

ACCOUNTING AND ECONOMIC ANALYSIS IN CONDITIONS OF DIGITALIZATION AND GLOBALIZATION OF PUBLIC RELATIONS

Yaroslav Izmaylov

Kryvyi Rih Economic Institute SHEE “Kyiv National Economic University named after
Vadym Hetman“, Ukraine

Iryna Yegorova

Kryvyi Rih Economic Institute SHEE “Kyiv National Economic University named after
Vadym Hetman“, Ukraine

Evalds Viskers

Rezekne Academy of Technologies, Latvia

Abstract. *The aim of the research is to identify the directions of accounting and economic analysis in the context of globalization and electronic data processing. The role of accounting and economic analysis in managing sustainable development of the national economy and economic entities is determined. The theoretical and methodological design of improved systems of accounting and economic analysis of enterprises' economic activity including expanded and updated functions, tasks and principles in accordance with current conditions of digitalization and globalization of public relations is presented. It allows creating appropriate organizational and methodological provision of accounting and analytical support of managing enterprises' activity to increase reliability and relevance of accounting information. The authors prove that improved components of the accounting and economic analysis system of enterprises' economic activity in the conditions of digitalization and globalization of economic relations will enhance application of accounting techniques, procedures, methodological support, management and internal control.*

Keywords: *accounting, digitalization, economic analysis, globalization, information.*

Introduction

Globalization and multi-vector integration of world countries, dynamic changes of the competitive environment, digitalization of economic relations and active investment into innovations are all the factors that accelerate economic development and have a direct impact on the national economy. Yet, in spite of the need to react to new challenges facing information society, the potential of sustainable development has failed to be realized. Making efficient managerial solutions at the age of economic globalization and digitalization is possible only through obtaining timely, complete, authentic and objective

information on enterprises' economy that can be provided by the system of accounting and economic analysis.

Economic globalization, business expansion of international companies, creation and functioning of joint enterprises and realization of international projects have caused the need to internationalize, unify, harmonize and standardize accounting in order to enhance data quality and reliance. Efficient methods and tools of financial management can be acquired by obtaining analytical and settled data necessary for managers of various levels to achieve their goals. Financial and economic information is extremely heterogeneous in character. Interrelations of some information types are complicated and tend to be even more complicated. By reflecting all essential changes in the structure of economic means, sources of their creation and results of financial and economic activity, accounting and economic analysis can provide the information necessary for users to make well-grounded decisions.

The aim of the research is to identify the directions of accounting and economic analysis in the context of globalization and electronic data processing.

Achievement of the set goal involves solving the following tasks:

- to substantiate the place and role of accounting and economic analysis under the economic globalization and digitalization;
- to formulate the postulates of the development theoretical and methodological provisions of the accounting systems in the direction of compiling integrated reporting;
- to substantiate the importance of developing a concept for the development of accounting and analysis in context of economic globalization and digitalization;
- to determine the prospects for the development of accounting and analysis of technology using computerized information systems in the context of the requirements of the digital economy as an instrument of globalization.

To achieve this aim the following methodology was used: scientific inductive and deductive methods, the monographic and the data based method.

The research is based on the dialectical method which enables determining the place of accounting and economic analysis of enterprises' economic activity under conditions of globalization and digitalization. Simulation is applied to depicting synergetic interaction of subsystems of accounting and economic analysis, planning and control in the enterprise management system.

Interconnection of accounting, economic analysis, planning and control data in the enterprise management system

The research by Darrough and Deng (Darrough & Deng, 2018) defines the role of accounting data in establishing optimal interrelations between business-partners. Suprunova (Suprunova, 2018) substantiates the influence of transformation processes, in particular globalization and digitalization of economy, on the accounting system.

John A. Pendley (Pendley, 2018) considers financiers' and accountants' role in ensuring economic entities' cyber security.

The research by Hall and O'Dwyer (2017) defines the role of accounting in managing non-profitable organizations.

