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DIGITAL INNOVATIONS IN UKRAINE'S FISCAL POLICY: PROMOTING SUSTAINABLE ECONOMIC DEVELOPMENT

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**ЦИФРОВІ ІННОВАЦІЇ У ФІСКАЛЬНІЙ ПОЛІТИЦІ УКРАЇНИ:
СПРИЯННЯ СТАЛОМУ ЕКОНОМІЧНОМУ РОЗВИТКУ**

The relevance of the research is driven by the overall increasing significance of digital innovations in fiscal policy, which is currently a global trend. It is occurring due to the expanding access to modern technologies and the development of digital solutions that enable governments to manage financial resources and ensure economic stability more effectively. Ukraine is no exception, where such innovations pertain to the use of modern technologies and digital solutions in improving financial management, tax collection, fiscal process control, and enhancing the overall efficiency of fiscal policy. Moreover, it is already evident that digital innovations in Ukraine's fiscal policy are contributing to its sustainable economic development, reducing bureaucratic procedures, and increasing the transparency and reliability of the fiscal system. According to the above, the purpose of this article is to conduct a comprehensive study of the features and role of digital innovations in Ukraine's fiscal policy, with a focus on how they contribute to sustainable economic development. Within the scope of the research, attention has been directed toward the fact that digital innovations in Ukraine's fiscal policy encompass the utilization of modern information technologies and digital solutions to enhance financial management, tax collection, fiscal process control, and overall optimization of the state's fiscal policy. A conclusion has been drawn that the primary digital innovations in Ukraine's fiscal policy include e-tax declaration and tax collection, the electronic tax invoice (ETI) system, e-budget, and the ProZorro system. Furthermore, it has been demonstrated that digital innovations in fiscal policy contribute to the sustainable economic development of Ukraine by enhancing the efficiency of budget utilization, attracting investments, boosting business competitiveness, ensuring sustainable economic growth, increasing state revenue, and reducing economic fluctuations. The triggers facilitating sustainable economic development include: the overall increase in data transparency and combatting tax evasion, reduction in bureaucracy, enhanced tax collection efficiency, stimulation of economic growth, ensuring financial stability, automatic information exchange, and attracting investments.

Актуальність дослідження зумовлена підвищенням значущості цифрових інновацій у фіскальній політиці, що наразі є глобальним трендом. Це відбувається через розширення доступу до сучасних технологій та розвиток цифрових рішень, які дозволяють урядам більш ефективно управляти фінансовими ресурсами та забезпечити економічну стабільність. Не є виключенням і Україна, де такі інновації ідентифікуються через використання сучасних технологій і цифрових рішень в поліпшенні управління фінансами, збору податків, контролю над фіскальними процесами, а також підвищення ефективності фіскальної політики. При цьому, вже зараз очевидно, що цифрові інновації у фіскальній політиці України сприяють її сталому економічному розвитку, зменшенню бюрократичних процедур та підвищенню прозорості та надійності фіскальної системи. Відповідно до вищенаведеного, метою статті є загальне дослідження особливостей застосування та ролі цифрових інновацій у фіскальній політиці України з точки зору їх сприяння сталому економічному розвитку. У межах дослідження звернено увагу на той факт, що цифрові інновації у фіскальній політиці України належать до сучасних інформаційних технологій та цифрових рішень, що впроваджуються з метою поліпшення управління фінансами, збору податків, контролю фіскальних процесів та оптимізації фіскальної політики держави. Зроблено висновок, що основними з цифрових інновацій у фіскальній політиці України є: електронне декларування і збір податків; система електронних податкових накладних; електронний бюджет; система ProZorro. При цьому доведено, що цифрові інновації у фіскальній політиці сприяють сталому економічному розвитку України через підвищення ефективності використання бюджетних коштів, залучення інвестицій, підвищення конкурентоспроможності бізнесу, забезпечення сталого економічного росту, збільшення доходів держави та зменшення економічних коливань. Тригерами, що забезпечують сприяння сталому економічному розвитку є: загальне підвищення прозорості даних та боротьба з податковими махінаціями; зменшення бюрократії; підвищення ефективності збору податків;

стимулювання економічного зростання; забезпечення фінансової стабільності; автоматичний обмін інформацією; залучення інвестицій.

