# SECTION 7. FINANCIAL, ACCOUNTING AND ANALYTICAL ASPECTS OF IFRS APPLICATION BY BUSINESS ENTITIES IN THE CONTEXT OF EUROPEAN INTEGRATION AND POST-WAR ECONOMIC RECOVERY OF UKRAINE

SPECIFICATIONS OF THE ACCOUNTING
OF HUMAN CAPITAL COSTS IN THE COUNTRIES
OF THE EUROPEAN UNION

Viktoriia Kolomiiets<sup>1</sup>

DOI: https://doi.org/10.30525/978-9934-26-268-5-16

Abstract. The section was published based on the results of the implementation of the state budget research topic "Building a system of accounting and analytical information and auditing of the activities of entities at different levels of management" (state registration number 0121U110164). Accounting for costs of human capital in accounting and analytical information takes a thorough position. In the modern economy of knowledge, human capital is the most valuable resource for the harmonious development of national economies. The specifics of human capital expense accounting are determined by the immateriality of the asset and the meaningfulness of its content. The purpose of the study is to reveal the specifics of accounting for human capital costs in general and in the countries of the European Union, in particular. It is appropriate to provide practical recommendations on their accounting, taking into account the specifics. The specifics of accounting for human capital costs are given. A large number of interpretations of the "human capital" category was revealed. Their legal regulation is needed. It was determined that it is advisable to apply "International Financial Reporting Standards" for human

© Viktoriia Kolomiiets

<sup>&</sup>lt;sup>1</sup> Doctor of Economics, Associate Professor, Melitopol Institute of Public and Municipal Administration of the "Classic Private University"

capital accounting. It is proposed to develop a comprehensive accounting of costs for human capital in IFRS. An analysis of the budgets of the European Union states was carried out, taking into account expenditures on human capital. It is proposed to develop new accounting objects (human capital, social potential), accounting standards for new objects.

**Keywords:** human capital, IFRS, accounting, specifics of accounting, European Union.

### 1. Introduction

In the countries of the European Union, human capital has become one of the main sources of interest in the scientific analysis of the dynamics of the state's economy. It acts as the most valuable resource of the economy. Under such a situation, economic growth is considered the result of human capital enrichment.

The creation of favorable positive conditions for the development of all components of society has become urgent. This is many times more acute in territories with an unstable political, economic and social situation [18, p. 18], which became a number of countries of the European Union, Ukraine. The volume of expenditure on human capital can occupy a significant city in the state budgets of countries and the budget of a separate economic unit. When determining the directions of economic policy, states should improve the accounting standards for state expenditures in these directions.

Modernity has not provided certain recommendations regarding specific mechanisms, evaluation systems, standards adapted for use by institutions and organizations, regulatory bodies for the analysis of the effectiveness of the use of budget funds in general [17, p. 21], which are used for human capital.

The interaction of human capital and human resources, capital and the financial market, positively affects the economic growth of the country, are important and mutually complementary factors of this process [20, p. 31–34]. Dynamic improvement of the quality of human capital is possible through proper accounting of costs for all components.

The impact of human capital on economic development is noted not only for individual countries, but also for entire regions [1; 17–18; 37, p. 2699]. Economic opportunities can play a constructive role in human capital to support growth phenomena [1, p. 4–5].

The above factors confirm the relevance and necessity of accounting for the costs of human capital in each country of the European Union.

Global economic studies of human capital are conducted entirely in the theoretical sphere and are therefore limited in practical use. In contrast, human capital requires significant financial investments. The amount of funding of human capital in the management of public finances in society has not been clearly resolved.

Funds are always a difficult issue. Expenditures of the state budgets of the countries of the European Union consist of expenditures on individual components of human capital. They do not consider "Costs for human capital", "Costs for the development of social potential" comprehensively. Considering the above, it is worth summarizing that the accounting of human capital is very weak or completely absent in some countries.

