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DEVELOPMENT OF INFORMATION SUPPORT FOR FISCAL RISK MANAGEMENT WITHIN CRISES

ABSTRACT

Crisis phenomena, such as economic downturns, health emergencies and geopolitical conflicts, had a significant impact on the transparency of information support for public financial management processes and the development of digitalization of the economy.

The objective of the study is to assess the current state of information support and transparency of the management of fiscal risks caused by state-owned enterprises' activities under uncertainty.

Within the study, the existing international approaches to identifying and assessing fiscal risks are analyzed; the areas for improving information support for managing fiscal risks caused by the activities of state-owned enterprises in emergency situations are identified; the impact of digital finance development on mitigating fiscal risks caused by emergencies is assessed. Proposals to increase the transparency of public finances and create additional revenues to the state budget by the development of innovative technologies are substantiated.

Implementation of fiscal and monetary policy measures to mitigate the impact of COVID-19 and ensure sustainable post-pandemic recovery requires relevant financial information reflecting the country's financial position. A reliable source of such information is public financial and budgetary statements prepared by IPSAS and on an accrual basis. Given the negative impact of uncertainty caused by the coronavirus pandemic and war on the activities of state-owned enterprises, an important tool for improving the efficiency of fiscal risk management is the unification of approaches to establishing indicators for assessing relevant risks and providing information for their calculation. In response to lockdowns and social distancing measures during crises, citizens have increasingly relied on digital channels to access government services, pay taxes, and receive financial support. This has necessitated improved digital infrastructure and service delivery mechanisms.

Keywords: fiscal risks, state-owned enterprises, sustainable development, IFRS, digital economy, economic security, transparency, public finance, taxation, legalization of activity

JEL Classification: D21, D45, D89, F36, F29, G14, G18, G28, H10, H56, H82, H84, O17

INTRODUCTION

Crisis phenomena, such as economic downturns, health emergencies and geopolitical conflicts, had a significant impact on the development of digitalization of the economy and information support of public financial management (PFM) processes.

The crises highlighted the importance of efficient and transparent public financial management. E-governance initiatives, including digital platforms for managing public finances, have become more critical to ensuring timely disbursements, tracking expenditures, and maintaining transparency. The need for real-time data and analytics for effective crisis management and response has increased the importance of data and analytics in both the public and private sectors. This emphasis on data-based decision-making has become a catalyst for digitalization of various processes.

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In response to global crises such as the COVID-19 pandemic, countries are collaborating on data sharing and digital solutions. This international collaboration has facilitated the sharing of best practices and technologies, leading to advances in digitization and PFM processes.

Crisis phenomena acted as catalysts for the digitalization of the economy and the improvement of information support for the management of state finances. They highlighted the importance of digital technologies, data-driven decision-making and innovation in navigating and recovering from crises, as well as increasing the overall resilience of the economy and government.

The instability of the global economic system causes unpredictability and uncertainty in the activities of its entities. The functioning of enterprises in such conditions is always associated with the emergence of risks and threats of additional losses. Such circumstances highlight the need to develop tools facilitating effective risk management under uncertainty. Fiscal risk management at the micro and macro levels plays a crucial role among the mechanisms for ensuring the sustainable activities of enterprises.

LITERATURE REVIEW

Over the past three decades, leading international and Ukrainian scientists have been widely studying the problems of analysis and assessment of the impact of fiscal risks on both the performance of enterprises and the state budget execution.

The theoretical and methodological foundations of the emergence, classification, monitoring and assessment of fiscal risks are covered in numerous scientific publications.

Thus, the authors Mourre G., and Reut A. (2019), based on a comparative analysis of data on the national accounts of the EU member states, identify non-tax revenues as a significant source of fiscal risks in the EU.

A specific area of research in the field of fiscal risk management is the search for the place of this system in the architecture of modern public finance management. The IMF researchers Cangiano M., Curristine T. R., and Lazare M. (2013) outline the core elements of PFM and define their interdependence and areas of improvement in the context of the increasing complexity of public finance management under contemporary geopolitical risks.

Modern challenges (COVID-19 pandemic, military conflicts), the impact of which is reflected in the effectiveness of PFM management, and value chains, are also the subject of attention from the scientific community. In the study of researchers Batini N., Lamperti F., Roventini A., and Loungani P. (2020) "Reducing Risk While Sharing IT: A Fiscal Recipe for the EU at the Time of COVID-19" approaches to the distribution of fiscal risks associated with COVID-19 in the EU are highlighted. The researchers propose several measures aimed at policy makers' response to the upheaval (Batini, et al. 2020).

In Ukraine, in the context of the unprecedented full-scale invasion of the aggressor, the issue of ensuring transparency and accountability in the area of fiscal risk management is becoming increasingly relevant. Ukrainian scholars T. Iefymenko (2022), S. Gasanov (2017), O. Ivanitska, T. Koshchuk (2020), L. Kozoriz (2020), O. Makarov, S. Arzhevitin (2022), study the issues of forming an anti-crisis policy of fiscal regulation in the context of emergency events and operational activities.

The issues of PFM digitalization and virtual assets regulation are highlighted in studies of the following researchers: S. Volosovych, A. Sholoiko, L. Shevchenko (2023), T. Hudima, V. Ustymenko, R. Dzhabrailov, O. Chernykh (2022) and others.

AIMS AND OBJECTIVES

The objective of the study is to assess the current state of information support and transparency of the management of fiscal risks caused by state-owned enterprises (SOEs) activities under uncertainty.

Achieving this objective caused the necessity to solve the following tasks:

- to study existing international approaches to the identification and assessment of fiscal risks;
- to analyze the information support for the assessment of fiscal risks caused by SOEs activities in Ukraine;
- to formulate directions for the development of the information support for managing fiscal risks caused by SOE activities under emergency;
- to investigate the impact of the development of digital finance on the mitigation of fiscal risks caused by the course of emergency situations (COVID-19, military aggression);

- to formulate proposals for increasing the transparency of state finances and creating additional revenues for the state budget through the development of the latest technologies.

METHODS

The following methods were used in the study:

- implementation analysis (to analyze the state of implementation of international requirements in the area of fiscal risk management);
- comparative analysis (to assess the compliance of the national legislative framework with the IMF documents; analysis of information support for fiscal risk management);
- a dialectical method of cognition, which provides an analysis of financial phenomena and processes in their development, interconnection and interdependence.

RESULTS

International experience in the area of managing fiscal risks arising from SOEs activities

If we consider the management of SOEs, in particular, the prevention of fiscal risks, as a process of creating and improving the system of regulation of their functioning at the international level, such institutions are OECD, World Bank, the UN, and IMF. International documents form the methodological basis for developing a strategy for managing fiscal risks caused by SOEs activities.

Specific recommendations on how the state can more effectively fulfil its responsibilities as the owner of state-owned companies are contained in OECD documents, in particular, the Guidelines on Corporate Governance in State-Owned Enterprises (OECD, 2015). They were first developed in 2005, and updated in 2015 to reflect the changes that have occurred since their adoption and reflect the experience of a growing number of countries.

