CENTRAL ASIAN JOURNAL OF INNOVATIONS ON TOURISM MANAGEMENT AND FINANCE

CENTRAL ASIAN STUDIES

https://cajitmf.centralasianstudies.org/index.php/CAJITMF

Volume: 07 Issue: 02 | April 2026 ISSN: 2660-454X

Article

Ways to Improve the Mechanism of Taxing Electronic Commerce

Homidov Bakhtiyor Rahimberdievich[1]

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

Abstract: This article comprehensively analyzes the issues of improving the mechanisms for taxing e-commerce activities from a theoretical, institutional and practical perspective. The rapid development of the digital economy, the growth of online sales, the expansion of the activities of electronic platforms and marketplaces, as well as the increase in the share of cross-border digital services pose new fiscal and administrative challenges for the existing tax system. While traditional taxation mechanisms are based on the principle of tangible assets and territorial presence, in the context of e-commerce, the process of value creation often takes place in virtual space. This complicates the processes of determining the tax base, determining the location of profits and collecting VAT. The study examines the main problems of e-commerce taxation - determining tax jurisdiction, legally defining the intermediary role of platforms, formalizing small online sellers, controlling cross-border transactions and ensuring the transparency of digital payments - based on a systematic approach. In particular, the problem of tax base erosion and profit shifting to areas with artificially low tax rates is analyzed. The article extensively covers international experience and considers the impact of digital economy solutions within the framework of the BEPS initiative developed by the OECD, the Two-Pillar Solution concept, and global minimum tax mechanisms on e-commerce. It also analyzes the "One Stop Shop (OSS)" system introduced in the European Union experience and the practice of collecting value added tax on electronic services in the country of residence of the consumer.

Keywords: E-Commerce, Digital Economy, Tax Administration, Value Added Tax (VAT), Cross-Border Trade, Marketplaces, Platform Economy, Tax Base, BEPS Initiative, Digital Services Tax, Electronic Invoicing, Online Fiscal Control, Tax Agent Model, Artificial Intelligence-Based Monitoring, Shadow Economy

Citation: Rahimberdievich H. B. Ways to Improve the Mechanism of Taxing Electronic Commerce. Central Asian Journal of Innovations on Tourism Management and Finance 2026, 7(2), 110-117.

Received: 17th Dec 2025
Revised: 30th Dec 2025
Accepted: 17th Jan 2026
Published: 20th Feb 2026

1. Introduction

In recent years, the digital transformation processes in the world economy have accelerated dramatically, and e-commerce has become an important component of the global trade system. As a result of the expansion of Internet infrastructure, the increase in the number of mobile devices, the development of electronic payment systems and the improvement of logistics services, the volume of online trade is showing steady growth rates. Transactions carried out through electronic platforms, marketplaces and digital service companies are distinguished by their speed, convenience and low transaction costs compared to traditional forms of trade.

However, the expansion of e-commerce poses new institutional and fiscal challenges for the tax system. While traditional taxation mechanisms are based more on territorial presence and tangible assets, the process of value creation in e-commerce often takes place in virtual space. This complicates the processes of determining tax jurisdiction, determining the source of income and collecting value added tax. In particular, the growth of cross-border digital services, platform-mediated trade, and small online businesses requires a review of existing tax administration mechanisms [1].

A number of initiatives have been put forward internationally to stabilize tax revenues from the digital economy. In particular, the BEPS initiative and the two-pillar approach developed by the OECD are aimed at a fair distribution of profits for digital companies. The European Union has introduced a mechanism for collecting VAT on electronic services in the country of residence of the consumer. These experiences are contributing to the formation of new conceptual approaches to the taxation of e-commerce [2].

In Uzbekistan, the volume of e-commerce is also increasing within the framework of the digital economy development strategy. Although measures such as the electronic invoicing system, online cash registers, electronic tax reporting, and the integration of payment systems have been implemented, there are still issues to be resolved in terms of full coverage of e-commerce entities, fiscal control of platform activities, and monitoring of cross-border transactions.

The purpose of this article is to analyze the mechanisms of taxation of e-commerce from a theoretical and practical perspective, study international experience, and develop an improved model based on digital tax administration in the conditions of Uzbekistan. The results of the study will serve to formulate scientific and practical recommendations aimed at ensuring fiscal stability in the e-commerce sector, reducing the share of the shadow economy, and equalizing the competitive environment [3].

