

Theoretical and Practical Research in Economic Fields

Special Issue

Quarterly

Volume XV

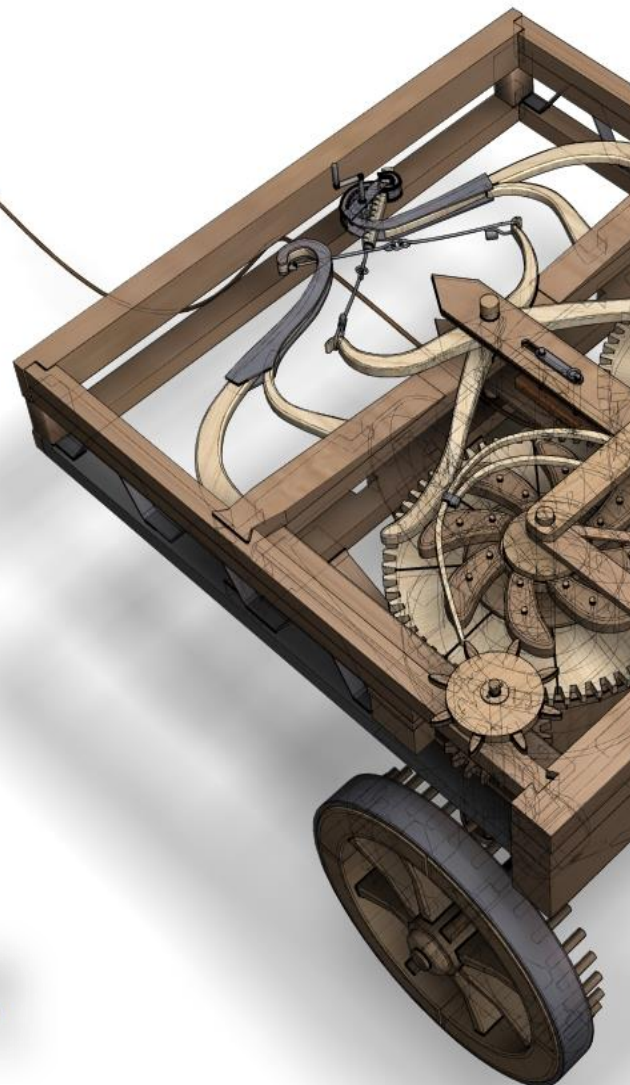
Issue 2(30)

Summer 2024

ISSN: 2068 – 7710

Journal DOI: <https://doi.org/10.14505/tpref>

ASERS
Publishing



Guest Editor

PhD Svitlana IVASHYNA

University of Customs and Finance, Ukraine

Editor in Chief

PhD Laura UNGUREANU

Spiru Haret University, Romania

Editorial Advisory Board

Aleksandar Vasilev

International Business School, University of Lincoln, UK

Germán Martínez Prats

Juárez Autonomous University of Tabasco, Mexico

Alessandro Morselli

University of Rome Sapienza, Italy

The Kien Nguyen

Vietnam National University, Vietnam

Emerson Abraham Jackson

Bank of Sierra Leone, Sierra Leone

Tamara Todorova

American University in Bulgaria, Bulgaria

Fatoki Olawale Olufunso

University of Limpopo, South Africa

Mădălina Constantinescu

Spiru Haret University, Romania

Esmail Ebadi

Gulf University for Science and Technology, Kuwait

Alessandro Saccal

Independent researcher, Italy

Lesia Kucher

Lviv Polytechnic National University, Ukraine

Hardy Hanappi

VIPER - Vienna Institute for Political Economy Research, Austria

Philippe Boyer

Académie d'Agriculture de France, France

Malika Neifar

University of Sfax, Tunisia

Nazaré da Costa Cabral

Center for Research in European, Economic, Financial and Tax Law of the University of Lisbon, Portugal

Jumadil Saputra

University of Malaysia Terengganu, Malaysia

Michael Emmett Brady

California State University, United States

Mina Fanea-Ivanovici

Bucharest University of Economic Studies, Romania

Bakhyt Altynbassov

University of Bristol, United Kingdom

Theodore Metaxas

University of Thessaly, Greece

Elia Fiorenza

University of Calabria, Italy

Table of Contents

	Editorial. Economic and Social Impacts of the Russian Invasion on Ukraine Svitlana IVASHYNA	
1	Comparative Analysis of the Squeeze-Out Procedure in Ukraine and the EU Anatoliy KOSTRUBA	162
2	Innovation and Investment Model for the Development of Small and Medium-Sized Businesses in Ukraine Marharyta M. BERDAR, Roman A. YAREMKO-HLADUN	174
3	Leveraging Technology: Enhancing Operations and Boosting EBITDA in Private Equity Owned Portfolio Companies Maximilian LIEPERT	186
4	Features of the Development of the Microfinance and Credit Monitoring System in Kyrgyzstan and Ukraine Renat MURZAIBRAIM, Venera OSMONBETOVA, Gulimhan SANSYZBAEVA, Svitlana IVASHYNA, Oleksandr IVASHYNA	196
5	Activities of the Government of the Ukrainian State in 1918 in Solving the Issue of Unemployment in the Context of Social Exclusion: Structural and Organizational Aspect Olena KHOMENKO	207
6	Assessment of the Current State and Prospects for the Development of the Digital Economy of the Republic of Azerbaijan Kamran ABDULLAYEV, Sevda BADALOVA, Asif MUSTAFAYEV, Mahir ZEYNALOV, Aynur BABAYEVA	217
7	Modelling the Impact of the Digital Economy on the Development of the Logistics Industry. Study Case of Henan Province Azyk OROZONOVA, Shanshan ZHANG, Esengeldi ZHUMADILOV, Xiaomei SUN, Xueqing LIU	232
8	Accounting for Non-Financial Assets in the Public Finance Management System in Ukraine during the Conflict Olena TSIATKOVSKA, Olena PRYMACHENKO, Liudmyla LEZHNEKO, Yevheniya FESHCHENKO, Olena MYKHALSKA	245
9	Barriers in the Development of Small Businesses in Kosovo Shaip GASHI	256
10	Specifics of Using C.G. Jung's Archetypes in Business Consulting Activities: Myths and Reality Burhan Reshat REXHEPI, Labeat MUSTAFA, Mejreme Krasniqi SADIKU, Burim Isa BERISHA, Besa Seadin XHAFERI, Orhan Reshat REXHEPI	267
11	Role of Festivals in Stimulating the Development of Event Tourism Aytakin AKHUNDOVA	277
12	Economic Dimensions of Agrarian Contracting Hrabrin BACHEV	288

Guest Editor

PhD Svitlana IVASHYNA

University of Customs and Finance, Ukraine

Editor in Chief

PhD Laura UNGUREANU

Spiru Haret University, Romania

Editorial Advisory Board

Aleksandar Vasilev

International Business School, University of Lincoln, UK

Germán Martínez Prats

Juárez Autonomous University of Tabasco, Mexico

Alessandro Morselli

University of Rome Sapienza, Italy

The Kien Nguyen

Vietnam National University, Vietnam

Emerson Abraham Jackson

Bank of Sierra Leone, Sierra Leone

Tamara Todorova

American University in Bulgaria, Bulgaria

Fatoki Olawale Olufunso

University of Limpopo, South Africa

Mădălina Constantinescu

Spiru Haret University, Romania

Esmail Ebadi

Gulf University for Science and Technology, Kuwait

Alessandro Saccal

Independent researcher, Italy

Lesia Kucher

Lviv Polytechnic National University, Ukraine

Hardy Hanappi

VIPER - Vienna Institute for Political Economy Research, Austria

Philippe Boyer

Académie d'Agriculture de France, France

Malika Neifar

University of Sfax, Tunisia

Nazaré da Costa Cabral

Center for Research in European, Economic, Financial and Tax Law of the University of Lisbon, Portugal

