ACCOUNTING AND ANALYTICAL TOOLS FOR THE FORMATION OF SUBORDINATED DEBT OF COMMERCIAL BANKS IN UKRAINE

[a]TETIANA SHMATKOVSKA, [b]IHOR KRUPKA, [c]VASYL SYNENKO, [d]ROMAN SYDORENKO, [e]NATALIIA MOSTOVENKO, [f]TETIANA TALAKH, [g]IRYNA DANCHEVSKA, [h]NATALIIA MELNYK

[a]Lesya Ukrainka Volyn National University, 28, Vynnychenka Str., 43025, Lutsk, Ukraine
[b,c,h]Ivan Franko National University of Lviv, 1, Universytetska Str.,79007, Lviv, Ukraine
[d,e,,f]Lutsk National Technical University, 75, Lvivska Str., 43018, Lutsk, Ukraine
[g]Stepan Gzhytskyi National University of Veterinary Medicine and Biotechnologies of Lviv, 50, Pekarska Str., 79010, Lviv, Ukraine
email: [a]shmatkovska2016@gmail.com, [b]ihor.krupka@lnu.edu.ua, [c]sv13051996@ukr.net, [d]romsydorenko@gmail.com, [e]mostovenko.n@gmail.com, [f]t.talah@lutsk-ntu.com.ua, [g]danchevska@lvet.edu.ua, [f]nataliya.melnyk@lnu.edu.ua

Abstract: The article considers the current specifics of accounting for hybrid financial instruments in the process of forming the regulatory capital of commercial banks in Ukraine. The important role of subordinated debt as a component of the bank`s equity capital is determined. The dynamics of changes in the total subordinated debt and the capital adequacy ratio in the banking system of Ukraine in the crisis conditions of the war, which results in instability of financial markets, is studied. The special role of subordinated debt in the process of ensuring the financial stability of commercial banks and increasing their capitalization is noted. The need to enhance the ability of banks to attract hybrid instruments for increasing their regulatory capital is determined.

Keywords: commercial banks; capital; economic security; subordinated debt.

1 Introduction

Increasing the amount of bank capital is one of the strategic objectives of the development and functioning of the Ukrainian banking system. At the same time, the problem of increasing the capitalization of banks in line with the growth of markets and the national economy as a whole has always been and remains relevant for the economic system. The banking system of Ukraine is no exception in this regard, as its main development goals are currently determined by the priorities of European integration and globalization processes, which are closely linked to significant changes in the country`s economy, the financial basis of which is the economic security of the banking system. In addition, the challenges faced by Ukrainian commercial banks since the beginning of the Russian aggression have forced them to fundamentally reconsider their approach to the formation of their own resources, including equity capital, which is the basis for ensuring their creditworthiness in the interbank market.

Accordingly, in the current environment, subordinated debt is of particular relevance in the process of raising bank capital, as it is an important tool for commercial banks to ensure their financial stability. Subordinated debt is a specific type of debt instrument that is payable after all other debt obligations of the bank. As Ukrainian banks are experiencing objective difficulties in replenishing their equity capital in the context of tension in the financial markets due to the active phase of the war, they are facing significant challenges in finding effective sources of equity capital increase through traditional (reinvestment of profits, additional issue of shares) and non-traditional sources (attraction of subordinated debt, securitization of assets). This is what will allow banks to conduct a wide range of active operations using available resources and will balance all the risks associated with the sufficient amount and reliability of the generated resources. Thus, it can be argued that strengthening the resource base contributes to increasing the ability of banks to meet the current and investment needs of business entities and households for additional financial resources. At the same time, the problem of the formation and use of resources by banks has become much more acute in Ukraine due to the growth of interest rates as a result of the destructive impact of Russian aggression on the markets. The resources provided by borrowers for use by the bank are becoming shorter, more expensive, and very unstable.