Keywords: *e-tax declaration; tax collection; electronic tax invoice system; e-budget.*

Ключові слова: *електронне декларування; збір податків; система електронних податкових накладних; електронний бюджет.*

Target setting. Currently, digital innovations in fiscal policy have become a global trend in many countries. Many countries are actively working on implementing electronic tax collection systems, online platforms for tax filing, data analytics, and electronic budgets. This is due to the expansion of access to modern technologies and digital solutions development that allows governments to manage financial resources and ensure economic stability more effectively. Ukraine is no exception, where such innovations involve modern technology use and digital solutions to enhance financial management, tax collection, fiscal process control, and overall fiscal policy effectiveness. At the same time, it is already evident that digital innovations in Ukraine's fiscal policy are contributing to its sustainable economic development, reducing bureaucratic procedures, and increasing the transparency and reliability of the fiscal system.

Analysis of research and publications. Research on various aspects of the formation and changes in Ukraine's fiscal policy has been conducted by researchers such as K. Yu. Vodolaskova, H. Kotina, M. Stepura, and Yu. Polivana. Special attention should be given to the works of N. Syniutka and K. Krysovatyi, which are dedicated to the implementation of digital innovations in Ukraine's fiscal policy. Considering the content of the works, noted that most researchers, when studying innovations in fiscal policy or general changes in this field, have emphasized their connection to issues promoting sustainable economic development of the country. The outlined statement confirms that research on the aspects of shaping and changing fiscal policy in Ukraine, as well as the implementation of digital innovations in this field, is indeed very relevant

and crucial for understanding the peculiarities of transitioning to sustainable economic development in the country. These studies are expected to shed light on how fiscal policy impacts the economy, social justice, investments, innovation, and other aspects of societal life.

The wording of the purposes of article (problem). The article is aimed at a general study of the application features and the role of digital innovations in the fiscal policy of Ukraine in terms of their promotion of sustainable economic development.

The paper main body with full reasoning of academic results. The fiscal policy of any state can be interpreted as an approach to regulating the government's revenues and expenditures [4]. In essence, the approach involves the continuous regulation of aggregate demand and real national income by adjusting government spending, transfer payments, and taxation. Considering that the regulation process is best facilitated through digital technologies, there are currently active efforts to implement them in Ukraine's fiscal policy. These initiatives began some time ago but gained momentum, particularly after the Revolution of Dignity (in 2014). Primarily, this process was associated with electronic declaration and tax collection. However, these innovations are becoming increasingly diverse and crucial components in adjusting government spending, transfer payments, and taxation, as they contribute to the improvement of financial management, tax collection, control over fiscal processes, and overall optimization of the state's fiscal policy [4].

The main digital innovations in Ukraine's fiscal policy (or information technology and digital solutions [4]) include e-tax declaration and collection, the electronic tax invoice system (ETI), e-budgeting, and the ProZorro system. Let's examine each of these outlined digital innovations in more detail in terms of their overall content and their role in regulating aggregate demand and real national income.

The key innovation is the implementation of electronic tax declaration and tax collection. Its core content was defined through initiatives that commenced in 2014 and was further expanded in 2016 with the introduction of the e-declaration system for government officials and civil servants. Ukraine is actively implementing and promoting electronic systems for tax collection and tax declaration along the following

directions (Figure 1): e-tax returns, e-register of taxpayers (where taxpayer information is stored and updated automatically), e-tax collection, and the introduction of mechanisms for automatic information exchange.