Jumadil Saputra

University of Malaysia Terengganu, Malaysia

Michael Emmett Brady

California State University, United States

Mina Fanea-Ivanovici

Bucharest University of Economic Studies, Romania

Bakhyt Altynbasov

University of Bristol, United Kingdom

Theodore Metaxas

University of Thessaly, Greece

Elia Fiorenza

University of Calabria, Italy

- 13 **Dynamics of Electronic Word-of-Mouth: Insights from Destination Management Organizations** 319
Kristína MEDEKOVÁ, Kristína POMPUROVÁ
- 14 **Brand Marketing Strategies of Trade Enterprises on Social Media Platforms** 335
Diana FAYVISHENKO, Zoreslava LIULCHAK, Anastasiia MOHYLOVA, Tetiana YAROVENKO, Iryna LORVI, Halyna ALDANKOVA
- 15 **The Impact of Economic Recession on the Financial Support of State Functions during Crisis Situations** 350
Mykyta ARTEMCHUK, Oksana MARUKHLENKO, Nataliia SOKROVOLSKA, Hennadii MAZUR, Dmytro RIZNYK
- 16 **The Influence of the Digital State on Preventing and Detecting Corruption in Ukraine** 365
Yuliia KOBETS, Mariia DIAKUR, Anatolii KYSLYI, Marina SHULGA, Iryna TOROPCHYNA
- 17 **Socio-Economic Aspects of Accessibility to Museums and Galleries in Europe by Removing Barriers** 375
Lubica ŠEBOVÁ, Izabela LAZUROVÁ, Radka MARČEKOVÁ
- 18 **An Investigation on the Relation between Traditional Banking and Peer-to-Peer Lending from a Management Perspective** 392
Sarasanabelli Prasanna KUMARI, Madhusmita MOHANTY
- 19 **Green Products in Banks. Case of an Emerging Country** 412
Yasmina JABER, Faten NASFI SALEM
- 20 **The Role of Blockchain Technologies in Changing the Structure of the Financial and Credit System** 425
Dmytro BIRIUK, Oleksandr YATSENKO, Iryna KREKOTEN, Halyna ROSSIKHINA, Iryna CHYCHKALO-KONDRATSKA
- 21 **The Role of Investment in the Production Equipment Modernization and Its Effect on Productivity** 439
Yuliya VOYTSEKHOVSKA, Lilia BUBLYK, Anna KUKHARUK, Safar Hasan PURHANI, Natalia BILOVA
- 22 **The Impact of Political Instability on Financial Development, Economic Growth, Economic Growth Volatility and Financial Stability in Developing Countries** 453
Wasim ULLAH, Ahmad Shauqi Mohamad ZUBIR, Akmalia Mohamad ARIFF
- 23 **The Impact of Digital Ecosystems on the Financial Management Efficiency in State Institutions** 471
Olena YATSUKH, Artem CHYHYRYNSKYI, Safar Hasan PURHANI, Olena BULHAKOVA, Mykola DURMAN
- 24 **Evaluating the Impact of Borrower Characteristics, Loan Specific Parameters, and Property Conditions on Mortgage Default Risk** 481
Ali Mahmoud ANTAR

Call for Papers Fall Issue 2024

Theoretical and Practical Research in Economic Fields

Many economists today are concerned by the proliferation of journals and the concomitant labyrinth of research to be conquered in order to reach the specific information they require. To combat this tendency, **Theoretical and Practical Research in Economic Fields** has been conceived and designed outside the realm of the traditional economics journal. It consists of concise communications that provide a means of rapid and efficient dissemination of new results, models, and methods in all fields of economic research.

Theoretical and Practical Research in Economic Fields publishes original articles in all branches of economics – theoretical and practical, abstract, and applied, providing wide-ranging coverage across the subject area.

Journal promotes research that aim at the unification of the theoretical-quantitative and the empirical-quantitative approach to economic problems and that are penetrated by constructive and rigorous thinking. It explores a unique range of topics from the frontier of theoretical developments in many new and important areas, to research on current and applied economic problems, to methodologically innovative, theoretical, and applied studies in economics. The interaction between practical work and economic policy is an important feature of the journal.

Theoretical and Practical Research in Economic Fields is indexed in SCOPUS, RePEC, ProQuest, Cabell Directories and CEEOL databases.

The primary aim of the Journal has been and remains the provision of a forum for the dissemination of a variety of international issues, practical research, and other matters of interest to researchers and practitioners in a diversity of subject areas linked to the broad theme of economic sciences.

At the same time, the journal encourages the interdisciplinary approach within the economic sciences, this being a challenge for all researchers.

The advisory board of the journal includes distinguished scholars who have fruitfully straddled disciplinary boundaries in their academic research.

All the papers will be first considered by the Editors for general relevance, originality, and significance. If accepted for review, papers will then be subject to double blind peer review.

This Special Issue was created at the request of a group of researchers from Ukraine. It is a response to the challenging situation of Ukrainian scholars due to the Russian invasion as well as the growing demand for knowledge on Ukrainian issues.

We would like to express our endless thank to our colleagues, scholars from Ukraine who are working amid the war on topics that are important for all. Also, we thank all our international authors for their valuable contributions to this Issue.

Deadline for submission of proposals: 10th August 2024

Expected publication date: September 2024

Website: <http://journals.aserspublishing.eu/tpref>

E-mail: tpref@aserspublishing.eu

To prepare your paper for submission, please see full author guidelines in the following file: https://journals.aserspublishing.eu/tpref/Template_for_Authors_TPREF_2024.docx on our site.



DOI: [https://doi.org/10.14505/tpref.v15.2\(30\).08](https://doi.org/10.14505/tpref.v15.2(30).08)

Accounting for Non-Financial Assets in the Public Finance Management System in Ukraine during the Conflict

Olena TSIATKOVSKA

Department of Tax Management and Financial Monitoring
Kyiv National Economic University named after Vadym Hetman, Ukraine
ORCID: 0000-0001-8825-9778
tsiatkovsk@ukr.net

Olena PRYMACHENKO

Department of Accounting and Consulting
Kyiv National Economic University named after Vadym Hetman, Ukraine
ORCID: 0000-0001-7180-1225
olena.prym@ukr.net

Liudmyla LEZHNEKO

Department of Accounting and Consulting
Kyiv National Economic University named after Vadym Hetman, Ukraine
ORCID: 0000-0002-0347-5875
lezhnenko.liud@outlook.com

Yevheniya FESHCHENKO

Department of Accounting and Audit
Taras Shevchenko National University of Kyiv, Ukraine
ORCID: 0000-0002-5673-7672
feshchenkoyev@ukr.net

Olena MYKHALSKA

Department of Accounting and Audit
Taras Shevchenko National University of Kyiv, Ukraine
ORCID: 0000-0003-1921-6293
mykhalolena@outlook.com

Article info: Received 23 March 2024; Received in revised form 12 April 2024; Accepted 13 May 2024; Published 28 June 2024. Copyright© 2024 The Author(s). Published by ASERS Publishing 2024. This is an open access article distributed under the terms of CC-BY 4.0 license.