In such conditions, when there is a growing need to attract additional resources to the banks` equity, subordinated debt is of particular importance, as it is a rather effective tool for replenishing equity. At the same time, there are objective concerns about its use in the bank's activities. The main problem is the operational and analytical tools for the formation of subordinated debt, which necessitates in-depth research on this issue.

2 Literature Review

The study of issues related to the resource provision and capitalization of commercial banks is not new to modern economic science and is widely covered in the specialized financial literature. The main focus of these studies is the formation of a sufficient and properly balanced resource base of banks. In particular, the issues of bank capitalization and the search for ways to increase bank capital by attracting subordinated debt were addressed by such scholars and practitioners as I. Balaniuk [1], Y. Chaliuk [11], M. Dziamulych [13-19], O. Ivanenko [21], M. Kryshtanovych [24], N. Kunitsyna [27], M. Masl'an [29], Y. Pozdnyakov [32], J. Reitšpís [34], O. Shubalyi [37-38], I. Yakoviyk [41], and many others.

In addition, it is necessary to note the research related to the study of the economic essence of subordinated liabilities, their role, and their importance in banking as an additional source of replenishment of the bank`s equity. The study of this issue is widely covered in the works of such scholars as I. Britchenko [2-10], Y. Danshina [12], N. Hurzhyi [20], S. Koshova [22-23], T. Kulinich [25-26], O. Lazorko [28], O. Polishchuk [31], O. Ramos [33], T. Shmatkovska [35-36], R. Sodoma [39], A. Zielińska [42], and others.

However, as already noted, the formation of destructive conditions in the financial markets has significantly complicated access to financial resources for commercial banks, including for replenishment of equity capital. Therefore, there is an objective need for an in-depth study of the current specifics of the formation of subordinated debt of banks, which can be used in the process of increasing their capitalization.

3 Materials and Methods

The study of the problems of formation of subordinated debt of commercial banks implies the need to improve the methodology for calculating all subordinated debt, or a part of it, which is included in the bank`s equity, as well as its constituent elements, which are classified as hybrid.

In accordance with the National Bank of Ukraine (NBU`s) methodology, subordinated debt is ordinary unsecured debt capital instruments (components of capital) that, in accordance with the agreement, cannot be withdrawn from the bank before five years and, in the event of bankruptcy or liquidation, are returned to the investor after all other creditors` claims have been paid. The amount of subordinated debt included in the capital is annually reduced by 20 percent of its original amount during the last five years of the agreement. The sources of subordinated debt funds are the investor`s own and/or borrowed funds, except for those raised from the debtor bank [30]. In addition, it is prohibited to directly or indirectly provide loans for the purchase of own securities and shares of other banks, and to provide subordinated debt to banks. The use of treasury securities to secure loans is possible only with the permission of the National Bank of Ukraine.

In their economic essence, subordinated liabilities are borrowed funds from the bank, which must ultimately be returned to the owners. However, given the rather long-term use of these funds and the possibility of their conversion (in particular, into bank shares), such borrowed funds are treated as equity. Banks can repay their previous debt with new borrowings, using this source of funds indefinitely. According to the Basel III Accord, a bank's capital consists of elements of Tier 1 and Tier 2 capital, which are limited and restricted to a certain extent [40].

In addition, hybrid (debt/equity) capital instruments include those that may have features of both equity and debt. The main criteria that such instruments meet are as follows:

- Hybrid equity instruments are unsecured, subordinated, and fully paid;
- They cannot be redeemed at the initiative of the holder (or without the prior consent of the regulator);
- Hybrid equity instruments can be freely used to cover losses without requiring the bank to cease trading operations;
- The equity instrument (unlike dividends or ordinary share capital and similar to cumulative preference shares) provides for the possibility of deferring the servicing of interest obligations if the bank's profitability does not allow it to make such payments.

Such criteria are in line with the Basel Capital Accord [40].

Accordingly, for the purpose of calculating subordinated debt, it should be taken into account that if debt capital instruments do not meet the above criteria, they should be classified as subordinated term debt.