In 2020, the OECD published a report entitled "Transparency and Disclosure Measures for State-Owned Enterprises (SOEs): An Analysis of National Practices", which provides an overview of national practices to enhance disclosure and implement consolidated reporting by examining relevant legislation, policies and practices applicable to SOEs in OECD countries, as well as in developing and emerging market economies. It was developed as a discussion paper for a meeting of the Global Knowledge Exchange Network on Corporate Governance of State-Owned Enterprises. It is based on research, supplemented by voluntary responses to a questionnaire on SOE transparency and disclosure measures developed by the OECD Secretariat and sent to the countries participating in the survey. Twelve countries (Argentina, Brazil, India, Korea, Lithuania, Malaysia, Mexico, Peru, Paraguay, Philippines, Sweden, and Vietnam) submitted responses (OECD, 2020).

In 2020, the OECD studied the impact of the restrictive measures imposed in most global economies to combat the COVID-19 pandemic. Based on empirical modelling, it assessed the impact of the crisis and outlined steps that governments can take to reduce the risks of such a crisis (OECD, 2020).

Different approaches to fiscal risk management and examples of best practices in response to COVID-19 are reflected in the report "Best Practices in Fiscal Risk Management - Lessons from Selected OECD Countries" (OECD, 2020). This paper contains case studies of fiscal risk management systems in Australia, Finland, New Zealand, the Netherlands, and the United Kingdom. Approaches to the identification and measurement of fiscal risks in OECD countries are shown in Table 1.

Each of the countries surveyed recognizes fiscal risk identification as an obligation. The only differences are in the subordination relationships and approaches to fiscal risk assessment.

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Table 1. Identification and assessment of fiscal risks in OECD countries. *(Source: OECD, 2020)*

Item	Description	Country
Identification of risks	Entities identify fiscal risks in their areas of responsibility and are required to provide information to the Ministry of Finance and the Treasury	Australia
	Each central government agency is responsible for identifying, describing and monitoring its risks. Ministries and funds report on state guarantees and pledges	Finland
	Identification of fiscal risks is the responsibility of many entities, which are responsible for identifying and monitoring the risks within their competence	Netherlands
	The Treasury relies on four main ways to identify fiscal risks: its fiscal risk monitoring system, analysis of previous risks, consultations with agencies, and review of budget negotiation protocols	New Zealand
	Identification and assessment of risks related to the government's fiscal objectives is carried out by the Treasury, which coordinates its work with other bodies responsible for specific sectoral risks	United Kingdom
Risk assessment	Entities identify and assess risks in the preparation of financial statements, and the Ministry of Finance consolidates risks. The Treasury analyzes the sensitivity of the main fiscal aggregates to changes in key macroeconomic forecasts and underlying assumptions	Australia
	State guarantees as fiscal risks are measured at their nominal value. Other risks are not systematically measured	Finland
	Macroeconomic and financial risks are assessed using alternative scenario analysis under unchanged policies and stress tests	Netherlands
	Each agency assesses its specific fiscal risks under the guidance and control of the Treasury. The Treasury assesses general and balance sheet risks	New Zealand
	The probability of the risk and its potential impact on both stocks and flows of public finances are assessed, with particular attention to macroeconomic risks (arising from cyclical or structural changes in the economy) and specific risks arising from certain sources, such as government guarantees	United Kingdom

The experience of OECD countries in fiscal risk management is summarized in Table 2. The fiscal risk management system of the United Kingdom and Australia provides for the identification of fiscal risks based on the probability of their occurrence and possible impact on budget execution. Finland mainly identifies internal fiscal risks from the introduction and implementation of government programs. New Zealand's fiscal policy is focused on identifying potential costs in the event of an emergency to rebuild infrastructure. The experience of the UK shows that management is focused on those fiscal risks that are characterized by the highest level of uncertainty about the timing and amount of costs, which are characterized by the non-linear nature of forecasting and global negative consequences for the economies of the world (the COVID-19 pandemic, climate change, and public debt) (OECD, 2020).

Table 2. Approaches to fiscal risk management in OECD countries. *(Source: OECD, 2020)*

Item	Description	Country
Prevention/mitigation of consequences	Companies prevent and mitigate risks associated with their operations, contingent liabilities and assets	Australia
	Each government organization is expected to prevent or mitigate its risks	Finland
	The risk management policy for contingent liabilities sets an upper threshold and prevents the government from entering into new contingent liabilities unless there are compelling reasons to do so	Netherlands
	Each department prevents and mitigates specific fiscal risks by adjusting priorities in the allocation of funds, budget allocations, or policy choices	New Zealand
	The government's strategy for managing fiscal risks consists of five steps: identifying the source, magnitude, and probability of risk; disclosing risk; mitigating risk; making provisions for risks that cannot be mitigated but have a relatively defined scope and time frame; and accounting for residual risks.	United Kingdom

(continued on next page)

Table 2. *Continued.*

Item	Description	Country
Provision or reserve	A provision (reserve) is included in the annual Law on Appropriations, which can be used in case of fiscal risk	Australia
	The budget contains an unallocated contingency reserve and provisions for new policies that will be included in any supplementary budget.	Finland
	The Netherlands does not have any appropriations or reserves. Unforeseen expenses must be financed by reallocating existing resources	Netherlands
	The inter-budgetary reserve provides urgent financing. Departmental contingencies can also be used to finance known expenditures that are uncertain at the time of final budget approval. In addition, New Zealand has two long-term reserve funds: The Natural Disaster Fund and the Superannuation Fund.	New Zealand
	The budget contains a contingency reserve (2% of the previous year's budget) and a reserve to cover unforeseen expenses and future expenditures that exceed the so-called spending limits (0.5% of the department's spending limits). In some cases, a so-called special reserve is created (for example, military operations in Afghanistan or winter floods)	United Kingdom
Fiscal policy	The fiscal strategy is aimed at ensuring fiscal sustainability and is therefore set with due regard to broad fiscal risks. Current political commitments are aimed at a balanced budget and debt reduction	Australia
	Fiscal risks are not formally taken into account when setting fiscal targets. The current fiscal targets are a central government deficit of -0.5% of GDP in 2023 and a public debt-to-GDP ratio below 60% of GDP.	Finland
	The government conducts a trend-oriented fiscal policy, setting expenditure ceilings for the central government, social contributions, and health care, as well as revenue thresholds to control the overall tax burden	Netherlands
	There are no legally established numerical fiscal rules, but the government is required by law to publish its fiscal strategy. The results of fiscal stress tests were officially taken into account in determining the country's latest fiscal indicator	New Zealand
	In the spring 2020 budget, it was announced that the Treasury would review the fiscal framework to ensure that it is in line with the macroeconomic context while ensuring the sustainability of public finance	United Kingdom

International practice shows that Australia and New Zealand have been leading the way in identifying and managing fiscal risks since the 1990s. The fiscal risk management system in Australia is highly decentralized, emphasizing the role and responsibility of departments and agencies in achieving the goals of transparent fiscal forecasts and good fiscal management. The New Zealand system has similar features but is more centralized. New Zealand is also one of the first countries to introduce stress testing of the state balance sheet and officially take its results into account in determining its fiscal policy (OECD, 2020).