Abstract: The relevance of the study lies in the fact that accounting and effective management of non-financial assets in times of conflict is strategically important for ensuring sustainability, economic recovery, and resource security of the state. The purpose of the study is to analyse the features of accounting for non-financial assets in the management of public finances in the war and post-war period. Among the methods used were the analytical, statistical, functional, system analysis, deduction, synthesis, and comparison. This study is devoted to the investigation of methods for assessing and reclassifying non-financial assets of state institutions in the context of military conflict, in particular, considering the aggression of Russia and the temporary occupation of the territory of Ukraine. The main criteria related to restricted access to non-financial assets were identified, and an algorithm for reclassification in case of loss or restricted access to them was proposed. Considering the criteria, a recommendation system has been developed for recognising and reclassifying non-financial assets in military conditions. The study emphasises the need to regulate this issue in the legal field, in particular, by making changes to the relevant regulatory documents that would consider the specifics of managing and evaluating non-financial assets during the war period. These changes include reclassification procedures and rules for recording such assets in financial statements, considering their real value and restricted access status. The practical significance of this study is to develop specific recommendations and procedures for reclassification of non-financial assets of state institutions in the context of military conflict, which will improve the efficiency of management and reflection of their value in conditions of limited access.

Keywords: public finance; accounting; reclassification; unified register; regulatory framework; evaluation algorithm.

JEL Classification: L86; E60; L82; M14.

Introduction

Ukraine's economy is going through a difficult time due to martial law and numerous challenges, both internal and external. However, the public sector remains a key driving factor in economic development and the introduction of effective mechanisms to respond to these challenges. State institutions are managed within the limits of their powers defined by the constituent documents and charters. These constituent documents define the functional purpose of each institution, in particular, its role in ensuring a social effect for society.

In Ukraine, according to the State Statistics Service of Ukraine (2023), the number of state institutions increases and decreases in different periods, but their role in the public administration system remains integral. In 2021, 79,323 state institutions were registered, in 2022 – 39,102 state institutions, and in 2023 – 93,952 state institutions. Of relevance is the study of state institutions that manage finances in the context of war, occupation and post-conflict periods. The positive development of the country and society is based on the cohesive work of all public sector actors, including state institutions and enterprises (Moshenskyi *et al.* 2024). Having a clear management system, accounting reform, and access to information about non-financial assets play an important role in achieving this goal.

The study of the features of accounting for non-financial assets in state institutions, especially in the war and post-war period, is an urgent task, since it will help determine ways to effectively manage these assets in a difficult socio-economic situation. Sliusar (2022) determined that the key component of effective public finance management is the proper functioning of accounting in public institutions. She stressed that high-quality accounting is a necessary condition for making informed management decisions and ensuring transparency in the management of public finances. In turn, Bezhenar (2021) suggests that the emphasis on the development and modernisation of the accounting system in public institutions will help to increase the efficiency of financial management. The researcher highlights the importance of introducing modern approaches and technologies into the accounting system to improve the processes of collecting and analysing financial information during martial law.

Storozhuk (2023) also focuses on the role of government agencies in reporting and provides proposals for standardisation of this process. The researcher suggests that unified reporting standards will help unify information, make it easy to compare, and promote consistent management decisions. Radionov (2023) highlights the role of state-owned enterprises in the public finance management system. These enterprises, bearing social responsibility, are key participants in the development of a positive social effect for society and citizens, especially in the conditions of martial law. Tsiatkovska (2023) focuses on the problems of accessing information about non-financial assets of the state. The researcher argues that free access to this information for the public is a necessary prerequisite for increasing the level of responsibility and transparency in the management of public finances, especially in the context of European integration processes.

In general, various aspects of public finance management and the role of public institutions in this process were considered. However, some aspects remained under-disclosed, such as specific methods for modernising accounting, analysis of the impact of standardisation on the consistency of financial information, aspects of social responsibility, and issues of ensuring public access to information about non-financial assets. The purpose of the study is to analyse the methods of modernisation of accounting of non-financial assets of state institutions in the context of public challenges.

1. Literature Review

Accounting for non-financial assets in the public finance management system is defined as a key component of an integrated financial and economic strategy in the context of the growing role of the state in economic development. Over the past decades, there has been a tendency to increase the influence of government agencies on the economy, which requires managers to take a balanced and integrated approach to managing a variety of resources, including both financial and non-financial ones.

First of all, it is necessary to address the theoretical aspects of accounting for non-financial assets. According to Gaio *et al.* (2021), non-financial assets include a variety of resources, such as real estate, technical equipment, natural resources, and others that can have a significant impact on a country's economic development. Accounting for these assets involves determining their value, condition, and use. Hecimovic and Martinov-Bennie (2023) focus on the importance of standardising the accounting of non-financial assets in the context of public finance. They point out that the development of national standards in this area will improve management efficiency and provide greater transparency in the financial statements of government agencies. One of the key aspects is to consider the impact of emergency events, such as military conflicts, on non-financial assets. Jeegers (2023) shows

that the conditions of military conflict can significantly affect the access and condition of non-financial assets, which requires adaptation of accounting and management methods in crisis situations.

An important aspect is also the introduction of international standards in the field of accounting for non-financial assets in the public sphere. The study by Alslihat *et al.* (2017) emphasises the importance of harmonising national standards with international ones in order to ensure comparability and standardisation of accounting for non-financial assets in the context of global economic interaction, especially in crisis situations. It is worth highlighting separately the problems associated with assessing and determining the state of non-financial assets during the crisis, which indicates the need to develop special methods and criteria. Lestari and Adhariani (2022) highlight the need to adapt accounting systems to emergencies.

Ironkwe and Nwaiwu (2018) consider this topic from the standpoint of using modern technologies in the process of accounting and management of non-financial assets. They highlight the relevance of digitalisation in the public sector, pointing out how modern information technologies can improve management efficiency and provide more accurate accounting of non-financial assets. On the other hand, the study by De Bernardi *et al.* (2019) examines the impact of climate change on the state of non-financial assets. The researchers propose new approaches to accounting and managing non-financial assets in changing environmental conditions. They analyse how challenges of climate change can affect the status and use of non-financial assets, and propose specific accounting strategies and techniques that allow these assets to be effectively managed in the face of environmental and climate change.

In general, accounting for non-financial assets in the public finance management system is a complex and urgent problem. The literature review reflects the need for research in areas such as standardisation, the impact of emergency events, international harmonisation, and the development of special accounting techniques. Further research in this area will identify effective tools and approaches for achieving optimal management of non-financial assets in government agencies.

2. Materials and Methods

The research was based on a comprehensive analysis of a number of materials, including theoretical sources, laws and regulations, statistical data, and accounting methods. These materials contributed to the consideration of the specifics of accounting for non-financial assets in the context of conflict and Russian aggression on the territory of Ukraine. One of the main sources of research was regulatory legal acts, in particular National Regulation (Standard) on Public Sector Accounting (NR(S)PSA) regulating the accounting and valuation of non-financial assets (Ministry of Finance of Ukraine 2023). They define procedures and criteria for recognising and evaluating assets in conditions of restricted access and temporary occupation of territories.