Therefore, the purpose of the research is to reveal the relevance and necessity and specifics of accounting for human capital costs, the possibility of accounting for human capital costs in the accounting systems of the European Union countries, to describe the specifics of accounting for human capital costs in the European Union countries. We also consider it expedient to provide practical recommendations regarding the accounting of the above costs.

In relation to the stages of the work, successive tasks were set and solved. The updated content of the human capital of the national economy made it possible to study the costs of the European Union countries on human capital and its components. The analysis showed the current state of human capital accounting, as well as its components according to International Accounting Standards and the countries of the European Union, Ukraine.

The actual accounting of costs for human capital in the European Union is considered. The possibility of building a full-scale normalized accounting of costs for the development of human capital is substantiated, the actual costs of the European Union countries on human capital, the specifics of the accounting of human capital costs in the European Union countries are considered.

From a methodological point of view, the conclusions of the given research can be brought to the level of methodological developments and applied recommendations at the level of public administration. The results of the study are recommended for use and development of programs of social and economic development of the countries of the European Union, development of projects of legislative and regulatory acts on reproduction, accounting of human capital. Theoretical research should become the basic basis for the formation of state policy in the field of public finance management of each national economy, the strategy of human capital development, and the basis for further scientific research.

The author's research over the past two centuries was aimed at identifying the role of human capital in ensuring the productive functioning of the country's economic system.

The formation of theories of human capital is associated with the works of I. Fisher [6, p. 234], but earlier studies of human capital can also be traced in some works. D. Nicholson [24, p. 102] singled out a part of capital that is different from money, land, equipment, and is contained in people.

A. Smit [40] is considered the founder of the classical theory of capital, where we find the basic theoretical basis for the formation of human capital.

Scientists consider G. Becker [2, p. 10–18], D. Mincer [21, p. 39] to be the authors of the most thorough research on human capital; 22] and T. Schulz [39, p. 4–17].

Modern researchers N. Bontis, N. Dragonetti, K. Jacobsen, G. Roos [3, p. 395], E. Pelinescu [27, p. 186], V. Kolomiiets, L. Golovkova [10, p. 292], N. Simchenko, G. Zhaldak [38, p. 379].

E. Glaeser summarized the theoretical basis under the category of "social capital" [7]. R. Putnam in 1996 first defined "social capital" [31, p. 68]. This contributed to the development of the "theory of social potential". Social factors of the development of society were considered by O. Kvilinskyi, A. Mieshkov, I. Bondaryeva [18], S. Sardak, O. Bilska, A. Simakhova [36].

It was possible to formulate the concept of human capital competence management at the beginning of the seventies of the XX century. At that time, the classic of political economy D. McClelland emphasized that "the best predictor of a candidate's success is his competencies and abilities" [18, p. 12].

Modern authors K. Precob, M. Mironiuc [28], V. Boronos, I. Plikus, V. Aleksandrov [4], S.-K. Necula [23], K. Pająk, B. Kamińska, O. Kvilinskyi [26].

The methodological basis of the study is a systematic approach. The theoretical basis of the given research is the provisions of classical and institutional theory, the theory of human capital. They became the property of world scientists. To achieve the goal of the research and the implementation of the tasks, a number of methods of theoretical research, economic-statistical methods and methods of empirical data analysis were used in the work.

## 2. Accounting determination of the essence of human capital

The economic rise of the country involves heavy expenditure on human capital. They should occupy a significant amount in the country's budget.

Analytical data on the material costs of human capital are widely used in human capital assessment methods. The countries of the European Union determine the priority of expenditures and investments and calculate their effect.

The variant of the development of the countries of the European Union implies an absolutely necessary direction of investments in human capital [33, p. 22–25; 34, p. 28–32; 41, p. 329–334].