The research by Hopper, Lassou, and Soobaroyen (Hopper, Lassou, & Soobaroyen, 2017) reveals prospects of accounting in the age of globalization of the country's development.

Bebbington, Russell and Thomson (Bebbington, Russell, & Thomson, 2017) investigate the place of the accounting system in sustainable development of economy.

The research paper by Shields (2018) determines the prospects of investigating accounting development.

Professor Butinets (Butinets, 2018) proves that accounting is an important part of forming the basis of the market economy, the language of business and entrepreneurship, an effective tool of managing economic processes. The reason for that is its potential to facilitate management, planning, monitoring and analysis through providing accounting information which is both retrospective and perspective in character.

Professor Yevdokimov (Yevdokimov, 2011) believes that in the age of economic globalization and arising information society, the theory and practice of accounting undergo transformation and IT development cause new insights into this field.

Hendriksen and Van Breda consider provision of information one of the main objectives of accounting in current conditions of the market economy. It enables investors to form their investment portfolio in order to balance risks and profits under the set security price. On the contrary, information can be necessary to establish the security price which would reflect risk and profit ratio and enable investors to form portfolios according to their own preferences to reach the maximum profitability under the set risk rate (Hendriksen & Van Breda, 1997).

Lehenchuk proves that the current accounting system under developing post-industrial economic conditions (Lehenchuk, 2011) does not provide users with necessary information to make efficient managerial decisions. It is

suggested by the criticism expressed both by internal and external users of accounting information and representatives of the accounting scientific community. This situation suggests the necessity to reconsider some theoretical and methodological principles of accounting in order to meet accounting information users' needs through considering current economic changes.

Accounting and financial reporting are of primary importance in the system of information support of economic entities, their indices characterizing enterprises' financial and economic activity. Interested users can apply accounting and financial reporting information to performing economic analysis, planning, developing financial strategies and tactics for basic directions of economic activity. The data on accounting and economic analysis is the only thing that helps find reserves, their better application in the form of investments improve production (services) and manufacture marketable products/services. In other words, accounting and financial reporting mediate between an enterprise and the external environment, the information revealing the processes occurring at an enterprise. On the other hand, they provide information of the volume required by external and internal users.

Accounting information is essential for either confirming or correcting assumptions as a decision is rarely made in isolation. The data on the result of one decision are used to make another decision, this process being a feedback. Ideally, accounting and financial reporting provide enterprises with the service like this (a feedback), enabling them to control their tactics and strategy.

It should be noted that information cannot be considered relevant if it is not timely, i.e. it should be applicable to making decisions before it loses its ability to affect this process. Timeliness of information does not guarantee its relevance, yet the latter is not conceivable without the former. Accumulation, summing up and further publication of reporting information should be done as soon as possible to ensure availability of current information for users.

It is estimated that benefits of information increase if it is presented in the form enabling comparison of an economic phenomenon with a similar one occurring at another point of time. Proceeding from this, comparability is a property of information which enables users to find similarity and difference between two sets of economic phenomena. In its turn, comparability of information depends on its heterogeneity (uniformity) and consistency (stability, conformity). To perform this, the accounting-analytical system should distinguish four pointcuts of information on enterprises' economic activity - accounting, analytical, forecasting and management information. Each of the mentioned information blocks is affected by a certain group of factors, requires solution of some methodological and organizational tasks and is characterized by a potential to enhance the management and quality level (Figure 1).

Resources, funds, their sources and account settlement, basic means, other noncurrent tangible assets, intangible assets, inventories and financial results are all subject to accounting and analytical monitoring, forecasting and control. It facilitates ordering and meaningful cooperation of separate elements of the enterprise's accounting and economic analysis system.

