УДК 331.5:311.219.1

Yurchuk N.

Ph. D. in Economics, Associate Professor,

Vinnytsia National Agrarian University, Ukraine;

e-mail: urnata@vsau.vin.ua; ORCID ID: 0000-0002-7987-9390

Leshchuk H.

Doctor of Economics, Associate Professor,

Carpathian National University named after Vasily Stefanyk, Ivano-Frankivsk, Ukraine; e-mail: galynaleshuk@gmail.com; ORCID ID: 0000-0003-1625-1536

Tkachenko O.

Ph. D. in Economics, Associate Professor,

Kyiv National Economic University named after Vadym Hetman, Ukraine; e-mail: olena.vadumivna@ukr.net; ORCID ID: 0000-0003-2923-7186

Kotenok A.

Ph. D. in Economics,

Kyiv National Economic University named after Vadym Hetman, Ukraine; e-mail: andrii.kotenok@kneu.ua; ORCID ID: 0000-0001-9262-5865

Cherviakova D.

Ph. D. student,

Kharkiv Petro Vasylenko National Technical University of Agriculture, Ukraine; e-mail: hdaryav@gmail.com; ORCID ID: 0000-0001-5139-7595

LABOR MARKET OF UKRAINE IN CONDITIONS OF SYSTEM CRISIS

Abstract. The study deals with identifying trends in the labor market in Ukraine, which is significantly influenced by threatening external and internal factors. The authors prove in the article that the incentives to reform this market today are significantly weakened by the negative effects of the crisis, which covers all spheres of life — from the economy to health care. It was found that the negative trends of the world and national markets contribute to the decline in the quality of human capital of labor resources, worsen the structure of the national labor market. The multi-vector nature of the crisis leads to the formation of a multiplicative effect — its various aspects increase the influence of each other. As a result, the negative pressure of the crisis factors on the national labor market is increasing with growing pace. The authors prove that the old extensive approach of managers to the use of labor resources of Ukraine has outlived itself. The existing model and approaches to its reform given the current scale of threatening trends do not meet the criteria of effectiveness. Ukraine needs a new labor market model. The efforts of government officials and the influence of the business community should be aimed at forming a model whose goals will be: stabilizing the economic, social and political situation in Ukraine, reducing the risk of uncontrolled growth of social tensions, forming a flexible response to neutralize the effects of the crisis. It is pointed out that the lack or even slowdown of the reaction to the existing negative tendencies inherent in the labor market in Ukraine can cause significant and drastic social and political changes. The originality of the article is stipulated by the need to identify labor market trends under the influence of the crisis and the situation on the world labor market, identify factors that lead to the consolidation of an extensive labor market model in a permanent crisis, identify factors that contribute to this and negative consequences for the economy.

Keywords: labor market, impact of the crisis, labor migration, quality of human capital, employment dynamics.

Formulas: 0; fig.: 5; tabl.: 0; bibl.: 22.

Юрчук Н. П.

кандидат економічних наук, доцент, Вінницький національний аграрний університет, Україна; e-mail: urnata@ysau.vin.ua; ORCID ID: 0000-0002-7987-9390

Лещук Г. В.

доктор економічних наук, доцент,

ДВНЗ «Прикарпатський національний університет імені Василя Стефаника», Івано-Франківськ, Україна;

Ткаченко О. В.

кандидат економічних наук, доцент,

Київський національний економічний університет імені Вадима Гетьмана, Україна; e-mail: olena.vadumivna@ukr.net; ORCID ID: 0000-0003-2923-7186

Котенок А. Г.

кандидат економічних наук,

Київський національний економічний університет імені Вадима Гетьмана, Україна; e-mail: andrii.kotenok(a)kneu.ua; ORCID ID: 0000-0001-9262-5865

Червякова Д. В.

