Financial risk management in the accounting system

Umantsiv Halyna*; Novikov Vladyslav B; Nikolaiets Oleksandra C

A, B, C Kyiv National University of Trade and Economics, Kyivo 19 st., Kyiv, 02156, Ukraine

Received: November 13, 2021 | Revised: November 29, 2021 | Accepted: December 28, 2021

JEL Classification: F37, G10, G32, M41.

DOI: 10.38188/2534-9228.21.4.08

Abstract
The article is devoted to the study of financial instruments in conditions of economic uncertainty. Based on a study of national and international statistics and theoretical resources related to the restructuring of socio-economic and geopolitical ties, due to the rapid spread of the COVID-19 pandemic, its implications for accounting for financial instruments and disclosure of financial statements in accordance with International Financial Standards Reporting.

A combination of factors such as rising unemployment, falling demand for goods, bans and restrictions on doing business, severance of international ties, reorientation of markets to domestic consumption, rising risks of bankruptcy and default have led to the formation of economic uncertainty, which is most threatened by business initiative. Economic uncertainty, which gradually changes from sudden to prolonged, has a direct impact on the business activity of enterprises, in particular, on their financial instruments.

The pandemic caused by the COVID-19 virus has become a great challenge for participants in economic relations, who during the years of stability have managed to get used to stable market relations. The pandemic, which humanity has been struggling with for almost two years, has affected the entire system of social relations. At the beginning of the deployment of anti-epidemiological measures, the world economy was not ready to distance the production process. Economic indicators, which are an indicator of the development of individual states, demonstrate the vulnerability of sustainable socio-economic relations that existed before the COVID-19 pandemic.

The potential impact of the coronavirus outbreak on financial instruments has been assessed in such areas as increased expected credit losses, modification of financial assets and liabilities, losses under financial guarantee agreements accounted for in accordance with International Financial Reporting Standards, and reduced hedge effectiveness.

Keywords: financial instruments, economic uncertainty, pandemic, unemployment.

Introduction
Since the beginning of the second millennium, the biggest challenge to the existence of human civilization has become the crown viral pandemic. The fundamental principle of business continuity has recently been significantly affected by socio-economic impacts due to quarantine restrictions imposed by governments to curb the spread of the COVID-19 pandemic. The article attempts to assess the effects of economic uncertainty on the accounting of financial instruments and analyze the impact of the COVID-19 pandemic on the disclosure of financial statements.

Analysis of the recent research and publications has indicated that this topic is of great interest for scientists. We explain that economic uncertainty is gradually moving from the sudden stage to the prolonged scene. Currently, all world institutions are working to reformat international
and national economic and industrial relations to modern "quarantine" realities. Rogoznyi S. and Dyadyun O. made a significant contribution to the study of numerical aspects of the impact of COVID-19 on the dynamics of economic processes, investigating the effects of quarantine and other features of 2020 on financial instruments in IFRS reporting. Stadnyk M. successfully studied the impact of COVID-19 on the world economy. Vyhivska I., in her work, described in detail the process of risk management in accounting. Umantsiv H. and Novikov V. explained the process of disclosing information about the impact of COVID-19 on accounting estimates in the financial statements. Ryabtsun O. studied the effect of the COVID-19 outbreak on the preparation of financial statements. Bykova G. assessed the application of IFRS 9 during the pandemic based on the explanations of the Ministry of Finance.

Berzin P., Shyshkina O., Kuzmenko O., Yarovenko H., investigated innovations in the risk management of the business activity of economic agents. Dovhan Z., Kravchuk I., Karaś P., successfully described the financial instruments market as an institutional approach. Sakun O., Yevtushenko Y., explained the foreign experience of financial instruments of assistance to investment development in detail.

The scientific works present the dynamics of economic and statistical indicators of various spheres of social and industrial relations, both within individual countries and internationally. The emergence of the coronavirus and its rapid spread has forced governments worldwide to declare quarantine restrictions, creating general economic uncertainty that directly impacts the accounting and financial reporting of many companies in Ukraine and around the world. The pandemic has created a new environment that creates significant difficulties for companies that prepare financial statements according to international standards.

Material and methods

The information base of the article is the scientific works of foreign and domestic economists on financial risk management in the accounting system, as well as international and macroeconomic statistics of international and national institutions. In writing the article, the authors used traditional and modern scientific methods and approaches of economic research, such as induction and deduction, comparison, statistical and empirical, economic-mathematical and economic-statistical analysis. The latter was used to form a relationship between the pandemic and financial risks, based on advice on risk management in the accounting system.

We used methods of induction and deduction to understand the global nature of the problem, both at the transnational and macroeconomic levels, with the help of statistical trends in the world and national economic development.

Results and discussion

The pandemic caused by the COVID-19 virus has become a significant challenge for participants in economic relations, who have become accustomed to traditional market relations over the years of stability. The pandemic, with which humanity has continued to struggle for more than two years, has struck at the most vulnerable part of its structure - social and industrial relations. As a result, society is gradually entering a new stage of civilizational development. Unfortunately, at the beginning of the deployment of anti-epidemiological measures, human civilization was not ready to distance the work process from the workplace itself. Economic indicators, which are an indicator of the development of individual states, demonstrate the initial vulnerability of sustainable social and industrial relations that existed before the COVID-19 pandemic.