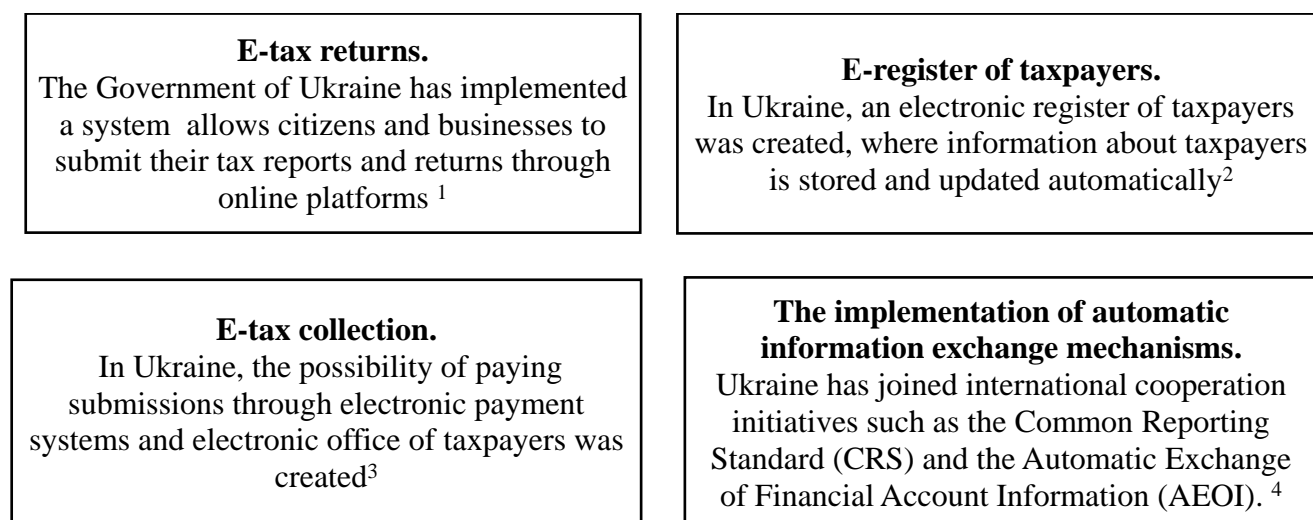


Figure 1. The digital innovations that have enabled electronic tax declaration and tax collection.

Note

1. E-tax returns simplify and expedite the tax filing processes.
2. The e-taxpayer registry enables efficient monitoring of taxpayers' tax status and ensures rapid notification of changes in the tax base to tax authorities.
3. E-tax collection streamlines tax payments for taxpayers and reduces the risk of errors in payments.
4. The implementation of automatic information exchange mechanisms involves the automatic exchange of financial information with other countries to combat tax evasion.

Source: formed based on [2-3]

Just as innovative, citizens and businesses can submit declarations and pay taxes through specialized online platforms, simplifying these processes and making them more transparent.

The initiative to introduce innovations in the tax invoices field was introduced in 2016. Specifically, it focused on innovative solutions that formed the Electronic Tax Invoice (ETI) system, which currently enables businesses to work with tax invoices in the following directions (Figure 2):

- electronic filing and submission of invoices.
- electronic data exchange (or the exchange of electronic tax invoices between businesses and tax authorities has been made possible [5-6]).
- e-signature and encryption.

- synchronization with accounting.
- data collection, transactions analysis, and turnover volumes of enterprises.

In unity, outlined directions constitute an electronic Value Added Tax (VAT) administration system and a new mechanism for the preparation and registration of tax invoices (adjustment calculations), which not only establishes the right to claim tax amounts as a tax credit (TC) but also reduces the opportunities for implementing the most common scheme of tax evasion by creating a "fictitious" tax credit.

For example, when a trading company purchases fictitious goods (goods that do not exist) from a paper-only "seller" company.

The money paid "for the goods" is transferred to cash at currency exchange centers and returned to the buyer.

In this process, the buyer gains the right to claim a VAT refund.