4 Results and Discussion

The current complex features of banking activity in Ukraine pose difficult tasks for commercial banks in the field of increasing their capitalization. In particular, under conditions of limited opportunities to increase equity capital at the expense of shareholders, there is an objective need to issue innovative instruments for attracting bank capital, for example, the issue of subordinated debt obligations. It is worth noting that the mechanism of raising funds on the terms of subordinated debt is much simpler than the one used in the case of the share issue. Capital formation through the issue of subordinated liabilities and securities contributes to the increase in the profitability of the bank's shares if the income from the placement of funds exceeds the costs associated with their borrowing. In general, raising funds on the terms of subordinated debt is more acceptable for banks also in view of the difficult economic situation in Ukraine, in which it is problematic for banking institutions to place shares, as they can be purchased only at the expense of shareholders' own funds.

As banking practice shows, compared to conventional debt, subordinated debt has some features that make it more attractive to commercial banks, namely:

1. Subordinated debt allows banks to increase their capitalization without reducing their control over the bank. This is possible because it does not give voting rights to bondholders. Thus, the bank can raise capital without risking losing control over the bank's management.
2. Subordinated debt allows banks to increase their capitalization without reducing their liquidity. Since subordinated debt is a long-term instrument, a bank can use it to ensure long-term financial stability without compromising its liquidity.
3. Subordinated debt can be used as a tool to ensure compliance with regulatory requirements, as the NBU requires banks to maintain a certain level of capital to ensure their financial stability by setting mandatory ratios.
4. Subordinated debt can be attractive to investors as it often has higher yields than conventional bonds. This can attract investors looking for high-yield investments.
5. Subordinated debt can help a bank raise capital at a time when conventional sources of funding, such as issuing shares or ordinary bonds, are not possible or are inefficient.

All of these factors make subordinated debt an important tool for commercial banks to ensure their financial stability and raise capital. However, it is worth noting that there is a risk for investors who buy subordinated debt, as they may suffer losses in case of default by the bank. Therefore, before purchasing subordinated debt, investors should carefully analyze the bank's financial position and the risks associated with this instrument.

To assess the situation with the formation of regulatory capital and subordinated debt of Ukrainian banks after the outbreak of war, let us look at the dynamics of the relevant indicators for 2022-2023 (Figure 1).

Figure 1. Dynamics of subordinated debt and regulatory capital adequacy ratio in the Ukrainian banking system in 2022-2023
Source: [30]

As we can see, after the start of the Russian aggression, the total subordinated debt of Ukrainian commercial banks decreased by UAH 111.6 million. However, after the situation in the financial markets stabilized in the summer of 2022, banks began to actively increase their volume, due to a shortage of sources of capital replenishment as a result of the overall increase in risks to the banking sector. As a result, as of 1 October, the aggregate amount of subordinated debt in the banking system reached a maximum of UAH 8,191.3 million. However, there is still a downward trend in the aggregate value of this indicator, although as of 1 March 2023, it is almost UAH 1,335.7 million higher than the aggregate subordinated debt of the Ukrainian banking system before the outbreak of war.

Another important indicator in this regard is the banks' regulatory capital adequacy ratio, which also includes subordinated debt. The trends in this indicator are somewhat different from those of subordinated debt. In particular, after a 1.36% decline in its importance for the Ukrainian banking system in mid-2022, the ratio has only increased, reaching 19.16% as of 1 March 2023, which is 1.15% higher than before the war. This is due to the banks' desire to ensure an adequate level of their own financial stability by increasing their share of the equity. At the same time, despite the minimum permissible value of this ratio of 10%, commercial banks seek to ensure that it is exceeded in the face of increased risk in the financial markets.