аспірант,

Харківський національний технічний університет сільського господарства імені Петра Василенка, Україна;

e-mail: hdaryav@gmail.com; ORCID ID: 0000-0001-5139-7595

РИНОК ПРАЦІ УКРАЇНИ В УМОВАХ КРИЗИ СИСТЕМИ

Анотація. Дослідження присвячено визначенню тенденцій ринку праці в Україні, який перебуває під значним впливом загрозливих зовнішніх і внутрішніх факторів. Доведено у статті, що стимули до реформування цього ринку сьогодні значно послаблені негативними впливами кризи, яка охоплює всі сфери життя — від економіки до охорони здоров'я. Було встановлено, що негативні тенденції світового і внутрішнього ринку сприяють зниженню якості людського капіталу трудових ресурсів, погіршують структуру національного ринку праці. Багатовекторність кризи призводить до формування мультиплікативного ефекту – різні її аспекти посилюють вплив один одного. Від цього негативний тиск чинників кризи на національний ринок праці посилюється з наростаючим темпом. Доведено, що старий екстенсивний підхід управлінців до використання трудових ресурсів України вичерпав себе. Наявна модель і підходи до її реформування за наявного масштабу загрозливих тенденцій не відповідають критеріям ефективності. Україна потребує нової моделі ринку праці. Зусилля урядовців і вплив бізнес-спільноти повинні бути спрямовані на формуванні такої моделі, цілями якої будуть: стабілізація економічного, соціального і політичного становища України, зменшення ризику некерованого зростання соціальної напруги, формування гнучкої реакції, спрямованої на нейтралізацію впливів кризи. Вказано на те, що відсутність чи навіть уповільнення реакції на наявні негативні тенденції, притаманні ринку праці в Україні, можуть стати причиною значних і різких соціальних та політичних змін. Оригінальність статті обумовлена необхідністю виявлення тенденцій ринку праці за впливів кризи і ситуації на світовому ринку праці, виявленню факторів, які призводять до закріплення екстенсивної моделі ринку праці в умовах перманентної кризи, виявленню факторів, які сприяють цьому, і негативних наслідків для економіки.

Ключові слова: ринок праці, вплив кризи, міграція робочої сили, якість людського капіталу, динаміка зайнятості.

Формул: 0; рис.: 5; табл.: 0; бібл.: 22.

Introduction. The instability of the world economy, exacerbated by the COVID-19 pandemic and by the introduction of new technologies leads to structural changes in the labor market, the international labor market tends to segment [1—5]. Segments of the international labor market increase their autonomy, form their own patterns and rules of labor movement. These rules and regulations have different degrees of severity for different countries and for different structural segments of national labor resources, but for Ukraine, in conditions of national and external restrictions on cross-border movement, there is a tendency to create a relatively autonomous

national labor market. The incentive to strengthen this trend is, in particular, external and internal restrictions on shuttle migration of labor, watch-based organisation of labor and so on. At the same time, the challenges of the socio-economic crisis for the labor market of Ukraine form opposite incentives aimed at increasing labor migration. Therefore, one of the urgent issues is to study the presence or absence of a balance of these trends for different segments of the working population, which will be a determining factor influencing the social, economic and political situation in Ukraine.

Analysis of research and problem statement. Problems of the labor market have been widely studied by national and foreign scientists. Challenges to the world labor market are studied in [6; 7]. Influences of the world market and tendencies of the Ukrainian labor market are considered in detail in scientific works [8—16]. Problems of the labor market, in particular in the transition to a digital economy are given in [17—19]. Statistical studies of the labor market in Ukraine [20—22] indicate a significant multiplicative effect of negative phenomena affecting the labor market. For example, there is a decrease in the human capital index (which is now 0.65) [22]. This, in turn, leads to a decrease in gross domestic product per employee, which is the lowest among neighboring countries — 20837 (1991) to 19095 (2018) in US purchasing power parity dollars. For Belarus it is 18013/35758, for Poland — 23714/60538, for Slovakia — 25978/65991 [21; 22]. The existing outflow of qualified personnel, which leads to a change in the structure of labor resources and the labor market, creates negative preconditions for slowing economic growth. For example, the share of manufacturing industries that use high and relatively high technologies in the economy of Ukraine is slightly more than 3% of the structure of gross value added in the economy as a whole by the level of technology use, and the share of goods for which these technologies are used in exports is only 17%) [20].