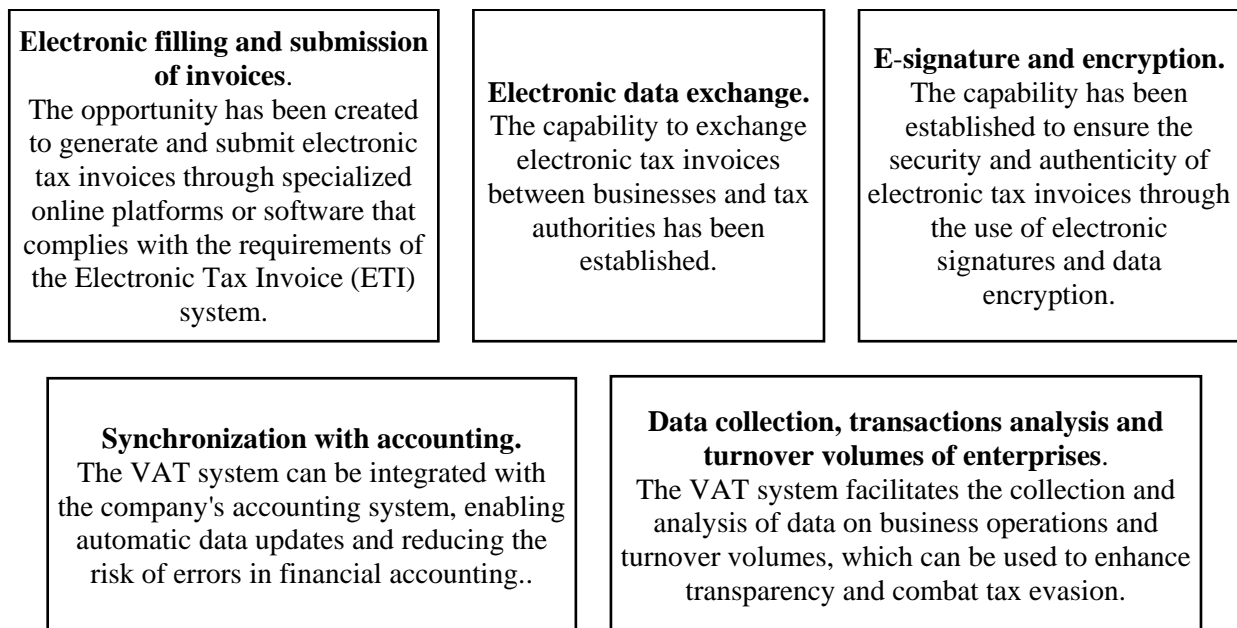


Figure 2. Digital innovations that have shaped the electronic tax invoice system.

Source: formed based on [2-3; 4]

Each direction plays a unique role in shaping the electronic administration of Value Added Tax (VAT) and preventing the combination of tax credits generated from imports or the production of goods in the shadow market with tax liabilities incurred by taxpayers who need to legalize shadow goods. Including [4]:

- Electronic completion and submission of invoices refer to the creating and sending of transport or commercial invoices (also known as shipping invoices or bill of lading [2; 5]) using electronic means and technologies.

- Electronic data exchange. It relates to exchanging business documents and other structured information between companies, partners, suppliers, and consumers using electronic systems and data exchange standards.

- E-signature and encryption. It pertains to ensuring the confidentiality, integrity, and authenticity of electronic information on the Internet and electronic communications.

- Synchronization with accounting. It relates to the automatic exchange of financial and accounting information between different programs or systems, such as accounting software and other programs or systems that track financial transactions (e.g., payment gateways, electronic invoices, inventory management systems, etc. [6]).

- Data collection, transactions analysis, and turnover volumes of enterprises (refer to the process in which businesses gather and process information about their financial operations, sales, and other business transactions to gain insights and make informed management decisions [3-4]). It allows for easy tracking of the entire chain of a company's transactions and pinpointing moments when certain goods seem to appear out of nowhere, indicating that they simply do not exist.