After the financial crisis of 2008, such countries as Finland, the Netherlands, and the United Kingdom developed their fiscal risk management systems. In all three countries, the main goal was to maximize the protection of public finances from a possible macroeconomic shock, as well as to manage future contingent liabilities, including guarantees that arose during the previous crisis. These three countries, as well as New Zealand, have also begun to stress test public sector budget items as part of their fiscal risk management framework.

The OECD countries have widely implemented the assessment of the effectiveness of their fiscal forecasting. It is worth noting that the UK is the only country in the world where a detailed report on fiscal risks is prepared by an independent fiscal council, the Office for Budget Responsibility (OBR), to which the government publishes a response to explain the manageability of fiscal risks. Thus, a large-scale phenomenon in OECD countries has become the disclosure of information on fiscal risks at the stage of forming the country's state budget, where special attention is paid to forecasting, analyzing and mitigating the impact on the country's economy (OECD, 2020) (Table 3).

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Table 3. Disclosure of information on fiscal risks in OECD countries. *(Source: OECD, 2020)*

Country	Disclosure mechanism
Australia	Fiscal risks are disclosed in the Risk Statement included in the Budget Strategy and the Medium-Term Economic and Fiscal Forecast.
Finland	The annual budget plan includes a summary of the general risks associated with the fiscal forecast. The review of risks and liabilities of the central government, published voluntarily, provides a more complete picture of fiscal risks
Netherlands	Information on fiscal risks is provided together with medium-term forecasts and the annual budget (especially related to guarantees)
New Zealand	Semi-annual and pre-election Economic and Fiscal Reviews disclose general, specific and balance-sheet fiscal risks
United Kingdom	Fiscal risks are disclosed in the Fiscal Risk Report. Some risks to the medium-term projections are also mentioned in the Economic and Fiscal Outlook, and sensitivity analysis of the long-term projections is presented in the Fiscal Sustainability Report

SOEs are the subject of attention from the World Bank. It provides technical assistance, and a wide range of financial products, and helps countries apply innovative knowledge and solve the challenges they face. In its practice, the World Bank supports the development of reforms of state-owned enterprises around the world. The support includes several SOE reform initiatives to strengthen oversight and improve efficiency to improve governance, support the efficiency of financial services, increase access to financial services, and more, all to improve development outcomes. Information on such projects in Ghana, Ethiopia, Kenya, and Tunisia is available on the World Bank's website.

Overcoming the consequences of the COVID-19 pandemic has caused financial problems for companies around the world, including many SOEs. In 2020, the International Monetary Fund (IMF) published a Note guiding whether and how governments should provide temporary exceptional financial assistance. The Note discusses the circumstances under which support may be provided, the main guidelines for the measures that may be used, and the need for accompanying governance and supervisory reforms. The Note focuses on SOEs in Africa, but its principles and messages are applicable in other regions (IMF, 2020).

Among the main recommendations, the IMF noted the need for governments to implement medium- and long-term reforms, in particular, in the areas of effective supervision of state-owned enterprises; financial transparency and accountability of SOEs; corporate governance; and updating the legal framework. In particular, one of the areas of SOEs reform is to strengthen fiscal risk management through the gradual strengthening of the identification, management and disclosure of such risks.

Challenges and opportunities for SOEs around the world are being studied by the UN. Recognizing that the private sector has expanded significantly in the twenty-first century, while the public sector has shrunk, it is recognized that in some countries state-owned enterprises remain an important source of employment and public resources. Under the auspices of the UN, studies are being conducted to analyze how SOEs should operate in the current environment, considering the constraints and challenges of globalization (World Bank, 2005).

In addition to intergovernmental organizations, the implementation of effective fiscal risk management is facilitated by the application of many professional and international standards offering the algorithm of actions under specific circumstances. The provisions of international standards include substantive and qualitative information on risk management (Table 4).

Table 4. International standards on risk management.

Standard	Author	Content
ISO 31000:2018 Risk management - Principles and guidelines	ISO	The main standard for risk management. Contains principles and general guidance for identifying and managing risks effectively. This standard provides a general understanding of how to develop, implement and maintain an effective risk management system within an industry and an enterprise.
ISO 31073:2022 Risk management — Vocabulary		The document defines common terms related to risk management faced by enterprises of all forms of ownership.
Risk management standard	FERMA	Risk management is a central component of strategic enterprise and/or project management. The document contains basic definitions and explains internal and external risk factors, risk management processes, risk assessment methodology and technology. Also, the document contains recommendations for creating a risk management system at the enterprise
Enterprise Risk Management Integrating with Strategy and Performance	COSO	The document emphasizes the importance of considering risks both in strategy development and performance management. The first part of the publication offers a view of current and evolving concepts and applications of corporate risk management. The second part, the Framework, consists of five easy-to-understand components that take into account different perspectives and operating structures; and help to improve strategies and decision-making.

The mentioned standards contain certain differences, despite which, in the objectives and methods of risk management, each standard determines the need for continuity of risk monitoring and control processes. These standards provide information for decision-making based on the most rational approach to risk management. The application of the analyzed risk management standards by domestic entities will ensure the following: assessment of risk management measures, identification of vulnerable and strong aspects of corporate risk management, reduction of the cost of preparing relevant reports, determination of the need to make changes to the organizational structure of the enterprise and improvement of performance indicators.

Thus, to date, a common system for monitoring and assessing fiscal risks has been developed at the international level, and most countries have developed relevant legislation. International practice shows that the methodological foundations of fiscal risk management differ, in particular in terms of identification, assessment, and forecasting. Given the above, the Recommendation of the Council for Budgetary Governance (OECD, 2015), which suggests that governments and authorities apply a common methodological framework for fiscal risk management, is becoming widely implemented. The International Monetary Fund in its Fiscal Risk Analysis and Management (IMF, 2018), the World Bank in its Debt & Fiscal Risks Toolkit (World Bank, 2023), and the OECD in its Best Practices for Managing Fiscal Risks (OECD, 2020) have developed common approaches to identifying, assessing, and mitigating fiscal risks.

Therefore, in Ukraine, in the context of the course towards European integration, the main factor in implementing the effective fiscal risk management of SOEs is the harmonization of domestic and foreign approaches in this area.

However, given that Ukraine's implementation of the fiscal risk assessment methodology was relatively recent (January 2018), there is a need to explore modern international approaches to fiscal risk management and to adapt them to the challenges and threats caused by the spread of the COVID-19 pandemic.

Based on the analysis of the studies of international organizations, it is proposed to classify fiscal risks caused by the activities of SOEs as infrastructure risks; operational risks; economic risks; liquidity risks; communication risks; and personnel risks. The institutional framework was based on the IMF review Government Support to State-Owned Enterprises: Options for Sub-Saharan Africa (IMF, 2020), OECD Business and Finance Outlook 2020: Sustainable and Resilient Finance (OECD, 2020), World Bank review State-owned enterprises and COVID-19: Policy principles (World Bank, 2020) (Table 5).