Unsolved aspect of the problem. A significant increase of the crisis phenomena in the economy, the emergence of new risks, a significant increase in the risks of the past creates a multiplicative effect of the crisis on the labor market and requires a study of trends in this market in Ukraine.

The purpose of the article. The purpose of writing this article is to identify the main trends in the labor market and its changes under the influence of changes in the global labor market and the crisis.

Research results. A comparison of employment on a sectoral principle in the international labor market (*Fig. 1*) and the labor market of Ukraine (*Fig. 2*) is conducted.

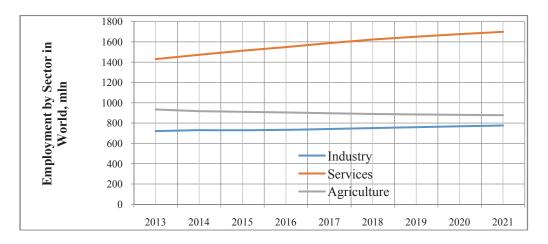


Fig. 1. Dynamics of employment by sectors of the economy in the world labor market, mln

Source: Developed by the authors using data [21].

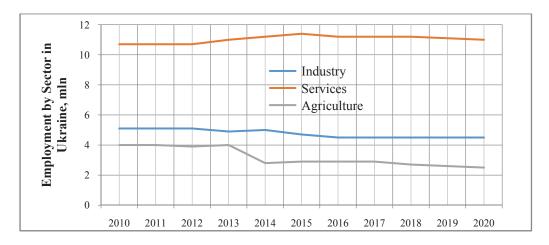


Fig. 2. Dynamics of employment by sectors of the economy in the labor market of Ukraine, mln

Source: Developed by the authors using data [21].

Analysis of the dynamics of employment by sectors of the economy in the global labor market [21] suggests a decline in employment in 2013—2016 with a forecast of extension until 2021 in the global labor market for agricultural production, a steady increase in employment in industry and a significant, outpacing other industries, employment growth in the service industry (see *Fig. 1*). This indicates the possibility of labor migration of Ukrainians on a sectoral principle. Participation in the global division of labor in agriculture will be limited to seasonal harvesting operations. The service sector, which includes the market for high intelligent labor, in particular, in the information service industry, will help to increase the outflow of qualified personnel from Ukraine. With the intensification of the economic crisis, the world labor market will be characterized by a significant reduction in employment, rising unemployment; significant differences in sectoral employment by region; an increase in employment in the service sector and a decrease in agriculture and industry; the spread of informal employment and self-employment.

The difference in the sectoral dynamics of the Ukrainian labor market [20; 21] indicates the impact of crises (see Fig. 2). We can note the reduction of the labor market in agriculture caused by the crisis of 2013—2014, with a certain delay in time, less impact of the crisis in industry and some growth in the service sector. But the impact of the 2019 crisis is so far-reaching that it affects all sectors, including the service sector and, to a lesser extent, industry. This is indicated by the analysis of the dynamics of unemployment in Ukraine (Fig. 3). The trend of decreasing unemployment after the crisis of 2014—2015 in the coming years is projected to change to a trend of significant growth in unemployment by \sim 8 million people.

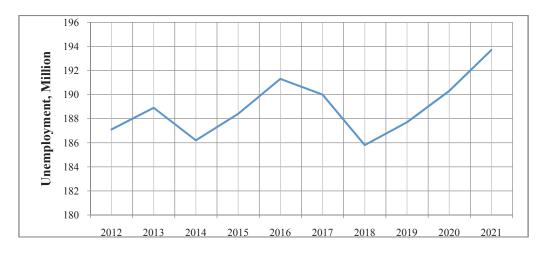


Fig. 3. Dynamics of unemployment in Ukraine, mln

Source: Developed by the authors using data [21].

A study of the dynamics of changes in the turnover rate of labor to the average number of full-time employees (*Fig. 4*) indicates a significant constant lag in employment on the same indicator of dismissal. The specified rate of dismissal is constant during the crisis of 2014—2015, but the amplitude of this indicator for employment for this period is significant. The slope ratio of the trends in the coefficient of labor turnover on hiring and firing (with a lag in time), are almost identical in volume, but opposite in sign. This indicates an increase in the sensitivity of the labor market to the effects of the crisis.