It is suggested that the system-based approach should determine the ways of improving some essential aspects of accounting, analysis, forecasting and control of enterprises' economic activity. This approach implies:

- synchronization of operating accounting, analytical, forecasting and managerial elements of accounting;
- arrangement of high-quality diagnostics of observing commitments by obtaining easy access to necessary accounting and analytical information of the required adequacy rate;
- dynamic responses to critical deviations in conditions and consequences of economic activity;
- prevention of unpredictable failures and errors in performing operations and their documentation.

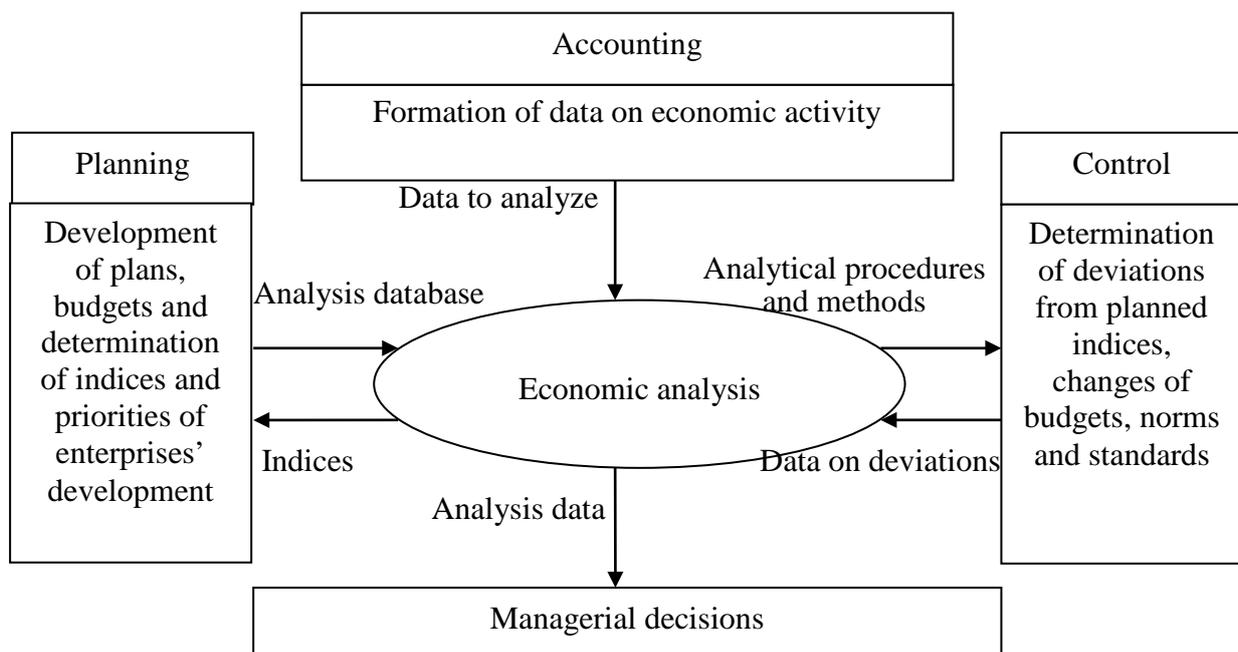


Figure 1 Accounting, economic analysis, planning and control in terms of enterprises' management subsystems (compiled by the authors)

Accounting and analytical information should provide an opportunity to assess whether an enterprise used funds in sufficient quantity in the previous period, how justified the chosen investments are and how previously performed operations affected the enterprise's profitability. Obtained results of accounting

data analysis form the basis for making efficient long-term managerial decisions. On this assumption, tasks of accounting and economic analysis are formed on the basis of integrated management objects: enterprise's development, efficient use of resources, introduction of innovations, product manufacturing, economic consequences of investments into innovations. According to each group of objects, there is a need in analytical provision of other management systems, including planning (application of economic analysis results to compiling budgets) and internal management (application of analytical procedures during inspections and using analysis of previous periods to plan inspections).