However, the Electronic Tax Invoice (ETI) has simplified taxation procedures and improved the transparency of financial transactions by simplifying the declaration process, reducing the risk of errors (as the system automatically checks entered information and can identify potential mistakes or deficiencies in tax invoices), ensuring transparency and control. However, the VAT did not resolve the issue of creating a "fictitious" tax credit but rather changed its format from the creation of a "fictitious" tax credit to complications. The peculiarity of this scheme is that at both ends of the chain, there is a legitimate counterparty and real goods. However, there is an exception - imported goods are initially sold for cash. Then, they are sold again, but this time through non-cash means and with proper documentation. For example, in 2019, businesses generated and utilized a fictitious credit amounting to 20.8 billion UAH,

while in 2020, it increased to over 25 billion UAH. As a result, the initiative to introduce innovations in the field of tax invoices continues to evolve and improve. Currently, a scheme for automatically verifying business entities' tax invoices for signs of risky transactions and blocking them in case of discrepancies in the product codes used during the purchase and sale of goods is being developed and implemented.

The initiative to introduce innovations in the field of state procurement was launched in 2015 in response to abuses in the procurement processes of state customers funded by the state budget, which is essentially funded by taxpayers (in areas such as falsification of bidding materials, contracting at prices higher than those of other bidders, creating conditions for the victory of a specific contractor, unwarranted use of single-sourcing procedures, and more) [1]. In 2016, this initiative became mandatory for state customers for procurements exceeding 200,000 UAH for goods and services and exceeding 1.5 million UAH for works. As part of the innovation, the ProZorro system was launched, which implements electronic tenders and procurement for government institutions on specialized platforms and brings together over 35,000 state and municipal authorities and enterprises (purchasers of goods, works, and services) and approximately 250,000 commercial companies (suppliers). This system consolidates 13 accredited platforms for sub-threshold and above-threshold procurement types and several platforms that have not been granted accreditation due to the lack of a comprehensive information security system. The ProZorro system promotes greater transparency, fights against corruption, and improves the management of funds allocated for government procurement. However, this system continues to be improved in the following directions: contract performance monitoring, identifying overpayments, uncovering collusion among tender participants, and ensuring the correctness of tender and procurement procedures.

The initiative to innovate in the field of government budgeting, including the implementation of an electronic budget, is an important step towards improving and modernizing the country's budgetary system. Currently, the Government of Ukraine is actively developing and implementing an electronic budget, which is intended to

provide citizens with access to information about the financial resources of the state and their allocation.

Therefore, the key aspects of digital innovations in the fiscal sector currently encompass e-tax filing and collection of taxes, data analytics, e-payments, e-budgeting, and cybersecurity (Figure 3).