One of the most damaging factors in the spread of the pandemic is the unemployment rate, which has risen significantly due to quarantine restrictions. Thus, the number of unemployed in Ukraine in 2020, compared to the previous year, increased by 121 thousand
people, the dynamics of the movement is shown in Fig. 1. This situation at the national labour market indicates a reduction in jobs in enterprises caused by the complex economic crisis due to quarantine restrictions.

![Figure - 1 Unemployment rate in Ukraine for 2010-2020, thousand people](source)

Unemployment has increased significantly, even in the most developed countries. According to the U. S. Bureau of Labor Statistics, the average annual unemployment rate in the United States for 2013-2020 was determined. Thus, in 2020, it experienced its apogee in the United States, reaching a record high of 8.06% in the last seven years.

![Figure - 2 The average unemployment rate in the United States for 2013 - 2020, %](source)

Given the unpredictability of the situation with the COVID-19 virus, the rate of spread of which affects the macroeconomic turbulence, developed countries are trying to reorient the market from foreign to domestic markets. They desire to get out of the economic influence of external participants in geopolitical and economic-industrial relations to stabilize the situation at the macro level in an era of economic uncertainty. There are historically developed grounds due to which the principles that foreign direct investments are desirable for national economies due to their scale and manufacturability. Unfortunately, large, meddle, and small businesses of developing economies cannot offset the investment of external players, leading to an unfavourable economic situation at the macro level. The national economy, which primarily focuses on export-import relations, is experiencing considerable turbulence at the international economic level. Thus, according to the official data of the Ministry of Finance of Ukraine, the final balance of direct investment in Ukraine in 2020 reached an unprecedented low level, amounting to $950 million, a detailed description of which is shown in Fig. 3.

![Figure - 3 Final balance of foreign direct investment in Ukraine for 2010 - 2020, million USD](source)

The COVID-19 pandemic caused a decline by almost $3 trillion in the volume of the world GDP. It happened for the first time in the last five years. The dynamics are shown in Fig. 4.

As a result, global economic uncertainty has a multifaceted impact on the further development of geopolitical, economic, social and industrial relations, which affects the business activity of economic entities, particularly on their financial instruments.
In modern literature, you can find various interpretations of the concept of financial instruments. In our opinion, the most appropriate one is: “a financial instrument is a legal document that reflects certain contractual relationships, provides certain rights related to assets and liabilities that can be bought and sold on the market and through which the distribution and redistribution of the created capital occur”. The distribution of financial instruments in accounting is shown in Fig. 5.

The spread of economic uncertainty significantly impacted financial instruments in the sphere of asset impairment and provisions. We believe that the potential result of the coronavirus outbreak on financial instruments is possible in various areas. As the increase in expected credit losses; modification of financial assets and liabilities; losses incurred under financial guarantee agreements that are accounted for by IFRS 9 financial instruments with third parties or related parties; impaired hedging efficiency, or the inability to continue hedge accounting due to the inability to predict future transactions.

Because all financial assets for which the expected loan losses are calculated to require an assessment of the possibility of default for the next twelve months, the impact of economic uncertainty will change significantly. This phenomenon is because economic uncertainty increases the chances of default. Which in turn entails an increase in potential default losses for financial assets.

![Figure 4 Dynamics of world GDP for 2010-2020, trillion. USD](Source: The World Bank, 2021)

![Figure 5 Financial instruments in accounting](Source: Pro zatverdzhennia Natsionalnoho polozhennia (standartu) bukhhalterskoho obliku 13 "Finansovi instrumenty", 2021)

Given that no business entity can exist outside the social relations of production, separately from other market participants, the impact on one business entity entails a gradual effect on other commodities. Thus, the reduction in activity or bankruptcy of some market participants entails a significant increase in the credit risk of others, which in turn leads to the recognition of the provision for expected credit losses for many financial assets. Alternatively, borrowers and lenders are invited to amend the terms of financial instruments agreements. Such changes should include a reduction in interest rates, changes in payment terms and grace periods for defaults. It is clear that the decrease in interest rates, for example, under a loan agreement with a bank, will
lead to a loss of economic benefit to the lender. Therefore, the National Bank of Ukraine has reduced the discount rate to a record 6% since the aggravation of the financial situation.

It enabled the reduction of the average annual accounting rate to 7.38%, and this number is the lowest in Ukraine since 2014, Fig. 6. Such actions of the regulator enabled to reduce the turbulence of financial and credit relations in the middle of the country, providing credit entities with an economic and legal instrument to lower interest rates.

As for hedging, unfortunately, the situation with determining future prices for financial commodity assets remains unpredictable. It is because financial assets include currency, cash, securities, and goods, which are understood as certain types of resources such as gas, oil, metals, grain, electricity, etc. The prices for such goods have a significant impact on the formation of the value of consumer goods, which directly affects the volume of consumption of a particular group of goods, which now reflects the general state of the national economy. Although the prices of raw materials themselves have nothing to do with banking institutions, their indirect impact on the living standards of the population (bank customers and borrowers) is indisputable.