Administrative needs at the country level can be facilitated by the introduction of a common network of fully functional software and the creation of an information system and an accounting system as a whole [17, p. 21–22]. During implementation, there will be a need to establish a transparent and effective human capital accounting system. Defined accounting may be hindered by such factors as the ambiguity of interpretations of the categorical apparatus, the legal uncertainty of accounting and economic terms, different approaches to the interpretation of used categories from legal, accounting, economic, managerial, and entrepreneurial positions.

The above-mentioned factors have long complicated the well-established accounting process of the following established concepts: fixed assets, profit, financial results, goodwill, biological assets, intangible assets and a number of less defined categories, which include human capital. The following are the reasons for the constant change in the content and economic essence of accounting tools: the changing institutional environment of a number of European Union countries, technological progress that changes the conditions of existence of production systems, the transition to a new economic cycle – the "knowledge economy", natural social evolution.

The implementation of "nternational Accounting Standards" with their gradual replacement and updating by "International Financial Reporting Standards" [35] provides development and impetus to the further standardization of a number of categories in accounting, especially relative to "obsolete" ones.

The formation of "human capital" and other categories took place over the last 60-70 years. Now continues. Scientists from all over the world conduct research and an active search for the fundamental essence of these categories and their content load. These concepts are at the top of the relevance of world scientific thought.

But, if from the point of view of economists, such searches provide positive development to society, then for accountants, such a variety of interpretations only add new complications in established accounting.

A generalized simplified definition of human capital considers it as a set of knowledge, skills, experience, skills, and education. The variable accumulation of the above aggregate by one person explains the different ability of the owners to accumulate and realize their qualities in the increase of material resources, money, new technologies, intangible resources.

The basic definitions of human capital were provided by the founders of this theoretical direction and the concept of the world level of human capital G. Becker and T. Schulz. "Human capital is an individuals stock of knowledge, skills, motivations, investments in which are education, experience, health, mobility, awareness" [2, p. 142].

Human capital is also considered as "a set of all innate and acquired human abilities. Properties that are valuable and can be developed through appropriate investments are recognized as human capital" [39, p. 2–3].

The latest macroeconomic studies determine that a person, together with his intellectual potential and abilities, is a strategic resource. It can be formed and developed. It becomes a potentially new source of competitiveness of both capital carrier and organization, national economy, world economy.

The following components of human capital are recognized: "level of education, health care, social infrastructure, social hierarchy, demographic trends, criminal and military risks" [18, p. 13–14].

In recent studies on the countries of the European Union, human capital development is associated with social potential and is considered in three directions, namely: social potential of human capital, the pace of innovative development of human capital and the potential of human capital development. Currently, "the social potential of human capital

as a mathematical variable characterizes the achieved state of human capital development in the country. The coefficient of innovative human capital development is used to describe the creativity of human capital in the country, and the potential of human capital development describes the preconditions for human capital development' [42, p. 1644]. In these interpretations it is difficult to see the accounting content and content, and therefore their use for accounting purposes is impossible.

Human capital accounting is a relatively new direction in the financial system. Due to globalization, international cooperation between countries in various markets, there is a need for accessibility of financial and accounting information for users. Such information is currently formed in the accounting systems of each country. But in comparative international studies it cannot be applied, because accounting in each country has individual characteristics associated with political, economic, legislative conditions. It is advisable to consider normative documents of international application that can be used for the purposes of human capital accounting, for comparison and comparability of human capital studies.

These requirements are met by International Financial Reporting Standards (IFRS) [35], previously known as International Accounting Standards (IAS), developed by The International Accounting Standards Board (IASB). Therefore, it is proposed to use International Financial Reporting Standards as the normative methodological basis at the international level in this study. According to the updated document "Conceptual Framework for Financial Reporting" [5], the International Accounting Standards Board seeks to reduce differences in accounting and reporting in different countries by harmonizing regulations, accounting standards and procedures related to the preparation and presentation of financial statements. The Board believes that further harmonization can best be achieved by focusing on financial statements that are prepared with the objective of providing information that is useful for economic decision-making. The Board believes that financial statements prepared for such purposes meet the general needs of most users. This is because almost all users make economic decisions, for example, to a) determine when to buy, hold or sell an equity investment; b) evaluate the management and accountability of management; c) assess an entity's ability to pay

wages and other benefits to its employees d) to assess the security of amounts lent to the entity; e) to determine tax policy; f) to determine the amount of profits and the amount of dividends to be distributed; g) to prepare and use national income statistics; h) to regulate the activities of economic entities.