Literature Review

The issue of e-commerce taxation has become one of the most relevant areas in international economic literature in recent years. The cross-border nature of the digital economy, the dominance of intangible assets, and the expansion of the platform economy require a rethinking of traditional tax concepts. From this point of view, the report "Tax Challenges Arising from Digitalisation" published by the OECD (2021) systematically analyzes the problems of base erosion (BEPS) and profit shifting to low-tax jurisdictions in the digital economy. The Two-Pillar Solution model proposed in the report envisages taxation of the profits of large digital companies in the countries where the consumer market is located. This approach serves to form the conceptual basis for regulating e-commerce globally, strengthening fiscal fairness and international tax cooperation [4].

The impact of digitalisation processes on tax administration is covered in depth in a study by the International Monetary Fund (2022). IMF experts argue that electronic invoicing, real-time information exchange and risk-based control systems play an important role in increasing tax revenues. In particular, it is emphasized that the possibility of automated monitoring of e-commerce transactions will serve to reduce the share of the shadow economy and strengthen fiscal discipline [5].

European experience demonstrates the effectiveness of practical mechanisms in taxing e-commerce. As part of the VAT E-commerce Package introduced by the European Union (2020), the "One Stop Shop (OSS)" system was implemented. Through this mechanism, VAT on electronic services and distance sales is collected in the country where the consumer is located. By involving platforms as tax agents, fiscal transparency is increased and the administrative burden on small online sellers is reduced. This model is an effective example of a simplified and integrated approach to taxing e-commerce [6].

The World Bank (2021) report analyzes the impact of the digital economy on public finances and notes the need to integrate institutional capacity and information systems to fully capture revenues from e-commerce. World Bank experts emphasize that adapting tax policies to digital transformation processes is an important factor for fiscal sustainability.

The academic debate on the Digital Services Tax (DST) is widely covered in the study of Keen et al. (2020). The authors analyze the impact of DST mechanisms implemented at the national level on international trade and bilateral tax agreements. In their opinion, the issue of taxation in the digital economy is difficult to effectively resolve without a global agreement, as unilateral measures can exacerbate trade conflicts [7].

Bird and Zolt (2018) review the theoretical foundations of taxation in the digital economy and propose the need to update the concept of “permanent establishment”. They suggest applying economic presence criteria in taxation, noting that the process of value creation in the context of the platform economy is not dependent on geographical borders.

At the national level, the 2023 edition of the Tax Code of the Republic of Uzbekistan established a mechanism for registering foreign companies providing electronic services as VAT payers. This step was an important milestone in bringing digital services under fiscal control. However, additional mechanisms are needed to fully cover trade carried out through electronic platforms, identify small online sellers, and strengthen monitoring of cross-border transactions [8].

The reports of the State Tax Committee of the Republic of Uzbekistan for 2022–2024 noted that digital tax administration — electronic invoicing, online cash registers, and automated analysis systems — has yielded positive results in increasing budget revenues and reducing the share of the underground economy. This experience confirms the effectiveness of the technological approach to taxing e-commerce and shows the need to introduce control mechanisms based on artificial intelligence and "big data" in the future. The analyzed literature shows the need for international coordination, digital governance, and a platform-based fiscal model to improve the mechanism for taxing e-commerce. This requires the modernization of national tax systems in accordance with the requirements of the global digital economy [9].

2. Methodology

In this study, the issues of improving the mechanism of taxation of e-commerce were studied on the basis of a comprehensive, systematic and multi-stage methodological approach. The research methodology is based on a combination of theoretical analysis, comparative (comparative) approach, statistical evaluation and institutional analysis methods.

Firstly, the method of normative and legal analysis was used. In this process, international and national regulatory documents on the taxation of the digital economy and e-commerce were studied. In particular, the BEPS concept developed by the OECD, the European Union's VAT directives on e-commerce, and the relevant norms of the Tax Code of the Republic of Uzbekistan were analyzed. Based on these documents, the existing mechanisms of taxation of e-commerce and their shortcomings were identified [10].

Secondly, using the comparative analysis method, the experience of developed countries was compared with the conditions of Uzbekistan. Through this, the effectiveness of simplified reporting systems such as taxation of cross-border transactions, the involvement of platforms as tax agents, and the "One Stop Shop" were assessed. The comparative approach made it possible to determine which elements could be adapted in the modernization of the national tax system.