Table 5. Classification of fiscal risks of SOEs and measures to manage them. *(Sources: (IMF, 2020; OECD, 2020; World Bank, 2020; OECD, 2020; AON, 2020))*

Type of risk	Risk-management measures
Infrastructure risks	▪ check the readiness to provide services (produce goods); ▪ check the readiness and availability of appropriate resources to ensure remote work of the company's employees; ▪ assessment of possible problems that may be caused by the provision of remote workplaces; ▪ development of appropriate IT support; ▪ provision of a sufficient number of licenses for employees to access remote workplaces
Operational risks	▪ development of a plan of organizational measures for the implementation of key operational processes; ▪ supply chain risk management; ▪ providing the necessary resources for the implementation of processes that cannot be carried out remotely; ▪ development of plans to eliminate disruptions in the company's activities
Economic risks	▪ development of budget for each project aimed at ensuring the uninterrupted activities of the entity; ▪ development of a plan for covering the current liabilities
Liquidity risks	▪ deferred tax payments; ▪ provision of financial assistance from the government to cover debt obligations; ▪ obtaining government assistance in the form of guarantees for bank loans
Communication risks	▪ developing and managing communication with employees, partners, suppliers, public authorities and the community
Personnel risks	▪ clarification of job descriptions and functional responsibilities of entities' departments; ▪ development of an employee health safety policy, especially in the context of the spread of infectious diseases; ▪ development of an anti-crisis management plan for the enterprise, including relations with counterparties

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According to the study, governments around the world have used SOEs to overcome crises, including the COVID-19 pandemic. For example, state-owned utilities provide water and electricity, including in some cases at subsidized prices and allow for deferred payments. However, some SOEs may face significant financial difficulties during the crisis, raising the question of state support. Governments may decide to intervene to provide liquidity or resolve solvency problems of strategic SOEs. At the same time, governments of low-income economy countries with a lack of resources and weak budgets will find it difficult to provide financial support to their SOEs. Support should also be well-designed and focused on the current crisis.

Supporting SOEs in times of crisis provides an opportunity to accelerate existing or introduce new structural reforms to improve their governance and performance. Reports by international organizations such as the IMF and the OECD highlight crucial measures to mitigate the impact of fiscal risks and ensure the stability of SOEs under economic uncertainty (Table 6).

Table 6. International experience in the area of SOEs' fiscal risk management. *(Sources: (IMF, 2020; OECD, 2020))*

Tools	Optional measures	Description
Strengthening cash flows of SOEs with immediate impact on the budget	Deferred payment of taxes and social security contributions	mitigate the pressure on the liquidity of SOEs at a low cost, as the government can reimburse the taxes later when the temporary shock from COVID-19 passes. However, in the interim period, the government loses revenue. Such measures are usually applied to sectors of the economy, not just to SOEs.
	Subsidies	may be granted to compensate for higher costs associated with the implementation of political mandates or when companies face greater financial difficulties (risk of insolvency)
Strengthening the balance sheet of SOEs	Capital injections	may be better than regular subsidies to overcome financial difficulties caused by shocks. This is especially relevant in the context of mixed ownership, as they allow the state to participate more in future recovery through dividends. However, the initial expenses may be too high for fiscally constrained governments or involve increased public borrowing
	Debt/equity swap	may be an option if the main source of financial pressure on SOEs is the burden of debt service. However, the government's debt and debt service costs will increase.
Simplification of borrowing for SOEs	Government guarantees for borrowings of SOEs	the least pressure on current public finances. Guarantees should be temporary and limited
	Lending to SOEs	This includes government borrowing directly from the market and lending to SOEs. In some cases, this may mean a lower cost of borrowing for the company than the option of using state guarantees
	Loans from state-owned banks	state-owned banks can be used to provide support to SOEs. If these operations lead to losses for state-owned banks, this will result in lower dividends for the government or the need to refinance them
Attracting private investors	Governments can attract strategic investors to SOEs (inject capital; providing experience in corporate governance)	

In Ukraine, the task of governmental fiscal risk management of SOEs is complicated by the extensive system of bodies that manage the activities of SOEs. The management of state-owned objects provides for the execution by the Cabinet of Ministers of Ukraine and its authorized bodies, other entities defined by the Law "On Management of State-Owned Objects" of the powers to exercise the rights of the state as the owner of such objects related to their ownership, use and disposal, within the limits defined by the legislation of Ukraine, to meet state and public needs (Law of Ukraine, dated 22.07.2020).

The relations between the government as the owner and the management of state property are carried out through authorized bodies. Legally established managers of state property are:

- the Cabinet of Ministers of Ukraine; the central executive body responsible for the formation and implementation of state policy in the field of state property management;
- ministries, other executive authorities and governmental collegial bodies (hereinafter referred to as authorized management bodies);
- the State Property Fund of Ukraine; bodies that support the activities of the President of Ukraine, the Verkhovna Rada of Ukraine and the Cabinet of Ministers of Ukraine;
- bodies managing state property under the powers defined by certain laws;

- state economic associations, state holding companies, other state economic organizations, SOEs, institutions, organizations or business entities, 100 per cent of shares are owned by the state or another business entity (100 per cent of shares are owned by the state);
- National Academy of Sciences of Ukraine, sectoral academies of sciences (Law of Ukraine, dated 22.07.2020).

In total, 85 entities are managing state-owned objects in Ukraine. Among them, there is no single centralized body responsible for the professional management of state assets. The functions of formulating and implementing the policy in the field of state property management are performed by the Cabinet of Ministers of Ukraine, which, in particular, determines the state property management objects and management functions; the Ministry of Economy as the central executive body that ensures the formation and implementation of state policy in the field of state property management.

The national system of state property management is recognized as inefficient. According to the OECD experts, Ukraine "does not have a single specialized and centralized ownership structure responsible for the ongoing professional management of state assets. Instead, there are a large number of owners of different ranks (85 at the central government level alone) and, worse, several different bodies with the power to interfere in the operations and business of enterprises. They function as autonomous control centres, unable to implement a nationally coordinated property policy and combine several roles, such as exercising property rights, formulating state policy, and regulating and protecting the interests of communities that consume the products and services of state-owned enterprises. This situation creates conflicts of interest, competing goals, and favourable conditions for corruption. It also impairs management, productivity, control, and accountability. It is therefore recommended that Ukraine move towards fully centralized ownership of state-owned enterprises and ensure that any institution assigned this role is composed of qualified professionals and protected from undue interference" (OECD, 2018).

Management of fiscal risks arising from the activities of SOEs in the context of the application of international accounting and reporting standards

As noted above, until recently, there was no fiscal risk assessment system for SOEs in Ukraine. Due to the absence of an assessment methodology and authorities responsible for this, the capacity to analyze the impact of SOEs on the budget was extremely low. Therefore, there was a need to create institutional preconditions for improving the efficiency of managing budget vulnerabilities by developing a mechanism for public disclosure of information on fiscal risks. After all, the identification of fiscal risks by raising awareness and information allows us to justify measures to reduce them.