Statistical data from the Unified register of managers and recipients of budget funds (State Treasury Service of Ukraine 2022) for different years were used. These data were used to analyse the dynamics of the number and structure of government agencies in the context of accounting for non-financial assets. The consideration and analysis of research papers in the field of non-financial asset accounting and public finance management contributed not only to the systematisation of scientific knowledge, but also to the creation of a conceptual and theoretical foundation for further research in this important area.

The study of topical issues was carried out using methods that reveal the content of the object. The use of the analytical method allowed considering the laws regulating the accounting of non-financial assets in conflict situations, and it was possible to identify the basic rules and requirements that apply to this type of asset. The results of the analysis provided an opportunity to understand the context of existing standards and their impact on accounting. The use of the statistical method helped to collect and investigate quantitative data on the number of state institutions that record non-financial assets during the conflict period. Trends and changes in the structure of these institutions were identified.

The use of the functional method consisted in determining the role and tasks performed by accounting for non-financial assets in a state conflict. This became the basis for understanding the role of accounting in the financial management system. The relationships between parts of the accounting system and their impact on the management of non-financial assets in conflict situations were studied through system analysis. The study provided insight into key factors and opportunities for optimisation. The application of the deduction involved the examination of general principles of accounting for non-financial assets and their further application to understand specific cases in conflict situations. The results can serve as a basis for formulating conclusions.

The synthesis allowed combining information from various sources (laws and regulation, statistical data, analysis results) to form a comprehensive idea of the problem of accounting for non-financial assets in a conflict. The use of the comparison method helped to contrast approaches and methods of accounting for non-financial

assets in Ukraine and assess the effectiveness and feasibility of the chosen approaches in the context of conflict. As a result, these actions were performed to gain a deep understanding of the system of accounting for non-financial assets in conflict situations, assess its effectiveness and identify opportunities for optimising public finance management processes.

3. Results

State institutions play a key role in the system of business entities, establishing the basis for the implementation of public tasks and ensuring the effective functioning of society. Defining their role and place in the overall structure of the economy means revealing the main aspects of their functionality and interaction with other business entities. This is confirmed by statistics in Table 1.

Table 1. Number of institutions and organisations included in the Unified register of managers and recipients of budget funds

Year	State budget	Number of institutions (organisations)					Total
		including		Local	including		
		managers	recipients	budgets	managers	recipients	
2015	17,815	14,252	3,563	59,747	41,821	17,926	77,562
2016	17,651	14,093	3,558	62,295	42,150	20,145	79,946
2017	16,707	13,550	3,157	63,200	41,616	21,584	79,907
2018	12,917	11,455	1,462	59,415	38,204	21,211	72,332
2019	12,941	11,673	1,268	59,804	36,825	22,979	72,745
2020	12,287	11,096	1,191	59,146	36,038	23,108	71,433
2021	11,561	10,415	1,146	58,762	36,715	22,047	70,323
2022	10,614	9,459	1,155	56,577	34,623	21,954	67,191
2023	10,527	9,431	1,096	56,229	34,483	21,746	66,756

Source: compiled by the authors based on (Hecimovic and Martinov-Bennie 2023; State Treasury Service of Ukraine 2022).

According to the Unified register of managers and recipients of budget funds for 2023, the number of institutions and organisations included in the Register is 66,800, of which 10,500 are state budgets and 56,200 are local budgets. Compared to 2021, it was revealed that during 2023 the number of registered institutions and organisations in the Treasury decreased by 3,600, of which 1,100 belong to the state budget and 2,500 to local budgets. The main reason for such a sharp decline is the full-scale invasion, which led to the occupation of a large part of the country's territory, and frequent rocket attacks that cause serious damage to buildings and pose a threat to the life and health of citizens.

Analysis of the structure of the network of budget managers indicates that the decrease in the number of managers and recipients of budget funds included in the register was recorded in almost all territorial offices of the State Treasury Service of Ukraine (STSU). This is directly related to the reduction in budget allocations in connection with the implementation of budget programmes under martial law. It is worth noting that the highest dynamics of decline was recorded in Donetsk, Lviv, and Zaporizhzhia oblasts (Slyuz 2022). In addition, the dynamics of the number of managers and recipients of budget funds in 2017 according to the corresponding indicator in 2023 are extremely negative. Since there was a decrease of 13,100, of which 6,200 were financed from the state budget and 6,900 from the local budget. The key feature of the activities and management of state institutions can be considered that all institutions are financed from the state or local budget on an irrevocable basis, but provided that the principle of targeted use of budget funds and specific measures and areas are observed. Namely, the activities and areas for which funds should be spent are determined in the functional purpose of the institution's activities (Ionela 2012; Roshlyo 2023).

The system of state institutions is developed under the influence of the formation of the budget system and the system of state and local government bodies. The modern system of state institutions was created during the independence of Ukraine. That is, at a time when the main executive, legislative, and judicial authorities were established. Under the influence of various factors and in order to improve the public administration system, the structure of these institutions is re-formed. But the main purpose of these institutions remains stable and key to the overall social impact on society. Public institutions are managed not only through the accounting system, but also through planning and use of budget funds, compliance with the intended use of these funds, development of NR(S)PSA and implementation of international public sector accounting standards (IPSAS), risk monitoring and analysis, external and internal audit, budget and financial reporting, public procurement, and other public administration mechanisms (Abbasova *et al.* 2023).

The modern accounting system in state institutions is standardised and harmonised with the IPSAS. The main reason for these processes is that Ukraine aims to work closely with international organisations and

institutions, and to ensure that the reporting of public sector institutions is transparent, understandable, and comparable with the reporting of international partners. That is why the process of implementing IPSAS has begun. It is the IPSAS that is used as the basis for developing national standards. Considering certain public challenges and state policies, NR(S)PSA are regulated and changed. An equally important driving force for change is the changes that are being made to IPSAS. Since domestic accounting standards must comply with international standards.

Currently, public sector institutions have serious problems with the valuation, recognition, and accounting of non-financial assets. Given the martial law in the country, the military aggression of the Russian Federation and the features of the functioning of state institutions in wartime, it is necessary to classify non-financial assets with due regard to these features. One problem is that not all institutions have access to their assets to manage them. Therefore, due to military aggression, temporary occupation of territories, and the conduct of military operations on the territory of Ukraine, it is necessary to classify non-financial assets according to such a classification feature as access to assets. And, accordingly, classify them into non-financial assets that are freely accessible, partially accessible, and located in the occupied territory, since not only accounting, but also the overall assessment of the state's assets depends on access to non-financial assets. That is why it is extremely necessary to reflect up-to-date information about non-financial assets and information about access to them, both in accounting and reporting, respectively (Furmanchuk 2023; Lemishovska 2023).

Non-financial assets of state institutions are a key component of their functioning. The success of an institution and its ability to perform various functions largely depends on the availability and size of these non-financial assets. It is important to keep in mind that the mere presence of non-financial assets, although important, does not guarantee the effectiveness of the institution's activities. Therefore, proper accounting of both created and non-created resources at the disposal and use of the institution is identified as a key aspect for ensuring effective management of the institution. Heads of institutions manage by making strategic decisions based on the analysis and synthesis of information obtained from accounting and financial statements. This approach emphasises the relationship between the management of government agencies and their non-financial assets, determining how the effectiveness of management affects the activities of the institution (Mahacek *et al.* 2019; Abbasova *et al.* 2022; Khodakovsky 2023). Non-financial assets occupy a significant part in the overall structure of assets of business entities; in particular, Table 2 provides statistical information on the indicators of non-financial assets for the period 2013-2022.