A large number of interpretations of the category "human capital", the lack of regulatory framework complicate the accounting of human capital costs. It is advisable to apply the International Financial Reporting Standards as a regulatory and methodological basis for human capital accounting at the international level.

### 3. Interpretation of human capital in international legislative acts

This subsection of the study considers all references related to human capital in IFRS.

In the "Conceptual Framework for Financial Reporting" [5] it is stated "...necessary information about ..., and how effective and efficient are the management personnel, the governing board, and how well they have fulfilled their responsibilities for the use of the entity's resources".

The IASB also provides examples of the responsibilities of management personnel, which, in our opinion, can be attributed to the functions of human capital [35]:

- "Protecting the entity's resources from adverse effects of economic factors;
  - Ensuring compliance by the entity with relevant laws and contracts".

The IFRS repeatedly emphasizes the importance of the quality of performance by management personnel of their duties [35]. We believe that the basis for the performance of these duties is a unique human capital that must be taken into account and accounted for for the purposes of international financial reporting.

Thus, the Organization needs information on the performance of management personnel in discharging their responsibilities. This information cannot be assessed by objective indicators by direct arithmetic calculation. In such cases, in the formation of the necessary information on the performance by management personnel of their duties, expert judgment may be applied to make management decisions and fair value measurement for accounting purposes.

The need to assess the fair value in terms of economic and financial profitability for the formation of an objective management information system is emphasized by S.-C. Necula [23, p. 74].

Such phenomena as the accumulation of knowledge, professional and communication skills, their functioning in the real environment leads to the dynamics and accumulation of human capital in the organization, the national economy as a whole.

As a result, the quality of performance by management personnel of their duties becomes part of human capital. The specificity of human capital accounting is determined by the fact that human capital affects the competitiveness of the organization (the quality of human capital can be a significant or unique competitive advantage) and the value of the company in case of its sale. The above coincides with the requirements of IFRS on the materiality of information [35]: "Information is material if its omission or misstatement could influence decisions taken by users based on financial information about a particular reporting entity".

V. Boronos, I. Plikus, V. Aleksandrov calculated the lost profits from not taking into account intangible assets for the owners of a particular enterprise. The scientists determined the reason for the discrepancy between the value of equity capital calculated according to the balance sheet data and its market value. This is "the presence of hidden (off-balance sheet) capital, embodied in existing intangible factors, one of the most important of which is human capital" [4, p. 125].

Accordingly, the absence or incorrect presentation of information about the existing human capital does not meet the requirements of IFRS and reduces or increases the actual value of the business. IFRS take into account the costs of wages, social security, health, safety, education [35]. These are standard components. But the presence of such important factors as support, financing of a stable psychological state, creative and creative qualities of a person, intellectual potential, which require accounting, are not defined.

It is noted above that human capital has the ability to influence the competitiveness of the organization, the value of the company when selling it. Human capital becomes a necessary and complementary component of ensuring and increasing the economic growth of the country [20, p. 31–34]. The above provisions meet the requirements of IFRS on the materiality of information: "Information is material if its omission or

misstatement could affect the decisions made by users based on financial information about a particular reporting entity" [35]. Accounting in the European Union does not take into account all the above components of human capital. The costs of human capital are distorted, not fully reflected. Thus, IFRS should develop a comprehensive accounting of human capital costs. It is also necessary to provide for the costs of maintaining a normal psychological state, the costs of analyzing the availability of creative and creative abilities, intellectual potential.