The relevant institutional framework for identifying and assessing fiscal risks was formed in 2018 when the Cabinet of Ministers approved the Methodology for Assessing Fiscal Risks Associated with the Activities of Public Sector Entities (hereinafter - the Methodology). The Ministry of Finance of Ukraine is designated as the executive body responsible for such assessment (CMU Resolution, dated 11.01.2018).

The following entities are involved in the process of assessing fiscal risks associated with the activities of public sector entities: business entities; governing bodies for each business entity; the Ministry of Finance of Ukraine; and the State Fiscal Service of Ukraine.

The Methodology is generally consistent with the IMF's approach to fiscal risk assessment. At the same time, as part of the challenges posed by the uncertainty of recent years, governments around the world are taking rapid fiscal and monetary policy measures to offset the impact of COVID-19 and ensure a sustainable post-pandemic recovery. Such decisions must be based on reliable financial information that accurately reflects the country's financial position. In this regard, public financial and budgetary reporting, prepared using international public sector accounting standards (on an accrual basis), is considered the most appropriate source of such data. For example, the World Bank's document "Government Financial Reporting in Times of the COVID-19 Pandemic" (World Bank, 2020), explains how governments can use existing financial reporting systems during the pandemic while identifying opportunities for further development in the post-pandemic recovery phase. The World Bank has provided its view on the possible impact of the pandemic on governments' financial activities, position and cash flows.

This IMF document complements the COVID-19 Intervention Assessment Tool developed by the International Federation of Accountants (IFAC) and the Zurich University of Applied Sciences in partnership with the International Public Sector Accounting Standards Board (IFAC, 2020). It is aimed at defining a methodological framework for assessing the economic impact of current and intended policy decisions. It uses public sector accounting and reporting data and the so-called "balance sheet" approach to assess the impact of COVID-19. The reliability and validity of the information obtained, as well as the qualitative level of its comparability, depends on the implementation of International Public Sector Accounting

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Standards (IPSAS) and accrual-based accounting by countries. The "balance sheet" approach provides a comprehensive view of fiscal policymaking from the perspective of the government's financial statements.

A few countries with strong accrual-based financial reporting, such as New Zealand, are better positioned to use the balance sheet approach and identify the impact of COVID-19. However, given the urgency of the recovery phase of the COVID-19 pandemic, governments should make efforts to provide more useful, timely, and reliable financial information for decision-making using the existing accounting system. At the same time, governments need to accelerate public sector accounting reforms to implement accrual-based accounting systems that comply with IPSAS.

Thus, a factor that ensures the effective activities of SOEs within uncertainty should be the formation of an effective fiscal risk management system based on the identification, assessment and analysis of fiscal risks, as well as the selection and implementation of fiscal risk mitigation tools based on international experience. Information support for the assessment and analysis of fiscal risks is crucial.

A reliable source of information for making effective fiscal decisions at any level of government is accounting and reporting data, based on international standards.

Thus, an important aspect that requires further study is the information support for the assessment and analysis of fiscal risks (CMU Resolution, dated January 11, 2018). Since the Methodology was developed in 2018, i.e., before the crisis, it is necessary to review the information support for fiscal risk assessment within the international practice. The study is based on the IMF methodology: State-owned enterprises stress test tool (SOE-ST); SOE Health Check Tool; COVID-19 Stress Test. Table 7 shows the results of a comparative analysis of the IMF indicators (for assessing fiscal risks) and information support for their determination in accordance with the Ukrainian reporting infrastructure.

Table 7. Information Support for the Assessment of Fiscal Risks Arising from the Activities of SOEs within the IMF Methodology. Note: *- by the requirements of Ukrainian legislation in the field of accounting and reporting.

Group of indicators	Indicators	Calculation	Source*
State-owned enterprises stress test tool (SOE-ST)			
SOEs profitability indicators	1. ROA Using Net Income	Net income/Average value of assets	Statement of financial results (Statement of comprehensive income): p. 2000 Balance sheet (statement of financial position): p. 1125
	2. ROE Using Net Income	Net Income/ Average Equity	Statement of financial results (statement of comprehensive income): p. 2350/2355, 2000 Balance sheet (statement of financial position): p. 1125
SOEs liquidity and leverage indicators	3. Non-current Liabilities to Assets	Long-term liabilities/Assets	Balance sheet (statement of financial position): p.1300, p.1595
	4. Current Ratio	Current assets/Current liabilities	Balance sheet (statement of financial position): p.1195, p.1695
SOEs expenditures and their efficiency indicators	5. Ratio of labour costs to net income	Labour costs/Net income	Statement of financial results (Statement of comprehensive income): p. 2000, p. 2505
	6. Profitability of labour costs	Net income/Personnel expenses	Statement of financial results (Statement of comprehensive income): 2000, p.2505
SOE Health Check Tool			
SOEs profitability indicators	1. Net profit margin	Net profit (loss) / Net sales revenue * 100%	Statement of financial results (Statement of comprehensive income): 2000, p. 2350/2355
	2. Operating profit margin	Operating profit / Sales revenue	Statement of financial results (Statement of comprehensive income): 2000, p. 2190/2195
	3. Return on working capital	Net profit / Current assets	Statement of financial results (Statement of comprehensive income): p. 2350 Balance sheet (statement of financial position): p. 1195
	4. ROE	Net Profit/Average Equity	Statement of financial performance (Statement of comprehensive income): p. 2000 Balance sheet (statement of financial position): p. 1495 (pp. 3, 4)
	5. ROA	Net profit/Average assets	Statement of financial performance (Statement of comprehensive income): 2000 Balance sheet (statement of financial position): p. 1300 (pp. 3, 4)
	6. Cost recovery	Current assets/current liabilities	Balance sheet (statement of financial position): p. 1195, p. 1695

(continued on next page)