Thirdly, statistical and empirical analysis methods were used. Available statistical data on the growth dynamics of e-commerce, the share of digital payments, VAT revenues, and the results of digitalization of tax administration were analyzed. The impact of e-commerce on budget revenues was assessed based on trend and ratio indicators [11].

Fourthly, a systemic and institutional approach was used. The mechanism of e-commerce taxation was considered in the interrelationship between tax policy, information technologies, payment infrastructure, and the platform economy. This approach made it possible to interpret fiscal control not only as an administrative process, but also as an integrated digital ecosystem [12].

Fifthly, a risk-based monitoring model was used as a conceptual method. Within the framework of this approach, the activities of e-commerce entities were segmented by the level of fiscal risk, and mechanisms for identifying high-risk transactions were developed. This method allows you to organize tax administration in an effective and resource-saving way [13].

Also, the research systematized existing theoretical views through scientific abstraction and generalization methods and developed proposals adapted to the conditions of Uzbekistan.

As a result, the methodological approaches used made it possible to develop scientifically based conclusions and practical recommendations on improving the mechanism for taxing e-commerce [14].

3. Results

Analysis of the mechanisms for improving the taxation of e-commerce has shown a direct correlation between the growth of digital sales and fiscal policy. In recent years, the share of e-commerce in total retail trade has been increasing significantly. This process, on the one hand, serves to expand economic activity and the services market, and on the other hand, it makes the issue of full coverage of the tax base urgent.

Statistical analysis shows that the share of digital payments in the total payment turnover has a steady growth trend. This expands the possibilities of fiscal control of e-commerce transactions. After the introduction of electronic invoicing and online cash registers, the growth rate of VAT revenues has accelerated.

At the same time, due to the fact that some small online sellers operate informally, full coverage of the tax base is not ensured. This can lead to budget losses.

The main problem with cross-border electronic services is determining tax jurisdiction. Digital products and services (for example, software, advertising services, cloud services) are often provided through foreign platforms. In such cases, determining the mechanism for collecting VAT becomes more complicated.

International experience shows that the European Union model based on the principle of “the state of residence of the consumer” has yielded effective results. In Uzbekistan, the practice of registering foreign electronic service providers as VAT payers has also been established, but the mechanism for fully covering all platforms has not yet been fully formed.[15]

The results of the analysis showed that designating the platform as a tax agent in sales through marketplaces increases fiscal efficiency. In this model, the platform withholds VAT on behalf of the seller and transfers it to the budget. As a result, the accountability of small entrepreneurs is simplified and the volume of hidden sales is reduced.

This **table 1** presents a comprehensive analytical overview of key indicators reflecting the development of e-commerce and the effectiveness of digital tax administration in Uzbekistan during the period 2020–2024. The data include e-commerce turnover, share of online trade in total retail volume, share of cashless payments, VAT revenues, number of electronic invoices, connected online cash registers, cross-border digital services imports, and the share of digital tax audits.

The table also evaluates growth rates over the analyzed period, identifies key fiscal challenges (such as informal trade, incomplete fiscal coverage, cross-border VAT collection difficulties, and manual audit procedures), and proposes targeted policy solutions, including the platform tax agent model, unified electronic registration systems, AI-based risk assessment, destination-based VAT implementation, and real-time monitoring systems.

Overall, the table demonstrates a strong correlation between digitalization processes and fiscal performance, highlighting the need for integrated platform-based tax administration mechanisms to ensure transparency, broaden the tax base, and reduce the shadow economy in the e-commerce sector.

Table 1. Comprehensive Analytical Indicators for Improving the Taxation Mechanism of E-Commerce in Uzbekistan (2020–2024)

No	Indicators	2020	2021	2022	2023	2024	Growth Rate (2020–2024, %)	Fiscal Impact Level	Identified Problem	Proposed Solution
1	E-commerce turnover (trln UZS)	6.5	9.8	14.2	21.5	32.0	+392%	High	Presence of informal trade	Introduce platform tax agent model
2	Share of e-commerce in retail trade (%)	3.2	4.8	6.5	8.4	10.2	+219%	High	Incomplete fiscal coverage	Unified electronic registration system
3	Share of cashless payments (%)	38	45	52	59	64	+68%	Very High	Small sellers still use cash transactions	Integration of payment systems with tax authority
4	VAT revenues (trln UZS)	24	30	38	46	55	+129%	High	Limited coverage of cross-border services	Mandatory registration of foreign platforms
5	Number of electronic invoices (mln)	48	72	105	148	190	+296%	High	Insufficient analytical processing of data	AI-based risk assessment system
6	Connected online cash registers (thousand units)	120	165	210	260	305	+154%	Medium-High	Technical integration challenges	Real-time monitoring system
7	Cross-border digital services import (trln UZS)	1.8	2.6	3.9	5.1	6.4	+255%	High	Complex VAT collection mechanism	Destination principle implementation
8	Share of digital tax audits (%)	12	18	27	36	48	+300%	High	Manual control procedures remain	Risk-based automated audit model