As it is well known, the Basel Accord on International Capital Standards provides for the issuance of long-term securities (debt) by banking institutions to increase their equity. Such obligations of banks are of a subordinated nature or second priority. Accordingly, subordinated debt is a debt that arises in a bank in the event of attracting investor funds to be included in the capital. That is why, in the face of uncertainty, commercial banks that have an objective need for both capital and financial stability, which guarantees their credibility in the market, seek to attract equity capital as part of subordinated debt, as this allows them to comply with the standards set by the regulator and also significantly reduces the cost of this method of increasing equity capital compared to alternative methods.

Accordingly, given the importance of subordinated debt for commercial banks in modern conditions, there is an objective need to use effective accounting and analytical tools for the formation of subordinated debt suitable for inclusion in the regulatory capital. In particular, raising funds on the terms of subordinated debt with a view to their inclusion in the bank's additional capital may be carried out either by concluding direct agreements between the debtor bank and the investor or by issuing bonds by the debtor bank on the basis of a special agreement with due regard for the special conditions of their issue and repayment.

In order to track changes in the share of subordinated debt in the regulatory capital of Ukrainian banks, let us look at its dynamics over the past year (Figure 2).

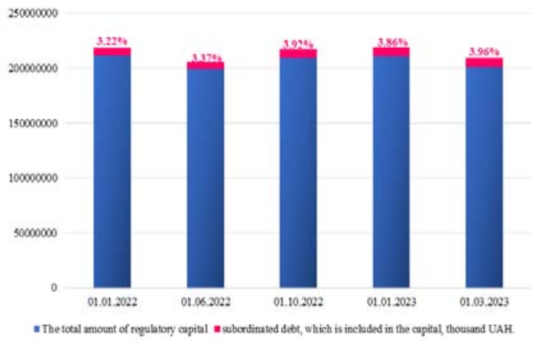

Figure 2. The ratio of regulatory capital to subordinated debt and the share of subordinated debt in the Ukrainian banking system in 2022-2023
Source: [30]

As we can see, despite the general trend towards a decrease in the total amount of regulatory capital in the banking system, the share of subordinated debt in it has been growing since the beginning of the war and as of 1 March 2023 exceeded the corresponding value by 0.84% compared to the beginning of 2022. Therefore, the trend of banks increasing their equity capital by raising subordinated debt can be considered confirmed. On the other hand, the generally low share of subordinated liabilities in the equity and regulatory capital of Ukrainian banks indicates that the replenishment of their capital base by raising capital on the terms of subordinated debt is slow. At the same time, it is clear that not all medium and small banks are able to use this source of capital replenishment. The growth rate of subordinated capital in the banking system in 2022 increased significantly compared to previous periods.

Thus, it can be argued that the effective development of Ukraine' banking system in the current environment is impossible without a sufficient level of capital base of commercial banks. Due to the volatility of the financial markets, Ukrainian banks are currently able to increase their equity capital without changing the shareholding - only through subordinated debt.

5 Conclusion

Thus, we conclude that subordinated debt has a dual economic nature: on the one hand, according to financial accounting rules, it should be included in bank liabilities that will be repaid to the creditor. On the other hand, subordinated debt is considered to be a component of equity when calculating capital ratios, which can lead to difficulties in determining the real financial position of commercial banks. Nevertheless, this method of capital replenishment is currently quite common among commercial banks in Ukraine, as it allows them to comply with the economic standards for the size and adequacy of equity capital set by the NBU, and contributes to the overall increase in profitability of banking activities by reducing capital costs. Therefore, the introduction of hybrid capital instruments into the practice of Ukrainian banks will have an overall positive impact on their financial stability. At the same time, it should be noted that there is a need to improve the system of banking supervision and assessment of commercial banks' equity capital, which will enhance the inclusion of hybrid instruments in regulatory capital. This will allow commercial banks in Ukraine to increase their capitalization levels in the future, which will have a positive impact on the overall state of the banking system

Literature:

1. Balaniuk, I., Kyrylenko, V., Chaliuk, Yu., Sheiko, Yu., Begun, S., & Diachenko, S. (2021). Cluster analysis of socioeconomic development of rural areas and peasant farms in the system of formation of rural territorial communities: a case study of Volyn region, Ukraine. *Scientific Papers Series "Management, Economic Engineering in Agriculture and Rural Development"*, 21(3), 177-188.
2. Britchenko, I., & Bezpartochnyi, M. (2020). Optimization of commodity stocks the enterprise by means of HML-FMR clustering. *Financial and Credit Activity: Problems of Theory and Practice*, 3(34), 259-269.
3. Britchenko, I., Bohomolova, N., Pinchuk, S., & Kravchenko, O. (2018). Assessment of the determinants of the financial security of railways in Ukraine. *Financial and credit activity: Problems of Theory and Practice*, 4(27), 270-281.
4. Britchenko, I., & Cherniavska, T. (2017). Transport security as a factor of transport and communication system of Ukraine self-sustaining development. *Scientific Bulletin of Polissia*, 1(9), 16-24.
5. Britchenko, I., Drotárová, J., Antonov, M.; Kholodna, J.; Polonska, O.; & Popova, Y. Environmental and economic security in the conditions of digitalization of the Ukraine`s economy. *AD ALTA: Journal of interdisciplinary research*, 12(2), Special Issue XXIX, 118-122.
6. Britchenko, I., Drotárová, J., Yudenko, O., Holovina, L., Shmatkovska, T. (2022). Factors and conditions of the environmental and economic security formation in Ukraine. *AD ALTA: Journal of interdisciplinary research*, 12(2), Special Issue XXIX, 108-112.
7. Britchenko, I., Hladchenko, S., Viktorova, L., Pronoza, I., & Ulianova, K. (2022). Information as Element of Enforcing the States Information Security. *AD ALTA: Journal of Interdisciplinary Research.* 12(1), Special issue XXV, 110-114.
8. Britchenko, I., Kraus, N., & Kraus, K. (2019). University innovative hubs as points of growth of industrial parks of Ukraine. *Financial and Credit Activity: Problems of Theory and Practice*, 4(31). 448-456.
9. Britchenko, I., Smerichevskyi, S., & Kryvovyazyuk, I. (2018). Transformation of entrepreneurial leadership in the 21st century: prospects for the future. In Advances in Social Science, Education and Humanities Research. *Proceedings of the 2nd International Conference on Social, Economic and Academic Leadership (ICSEAL 2018)*, 217, 115-121.
10. Britchenko, I., Svydruk, I., Pidlypnyi, Y., & Krupskyi, O. P. (2020). Lessons to Be Learned from Ukraine's Positioning in International Rankings: The Need for Institutional Support and Financial Support for Economic Creativity. *Management Issues*, 18(4), 90.
11. Chaliuk, Y., Dovhanyk, N., Kurbala, N., Komarova, K., & Kovalchuk, N. (2021). The digital economy in a global environment. *AD ALTA: Journal of Interdisciplinary Research*, 11, Special issue XVII, 143-148.
12. Danshina, Y., & Britchenko, I. (2018). Net structure of subject-to-subject relations in the management of the system of administrative services provision. *Baltic Journal of Economic Studies*, 3(5), 108-115.
13. Dziamulych, M., Hrytsenko, K., Krupka, I., Vyshyvana, B., Teslia, S., Tereshko, O., & Fadyeyeva, I. (2022). Features of banks` liquidity management in the context of the introduction of the LCR ratio in Ukraine. *AD ALTA: Journal of interdisciplinary research*, 12(1), Special Issue XXVII, 148-152.
14. Dziamulych M., Krupka, I., Andruschak, Y., Petyk, M., Paslavska, R., Grudzevych, Y., &Martyniuk, R. (2022). Banking liquidity risk management in Ukraine based on the application of digital and information technologies. *AD ALTA: Journal of interdisciplinary research*, 12(2), Special Issue XXIX, 102-107.
15. Dziamulych, M., Krupka, I., Petyk, V., Zaplatynskyi, M., Korobchuk, T., Synenko, V., & Avramchuk, L. (2023), Operational efficiency of Ukraine`s banking system during the war. *AD ALTA: Journal of interdisciplinary research*, 12(2), Special Issue XXXII, 164-168.
16. Dziamulych, M., Kulinich, T., Shmatkovska, Y.,