Table 7. *Continued.*

Group of indicators	Indicators	Calculation	Source*
SOEs solvency indicators	1. Debt to equity	Liabilities/Equity	Balance sheet (statement of financial position): p. 1495, p. 1595, p. 1695
	2. Debt to assets	Liabilities/Assets	Balance sheet (statement of financial position): p. 1300, p. 1595, p. 1695
	3. Debt to EBITDA	(Long-term + Current liabilities) / (Operating profit + Depreciation + Amortization)	Balance sheet (Statement of financial position): p. 1012, p. 1595, p. 1695 Statement of financial results (Statement of comprehensive income): p. 2190, p. 2515
	4. Debt coverage	Current assets / Current liabilities	Balance sheet (Statement of financial position): p.1195, p.1695
	5. Interest coverage ratio (ICR)	EBIT / Interest expense EBIT = Net income + Interest expense + Taxes - Non-operating income	Statement of financial results (Statement of comprehensive income): p. 2350, p. 2250, p. 2200, p. 2220, p. 2240, p. 2300
SOEs liquidity indicators	1. Current Ratio	Current assets / Current liabilities	Balance sheet (statement of financial position): p.1195, p.1695
	2. Quick ratio	(Cash and cash equivalents + Current financial investments + Current accounts receivable) / Current liabilities	Balance sheet (Statement of financial position): p. 1165, p. 1160, 1125, p. 1130, p. 1695
	3. Creditor turnover days	Net profit / Average annual accounts payable	Statement of financial results (Statement of comprehensive income): p. 2000 Balance sheet (statement of financial position): p.1595, p.1695
	4. Debtor turnover days	Net profit / Average annual amount of accounts receivable	Statement of financial results (Statement of comprehensive income): 2000 Balance sheet (Statement of financial position): p.1040, p.1125, p.1130, p.1155
COVID-19 Stress Test			
▪ analysis of the need for external borrowings	-	Comparison of the company's cash balance and debt (current and long-term)	Balance sheet (statement of financial position): p.1595, p.1695 Statement of cash flows: p. 3195, p. 3295, p. 3395, p. 3415
▪ ability to cover debts	Interest coverage ratio (ICR)	EBIT/Interest expense EBIT = Net income + Interest expense + Taxes - Non-operating income	Statement of financial results (Statement of comprehensive income): p. 2350, p. 2250, p. 2200, p. 2220, p. 2240, p. 2300
▪ solvency	1) Debt to equity	Liabilities/Equity	Balance sheet (Statement of financial position): p. 1495, p. 1595, p. 1695
	2) Debt to assets	Liabilities/Assets	Balance sheet (statement of financial position): p. 1300, p. 1595, p. 1695
	3) Debt to EBITDA	(Long-term + Current liabilities) / (Operating profit + Depreciation + Amortization)	Balance sheet (Statement of financial position): p. 1012, p. 1595, p. 1695 Statement of financial results (Statement of comprehensive income): p. 2190, p. 2515
	4) Debt coverage	Current assets / Current liabilities	Balance sheet (Statement of financial position): p.1195, p.1695
	5) Interest coverage ratio (ICR)	EBIT / Interest expense EBIT = Net income + Interest expense + Taxes - Non-operating income	Statement of financial results (Statement of comprehensive income): p. 2350, p. 2250, p. 2200, p. 2220, p. 2240, p. 2300

The comparative analysis of the indicators of fiscal risk assessment in Ukraine with the IMF methodology showed that our country has created the appropriate preconditions for the formation of high-quality and comparable data for decision-making at the macro level. This provides the information background for forecasting the impact of uncertainty (coronavirus pandemic, war, climate change) on state budget revenues. At the same time, the issue of information support for management needs in terms of assessing the impact of the non-financial impact of SOEs (environmental, social, and institutional impact) on the probability of fiscal risks remains unsolved.

Even though IFRS form the methodological basis for the formation of information support for the management of SOEs in most countries, there is a practice of establishing requirements for additional disclosure of information for SOEs based on

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the requirements set in legislation. In particular, in Sweden and the United Kingdom, there are special instructions for SOEs on financial disclosure. In Sweden, according to the document "Guidelines for External Reporting by State-Owned Enterprises", state-owned enterprises are required to publish sustainability reports. As for the UK, the obligation to prepare sustainability reports is imposed not only on non-financial public corporations but also on all entities in the general government sector (OECD, 2020).

Given the above, we suggest for purposes of assessment and analysis of SOEs fiscal risks when preparing a management report (sustainability reporting), to provide the comparative information for each indicator (financial and non-financial).

Using this approach and the classification of fiscal risks proposed in this study (see Table 5), we have compiled a list of indicators that characterize the impact of uncertainty on the performance of state-owned enterprises (Table 8).

Table 8. List of indicators for SOEs fiscal risks' assessment under special conditions (COVID-19 pandemic, war).

Types of risks	Indicators characterizing the impact of uncertainty on the activities of SOEs caused by the:	
	the COVID-19 pandemic	**War in Ukraine**
Operational risks Economic risks Liquidity risks	1. The amount of credit resources attracted by the company during the COVID-19 pandemic, thousand UAH 2. Amount of expenses for investment projects that were temporarily suspended due to the pandemic, thousand UAH 3. Amount of costs incurred to ensure the digitalization of business processes at the enterprise in the context of countering the spread of COVID-19, thousand UAH	1. Expenditures on investment projects suspended as a result of martial law, thousand UAH. 2. The amount of credit resources attracted by the company during martial law, thousand UAH. 3. Change in cash flows during martial law compared to the pre-war period, thousand UAH. 4. Costs associated with the destruction (partial or complete) of fixed assets as a result of the war, thousand UAH. 5. Costs associated with disruption of supply chains, thousand UAH. 6. Expenses related to the elimination of the consequences of natural disasters caused by the war, thousand UAH.
Infrastructure risks	1. Water consumption, thousand m3, thousand UAH 2. Energy consumption, thousand m3, thousand UAH	1. Expenditures related to the liquidation of the consequences of natural disasters caused by the war, thousand UAH. 2. Total area of destroyed/partially destroyed buildings as a result of the war, m2. 3. Total area of land plots owned/leased by the enterprise that is subject to long-term restoration, ha.
Personnel risks	1. The incidence of COVID-19 among employees, units. 2. Amount of sick leave expenses incurred during the COVID-19 pandemic, thousand UAH. 3. The amount of costs incurred to create safe working conditions in the context of countering COVID-19, thousand UAH. 4. Amount of expenses related to payment of fines for inadequate working conditions in the context of countering COVID-19, thousand UAH. 5. Amount of expenses incurred for additional health insurance for employees (life insurance), thousand UAH. 6. Duration of remote work of employees in the context of COVID-19, hours per week.	1. Expenses for sick leave paid during martial law, thousand UAH. 2. Expenses incurred to create safe working conditions, thousand UAH. 3. Expenses incurred for additional health insurance of employees (life insurance), thousand UAH. 4. Expenses for humanitarian aid and charity, thousand UAH. 5. Staff reduction ratio, %. 6. Number of cases of injuries at the workplace caused by the war, units.
Communication risks	1. Number of confirmed cases of corruption during the period, units. 2. Amount of fines paid for corruption-related court cases during the period, thousand UAH.	

The application of this list of indicators by SOEs is aimed at strengthening the fiscal risk management system. This will ensure the effective supervision of SOEs, their accountability and transparency, as the disclosure of these indicators allows assessing of the uncertainty's impact on their performance. It should be noted that these indicators can be disclosed as part of the information produced by the current Ukrainian accounting and reporting infrastructure. The advantage of the suggested list of indicators is the simple calculation and availability of information for disclosure (financial reporting, management report, sustainability report, statistical reporting, etc.).

Management of fiscal risks caused by the development of digital finance and the latest technologies in emergency situations

New technologies have enabled governments to automate various financial processes such as payments, accounting, and auditing. Such digitization of fiscal operations leads to increased efficiency, and reduced probability of errors, delays, and fraud. By minimizing operational risks, governments can focus resources on dealing with the economic challenges caused by COVID-19.

The transparent nature of blockchain technology has allowed governments to track the flow of funds with greater accuracy. By using the assets, governments can enhance their ability to track financial transactions related to COVID-19 relief efforts and the course of military disasters, such as the virtual aggression of the russian federation against Ukraine. The implementation of such traceability ensures the reduction of risks associated with misallocation of funds, mismanagement, or diversion.