Table 2. Statistical information on non-financial assets of business entities in Ukraine, million UAH

Indicator	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fixed assets and intangible assets	1,750.9	1,781.5	2,661.5	2,771.6	2,770	2,987	3,271.4	3,539	3,818.9
Depreciation	7,837.6	11,424.7	4,598.4	4,385.3	3,887.6	5,117.2	4,723.8	5,559.6	5,597.4
Investment property	32.4	45.3	47.8	48.9	52.7	57.7	76.3	89.4	101.2
Long-term biological assets	8.6	7.4	8.4	9.4	10.9	12.4	13.8	14.4	15.8
Capital investment in progress	270	253.1	271.7	315.7	389.5	481.7	487.2	488.4	518.9
Inventory	683.6	654.1	850.8	1,046.5	1,294.6	1,548.1	1,624.2	1,739.2	2,096.4
Current biological assets	13.2	13.4	15.8	18.9	21.5	26.6	28.8	31.8	36.2
Total non-financial assets:	2,758.8	2,754.9	3,856.1	4,211.1	4,539.3	5,113.4	5,501.7	5,902.2	6,587.5
Balance	5,712.3	5,994.3	8,073.8	9,991.8	9,961.8	10,878.1	11,495	12,682.5	14,070.5
Non-financial assets in the asset structure, %	48.3	45.96	47.76	42.15	45.57	47.01	47.86	46.54	46.82

Source: compiled by the authors based on (State Statistics Service of Ukraine 2023).

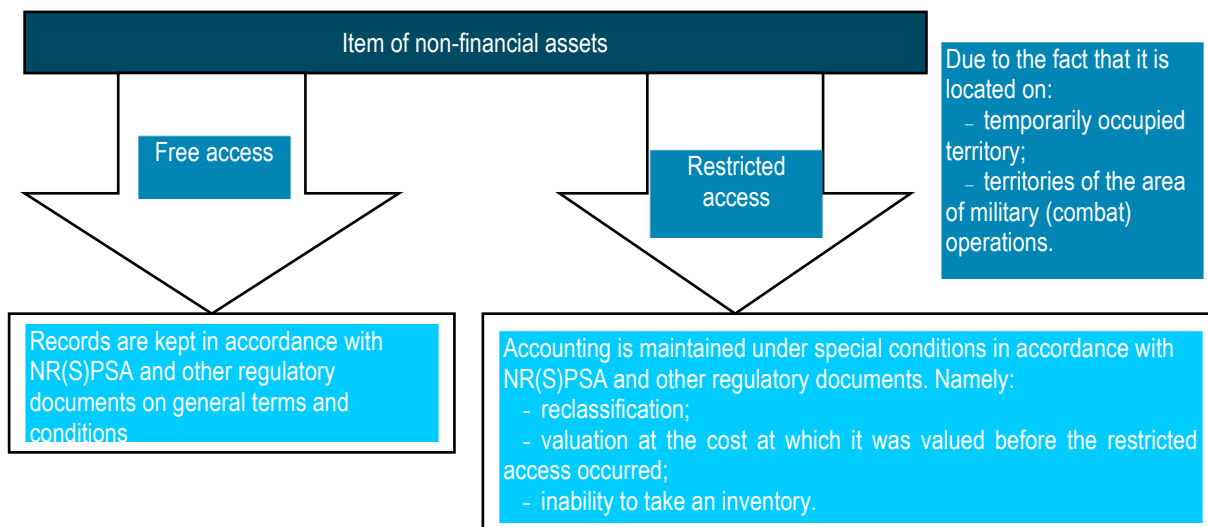
When evaluating the indicators in the structure of business entities' assets, it is worth noting that non-financial assets account for a significant share of the asset structure. That is, this figure is about 50%. Analysing the dynamics of the share of non-financial assets in the asset structure, this indicator had minor changes during the analysed period. The lowest value of this indicator was in 2016 and amounted to 42.15%, which is more than 6% less than in 2013. But in comparison with 2016, in 2021 this indicator increased by more than 4.5%, which

indicates a positive trend in the provision of business entities with non-financial assets. Consequently, non-financial assets, depending on their structure and security features of business entities, are an important component of the assets of business entities (Khodakivska *et al.* 2022). The manner in which non-financial assets are acquired also determines the recognition and measurement of such assets. Features of valuation of non-financial assets depending on the method of receipt is regulated by NR(S)PSA. It is worth noting that there is a direct relationship between the method of receipt and the definition of valuation of non-financial assets. Since the valuation of non-financial assets received as a result of acquisition for a fee differs significantly from the valuation of non-financial assets received without payment.

As a result of the Russian invasion, non-financial assets of certain state institutions are located in the temporarily occupied territory or are located in a war zone. That is why it is advisable to classify and identify all non-financial assets in accordance with the proposed classification features for the division of non-financial assets. Since the issue of access to non-financial assets is currently relevant and requires legal regulation. That is why it is advisable to reclassify it and transfer it from one group to another if there is a situation where access to non-financial assets is limited or completely absent. Accordingly, if an object of non-financial assets is located in the temporarily occupied territory, then it must be removed from one group of non-financial assets to another. And, accordingly, reflect on the balance sheet at the cost at which the corresponding object was accounted for and reflected in the financial statements in the previous period until access to it became impossible. However, in order to carry out reclassification, it is necessary to define the main criteria that must be considering when making a decision on reclassification. Thus, focusing on the non-financial assets of public entities, they can be considered as resources that were and were not created under the control of public entities as a result of past events related to their creation. These resources bring economic benefits through the ownership or use of operational management rights over a certain period of time.

The main criteria for recognising non-financial assets can be determined by considering their control and management by a state institution. According to the classification of assets by access level, non-financial assets are divided into those that have free access, partial access, and those that are located in the temporarily occupied territory, where access is restricted. Therefore, in order to evaluate and recognise non-financial assets, access to which is restricted, it is necessary to define criteria in accordance with the essence of non-financial assets and considering that the objects of non-financial assets have different recognition criteria. It is necessary to highlight such main criteria as: lack of management and control over the object of non-financial assets; there is a possibility of obtaining certain economic benefits in the future; the possibility of reliable assessment (revaluation); use for its intended purpose. A government agency may exercise control over an asset if it has the right to receive future economic benefits from its use and may restrict other business entities' access to the asset. Usually, control is related to ownership.

Figure 1. The Algorithm for evaluating and reclassifying non-financial assets depending on access to the asset



Source: compiled by the authors based on (State Statistics Service of Ukraine 2023).

These norms define the criteria for recognising an object of non-financial assets, such as controllability, materiality, useful life of more than a year or an operating cycle, obtaining future economic benefits, the possibility of reliable assessment, purpose for use in the production process, supply of goods, services, lease or implementation of

administrative and socio-cultural functions (Slobodeniuk 2023). Features of assessment and reclassification of non-financial assets in the absence of free access to objects related to the military aggression of the Russian Federation and the occupation of a certain part of the territory of Ukraine are presented in Fig. 1.

Appropriate adjustments should be made to laws and regulations, which determine that a public sector entity should reclassify all objects of non-financial assets only in cases where these assets are located in the territory that is under the influence of military (combat) operations, or are under temporary occupation, surrounded (blocked), and should be evaluated according to the value determined in the financial statements for the previous reporting period.