Moskovchuk, A., Rogach, S., Prosovych, O., & Talakh, V. (2022). Forecasting of economic indicators of agricultural enterprises activity in the system of ensuring their management on the basis of sustainable development: a case study of Ukraine. *Scientific Papers Series "Management, Economic Engineering in Agriculture and Rural Development"*, 22(1), 207-216.
17. Dziamulych, M., Myskovets, I., Zubko, A., Tereshchuk, O., Baidala, V., Voichuk, M. (2022). Formation of the natural resource economics in the system of environmental and economic security. *AD ALTA: Journal of interdisciplinary research,* 12(2), Special Issue XXX, 142-146.
18. Dziamulych, M., Petrukha, S., Yakubiv, V., Zhuk, O., Maiboroda, O., Tesliuk, S., & Kolosok, A. (2021). Analysis of the socio-demographic state of rural areas in the system of their sustainable development: a case study of Ukraine. *Scientific Papers Series "Management, Economic Engineering in Agriculture and Rural Development"*, 21(4), 223-234.
19. Dziamulych, M., Stashchuk, O., Korobchuk, T., Mostovenko, N., Martyniuk, R., Strelkova, I., & Grebeniuk, N. (2021). Banking innovations and their influence on the formation of digital banking. *AD ALTA: Journal of Interdisciplinary Research*, 11(2), Special issue XXI, 108-112.
20. Hurzhyi, N., Mishustina, T., Kulinich, T., Dashko, I., Harmider, L., & Taranenko, I. (2021). The Impact of Innovative Development on the Competitiveness of Enterprises. *Postmodern Openings*, 12(4), 141-152.
21. Ivanenko, O., Bugaychuk, V., Belei, S., Grynchuk, N., & Kulinich, T. (2021). Financial Equalization of Territorial Development East European Countries and its Impact on Quality of Life. *International Journal for Quality Research*, 15(4), 1301-1316.
22. Koshova, S., Britchenko, I., & Bezpartochnyi, M. (2022). Investment in the space industry: a comparative analysis of Ukraine and the EU. *Baltic Journal of Economic Studies*, 8(3), 2256-0742.
23. Koshova, S., Britchenko, I., & Bezpartochnyi, M. (2022). The essence of financing the space in in the post-war period as an integral part of the country's reconstruction plan. *Financial and Credit Activity: Problems of Theory and Practice*, 4(45), 405-415.
24. Kryshtanovych, M., Britchenko, I., Lošonczi, P., Baranovska, T., & Lukashevska, U. (2022). State Management Mechanisms for the Exchange of Information Regarding Cyberattacks, Cyber Incidents and Information Security Incidents. *IJCSNS International Journal of Computer Science and Network Security*, 22(4), 33-38.
25. Kulinich, T., Lisnievska, Y., Zimbalevska, Y., Trubnik, T., & Obikhod, S. (2022). Digitalization of economies of low and middle income countries in the context of digital transformation. *Amazonia Investiga*, 11(51), 300-311.
26. Kulinich, T., Pikus, R., Kuzmenko, O., Vasilieva, S., Melnik, V., & Orel, M. (2022). Cognitive Aspects of the Strategic Management System under Uncertainty. *Postmodern Openings*, 13 (3), 166-179.
27. Kunitsyna, N., Britchenko, I., & Kunitsyn, I. (2018). Reputational risks, value of losses and financial sustainability of commercial banks, *Entrepreneurship and Sustainability Issues*, 5(4), 943-955.
28. Lazorko, O., Virna, Z., Brytova, H., Tolchieva, H., Shastko, I., & Saienko, V. (2021). Professional Safety of Personality: System Regularities of Functioning and Synergetic Effects of Self-Organization. *Postmodern Openings*, 12(2), 170-190.
29. Masl'an, M., & Britchenko, I. (2023). Formation of an integrated system of state economic security. *AD ALTA: Journal of interdisciplinary research*, 12(2), Special Issue XXXII, 159-163.