A defining stage in the regulation of accounting in the European Union was the creation of the International Integrated Reporting Council (IIRC) "International Integrated Reporting Framework" [9]. For the first time in the regulatory and legislative document was fixed the definition of the categories "human capital", "social and relationship capital", "intellectual capital".

But in the "International Integrated Reporting Framework" it is determined that such types of capital are not necessarily included in Integrated Reporting [9, p. 13]. The need to reflect these types of capital is determined by the organization itself depending on the degree of its interaction with this type of capital. Thus, the organization again has the opportunity to reduce or increase the value of the company. The above conclusions of this study are relevant.

# 4. Analysis of expenditures of the European Union states on human capital

The analysis of the European Union countries' expenditures on human capital is based on the data of the European Commission for Eurostat [25]. The European Union countries include Estonia, Latvia, Lithuania, Poland, Germany (Eastern part), Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Slovenia, Croatia, Albania, Montenegro, Serbia, Macedonia, Bosnia-Herzegovina, Kosovo.

The analysis of the budgets of the European Union countries shows the budget expenditures that can be attributed to the costs of human capital and its development in the following composition: social protection costs, health care costs, education costs, recreation costs, cultural component and religious direction. Other possible objects are not taken into account, and in general, such costs are not provided by the budgets of the European Union countries.

The structure of expenditures on human capital and all other expenditures in the annual GDP of the European Union is presented in Figure 1: social protection -19.9% of GDP, health care -7.3% of GDP, education -5.3% of GDP, cultural activities, recreation, religion -1.1% of GDP.

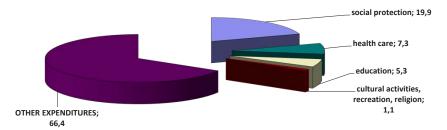


Figure 1. Structure of annual GDP expenditures of the European Union, %

However, each country has its own structure of the state budget. The Czech Republic substantially finances recreation, culture and religion (2.7% of GDP).

In general, the European Union allocates 19.9% and 7.3% of GDP for social protection and health, respectively. At the same time, annual expenditures amounted to 49.4% of GDP of the European Union.

It should be remembered that social protection is always positioned as a permanent integral function of the state. It provides pension payments, care for pensioners, pension compensation, sickness and disability payments, payments for dependents, family and children. The volume of expenditures on pension provision is at least 2/3 of social expenditures in Bulgaria, Latvia. The lowest pension expenditures (1/3 of social protection) are in Croatia and Norway. Non-state pension funds exist and successfully function in these countries.

In the European Union, the second place in social protection is occupied by sickness and disability benefits. They make up about 20% in Lithuania and Croatia.

In the total budget of the European Union countries, health expenditures took the second place. Their amount is about €948 billion, in the structure they occupy 7.3% of GDP. The highest level is in Croatia (9.2% of GDP or 20% of total public expenditures), the lowest is in Romania (3.1% of GDP).

The European Union on average allocates 5.3% of GDP, which is € 680 billion, to education. Comparable characteristics for the European Union countries are shown in Figure 2.

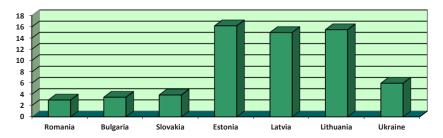


Figure 2. Expenditures of European Union countries on education, %

For comparison, in Ukraine the expenditures on human capital are as follows: expenditures on social protection -4.9% of GDP, expenditures on education -6% of GDP, expenditures on pensions -4.7% of GDP, expenditures on health care -3.4%, expenditures on culture and sports -0.8% of GDP [29].

Thus, the analysis of the budgets of the European Union states showed the following. Budget expenditures that can be identified as human capital expenditures are accounted for only in terms of social protection expenditures, health care expenditures, education expenditures, recreation expenditures, cultural activities, religion. Possible other objects are not taken into account. In most cases, the budgets of the European Union countries do not provide for additional expenditures on human capital. Summarizing the analysis of the budgets of the European Union states, we emphasize that new accounting objects (human capital, social potential) need to be thoroughly developed.