4. Discussion

The results of the study indicate a significant impact of changes in the number of institutions and organisations included in the Unified register of managers and recipients of budget funds (State Treasury Service of Ukraine 2022). This influence is associated with a full-scale invasion, which led to the occupation of part of the country's territory, and missile attacks. The results obtained indicate a significant decrease in the number of managers and recipients of budget funds included in the register at almost all territorial representative offices of the State Treasury Service of Ukraine. This decrease is determined by the reduction of budget allocations in connection with the implementation of budget programmes under martial law. Analysis of the dynamics from 2017 to 2023 indicates extremely negative trends, which were manifested in an overall decrease of 13,100, of which 6,200 were financed from the state budget, and 6,900 from the local budget.

It is important to note that in the context of military conflict and temporary occupation of territories, there are serious problems in the assessment, recognition, and accounting of non-financial assets of state institutions. One problem is that not all institutions have access to their assets to manage them. Given these difficulties, it is recommended to classify and identify all non-financial assets in accordance with the proposed classification criteria, in particular by the specifics of the functioning of wartime conditions. It is necessary to focus on the importance of providing up-to-date information about non-financial assets and information about access to them, both in accounting and reporting. It is very important to define criteria for reclassifying non-financial assets, in particular, considering different levels of access to assets, such as free access, partial access, and location in the temporarily occupied territory. Such measures will help ensure adequate accounting and evaluation of non-financial assets in the context of military conflict and occupation.

Battaglio *et al.* (2019) considered in detail the role of state institutions in the system of enterprises, where they highlighted the significant influence of these institutions on the performance of public tasks and on ensuring the effective functioning of society. The researchers focused on the functional aspects of the work of state institutions and their interaction with other actors in a complex system. One of the key points that the researchers identified is the need for adequate funding to ensure the effective operation of government agencies. They strongly argued that responsible use of budgetary funds plays a critical role in ensuring the functionality of these institutions and in their positive impact on society as a whole. These results, as well as the study above, show the interaction of state institutions with other subjects of the system, which is an important aspect of the analysis. The researcher identified the key aspects of this interaction, given their importance for achieving optimal results in the sphere of public tasks and the functioning of society.

Kaufman and Covaleski (2019) comprehensively analysed the accounting of funds of budgetary institutions. The results of this analysis reveal important aspects of money management and financial transparency in government organisations. The researchers reviewed in detail the process of registering funds in budgetary institutions. They drew attention to the importance of accurate and systematic recording of each cash flow in the accounting system. The results show that proper accounting guarantees effective financial management and allows identifying possible risks and shortcomings in the economy in a timely manner. The results obtained indicate the importance of improving cash accounting in government agencies. These recommendations can serve as a basis for further measures to optimise financial management and ensure the financial stability of budgetary institutions.

Macintosh and Daft (1998) considered aspects of government agency management through the introduction of a system of accounting and budget planning. The researchers focused on key elements of effective management, in particular, on the directed use of budget funds and the need to develop national standards. They identified that the accounting and budget planning system is an important management tool that allows efficient allocation of resources and prioritisation for government agencies. In particular, it was emphasised that the principle of directed use of budget funds is important for achieving maximum efficiency in the use of public finances. The development of national standards in the field of public institution management would allow unifying approaches to accounting

and planning, providing standard procedures and improving the comparison of results between different institutions. This step will help to increase transparency and efficiency of governance in the public institutions sector.

Kori *et al.* (2020) focused on the problems of evaluating and accounting for non-financial assets in public institutions, especially in the context of crisis conditions caused by military conflicts. The researchers developed a classification system for non-financial assets, considering limited access to them due to these conflicts, which cause difficulties in managing and evaluating resources. As a result of the study, an algorithm was created for evaluating and reclassifying non-financial assets in connection with war and occupation zones. This algorithm can be an important tool in situations where some objects may have limited or no access due to military operations. This approach allows managers and specialists in the field of finance to consider the specifics of the conditions faced by public institutions and effectively manage non-financial assets, ensuring accuracy and objectivity in financial statements in times of crisis.

Hu *et al.* (2019) considered the current system of state institutions in the country, analysing in detail the influence of various factors on their structure and reform processes. They delved deeply into the main aspects of the functioning and management of state organisations, their place in the overall system of government, and their interaction with other actors. The researchers analysed various factors that affect public institutions, such as political, economic, and socio-cultural changes. They looked at the impact of reforms and modernisation on the structure and functionality of public institutions, and identified the main challenges they face in modern conditions. The researcher's results, as well as the study above, focus on the key challenges faced by public institutions in modern conditions and determine their role in the power system. They also highlight the importance of analysing practical examples and provide grounds for further discussions on the effectiveness of public sector management strategies.

Oliinyk *et al.* (2023) focused on managing non-financial assets of public institutions in times of crisis and military conflicts. One of the key features of their study is the development of a classification system for non-financial assets, considering limited access to them due to military conflicts. A distinctive feature of the research is the creation of an algorithm for evaluating and reclassifying non-financial assets in a war or occupation zone. The study can serve as an important tool in situations where asset management and valuation become particularly difficult due to the impact of military conflicts. These approaches can be useful for finance professionals and managers working in the field of public administration in emergency situations.

In general, the results indicate important aspects of managing public institutions and solving problems related to financial and non-financial management in modern society and crisis situations. The researchers focused on the effective use of budget funds, the development of standards, and asset management in the face of constraints such as military conflicts.

Conclusions and Further Research

The study aims to understand the role of government institutions and the challenges faced in managing non-financial assets, especially in the context of the crisis caused by the Russian invasion. An analysis of the Unified register of managers and recipients of budget funds for 2022 revealed a significant decrease in the number of registered institutions due to the ongoing conflict situation. The war led to the occupation of the territory, destruction, and reduction of budget allocations, which affected the work of state institutions.

The study highlighted the importance of effective management through budget planning, compliance with the intended use of funds, and compliance with national and international standards. The introduction of International Public Sector Accounting Standards (IPSAS) is defined as a step towards achieving transparency and compatibility with international reporting standards. The need for a flexible classification of non-financial assets in connection with limited access in times of war is highlighted. Analysis of non-financial assets of economic entities showed their key role in the overall asset structure, accounting for about 50%. The dynamics indicated a positive trend in providing business entities with non-financial assets. However, the valuation and recognition of non-financial assets in times of crisis, where access is limited, requires a reclassification process. The proposed evaluation and reclassification algorithm considers the lack of access, economic benefits, and intended use. In the context of war, the study points to the need for criteria for recognising non-financial assets, such as control, materiality, useful life, and the possibility of future economic benefits. The algorithm provides a basis for evaluating and reclassifying assets in territories affected by military operations or temporary occupation. Overall, the study provides valuable insights for policy makers and professionals who face the complexities of managing government agencies and non-financial assets in challenging circumstances.

Further research may be aimed at analysing the effectiveness of managing government institutions and non-financial assets in a military crisis, including aspects of international experience, technological innovation, public policy, and international cooperation.

Credit Authorship Contribution Statement

Olena Tsiatkovska: Conceptualization, Project administration, Writing – original draft.

Olena Prymachenko: Methodology, Formal analysis, Data curation;

Liudmyla Lezhnenko: Investigation, Formal analysis, Writing – review and editing, Visualization;

Yevheniya Feshchenko: Formal analysis, Writing – review and editing, Visualization.