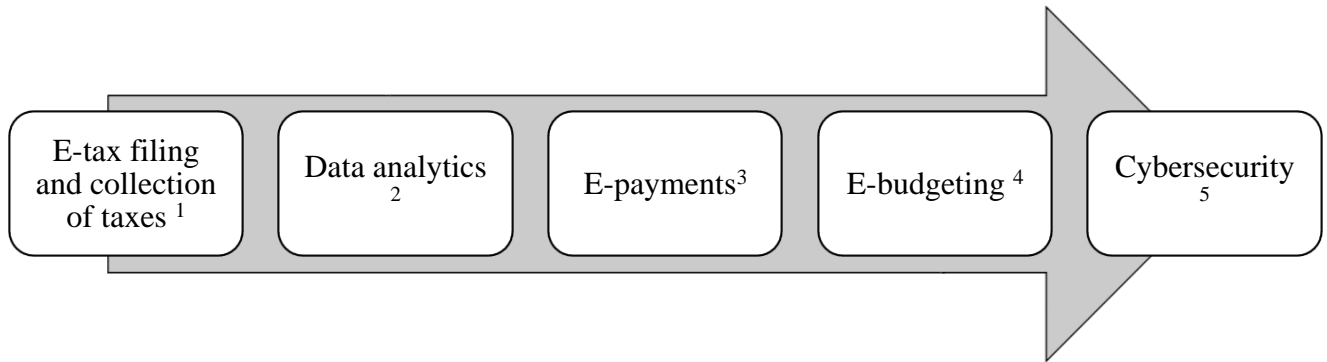


Figure 3. Main aspects of digital innovations in fiscal policy of Ukraine

Note

1. Digital innovation simplifies the tax payment process for both individuals and businesses while minimizing opportunities for tax fraud.
2. Digital innovation enables tax authorities to detect tax evasion and fraud more effectively, as well as forecast revenues and expenditures of the state budget.
3. Digital innovation contributes to reducing the use of cash in circulation and facilitates control over financial transactions.
4. Digital innovation allows citizens and companies to access information about the state's financial resources, their allocation, and utilization through online platforms.
5. Digital innovation is critically important for maintaining fiscal stability.

Source: formed based on [2; 4]

In accordance with the outlined aspects, it is evident that Ukraine is actively implementing digital innovations in its fiscal policy. Moreover, it is already clear that these innovations contribute to sustainable economic development in Ukraine due to the embedded triggers that determine the direction of increased efficiency in the use of budgetary funds, attracting investments, enhancing business competitiveness, ensuring sustainable economic growth, increasing state revenue, and reducing economic fluctuations. The triggers that contribute to sustainable economic development include:

1. Increasing data transparency and combating tax evasion (which amounts to approximately 2.5 billion UAH per month in Ukraine) are facilitated by digital innovations that enable the publication of tax and financial data while ensuring their accessibility to the public (Figure 4).

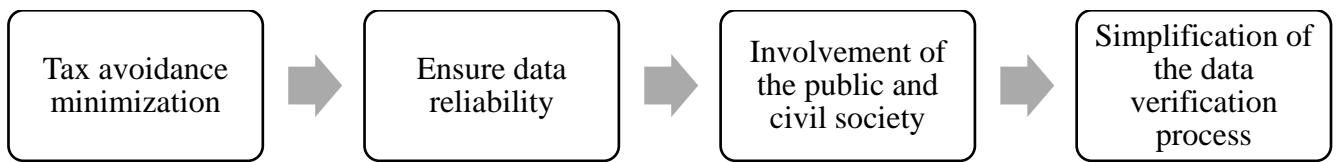


Figure 4. The results of increased data transparency and the fight against corruption

Source: formed based on [2-3; 5]

Specifically, increasing data transparency and combating corruption help to:

- tax avoidance minimization (it allows for the automation of processes related to the collection and processing of financial information, making data on transactions, income, and expenses more accessible and easier to verify).
- ensure data reliability (it enables the application of encryption and electronic signatures technologies to ensure the integrity and confidentiality of financial data [5-6]).
- involvement of the public and civil society (it allows citizens to monitor the use of public funds and demand accountability in case of any improprieties or corrupt actions [2]).
- it simplifies the process of data verification, allowing auditors and regulatory authorities to conduct faster and more accurate audits of the financial activities of businesses and government entities.

2. Reduction of bureaucracy. Electronic systems simplify tax declaration and tax collection procedures, which:

- Facilitates business operations for legal entities and entrepreneurs.
- Reduces bureaucratic barriers.
- Ensures the accuracy and reliability of data.

3. Increasing tax collection efficiency. Automation of tax processes helps reduce the possibility of errors and incorrect tax calculations, thereby increasing government revenue.

4. Stimulating economic growth. Thanks to digital innovations, businesses can operate and expand more easily, which promotes increased investments and the creation of new jobs.

5. Ensuring financial stability. Through effective tax collection and financial resource management, the government can [4]:

- Ensure financial stability.
- Meet the needs of society, including funding various social and infrastructure projects, supporting social programs, and improving the quality of citizens' lives.

6. Automatic information exchange. Participation in international initiatives on automatic financial information exchange helps combat tax evasion and ensures fairness in the tax system.