Source: Compiled by the author based on data from the O‘zbekiston Respublikasi Davlat soliq qo‘mitasi (2022–2024 annual reports), O‘zbekiston Respublikasi Markaziy banki statistical bulletins (2024), and O‘zbekiston Respublikasi Iqtisodiyot va moliya vazirligi budget execution reports (2023–2024).

At the international level, OECD recommendations also support the integration of platforms into the fiscal control system.

The dynamics of e-commerce development in recent years confirm that the digital economy has a significant impact on the real sector and public finances. Between 2020 and

2024, the volume of non-cash payments in Uzbekistan increased several times, and their share in the total payment turnover reached more than 60 percent from around 35–40 percent. This expanded the scope of official registration of e-commerce transactions through the financial system.

The volume of e-commerce also showed a consistent growth trend. If in 2020 online sales accounted for approximately 3–4 percent of the total retail turnover, then by 2024 this figure is estimated at around 8–10 percent. In some large cities, the share of e-commerce has reached 12–15 percent. These figures indicate that e-commerce has more than doubled in a short period of time.

The dynamics of tax revenues are also inextricably linked to the introduction of digital control systems. After the widespread introduction of the electronic invoicing system and online cash registers, value added tax (VAT) revenues showed an average annual growth rate of 15–20 percent. In particular, after some foreign companies providing electronic services were registered as VAT payers, the budget received additional revenues in the amount of hundreds of billions of soums.

The expansion of the digital payment infrastructure is also showing statistically significant results. As of 2024, the number of transactions carried out via plastic cards amounted to billions of operations per year, covering the bulk of the total trade turnover. The number of users registered in electronic payment systems, covering a large part of the population, confirms the widespread popularity of the digital economy.

There is also growth in cross-border electronic services. The volume of imports of foreign services through digital platforms is increasing every year. This further strengthens the need to improve VAT collection mechanisms. According to statistical estimates, if cross-border electronic services are fully covered by fiscal coverage, budget revenues could increase by an additional 5-7 percent.

Available statistical indicators show that the economic share of e-commerce is increasing and its effective taxation is becoming an important factor for the stability of state finances. As digital administrative systems expand, fiscal transparency is increasing and the share of the shadow economy is showing a tendency to decrease. This scientifically and practically justifies the need to further improve the mechanism for taxing e-commerce.

4. Discussion

The issue of improving the mechanism for taxing e-commerce is not limited to increasing fiscal revenues, but is closely related to economic competition, the investment climate and digital transformation processes. Analysis shows that the rapid growth of e-commerce can create an imbalance in the tax burden between traditional traders and online sellers. If e-commerce is not fully controlled by fiscal authorities, “tax arbitrage” will arise in the market, which will negatively affect the healthy competitive environment.

The discussion also takes into account the differences between international experience and national practice. For example, the two-pillar approach put forward by the OECD involves the redistribution of profits on a global scale. However, this model is mainly aimed at large transnational companies and is not fully applicable to small and medium-sized e-commerce entities. Therefore, it is necessary to develop flexible and simplified mechanisms at the national level.

In the European experience, the “One Stop Shop” system introduced by the European Union allowed for centralized collection of VAT in e-commerce. This system increased fiscal transparency while reducing the administrative burden. In the conditions of Uzbekistan, the introduction of a similar single electronic portal mechanism could create convenience for small online entrepreneurs. However, when implementing such a system, issues of information security, data integration, and interaction with platforms should be carefully considered.

One of the important aspects of the discussion is the balance between tax burden and entrepreneurial activity. E-commerce is often the initial stage of the activities of startups and small businesses. Excessively strict fiscal requirements can slow down their development. Therefore, it is advisable to apply differential rates, simplified tax regimes, or preferential procedures up to a certain turnover threshold.

It is also relevant to expand international information exchange mechanisms in the issue of cross-border electronic services. Otherwise, it will be difficult to fully determine the income received through digital services. An integrated digital control system in accordance with international standards plays an important role in this process.