Olena Mykhalska: Supervision, Validation, Visualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of Use of Generative AI and AI-assisted Technologies

The authors declare that they have not used generative AI and AI-assisted technologies during the preparation of this work.

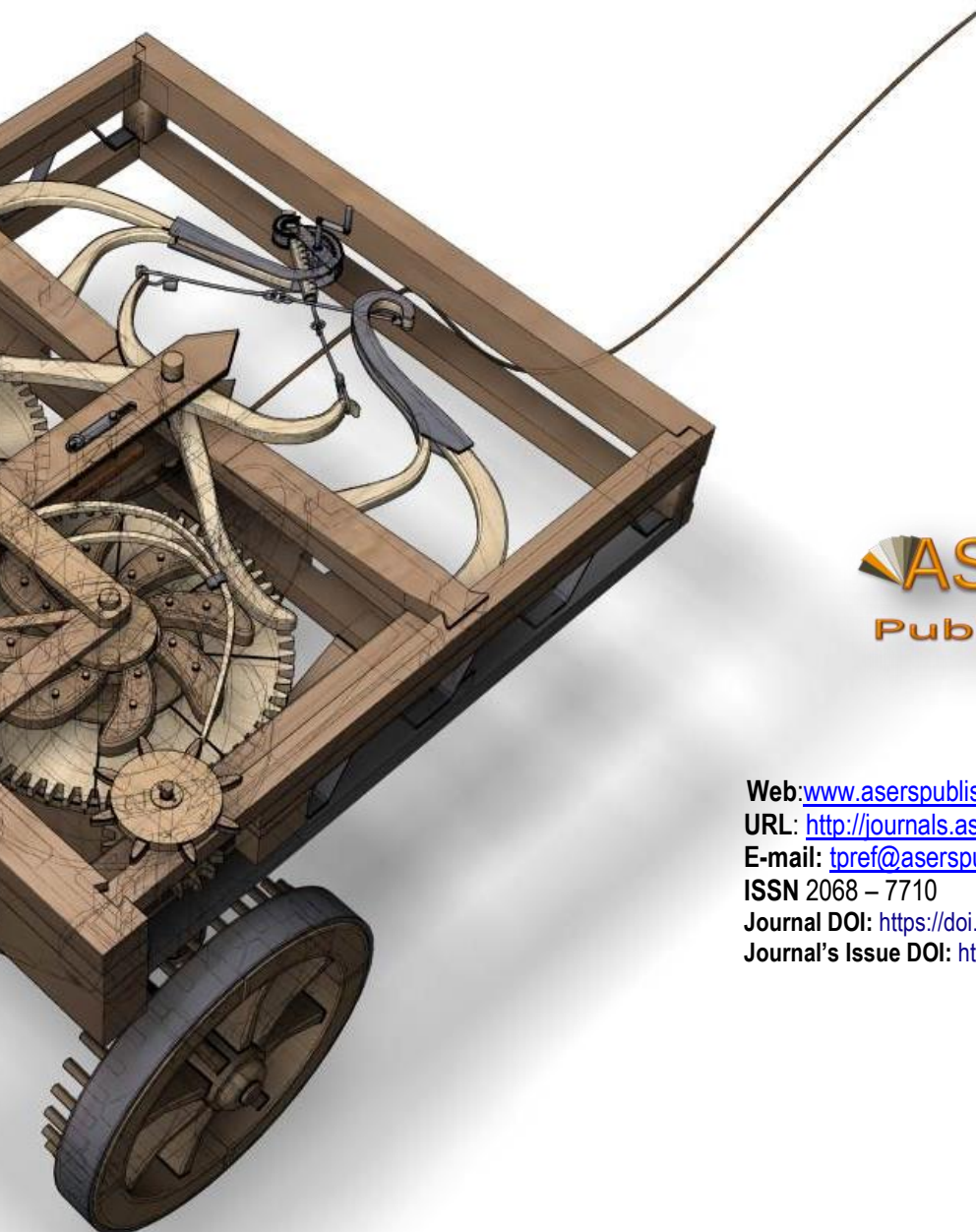
References

- [1] Abbasova, Agamamed *et al.* (2023). Problems and Prospects in Developing the Auditing System in Azerbaijan. *Universidad y Sociedad*, 15(2): 550-61.
- [2] Abbasova, Sevinj, Mehriban Aliyeva, and Leyla Huseynova (2022). Accounting Information Transparency and Business Performance: A Case of G7 Construction Companies. *Problems and Perspectives in Management*, 20(4): 518-31. DOI: [https://doi.org/10.21511/ppm.20\(4\).2022.39](https://doi.org/10.21511/ppm.20(4).2022.39)
- [3] Alslihat, Nimer (2017). Accounting Disclosure of Both Financial and Non-Financial Information in the Light of International Accounting Standards. *International Journal of Economic Research*, 14(12): 105-18. Available at: https://serialsjournals.com/abstract/21953_8.pdf
- [4] Battaglio, R. Paul Jr., Paola Belardinelli, Nicola Bellé, and Patrick Cantarelli (2019). Behavioral Public Administration Ad Fontes: A Synthesis of Research on Bounded Rationality, Cognitive Biases, and Nudging in Public Organizations. *Public Administration Review*, 79(3): 304-20. DOI: <https://doi.org/10.1111/puar.12994>
- [5] Bezhenar, Andrii Yu (2021). Modernization of the Accounting System in the Public Sector. In: *Proceedings of the VII International Scientific and Practical Conference Dedicated to the 115th Anniversary of the Kyiv National Economic University named after Vadym Hetman 'Accounting, Analysis, Audit and Taxation: A Modern Paradigm in the Information Society'* (pp. 222-26). Kyiv: Kyiv National Economic University named after Vadym Hetman. Available at: <https://dspace.kntu.kr.ua/server/api/core/bitstreams/6a3a5b6c-feb2-4a79-8118-d9ed08d936fa/content>
- [6] De Bernardi, Patrizia, Francesco Venuti, and Amedeo Bertello (2019). The Relevance of Climate Change Related Risks on Corporate Financial and Non-Financial Disclosure in Italian Listed Companies. In: *The Future of Risk Management: Perspectives on Law, Healthcare, and the Environment* (pp. 77-107). Cham: Palgrave Macmillan. DOI: https://doi.org/10.1007/978-3-030-14548-4_4
- [7] Furmanchuk, Oksana (2023). The Role of State Finance Audit in the System of Accounting and Analytical Support of the State Funds Management System. *Economics of Development*, 22(4): 34-42. DOI: <https://doi.org/10.57111/econ/4.2023.34>
- [8] Gaio, Cristina, Teresa Gonçalves, and Adalmiro Pereira (2021). Financial Crisis and Impairment Recognition in Non-Financial Assets. *Review of Business Management*, 23(2): 370-87. DOI: <https://doi.org/10.7819/rbgn.v23i2.4108>
- [9] Hecimovic, Aida, and Nonna Martinov-Bennie (2023). Audit Report Construction: Public Sector Organisation Perspectives within a Non-Financial Information Context. *Journal of Public Budgeting, Accounting and Financial Management*, 35(2): 172-91. DOI: <https://doi.org/10.1108/JPBAFM-09-2021-0135>
- [10] Hu, Helen Wei, Luoluo Cui, and Preet S. Aulakh (2019). State Capitalism and Performance Persistence of Business Group-Affiliated Firms: A Comparative Study of China and India. *Journal of International Business Studies*, 50: 193-222. DOI: <https://doi.org/10.1057/s41267-018-0165-5>