The role and place of accounting in the age of digitalization and economic globalization

Izmaylov, Yegorova, Maksymova and Znotina proves that emerging information society provides for conformity of economic growth to quality parameters of social and economic development as further progress is determined not by production, but by more extensive use of information. Digital economy is composed of the following three elements - development and maintenance of infrastructure, electronic business and electronic commerce (Izmaylov, Yegorova, Maksymova, & Znotina, 2018). For every element of electronic economy to function effectively and evolve, there should be a clear accounting and analytical system for providing high-quality, authentic and complete information on making managerial decisions.

Professor Svirko (Svirko, 2014) thinks that the role of accounting should be considered in terms of the following three levels of economy:

- 1) the mega-level as an element of the international complex of informational interaction of enterprises and a tool of economic integration;
- 2) the macrolevel as a component of the national accounting system and a tool of informational provision of controlling the country's national income;
- 3) the microlevel as an element of financial management of business entities, a means of protecting the rights of personnel, consumers, legal entities and individual taxpayers.

Modern conditions of globalization and digitalization of business relations lead to expanded application of accounting data from the microlevel and the macrolevel to the mega-level through intensification of its manifestation on these levels of business relations (Figure 2).

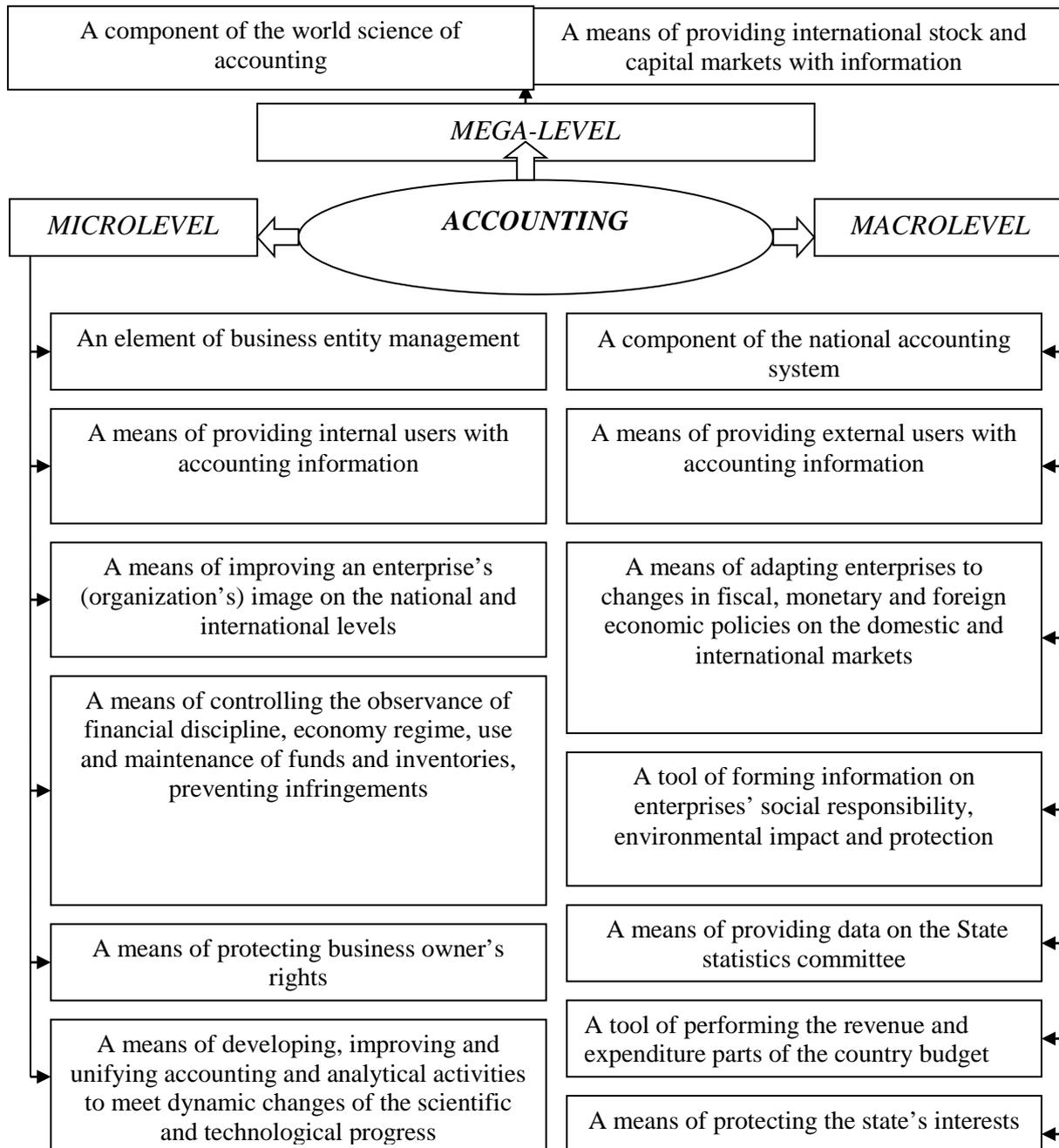


Figure 2 Accounting on the mega-, macro- and microlevels in the age of economic globalization and digitalization (compiled by the authors)

Standardization means determination and application of rules to manage a filed-specific activity by regulating some conditions, standards, qualitative characteristics and other standardization objects called standards (Academic Explanatory Dictionary, 2018).

According to its scale, standardization is characterized by the following levels: 1) the mega-level implying standardization on the international level and

participation of corresponding bodies of all countries; 2) the regional level implying standardization on the corresponding regional level and participation of corresponding bodies of the countries of a certain geographical or economic space; 3) the macrolevel implying national standardization on the level of a single country; 4) the microlevel implying standardization on the level of a separate business entity.