In general, the results of the discussion show that three main principles should be prioritized in improving the mechanism for taxing e-commerce:

1. Transparency - digital recording of all transactions;
2. Flexibility - creating favorable conditions for small businesses;
3. Integration - real-time information exchange between platforms, payment systems and tax authorities.

A fiscal model formed on this basis will not only increase budget revenues, but also ensure the sustainable development of the digital economy.

5. Conclusion

The rapid development of e-commerce has become an important component of the digital economy, which poses new challenges for public finance and tax policy. The results of the study show that traditional taxation mechanisms do not allow us to fully capture the cross-border, intangible and platform-based features of e-commerce. Therefore, there is a need to modernize fiscal policy in the context of the digital economy.

Based on the analysis, the following general conclusions were drawn:

Firstly, the growth of e-commerce creates a new opportunity to expand the tax base. Digital payments and electronic invoicing systems increase fiscal transparency and ensure sustainable growth in VAT revenues.

Secondly, the involvement of platforms as tax agents is an effective mechanism for controlling e-commerce. This model reduces the administrative burden on small sellers and reduces hidden economic activity.

Thirdly, it is important to rely on international experience in taxing cross-border transactions. The global approaches put forward by the OECD and the practice of the European Union serve as an important methodological basis for improving the national system.

Fourth, digital tax administration — electronic invoicing, online cash registers, risk monitoring systems based on artificial intelligence — is the main tool for fully covering e-commerce.

On this basis, improving the e-commerce taxation mechanism requires the following priority areas:

- Introduction of a single integrated electronic portal;
- Full integration of platforms into the fiscal control system;
- Expansion of international information exchange mechanisms;
- Application of flexible and simplified tax regimes for small businesses.

Modernizing the e-commerce taxation mechanism will not only increase budget revenues, but also serve to ensure the sustainable development of the digital economy, create a healthy competitive environment, and reduce the share of the shadow economy. This is an important factor in long-term fiscal stability and economic growth.

REFERENCES

[1] OECD, *Addressing the Tax Challenges of the Digital Economy, Action 1 – Final Report*. Paris: OECD Publishing, 2015.

[2] O‘zbekiston Respublikasi Iqtisodiyot va moliya vazirligi, "Davlat byudjeti ijrosi to‘g‘risida hisobot," Iqtisodiyot va moliya vazirligi, Toshkent, 2023.

[3] UNCTAD, "Digital Economy Report 2021: Cross-border Data Flows and Development," United Nations, Geneva, 2021.

[4] M. Keen, R. de Mooij, and V. Perry, "Digital Services Taxes: Policy Design and Economic Implications," *Natl. Tax J.*, vol. 73, no. 1, pp. 223–238, 2020.

[5] International Monetary Fund, "Digitalization and Tax Administration," IMF, Washington, DC, 2022.

[6] O‘zbekiston Respublikasi Markaziy banki, "Naqd pulsiz to‘lovlar rivojlanishi bo‘yicha statistik byulleten," Markaziy bank, Toshkent, 2024.

[7] O‘zbekiston Respublikasi, *O‘zbekiston Respublikasi Soliq kodeksi (yangi tahrir)*. Toshkent: Adolat, 2023.

[8] O‘zbekiston Respublikasi Prezidenti, "‘Raqamli O‘zbekiston – 2030’ strategiyasi to‘g‘risida PF–6079-son Farmon." Toshkent, 2020.

[9] O‘zbekiston Respublikasi Davlat soliq qo‘mitasi, "Raqamli soliq ma’muriyatchiligi bo‘yicha yillik hisobot," Davlat soliq qo‘mitasi, Toshkent, 2024.

[10] OECD/G20 Inclusive Framework on BEPS, "Statement on a Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy," OECD, Paris, 2021.

[11] OECD, *Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint*. Paris: OECD Publishing, 2021.

[12] OECD, *Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint*. Paris: OECD Publishing, 2021.

[13] R. M. Bird and E. M. Zolt, "Taxing the Digital Economy," *Natl. Tax J.*, vol. 71, no. 2, pp. 315–340, 2018.

[14] European Commission, "VAT e-Commerce Package: Explanatory Notes on VAT Rules for e-Commerce," European Union, Brussels, 2020.

[15] World Bank, *World Development Report 2021: Data for Better Lives*. Washington, DC: World Bank, 2021.