The legalization of the crypto market, which began with the implementation of international anti-money laundering and countering the financing of terrorism (AML/CFT) standards, has allowed governments to diversify their investment portfolios, reducing their reliance on traditional financial instruments that have been hit hard by the economic downturn caused by COVID-19. Such diversification mitigated fiscal policy risks by providing alternative sources of revenue and mitigating the impact of market volatility.

As determined by the voluntary self-assessment, the public sector demonstrates a clear commitment to the adoption and implementation of the revised FATF standards. 32 of the 54 FATF-style Regional Body (FSRB) jurisdictions reported having AML/CFT regulations in place for virtual asset trading service providers (VASPs), 13 having regulations, which are under development, and another 5 jurisdictions have current or potential VASP bans (Figure 1).

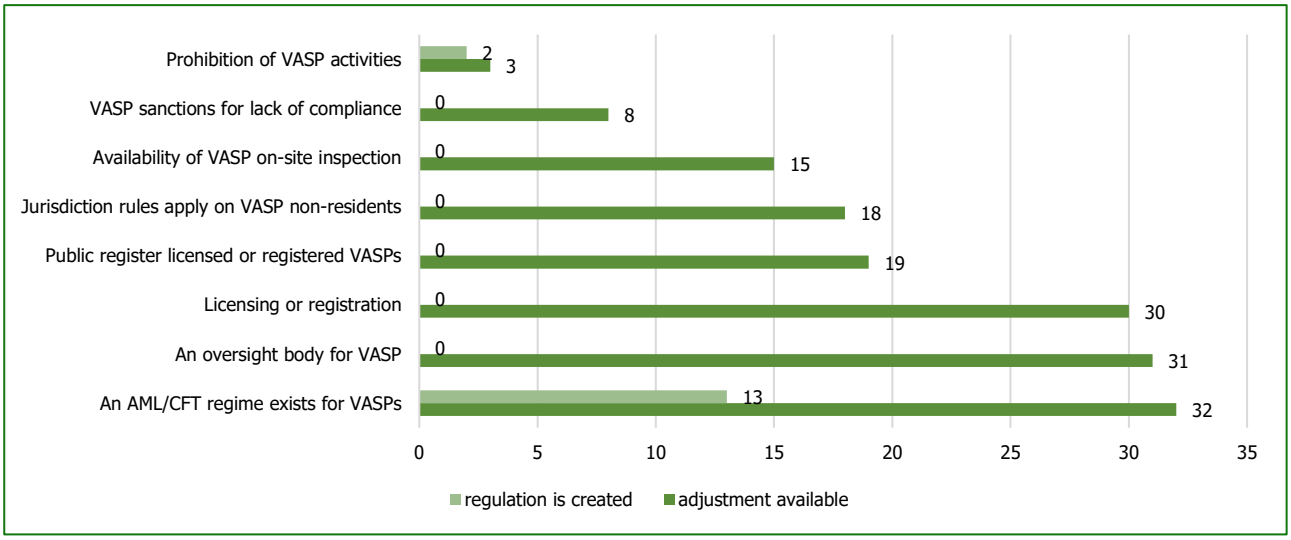

Figure 1. Public sector: implementation by governments of crypto-regulatory norms against money laundering and terrorist financing.
(Source: CipherTrace Cryptocurrency Intelligence, 2021)

Traditional financial systems often involve numerous intermediaries, increasing complexity and potential vulnerability. Through the implementation of digital tools, governments should optimize their financial operations by eliminating intermediaries, reducing transaction costs and minimizing the risks associated with the involvement of third parties, which will contribute to the optimization of costs in public finances.

Virtual assets (VA) have unique technological properties that provide pseudo-anonymous and anonymous transactions, fast cross-border transfer of value and impersonality of business relations. These properties can enhance a variety of financial products and services, such as trade finance, cross-border payments and regulation of financial instruments. Traditional financial institutions have recognized these benefits. For example, a survey by the Bank for International Settlements among 63 central banks showed that most of them were considering the possibility of issuance to support central banks regarding BA in 2018 (Yatsyk & Shvets, 2020). VA market adoption is increasing worldwide. Number of BAs with a market capitalization of at least USD 1 million. US increased from 30 to approximately 1,000 between 2015 and 2020, and the total market capitalization of all VAs is approaching USD 300 billion (Mishchenko, 2021).

Recent advances in digital technology enable financial institutions to more efficiently analyze large volumes of structured and unstructured data and more effectively identify patterns and trends. Data collection and collaborative analytics help

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financial institutions to understand, assess and mitigate economic security risks, resulting in easier, more dynamic and efficient identification of such activities, reducing false positives, allowing the private sector to comply in a timely and less burdensome manner. It can also prevent criminals from exploiting information gaps as they interact with multiple domestic and international financial services, each with limited and partial visibility into transactions. However, it may negatively affect the protection of personal and fundamental rights. Therefore, it is extremely important that any exchange of information takes place in compliance with national and international data protection and privacy laws.

The introduction of the latest technologies improves the level of security of the state, namely digital finance infrastructure often requires robust security measures, including encryption and distributed storage systems. By applying this technology, the government can reduce the risks of cyber threats and data leakage, ensuring the integrity and confidentiality of its fiscal policies during periods such as COVID-19 and military actions (European Parliament, 2023).

Digital assets and blockchain technology facilitate decentralized systems that are inherently resistant to manipulation or unauthorized change (UNDP Overview report). By using these technologies, governments can build trust between citizens and international partners, reducing the risks associated with fiscal policy decisions in uncertain times.

DISCUSSION

Information support for fiscal risk assessment is quite broad. Financial statements remain the main source of information. However, under current conditions in Ukraine (the coronavirus pandemic and war), the range of fiscal risks caused by the activities of SOEs has increased. Therefore, it is necessary to determine the impact of these factors caused by emergencies and uncertainty on the SOEs' activities performance.

This approach is widely used in international practice. Thus, during and after the coronavirus pandemic, the international professional community has repeatedly noted in several documents the need for public authorities to focus on the reporting indicators of enterprises that characterize the impact of uncertainty on their activities, in particular: World Health Organization (2020), Monitoring and Evaluation Framework; IOSCO/OR/02/2020 dated 29.05.2020 Statement on Importance of Disclosure about COVID-19; UN framework for the immediate socio-economic response to COVID-19 (2020); Summary of Covid-19 Financial Reporting Considerations (IFAC, 2020).

International professional organizations in the field of accounting, reporting and corporate governance are focusing their efforts on developing a methodological basis for disclosure of information on sustainable development by enterprises (including SOEs). Examples of such initiatives include:

- the updated edition of the 2022 UNCTAD Guidance on Core Indicators for Sustainability and SDG Impact Reporting;
- a document issued within the framework of the World Economic Forum "Measuring Stakeholder Capitalism. Towards Common Metrics and Consistent Reporting of Sustainable Value Creation". This document defines the main areas and indicators of disclosure of information on the non-financial side of companies' activities (proposed metrics). The indicators have been organized into four pillars (Pillars) - Governance, Planet, People and Prosperity - which are aligned with the main elements of the SDGs (World, Economic Forum, 2020).