30. National Bank of Ukraine. (2022). The main indicators of the banks of Ukraine. Available at: https://bank.gov.ua/.
31. Polishchuk, O., Kulinich, T., Martynovych, N., & Popova, Y. (2022). Digitalization and Sustainable Development: the New COVID-19 Challenge Requires Non-standard Solutions. *Problemy Ekorozwoju*, 17(2), 69-79.
32. Pozdnyakov, Y., Britchenko, I., Hryniv, N., & Nakonechna, T. (2022). Economic Measurements Methodology of Property Rights To Unbuilt Residential Real Estate Objects Market Value. *Financial and Credit Activity: Problems of Theory and Practice*, 4(45), 133-152.
33. Ramos O. R., Myronenko, Y., Britchenko, I., Zhuk, O., & Patlachuk, V. (2022). Economic security as an element of corporate management. *Financial and Credit Activity: Problems of Theory and Practice*, 1(42), 304-312.
34. Reitšpís, J., Mašľan, M., & Britchenko, I. (2021). Selection and application of appropriate analytical methods needed to assess the risks reducing the security of the protected system. *Baltic Journal of Economic Studies*, 7(3), 1-8.
35. Shmatkovska, T., Britchenko, I., Voitovych, I., Lošonczi, P., Lorvi, I., Kulyk, I., & Begun, S. (2022). Features of banks` liquidity management in the context of the introduction of the LCR ratio in Ukraine. *AD ALTA: Journal of interdisciplinary research*, 12(1), Special Issue XXVII, 153-156.
36. Shmatkovska, T., Kulinich, T., Dziamulych, M., Rogach, S., Bilochenko, A., Serdiukova, O. (2022). Analysis of investment efficiency in the agricultural sector of Ukraine on the basis of sustainable development. *Scientific Papers Series "Management, Economic Engineering in Agriculture and Rural Development"*, 22(3), 649-657.
37. Shubalyi, O., Liashenko, O., Rud, N., Shubala, I., Mylko, I., Mykhalchynets, N. (2022). Economic activity of the rural population: a case study of Ukraine. *Scientific Papers Series "Management, Economic Engineering in Agriculture and Rural Development"*, 22(4), 677-684.
38. Shubalyi, O., Rud, N., Shubala, I., Gordiichuk, A., Potomkina, O., Kosinskyi. P. (2021). Assessment of economic activity of the rural population by age and gender groups: a case study of Ukraine. *Scientific Papers Series "Management, Economic Engineering in Agriculture and Rural Development"*, 21(2), 555-568.
39. Sodoma, R., Shmatkovska, T., Dziamulych, M., Vavdiiuk, N., Kutsai, N., & Polishchuk, V. (2021). Economic efficiency of the land resource management and agricultural land-use by agricultural producers. *Management Theory and Studies for Rural Business and Infrastructure Development*, 43(4), 524-535.
40. The Basel Committee on Banking Supervision. (2003). Markets for Bank Subordinated Debt and Equity in Basel Committee Member Countries. Basel: Bank for International Settlements Information, Press & Library Services. 86 p.
41. Yakoviyk, I., Chyzhov, D., Karpachova, N., Hlushchenko, S., & Chaliuk, Yu. (2020). National security policy in Ukraine: a change in the system of power relations of the modern world. *Revista San Gregorio*, 42, 224-235.
42. Zielińska, A., Britchenko, I., & Jarosz, P. (2018). Leading innovations and investments into the new energy technologies. In Advances in Social Science, Education and Humanities Research. *Proceedings of the 2nd International Conference on Social, Economic and Academic Leadership (ICSEAL 2018)*, 217, 320-324.

Primary Paper Section: A

Secondary Paper Section: AE, AH