Standardization of accounting on the international level is determined by globalization and data users' need in making similar managerial decisions as to asset purchasing and selling, evaluating management quality, employers' ability to pay for employees' labour, diagnostics of business entities' credit worthiness and solvency, improvement of their tax policies and regulation of other issues of their economic and financial activity.

Standardization of accounting is performed by several international organizations including the International Accounting Standards Committee which designs international accounting standards; the International Federation of Accountants which develops ethical, educational and auditing aspects of accounting; the United Nations Organization which facilitates introduction of international standards in the world countries and mainly deals with studying the issues of accounting and reporting of international corporations and developing corresponding recommendations to harmonize them. At the same time, international standards do not control accounting methods and techniques. Therefore, they are different in different countries. Only the basic principles affecting formation and reflection of enterprises' activity results and financial state are subject to control.

Transition of business entities' accounting and reporting systems to international standards is to make economic relations with foreign companies simpler. Foreign business-partners will be able to obtain clear, complete and authentic information on Ukrainian enterprises' financial state. The new accounting and reporting system by international standards facilitates procedures of determination of financial and economic activity results, evaluation of investment or reinvestment expediency for foreign business entities, financial institutions, investors, counteragents and other users of accounting and reporting information.

Benefits of creating the accounting system according to international accounting and reporting standards include automation of everyday business processes, crediting opportunities, efficient management decision-making, establishment of long-term contacts with foreign business-partners, and simplification of consolidated reporting forms.

The role and place of economic analysis in the age of economic globalization and digitalization

Economic analysis is an integral part of enterprises' economic activity. As its final stage before making managerial decisions, it covers all the elements of this activity. Economic analysis enables providing correct assessment of an enterprise's and its departments' activity, detecting reasons for failures and available reserves, facilitates the general level of economic activity by making it a serious incentive of the scientific and technological progress and improving production efficiency. The place of economic analysis in making managerial decisions is given in Figure 3.