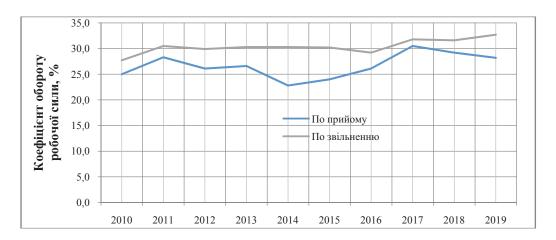


Fig. 4. Dynamics of the labor turnover ratio in% to the average number of full-time employees

Source: Developed by the authors using data [21].

Since the factor of stabilization of the labor market is wages, a study of the dynamics of changes in nominal and real average monthly wages was conducted (*Fig. 5*).

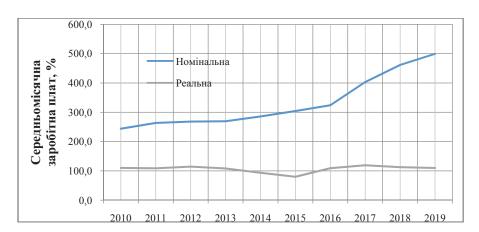


Fig. 5. Dynamics of the average monthly salary. Nominal wage — in % to the subsistence level for able-bodied persons, real — in % to the previous year *Source*: Developed by the authors using data [22].

Despite the significant increase in nominal wages for the period 2010—2019, the growth of real wages remained almost unchanged. That is, the increase in nominal wages only offset the increase in prices for basic consumer goods while restraining the increase in the subsistence level. The study found that the problematic issues of wages in Ukraine are: the predominant lack of correlation between labor efficiency and the level of wages; the presence of a significant variable share in wages (for example, civil servants have only 50% of wages which is constant, the rest is surcharges, teachers have these shares, respectively, 60% and 40%), which gives the employer a flexible approach to wages. This is facilitated by the low minimum wage, which leads to a decrease in the share of standardized labor (constant) and an increase in the share of overtime (variable),

which allows to adjust the regulation of wages at the national level with sectoral characteristics of the labor market. As taxes on remuneration for work performed are tightly controlled and the share of taxes and payments to social funds is significant, this reduces the ability of employers to invest in improving the quality of labor resources. Cheaper labor helps to maintain a certain level of demand for these resources, but this leads to low growth rates of labor activity and the economy as a whole.

Conclusions. Efforts to reform the labor market model should be aimed at the following goals: stabilization of the economic, social and political situation in Ukraine, reducing the risk of uncontrolled growth of social tensions, flexible neutralization of the effects of the crisis. But the existing model and approaches to its reform do not meet the criteria of effectiveness. As it has been established, the profitability of enterprises is still mainly determined not by the efficiency of production and its level of management, quality of work, but by the monopoly position of enterprises, foreign market prices for resources, the possibility of obtaining a fairly large rent. This leads to a slowdown in investment into the quality of human capital and reduces incentives for structural changes towards the formation of an intensive labor market. Cheap labor, in certain categories, also does not encourage managers and business owners to invest in improving the quality of human capital and modernization of production. And this, in turn, leads to a decrease in labor activity and non-competitiveness of national production, slows down the creation of new jobs and raising living standards, which leads to the preservation of the existing extensive model of the labor market, which has outlived itself. The extensive nature of the labor market model is due to the historically formed approach of management to the labor market and, under conditions of permanent crisis, the lack of need for managers and owners of industries in a strategic approach to the formation of their own labor resources. The consequences of this are: a significant degree of reaction to the effects of risks of destabilization of the economic situation according to a certain change in foreign markets (for example, falling prices for resources exported to Ukraine); declining quality of human capital, lack of a strategic approach to the formation of the labor market; lack of incentives for rational management of Ukrainian industries; extensive use of labor resources; formation of a significant share of low-skilled workers in the labor force; formation of structural disparities on a sectoral and regional basis. Current tendencies to limit cross-border labor migration, the formation of interstate sectoral labor markets and a relatively autonomous national labor market in Ukraine so far support the relative stability of such a labor market model. But this shaky balance can be upset by changes in external or internal factors. And this can lead to significant and drastic social and political changes.