It is advisable to develop accounting standards for new objects, the formation of systematic accounting of human capital costs.

The urgent need of each country of the European Union is to direct part of the GDP expenditures of the European Union to finance human capital expenditures. The effectiveness of the proposed measures to establish an accounting system of human capital will be harmonized accounting of the above costs in each country of the European Union.

### 5. Conclusions

The above study provided an opportunity to draw solid conclusions. A large number of interpretations of the category "human capital", the lack of regulatory and legislative framework complicate the accounting of human capital costs. A legislative definition of these accounting objects is needed.

It is advisable to apply International Financial Reporting Standards as a regulatory and methodological basis for human capital accounting at the international level.

The specificity of accounting for human capital costs in the European Union is due to the following provisions. Inaccurate presentation of data on available human capital does not meet the requirements of IFRS, because it reduces or increases the value of the organization. It is proposed in IFRS to use a comprehensive approach to accounting for human capital costs. This should include the maintenance of a normal psychological state, the presence of cultural, creative, creative abilities, high intellectual potential.

The specificity of the budgets of the European Union states lies in the structure of budget expenditures. Expenditures are taken into account only in terms of social protection, health care, education, recreation, sports, culture, religion. Other possible areas are simply not taken into account, and in general, such costs are not provided for in the budgets of countries. It is proposed to develop new accounting objects (human capital, social potential), accounting standards for new objects. It is advisable to form a thorough system of accounting for human capital expenditures.

It is recommended that each country of the European Union should allocate a part of GDP expenditures to finance additional expenditures on human capital. The effectiveness of the accounting system will lead to a sustainable harmonized accounting of human capital expenditures in the European Union.

The specificity of accounting for human capital expenditures is determined not only in the redistribution of public funding and improvement of accounting, but also in the dynamic growth of human capital of each individual country of the European Union. It is proposed to the state legislative bodies in the state budget to take into account both basic and additional expenditures on human capital, to establish a system of their state financing.

### **References:**

- 1. Ali, M., Egbetokun, A., & Memon, M. (2018) Human capital, social capabilities and economic growth. *Economies*, 6(2), 1–18. DOI: https://doi.org/10.3390/economies6010002
  - 2. Becker, G. S. (1964) *Human Capital*. N. Y.: Columbia University Press.
- 3. Bontis, N., Dragonetti, N., Jacobsen, K., & Roos, G. (1999) The Knowledge Toolbox: A Review of Tools Available to Measure and Manage Intangible Resources. *European Management Journal*, 17(4), 391–402.
- 4. Boronos, V., Plikus, I., & Aleksandrov, V. (2016) Financial and accounting approaches to definition of the intangible factors impact on the value of the company. *Economic Annals-XXI*, 160(7–8), 121–125. DOI: https://doi.org/10.21003/ea.V160-24
- 5. Conceptual Framework for Financial Reporting (Conceptual Framework). (2018). Retrieved from: https://www.ifrs.org/-/media/project/conceptual-framework/fact-sheet-project-summary-and-feedback-statement/conceptual-framework-project-summary.pdf
- 6. Fisher, I. (1930) The application of mathematics to the social sciences. *Bull. Amer. Math. Soc.*, 36 (4), 225–243. DOI: https://doi.org/10.1090/s0002-9904-1930-04919-8
- 7. Glaeser, E. W. (1993) The Formation of Social Capital. OECD Conference Papers. Chicago-L. Retrieved from: www.oecd.org
- 8. Golovkova, L. S., & Kolomiiets, V. M. (2019) Formation of the shadow market for the functioning of human capital in Ukraine. Problems and prospects of the development of railway transport: Abstracts of the 79th International Scientific and Practical Conference (Dnipro, May 16-17, 2019) D.: DNURT, 390–391.
- 9. International Integrated Reporting Framework (2013) *International Integrated Reporting Council ('IIRC')*. Retrieved from: http://integratedreporting.org/resource/international-ir-framework/
- 10. Kolomiiets, V., & Golovkova, L. (2017) The institutional content of the human capital of the national economy. *Baltic Journal of Economic* Studies, 3(5), 289–293. DOI: htp://dx.doi.org/10.30525/2256-0742/2017-3-5-289-293
- 11. Kolomiiets, V. (2021) Human Capital Expenditure Management. Institutional Society Transformation: World Experience and Ukrainian Reality: Material Collection of International Scientific and Practical Conferences (Melitopol, 25 December / according to the general edition M. M. Fesenko. Z.: CPU, 46–48.
- 12. Kolomiiets, V. (2019) Human capital investigation: institutional context and methodology. *Economy and Society: the Modern Foundation for Human Development:* III International scientific conference (Leipzig, April 26, 2019). Leipzig: Baltija Publishing, pp. 23–25.
- 13. Kolomiiets V. (2019) Structuring human capital from the point of view of institutional theory. *Socio-economic development of Ukraine: civilizational choice: materials of the conference (Melitopol, 2019).* Melitopol: "Kolor Print" LLC., pp. 65–67.
- 14. Kolomiiets, V., Tkach, A., & Radieva, M. (2019) Institutional models of the new economy development. *Revista Espacios*, 40, 22. Retrieved from: https://www.revistaespacios.com/a19v40n22/19402229.html
- 15. Kolomiiets, V. M., Fesenko, M. M., & Zolkina, O. V. (November 8, 2022) Development of human capital accounting standards for management needs. International scientific and practical conference "Current problems of economy, finance, accounting and law in the 21st century". Uman, 105–109.