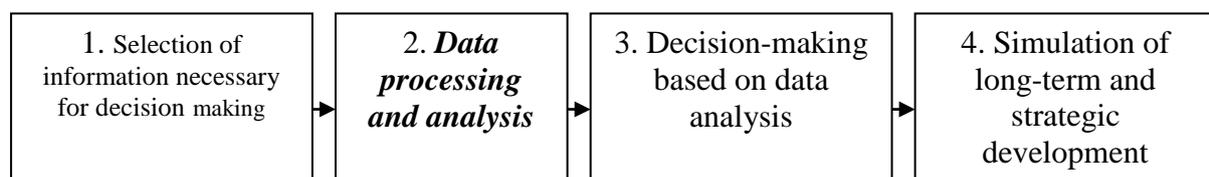


Figure 3 The place of economic analysis in making managerial decisions in the age of economic globalization and digitalization (compiled by the authors)

A perfect economic analysis of an enterprise's economic activity enhances generalization of accounting and reporting information, its dynamic changes, structure and financial consequences. The results of economic analysis enable diagnostics and control of trends of improving qualitative and quantitative indices of enterprises' economic activity. Functions and tasks of economic analysis always depend on the country's social and economic order and the economic development level, in particular the conditions of an enterprise's operation. The functions and tasks can also vary depending on the economic analysis level. On the macrolevel (economy of countries, regions, fields) economic analysis is in close relation to statistics and acquires a form of economic and statistic analysis. On the microlevel (the first level economy of the economic system), it is realized as economic analysis of an enterprise's activity.

Conclusions

It is estimated that accounting and analysis of enterprises' economic activity in the age of economic globalization and digitalization is aimed at forming transparent accounting and analytical data to ensure users' trust and providing an opportunity to control reporting indices formation. In particular, it implies creating complete, timely, authentic and structured retrospective and perspective information on strategic and current aspects of an enterprise's

activity and its environment considering users' requirements on the basis of long- and short-term financial and non-financial indices.

The most important tasks of developing accounting and economic analysis in the age of digitalization and globalization of public relations is transition from the concept of financial reporting to the concept of corporate reporting which is to provide users with information on rational use of land, water and other country's resources; efficiency of using noncurrent assets, their updating and improvement to ensure further development; application of innovative energy- and resource-saving technologies; efficient application of labour resources including intellectual capital; provision of formation and efficient use of capital, borrowed and debt financial resources; creation, application and production of innovations; introduction of results of the investment-innovative development aimed at environmentally sound and intensified production and expanded range of innovative products and services; enhancement of the state's military, political and economic security, etc. Development of economic analysis aimed at improving analytical calculations will allow managers to actively affect investments into updating of real assets, mobilizing current reserves to increase feedbacks from the invested capital.

Further research should be focused on developing theoretical and methodological principles ensuring obtainment of data from integrated accounting and analysis systems. The data obtained will characterize production, distribution and consumption of social products and the national income within the scale of a single economic entity.

Summary

Making efficient managerial solutions at the age of economic globalization and digitalization is possible only through obtaining timely, complete, authentic and objective information on enterprises' economy that can be provided by the system of accounting and economic analysis.

The research is intended to define the place and role of accounting and economic analysis subsystems in the business management system under conditions of globalization and digitalization of economic relations.

The role of accounting and economic analysis in managing sustainable development of the national economy and economic entities is determined.

It is estimated that accounting and analysis of enterprises' economic activity in the age of economic globalization and digitalization is aimed at forming transparent accounting and analytical data to ensure users' trust and providing an opportunity to control reporting indices formation. In particular, it implies creating complete, timely, authentic and structured retrospective and perspective information on strategic and current aspects of an enterprise's activity and its environment considering users' requirements on the basis of long- and short-term financial and non-financial indices.