Література

- 1. Kharkovshchenko Ye., Predko O., Turenko V. Pandemic as a Challenge for Future of Humanity: Philosophical and Religious Studies Aspects. *Future Human Image*. 2020. № 14. P. 13—20.
- 2. Kostenko I. Current Problems and Challenges in International Space Law: Legal Aspects. *Advanced Space Law*. 2020. № 5. P. 48—57.
- 3. Bazaluk, O., Balinchenko, S. Dynamic Coordination of Internal Displacement: Return and Integration Cases in Ukraine and Georgia. Sustainability. 2020. № 12. P. 4123.
- 4. Fatkhutdinov V. H. The Pension Fund of Ukraine: Rethinking Risk Management during the Creation. *Ukrainian Policymaker*. 2020. № 6. P. 5—23.
- 5. Rozin V. The Pandemic, the Crisis of Modernity, and the Need for a New Semantic Project of Civilization. *Philosophy and Cosmology*. 2020. № 25. P. 32—42.
- 6. Kergroach S. Industry 4.0: new Challenges and Opportunities for the Labour market. *Foresight and STI Governance*. 2017. Vol. 11. № 4. P. 6—8.
- 7. Македон В. В., Валіков В. П., Кошляк Є. Є. Світовий ринок праці в координатах цифрової економіки. *Академічний огляд*. 2020. № 1 (52). С. 91—104.
- 8. Чорна Н., Чорний Р. Ринок праці України: сучасні виклики. *Економічний часопис Східноєвропейського національного університету імені Лесі Українки*. 2020. № 1 (21). С. 64—73.
- 9. Колот А., Данюк В., Герасименко О. та ін. Гідна праця: імперативи, українські реалії, механізми забезпечення. Київ : КНЕУ, 2017. 504 с.
- 10. Петрова І. Л., Близнюк В. В. Український ринок праці: імперативи та можливості змін. Київ : ДУ «Ін-т екон. та прогнозув. НАН України», 2018. 356 с.
- 11. Ільїч Л. М. Взаємодія ринків праці та освіти: сутність, характерні риси та модель функціонування. *Економіка та держава*. 2017. № 4. С. 69—74. URL : http://nbuv.gov.ua/UJRN/ecde_2017_4_16.
- 12. Zamula I., Tanasiieva M., Travin V., Nitsenko V., Balezentis T., Streimikiene D. Assessment of the Profitability of Environmental Activities in Forestry. Sustainability. 2020. № 12 (7). P. 2998.

- 13. Давидова І. О., Гатило В. П. Дослідження стану ринка праці в Україні як основи для формування імідж-стратегії підприємств у рамках Індустрії 4.0. *Проблеми економіки*. 2019. № 3 (41). С. 100—108.
- 14. Volianska-Savchuk L., Krasovskyi V. Theoretical principles of the labor market in the economic system. *Economics and Management Organization*. 2019. № 1 (33). P. 21—32.
- 15. Osaulenko O., Yatsenko O., Reznikova N., Rusak D., Nitsenko V. The Productive Capacity of Countries Through the Prism of Sustainable Development Goals: Challenges to International Economic Security and to Competitiveness. *Financial and credit activity problems of theory and practice*. 2020. № 2 (33). P. 492—499.
- 16. Bazaluk O., Yatsenko O., Zakharchuk O., Ovcharenko A., Khrystenko O., Nitsenko V. Dynamic Development of the Global Organic Food Market and Opportunities for Ukraine. Sustainability. 2020. № 12 (17).
- 17. Азьмук Н. А. Сучасні виклики ринку праці при переході до цифрової економіки. *Modern Economics*. 2020. № 19. С. 6—13.
- 18. Федунчик Л. Г. Ринок праці в Україні: проблеми та напрями їх вирішення. *Економіка праці та проблеми зайнятості*. 2016. № 2. С. 31—34.
- 19. Andriushchenko K., Buriachenko A., Rozhko O., Lavruk O., Skok P., Hlushchenko Y., Muzychka Y., Slavina N., Buchynska O., Kondarevych V. Peculiarities of sustainable development of enterprises in the context of digital transformation. *Entrepreneurship and Sustainability Issues*. 2020. № 7 (3). P. 2255—2270.
- 20. Макарчук О. Г., Вороніна А. В. Статистичне дослідження ринку праці в Україні. *Молодий вчений*. 2017. № 9. С. 540—544.
- 21. International Labour Organization (ILO). World Employment and Social Outlock. (2020). URL : https://www.ilo.org/global/research/global-reports/weso/2020/lang--en/index.htm.
- 22. Економічна статистика. Навколишнє середовище / Державна служба статистики України. 1998—2020. URL: http://www.ukrstat.gov.ua/operativ/menu/menu u/ns.htm.

