by the OECD will help increase the efficiency of e-commerce taxation.

Improving the e-commerce taxation system is important not only for increasing state budget revenues, but also for ensuring the transparency of economic processes. Modernizing tax administration based on digital technologies, monitoring e-commerce transactions, and applying innovative approaches in the tax system will ensure the sustainable development of the e-commerce sector.

#### **5. Conclusion**

This study analyzed the theoretical and practical aspects of the e-commerce taxation mechanism and studied important areas for improving this system in the digital economy. The results of the study showed that e-commerce is one of the fastest growing sectors of the economy, its volume and share in the economy are increasing every year. The

expansion of e-commerce activities creates new opportunities for increasing state budget revenues, but for effective taxation of this sector, it is necessary to introduce modern tax mechanisms.

The analysis revealed a number of problems in the process of taxing e-commerce. In particular, the complexity of identifying e-commerce entities, difficulties in controlling trade transactions carried out through social networks, insufficient development of the mechanism for taxing cross-border e-commerce transactions, and the fact that some entrepreneurs operate without official registration, which negatively affect the efficiency of the tax system.

Based on the results of the study, a number of scientifically based conclusions and proposals were developed to improve the e-commerce taxation mechanism. First of all, it is necessary to create the possibility of real-time monitoring of trade transactions by integrating e-commerce platforms with the information systems of tax authorities. This will increase the transparency of e-commerce activities and ensure full accounting of tax revenues.

It is also important to improve the system of mandatory digital identification of e-commerce entities and their official registration. This will allow for accurate accounting of the income of entrepreneurs engaged in e-commerce and expand the tax base.

In addition, the digitalization of tax administration is also one of the important factors for effective taxation of e-commerce. The introduction of modern information technologies, including Big Data, artificial intelligence and automated analysis systems into the tax system, will allow monitoring e-commerce transactions and identifying cases of tax evasion.

In general, improving the mechanism for taxing e-commerce is of great importance in ensuring the sustainable development of the digital economy, reducing the share of hidden transactions in the economy, and increasing state budget revenues. The introduction of modern tax administration systems will increase the transparency of the e-commerce sector and further strengthen its role in the economy.

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