7. Attracting investments. Creating a favorable fiscal environment based on digital innovations can attract more foreign investments, contributing to infrastructure development and sustainable economic growth.

Conclusions from this study and prospects for further exploration in this area. Within the scope of research, digital innovations in Ukraine's fiscal policy refer to the use of modern information technologies and digital solutions aimed at improving financial management, tax collection, fiscal process control, and overall optimization of the state's fiscal policy. The following conclusions have been drawn in this regard:

1. Digital innovations in fiscal policy contribute to the sustainable economic development of Ukraine by enhancing the efficiency of budget utilization, attracting investments, boosting business competitiveness, ensuring sustainable economic growth, increasing state revenue, and reducing economic fluctuations.
2. The key digital innovations in Ukraine's fiscal policy (or information technologies and digital solutions) include electronic tax declaration and tax collection, the Electronic Tax Invoice (ETI) system, electronic budgeting, and the ProZorro system.
3. The triggers promoting sustainable economic development include: the overall increase in data transparency and combating tax evasion, reduced bureaucracy, enhanced tax collection efficiency, stimulation of economic growth, ensuring financial stability, automatic information exchange, and attracting investments.

The obtained results create opportunities for expanding the scope of research by studying how digital innovations impact budget strategy and planning in Ukraine. It

includes analyzing the reduction of fiscal pressure, optimizing budget expenditures, and ensuring the efficient utilization of budgetary funds.

Література

1. Водоласкова К.Ю. Правопорушення у галузі державних закупівель, *Право та управління*, 2011, Вип. 2, С. 58-74.
2. Дубина М.В., Козлянченко О. М. Концептуальні аспекти дослідження сутності діджиталізації та її ролі в розвитку сучасного суспільства, *Проблеми і перспективи економіки та управління*, 2019, Вип. 3 (19), С. 21-32.
3. Котіна Г., Степура М., Поливана Ю. Оподаткування цифрових послуг як альтернативний інструмент фіскальної політики в глобальному світі, *Підприємництво та інновації*, 2020, Вип. 12, С. 188-194.
4. Синютка Н., Крисовата К. Фіскальна дисфункція електронного адміністрування ПДВ в Україні, *Світ фінансів*, 2019, Вип. 4(61), С. 23-36.
5. Соколовська А. М., Твардієвич В. О. Дискусійні питання реформування ПДВ. *Фінанси України*, 2011. Вип. 8, С. 35–50.
6. Якушко, І. Фіскальна діджиталізація: сутність та роль у розвитку національної економіки, *Проблеми і перспективи економіки та управління*, 2023, Вип. 2(30), С. 44–53.

References

1. Vodolaskova, K.YU. (2011), "Offenses in the field of public procurement", *Pravo ta upravlinnya*, Vol. 2, pp. 58-74.
2. Dubina, M.V. and Kozlyanchenko, O.M. (2019), "Conceptual aspects of the study of the essence of digitization and its role in the development of modern society", *Problemy i perspektyvy ekonomiky ta upravlinnya*, Vol. 3 (19), pp. 21-32.
3. Kotina, G., Stepura, M. and Polivana, Yu. (2020). "Taxation of digital services as an alternative tool of fiscal policy in the global world", *Pidpryyemnytstvo ta innovatsiyi*, Vol. 12, pp. 188-194.
4. Sinyutka, N. and Krysovata, K. (2019), "Fiscal dysfunction of electronic VAT administration in Ukraine", *Svit finansiv*, Vol. 4(61), pp. 23-36.
5. Sokolovska, A.M. and Tvardievich, V.O. (2011), "Debatable issues of VAT reform", *Finansy Ukrainy*, Vol 8, pp. 35–50.
6. Yakushko, I. (2023). "Fiscal digitalization: essence and role in the development of the national economy", *Problemy i perspektyvy ekonomiky ta upravlinnya*, Vol. 2(30), pp. 44–53.

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