Статтю рекомендовано до друку 11.02.2021

© Юрчук Н. П., Лещук Г. В., Ткаченко О. В., Котенок А. Г., Червякова Д. В.

References

- 1. Kharkovshchenko, Ye., Predko, O., & Turenko, V. (2020). Pandemic as a Challenge for Future of Humanity: Philosophical and Religious Studies Aspects. *Future Human Image, 14*, 13—20. https://doi.org/10.29202/fhi/14/2.
- Kostenko, I. (2020). Current Problems and Challenges in International Space Law: Legal Aspects. Advanced Space Law, 5, 48—57. https://doi.org/10.29202/asl/2020/5/5.
- 3. Bazaluk, O., & Balinchenko, S. (2020). Dynamic Coordination of Internal Displacement: Return and Integration Cases in Ukraine and Georgia. *Sustainability*, 12, 4123. https://doi.org/10.3390/su12104123.
- 4. Fatkhutdinov, V. H. (2020). The Pension Fund of Ukraine: Rethinking Risk Management during the Creation. *Ukrainian Policymaker*, 6, 15—23. https://doi.org/10.29202/up/6/2.
- 5. Rozin, V. (2020). The Pandemic, the Crisis of Modernity, and the Need for a New Semantic Project of Civilization. *Philosophy and Cosmology*, 25, 32—42. https://doi.org/10.29202/phil-cosm/25/3.
- 6. Kergroach, S. (2017). Industry 4.0: new Challenges and Opportunities for the Labour market. *Foresight and STI Governance, 11* (4), 6—8.
- 7. Makedon, V. V., Valikov, V. P., & Koshliak, Ye. Ye. (2020). Svitovyi rynok pratsi v koordynatakh tsyfrovoi ekonomiky [World labor market in the coordinates of the digital economy]. *Akademichnyi ohliad Academy review, 1* (52), 91—104. https://doi.org/10.32342/2074-5354-2020-1-52-9 [in Ukrainian].
- 8. Chorna, N., & Chornyi, R. (2020). Rynok pratsi Ukrainy: suchasni vyklyky [The labour market in Ukraine: current challenges]. Ekonomichnyi chasopys Skhidnoievropeiskoho natsionalnoho universytetu imeni Lesi Ukrainky Economic Journal of Lesia Ukrainka Eastern European National University, 1 (21), 64—73. https://doi.org/10.29038/2411-4014-2020-01-64-73 [in Ukrainian]
- 9. Kolot, A., Danyliuk, V., & Herasymenko, O. (et al.). (2017). *Hidna pratsia: imperatyvy, ukrainski realii, mekhanizmy zabezpechennia [Decent work: imperatives, Ukrainian realitiy, mechanisms of providing]*. Kyiv: KNEU [in Ukrainian].
- 10. Petrova, I. L., & Blyzniuk, V. V. (2018). *Ukrainskyi rynok pratsi: imperatyvy ta mozhlyvosti zmin [Ukrainian labor market: imperatives and opportunities for change]*. Kyiv: DU «In-t ekon. ta prohnozuv. NAN Ukrainy» [in Ukrainian].
- 11. Ilich, L. M. (2017). Vzaiemodiia rynkiv pratsi ta osvity: sutnist, kharakterni rysy ta model funktsionuvannia [Interaction between labour and educational markets: essence, characteristic features and the model of functioning]. *Ekonomika ta derzhava Economy and State, 4*, 69—74. Retrieved from http://nbuv.gov.ua/UJRN/ecde_2017_4_16 [in Ukrainian].
- 12. Zamula, I., Tanasiieva, M., Travin, V., Nitsenko, V., Balezentis, T., & Streimikiene, D. (2020). Assessment of the Profitability of Environmental Activities in Forestry. *Sustainability*, *12* (7), 2998. https://doi.org/10.3390/su12072998.
- 13. Davydova, I. O., & Hatylo, V. P. (2019). Doslidzhennia stanu rynka pratsi v Ukraini yak osnovy dlia formuvannia imidzhstratehii pidpryiemstv u ramkakh Industrii 4.0 [Research of the labor market in Ukraine as a basis for the formation of the image strategy of enterprises within Industry 4.0]. *Problemy ekonomiky Problems of the Economy, 3* (41), 100—108. https://doi.org/10.32983/2222-0712-2019-3-100-108 [in Ukrainian].
- 14. Volianska-Savchuk, L., & Krasovskyi, V. (2019). Theoretical principles of the labor market in the economic system. *Economics and Organization of Management*, 1 (33), 21—32. https://doi.org/10.31558/2307-2318.2019.1.3.
- 15. Osaulenko, O., Yatsenko, O., Reznikova, N., Rusak, D., & Nitsenko, V. (2020). The Productive Capacity of Countries Through the Prism of Sustainable Development Goals: Challenges to International Economic Security and to Competitiveness. *Financial and credit activity problems of theory and practice, 2* (33), 492—499. https://doi.org/10.18371/fcaptp.v2i33.207214.
- 16. Bazaluk, O., Yatsenko, O., Zakharchuk, O., Ovcharenko, A., Khrystenko, O., & Nitsenko, V. (2020). Dynamic Development of the Global Organic Food Market and Opportunities for Ukraine. *Sustainability*, 12 (17). https://doi.org/10.3390/su12176963.
- 17. Azmuk, N. (2020). Suchasni vyklyky rynku pratsi pry perekhodi do tsyfrovoi ekonomiky [Modern challenges of the labor market in the transition to a digital economy]. *Modern Economics*, 19, 6—13. https://doi.org/10.31521/modecon.V19(2020)-01 [in Ukrainian].