- [11] Ironkwe, Umanta I., and Joseph N. Nwaiwu (2018). Accounting Information System on Financial and Non-Financial Measures of Companies in Nigeria. *International Journal of Advanced Academic Research: Business Development and Management*, 4(2): 39-55. Available at: <https://www.ijaar.org/articles/Volume4-Number2/Business-Development-Management/ijaar-bdm-v4n2-feb18-p3.pdf>
- [12] Jeegers, Thomas (2023). Non-Financial Risk Management. In: *Understanding Crypto Fundamentals: Value Investing in Cryptoassets and Management of Underlying Risks* (pp. 219-36). Berkley, CA: Apress. DOI:https://doi.org/10.1007/978-1-4842-9309-6_13
- [13] Kaufman, Wm. Brett, and Michael A. Covalleski (2019). Budget Formality and Informality as a Tool for Organizing and Governance Amidst Divergent Institutional Logics. *Accounting, Organizations and Society*, 75: 40-58. DOI: <https://doi.org/10.1016/j.aos.2018.10.003>
- [14] Khodakivska, Olga et al. (2022). Sustainable Development of Regions: Modeling the Management of Economic Security of Innovative Entrepreneurship. *International Journal of Advanced and Applied Sciences*, 9(3): 31-38. DOI: <https://doi.org/10.21833/IJAAS.2022.03.004>
- [15] Khodakovskiy, Vadim (2023). State Financial Policy of Economic Development. *University Economic Bulletin*, 18(3): 24-30. DOI: <https://doi.org/10.31470/2306-546X-2023-58-24-30>
- [16] Kori, Bryson Wafula, Samuel M.A. Muathe, and Samuel Maina (2020). Financial and Non-Financial Measures in Evaluating Performance: The Role of Strategic Intelligence in the Context of Commercial Banks in Kenya. *International Business Research*, 13(10): 130-42. DOI: <https://doi.org/10.5539/ibr.v13n10p130>
- [17] Lemishovska, Olesia (2023). Methodological Tools in the Processes of Income and Expenditure Accounting: Contemporary Discussions and Developments in Galicia at the Turn of the Century. *Economics, Entrepreneurship, Management*, 10(2): 35-47. DOI: <https://doi.org/10.56318/eem2023.02.035>
- [18] Lestari, Ni Ida Gede, and Desi Adhariani (2022). Can Intellectual Capital Contribute to Financial and Non-Financial Performances During Normal and Crisis Situations? *Business Strategy and Development*, 5(4): 390-404. DOI: <https://doi.org/10.1002/bsd.2.206>
- [19] Macintosh, Norman B., and Richard L. Daft (1998). Management Control Systems and Departmental Interdependences: An Empirical Study. In: *Management Control Theory* (pp. 251-78). London: Routledge. DOI:<https://doi.org/10.4324/9780429422553>
- [20] Mahacek, Darko, Aleksandar Vcev, and Drazen Sebo (2019). Budget and Non-Financial Assets. In: *Economic and Social Development: 37th International Scientific Conference on Economic and Social Development – ‘Socio Economic Problems of Sustainable Development’*. Baku: Varazdin Development and Entrepreneurship Agency. Available at: <https://unec.edu.az/application/uploads/2019/09/Huseynov-Faiq1.pdf>
- [21] Moshenskyi, Sergii, Dymytrii Grytsyshen, and Oleksandr Petruk (2024). Agricultural and Resource Economy of Ukraine and Problems for Economic Growth. *Scientific Horizons*, 27(1): 152-161. DOI:<https://doi.org/10.48077/scihor1.2024.152>
- [22] Oliinyk, Yuliia et al. (2023). Development of Information Support for Fiscal Risk Management Within Crises. *Financial and Credit Activity: Problems of Theory and Practice*, 6(53): 432-50. DOI:<https://doi.org/10.55643/fcaptop.6.53.2023.4219>
- [23] Popa, Ionela (2012). Features of Budget Execution in Public Institutions' Budgets Entirely Funded by Public and Local Budgets. *Ovidius University Annals: Economic Sciences Series*, 12(2): 1330-32.
- [24] Radionov, Yurii D. (2023). The Public Finance System of Ukraine under Martial Law. In: *V International Scientific and Practical Conference ‘Financial Instruments of Sustainable Economic Development’* (pp. 34-38). Chernivtsi: Yuriy Fedkovych Chernivtsi National University. Available at: http://dspace.puet.edu.ua/bitstream/123456789/13038/1/2023_Conference_CHERNIVTSI%20.pdf#page=35
- [25] Roshlyo, Violetta (2023). Specific Features of the Financial System of Ukraine in the Conditions of War. *Scientific Bulletin of Mukachevo State University. Series ‘Economics’*, 10(2): 31-41. DOI:<https://doi.org/10.52566/msu-econ2.2023.31>

- [26] Sliusar, Svitlana (2022). Organisation of Accounting in Public Sector Institutions of Ukraine: International Context. *University Economic Bulletin*, 53: 88-93. Available at: <https://www.cceol.com/search/article-detail?id=1060064>
- [27] Slobodeniuk, Tymur (2023). Modernisation of the National System of Administrative Services in Ukraine, Caused by the Russian-Ukrainian War. *Development Management*, 22(4): 8-15. DOI:<https://doi.org/10.57111/devt/4.2023.08>
- [28] Slyuz, Tetyana (2022). Public Report of the Head of the Treasury on the Results of the Activities of the State Treasury Service of Ukraine for 2022. *State Treasury Service of Ukraine*. Available at: <https://www.treasury.gov.ua/storage/app/sites/1/uploaded-files/ПУБЛІЧНИЙ%20БІТ%20за%202022%20рік.pdf>
- [29] Storozhuk, T.M. (2023). On the Issue of Forming the Accounting Policy of Public Sector Institutions. In: *V International Scientific-Practical Conference 'Modernization of Economy: Current Realities, Forecast Scenarios and Development Prospects'* (pp. 465-69). Kherson: Kherson National Technical University. <http://dspace.nbu.gov.ua/bitstream/handle/123456789/196945/16-Boichenko.pdf>
- [30] Tsiatkovska, Olena (2023). Methodological Basis for Constructing the Accounting of Non-Financial Assets in State Institutions. *Acta Academiae Beregsasiensis. Economics*, 4: 552-62. Available at: <https://aab-economics.kmf.uz.ua/aabe/article/view/121>
- [31] Regulatory and Legal Support of Accounting in the Public Sector. (2023). Ministry of Finance of Ukraine. Available at: <https://mof.gov.ua/uk/nacionalni-polozhennja>
- [32] State Statistics Service of Ukraine. (2023). Available at: <https://www.ukrstat.gov.ua/>
- [33] Unified Register of Managers and Recipients of Budget Funds. (2022). State Treasury Service of Ukraine. Available at: <https://www.treasury.gov.ua/unifie-register-search>

ASERS



**ASERS**
Publishing

Web: www.aserspublishing.eu

URL: <http://journals.aserspublishing.eu/tpref>

E-mail: tpref@aserspublishing.eu

ISSN 2068 – 7710

Journal DOI: <https://doi.org/10.14505/tpref>

Journal's Issue DOI: [https://doi.org/10.14505/tpref.v15.2\(30\).00](https://doi.org/10.14505/tpref.v15.2(30).00)