At the same time, since 2014, Ukraine has been experiencing military aggression. This caused the high risks of filling the state budget. Under these conditions, the importance of the quality of information support for management, analysis and assessment of fiscal risks caused by SOEs activities is growing. This poses the need to identify and formulate a list of financial and non-financial indicators. The basis for such work is proposed to be the areas of disclosure in the management report introduced in Ukraine, as defined by the Order of the Ministry of Finance of Ukraine No. 982 dated 07.12.2018 "On Approval of the Methodological Recommendations for Preparing a Management Report". In addition, the source of information may be the sustainability report in the case of implementation of the requirements of EU Directive 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU on corporate sustainability reporting. The proposed approach will create the prerequisites for further development of information support for decision-making at the macro-level. This will help to improve the efficiency of fiscal risk management and overcome the consequences of military aggression (Iefymenko et al., 2022).

Considering that Ukraine is on the European democratic path, the need to revise the legislation in the financial system in terms of the introduction of digital finance is absolutely necessary for the effective development of the economic and IT spheres.

The introduction of an effective market of virtual assets in our country is currently one of the important tasks of the political and financial system of the country, taking into account their popularity in Ukraine and the need in wartime for settlements with foreign counterparties. An effective legal system will not only maintain a leading position in the IT sector on the global market but also the development of the financial and economic system as a whole. Since the European Union is the world's third largest economy, regulatory decisions are more likely to have a major impact on other countries, including Ukraine. Therefore, the study and implementation of its legislative initiatives, such as the Directive on the regulation of the crypto-asset market and ensuring the security of cyberspace, which are part of the Digital Finance Strategy of the European Commission, is an important step towards bringing Ukraine closer to a democratic safe space.

CONCLUSIONS

OECD countries apply a common ideology in managing fiscal risks. The last can be described as protecting public finances from a possible macroeconomic shock. This allows it to be used as a reliable risk management tool in the context of the COVID-19 pandemic and the development of the global economy. However, there are several differences in approaches to forecasting and mitigating the negative impact of uncertainty on the PFM due to the specifics of domestic legislative regulation and response to macroeconomic challenges and threats; financial stability; availability and size of unallocated budget reserves; and the extent of existing government guarantees.

International experience shows that the implementation of effective risk management is facilitated by the application of professional and international standards that offer an algorithm of actions under certain circumstances. Such standards provide an information basis for a rational approach to risk management, and can also be used to make decisions on identified risks or to make a choice between several options.

Implementation of fiscal and monetary policy measures to mitigate the impact of COVID-19 and ensure a sustainable post-pandemic recovery requires relevant financial information reflecting the country's financial position. A reliable source of such information is public financial and budgetary statements prepared by international public sector accounting standards and on an accrual basis.

Given the negative impact of the uncertainty caused by the coronavirus pandemic and the war on the activities of state-owned enterprises, an important tool for improving the efficiency of fiscal risk management is the unification of approaches to establishing indicators for assessing relevant risks and providing information for their calculation. In this context, regulating the preparation of sustainable development reports by SOEs and establishing a unified list of indicators characterizing the impact of uncertainty on economic performance will expand and strengthen the information base for assessing and analyzing fiscal risks at the state level.

Promising areas for further research in the area of creating powerful information support for managing fiscal risks caused by the activities of SOEs are the scientific substantiation of the methodology for preparing sustainability reporting.

In response to lockdowns and social distancing measures during crises, citizens have increasingly relied on digital channels to access government services, pay taxes, and receive financial support. This has necessitated improved digital infrastructure and service delivery mechanisms.

The legalization of new economic sectors related to the development of digital finance, on the one hand, often stimulates innovation and entrepreneurship. As traditional business models are disrupted, new digital startups and technological innovations emerge, fuelling the growth of the digital economy. On the other hand, with an effective fiscal policy, the legalization of new markets contributes to the increase of revenues to the state budget of the country and accelerates the growth rate of the economy in post-war times.

The COVID-19 pandemic and the military aggression of the russian federation against Ukraine presented an unprecedented dual crisis, necessitating the development of a comprehensive anti-crisis fiscal regulation policy.

The overall goal of government fiscal risk management in Ukraine during the war is to ensure the stability of the country's economy and finances and maintain financial independence and readiness for military defence.

Prospective areas of further research in the field of economic development of Ukraine are the scientific justification of fiscal policy and methodology regarding the activities of new sectors of the digital economy and the introduction of reforms in financial management, the fight against corruption to increase the efficiency of financial management in crisis conditions.

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ФОРМУВАННЯ ІНФОРМАЦІЙНОГО ЗАБЕЗПЕЧЕННЯ УПРАВЛІННЯ ФІСКАЛЬНИМИ РИЗИКАМИ В УМОВАХ КРИЗ

Кризові явища, такі як економічні спади, надзвичайні ситуації в царині охорони здоров'я й геополітичні конфлікти, мали значний вплив на посилення прозорості інформаційного забезпечення процесів управління державними фінансами (Public Financial Management, PFM) та розвиток цифровізації економіки.

Метою дослідження є оцінювання поточного стану інформаційної забезпеченості та прозорості процесу управління фіскальними ризиками, зумовленими діяльністю державних підприємств, в умовах невизначеності.

У рамках дослідження проаналізовано існуючі міжнародних підходи до ідентифікації та оцінки фіскальних ризиків; визначено напрями вдосконалення інформаційного забезпечення управління фіскальними ризиками, зумовленими діяльністю державних підприємств в умовах надзвичайних ситуацій; досліджено вплив розвитку цифрових фінансів на пом'якшення фіскальних ризиків, зумовлених перебігом надзвичайних ситуацій і сформульовано пропозиції щодо підвищення транспарентності державних фінансів та створення додаткових надходжень до державного бюджету шляхом розвитку новітніх технологій.

Реалізація заходів фіскальної та монетарної політики для нівелювання впливу COVID-19 і сталого постпандемічного відновлення вимагає релевантної фінансовій інформації, яка достовірно відображає фінансовий стан країни. Надійним джерелом для надання такої інформації є державна фінансова й бюджетна звітність, складена з використанням міжнародних стандартів бухгалтерського обліку в державному секторі та за методом нарахування. В умовах негативного впливу невизначеності, спричиненої пандемією коронавірусної хвороби, війни, на діяльність державних підприємств важливим інструментом підвищення ефективності управління фіскальними ризиками є уніфікація підходів до встановлення індикаторів оцінки відповідних ризиків та інформаційного забезпечення їх розрахунку. У відповідь на карантинні заходи COVID-19 і заходи соціального дистанціювання під час криз громадяни все більше покладаються на цифрові канали для доступу до державних послуг, сплати податків і отримання фінансової підтримки. Це зумовило потребу в удосконаленні цифрової інфраструктури та механізмів надання послуг.

Ключові слова: фіскальні ризики, державні підприємства, сталий розвиток, МСФЗ, цифрова економіка, економічна безпека, прозорість, державні фінанси, оподаткування, легалізація діяльності

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