- 16. Kolomiiets, V. (2022) Specific functioning of human capital of the medical industry. *Actual Issues of Modern Science. European Scientific e-Journal*, 22. Ostrava: Tuculart Edition, European Institute for Innovation Development. DOI: http://dx.doi.org/10.47451/ECN2022-10-04
- 17. Kurganskaya, E. (2017) The System of the Treasury in Ukraine. Actuality and prospects of development. *Research Papers in Economics and Finance*, 2(3), 15–22. DOI: http://dx.doi.org/10.18559/ref.2017.3.2
- 18. Kvilinskyi, O., Mieshkov, A., & Bondaryeva, I. (2017) Investigation of the Social Factors of Development of Society in the Territories with Transforming Environment. *Research Papers in Economics and Finance*, 2(2), 13–19. DOI: http://dx.doi.org/10.18559/ref.2017.2.2
- 19. McClelland, D. (January 1973) Testing for Competence Rather Than for "Intelligence". *American Psychologist*, 1–14.
- 20. Mahmood, H., & Alkahtani, N. (2018) Human resource, financial market development and economic growth in Saudi Arabia: a role of human capital. *Economic Annals-XXI*, 169(1-2), 31–34. DOI: https://doi.org/10.21003/ea.V169-06
- 21. Mincer, J. (1974) Progress in Human Capital Analysis of the Distribution of Earnings. Stanford: Junipero Serra Blvd.
- 22. Mincer, J. (1981) Human Capital and Economic Growth. *NBER Working Paper*, 803. Retrieved from: http://www.nber.org/papers/w0803.pdf
- 23. Necula, S.-C. (2017) Accounting decisions from the perspective of profitability. *Economic Annals-XXI*, 166(7-8), 72–75. DOI: https://doi.org/10.21003/ea.V166-14
- 24. Nicholson, J. (1891) The Living Capital of the United Kingdom. *Economic Journal*, 1, 95–107.
- 25. Overview and comparison of public accounting and auditing practices in the 27 EU Member States: Prepared for Eurostat (2012) *Final Report*. Retrieved from: https://ec.europa.eu/eurostat/documents/1015035/4261806/study-on-public-accounting-and-auditing-2012.pdf/5ad43e2b-2ba7-4b05-afab-d690fc2ad9dd
- 26. Pająk, K., Kamińska, B., & Kvilinskyi, O. (2016) Modern trends of financial sector development under the virtual regionalization conditions. *Financial and credit activity: problems of theory and practice,* 2(21), 204–217. Retrieved from: http://fkd.org.ua/article/view/91052/92128
- 27. Pelinescu, E. (2015) The Impact of Human Capital on Economic Growth. *Procedia Economics and Finance*, 22, 184–190. DOI: https://doi.org/10.1016/S2212-5671(15)00258-0
- 28. Precob, C., & Mironiuc, M. (2016) The Influence of Reporting Intangible Capital on the Performance of Romanian Companies. *The Audit Financiar journal*, 1 (133), 103–114. DOI: http://dx.doi.org/10.20869/AUDITF/2016/133/103
  - 29. Price of the state (2018). Retrieved from: http://cost.ua/budget/expenditure/
- 30. Pshinko, A., Golovkova, L., Kolomiiets, V., & Dobryk, L. (2020) Costs of the human capital and development of the social potential in accounting system for Central and Eastern Europe. *Journal of european economy*, 19(1). DOI: https://doi.org/10.35774/jee2020.01.182
  - 31. Putnam, R. (March 1996) Who Killed Civic America? *Prospect*, 66–72.