- 18. Fedunchyk, L. G. (2016). Rynok pratsi v Ukraini: problemy ta napriamy yikh vyrishennia [The labor market in Ukraine: problems and their solution]. *Ekonomika pratsi ta problemy zainiatosti Labor Economics and Employment Problems*, 2, 31—34 [in Ukrainian].
- 19. Andriushchenko, K., Buriachenko, A., Rozhko, O., Lavruk, O., Skok, P., Hlushchenko, Y., Muzychka, Y., Slavina, N., Buchynska, O., & Kondarevych, V. (2020). Peculiarities of sustainable development of enterprises in the context of digital transformation. *Entrepreneurship and sustainability issues*, 7 (3), 2255—2270. http://doi.org/10.9770/jesi.2020.7.3(53).
- Makarchuk, O., & Voronina, A. (2017). Statystychne doslidzhennia rynku pratsi v Ukraini [Statistical research of the labor market in Ukraine]. *Molodyi vchenyi Young scientist*, 9, 540—544. Retrieved from http://nbuv.gov.ua/UJRN/molv 2017 9 123.
- 21. International Labour Organization (ILO). (2020). World Employment and Social Outlock. Retrieved from https://www.ilo.org/global/research/global-reports/weso/2020/lang--en/index.htm.
- 22. Derzhavna sluzhba statystyky Ukrainy. (1998—2020). Ekonomichna statystyka. Navkolyshnie seredovyshche [Economic statistics. Environment]. Retrieved from http://www.ukrstat.gov.ua/operativ/menu/menu_u/ns.htm.

The article is recommended for printing 11.02.2021 © Yurchuk N., Leshchuk H., Tkachenko O., Kotenok A., Cherviakova D.