The theoretical and methodological design of improved systems of accounting and economic analysis of enterprises' economic activity including expanded and updated functions, tasks and principles in accordance with current conditions of digitalization and globalization of public relations is presented. It allows creating appropriate organizational and methodological provision of accounting and analytical support of managing enterprises' activity to increase reliability and relevance of accounting information.

The most important tasks of developing accounting and economic analysis in the age of digitalization and globalization of public relations is transition from the concept of financial reporting to the concept of corporate reporting which is to provide users with information on rational use of land, water and other country's resources; efficiency of using noncurrent assets, their updating and improvement to ensure further development; application of innovative energy- and resource-saving technologies; efficient application of labour resources including intellectual capital; provision of formation and efficient use of capital, borrowed and debt financial resources; creation, application and production of innovations; introduction of results of the investment-innovative development aimed at environmentally sound and intensified production and expanded range of innovative products and services; enhancement of the state's military, political and economic security, etc. Development of economic analysis aimed at improving analytical calculations will allow managers to actively affect investments into updating of real assets, mobilizing current reserves to increase feedbacks from the invested capital.

References

- Academic Explanatory Dictionary of the Ukrainian Language* (2018). Retrieved from <http://sum.in.ua/s/informacija>
- Bebbington, J., Russell, S., & Thomson, I. (2017). Accounting and sustainable development: Reflections and propositions. *Critical Perspectives on Accounting*, 48, 21-34. DOI: <https://doi.org/10.1016/j.cpa.2017.06.002>
- Butinets, F. (2018). *What gives the owner accounting?* Retrieved from <http://eztuir.ztu.edu.ua/3814/1/4.pdf>
- Darrough, M., & Deng, M. (2018). The Role of Accounting Information in Optimal Debt Contracts with Informed Lenders. *The Accounting Review*. Retrieved from <https://doi.org/10.2308/accr-52313>
- Yevdokimov, V. (2011). *Concept of the integrated accounting system: theory, methodology, organization: the dissertation diss. ... doctor econ Sciences: 08.00.09*. Zhytomyr.
- Hall, M., & O'Dwyer, B. (2017). Accounting, non-governmental organizations and civil society: The importance of nonprofit organizations to understanding accounting, organizations and society. *Accounting, Organizations and Society*, 63(C), 1-5. DOI: <https://doi.org/10.1016/j.aos.2017.11.001>
- Hendriksen, E.S., & Van Breda, M.F (1997). *Accounting Theory*. Moscow: Finance and Statistics.
- Hopper, T., Lassou, P., & Soobaroyen, T. (2017). Globalisation, accounting and developing countries. *Critical Perspectives on Accounting*, 43, 125-148. DOI: <https://doi.org/10.1016/j.cpa.2016.06.003>

- Izmaylov, Y., Yegorova, I., Maksymova, I., & Znotina, D. (2018). Digital economy as an instrument of globalization. *Scientific Journal of Polonia University*, 27(2), 52-60. DOI: <https://doi.org/10.23856/2706>
- Pendley, J.A. (2018). Finance and Accounting Professionals and Cybersecurity Awareness. *Journal of Corporate Accounting & Finance*, 29(1), 53-58. DOI: <https://doi.org/10.1002/jcaf.22291>
- Lehenchuk, S. (2011). Development of the theory and methodology of accounting in a post-industrial economy: *dissertation ... doctor economics sciences*: 08.00.09. Zhytomyr.
- Shields, M. (2018). A Perspective on Management Accounting Research. *Journal of Management Accounting Research*, 30(3), 1-11. DOI: <https://doi.org/10.2308/jmar-10618>
- Suprunova, E. (2018). Transformation of new types accounting in the context of globalization and digitalization of the economy. *International Accounting*, 21(8), 870-886. DOI: <https://doi.org/10.24891/ia.21.8.870>
- Svirko, S. (2014). Modernization of budget accounting as an instrument for the successful integration of the national economy into the world economy. *Actual problems of the economy*, 5(155), 478-484.