- 32. Radieva, M., & Kolomiiets, V. (2019) Factors of human capital modernization in the context of institutionalization of information economy. *Virtual Economics*, 2(4), 26–45. DOI: https://doi.org/10.34021/ve.2019.02.04(2)
- 33. Radyeva, M. N., Porokhnia, V. M., & Kuznetsov, V. I. (2017) Modeling the Impact of Intellectual Capital on Macroeconomic Processes in the State. *Derzhava ta rehiony. Seriia: Ekonomika ta pidpryiemnytstvo*, 2, 22–25.
- 34. Rekun, I. (2015) Personnel management in the system of economic security of the railway transport company. *Ekonomika ta derzhava: mizhnarodnyj naukovo-praktychnyj zhurnal*, 11, 28–32.
- 35. Required IFRS Standards 2018 (2018). Retrieved from: https://www.ifrs.org/issued-standards/list-of-standards/
- 36. Sardak, S., Bilska, O., & Simakhova, A. (2017) Potential of economy socialisation in the context of globalisation. *Economic Annals-XXI*, 164(3–4), 4–8. DOI: https://doi.org/10.21003/ea.V164-01
- 37. Siddiqui, A., & Rehman, A. (2017) The Human Capital and Economic Growth Nexus: in East and South Asia. *Applied Economics*, 49 (28), 2697–2710. DOI: https://doi.org/10.1080/00036846.2016.1245841
- 38. Simchenko, N. O., & Zhaldak, G. P. (2014) Scientific approaches to assessment of social innovations at industrial enterprises. *Actual Problems of Economics*, 1, 376–382. Retrieved from: http://nbuv.gov.ua/UJRN/ape 2014 1 46
- 39. Schulz, T. W. (March 1961) Investment in Human Capital. *American Economic Review*, 51, 1–17.
- 40. Smit, A. An Inquiry into the Nature and Causes of the Wealth of Nations. Retrieved from: http://www2.hn.psu.edu/faculty/jmanis/ adam-smith/wealth-nations.pdf
- 41. Tkach, A. A. (2013) Formation of the institutional paradigm of economic theory. *Biuleten' Mizhnarodnoho Nobelivs' koho ekonomichnoho forumu*, 1, 329–334.
- 42. Vaitkevičius, S., Čiutienė, R., Meilienė, E., & Savanevičienė, A. (2015) Typology of Human Capital Development in EU Countries. *Procedia Economics and Finance*, 23, 1641–1648. DOI: https://doi.org/10.1016/S2212-5671(15)00520-1