In conditions of economic uncertainty, the prices of financial commodity assets remain unpredictable, which creates the need for economic entities to take any action to limit or minimise price risks, Fig. 7.

**Figure – 6 Average annual discount rate of the NBU for 2014 - 2020, %**
*Source: National Bank of Ukraine, 2021*

**Figure – 7 Risk hedging methods.**
*Source: Buklib by Magistr.ua, 2021*
With the growing degree of risk activity in the space of economic uncertainty, the government should form an effective risk management policy during accounting. The governing party should establish preventive measures and an internal insurance system. At the same time, these preventative measures aimed at reducing accounting risks can significantly affect the likelihood of their occurrence but cannot completely neutralize them. Also, in the situation of unpredictability, it will be reasonable for business entities to resort to risk prevention in accounting in the areas shown in Fig. 8.

This standard requires companies to disclose qualitative and quantitative information about the level of risks and their nature arising from activities with financial instruments. This type of information is crucial because it provides an opportunity to assess the nature and level of risks inherent in economic entities arising from existing financial instruments.

In our opinion, concerning credit risk, businesses in this sector should pay attention to the guidelines of the National Bank of Ukraine "On the reflection of financial instruments in accounting and financial reporting in conditions of uncertainty caused by the coronavirus". The importance of credit risk lies in the fact that the source of its occurrence is receivables. As a result of the non-fulfilment of financial obligations by the counterparty, companies are exposed to credit risk and a significant probability of loss. Thus, expected credit losses will increase due to the possibility of default and potential default losses for financial assets.

Firstly, entities that disclose credit risk by financial instrument class need to reflect better the maximum level of credit risk at the end of the reporting period. Secondly, it is reasonable to describe the collateral held as collateral. Thirdly, to pay special attention to the credit quality of financial assets.
In contrast to credit, multifactorial influences represent a market risk, Fig. 10. Each factor does not pose a potential threat to the strategic activities of the enterprise. The situation with the pandemic is dangerous precisely because the elements begin to influence simultaneously, forming an external space of economic uncertainty. The synergetic influence of factors is potentially hazardous for the continuous operation of both national enterprises and transnational corporations. It will be appropriate for entities to disclose a sensitivity analysis for each type of market risk related to an entity’s operations and monitor the information’s representativeness.

Another quite important group of financial risks is liquidity risk. With the spread of the COVID-19 pandemic, this risk group has become particularly relevant because the risk is associated with the repayment of financial obligations by economic entities, leading to the transfer of cash or other financial assets. Because the Coronavirus crisis has affected the solvency of market participants, this group of risks requires special attention when disclosing information about financial risks.

For liquidity risk, an entity shall disclose an analysis of non-derivative and derivative financial liabilities by maturity. Significant solvency problems Rogozny S. and Dyadyun. O., advise in addition to the necessary disclosures to show what sources are used to minimize it; reflect the impact of COVID-19 on the processes of monitoring and managing the liquidity position.

**Conclusions**

Economic uncertainty caused by the spread of the COVID-19 pandemic is a significant factor in the financial problems of enterprises. It is primarily due to the rate of reach of the disease, which entails macro and microeconomic changes within the country and geopolitical
ones outside the country. Falling world GDP, rapid unemployment, market reorientation, declining investment - all this leads to the formation of an unfavourable external environment of economic uncertainty, which, unfortunately, continues to increase nowadays.

Financial instruments, as a means of implementing the financial objectives of the enterprise, are a virtual object of attention at the stage of analysis of the continuous operation of the entity, at least in terms of cash adequacy and sources of short-term liabilities.

Economic uncertainty leads to an increase in the possibility of default, which questions the entity's activities as a full participant in market relations. As a result, one of the critical consequences for financial instruments and the formation of financial statements is a violation of the principle of continuing operations and impairment of assets, which directly affects the appearance of business activity of the entity.

The potential impact of the coronavirus outbreak on financial instruments has been assessed in the following areas: increase in expected credit losses; modification of financial assets and liabilities; losses incurred under financial guarantee agreements accounted for by IFRS 9; reducing the effectiveness of hedging. The study found out that it would be appropriate for businesses to pay special attention to the function of risk insurance in accounting, which in the long run does not level. Still, it at least will reduce the impact of the external environment on the enterprise's activities.

Also, the article has analyzed information on financial risks by IFRS, based on which it describes three main groups of financial risks that most members of the group face. In our opinion, financial accounting instruments in economic uncertainty are a tricky task, which does not have a specific approach. But it is a multifaceted step-by-step process of making particular management decisions, for the implementation of which it is necessary to apply a multifactor synergistic approach.

References

Rohoznyi, S. & Diadiun, O. (2020). Finansovi instrumenty v MSFZ-zvitnosti. Vplyv karantynu ta inshi osoblyvosti 2020 roku. Upravlinnia finansami, 12. Available from: <https://e.fin.ua.com/upravlinnya-finansami-2020-12/finansovi-instrumenti-v-msfz-zvitnosti-vpliv-karantinu-ta-inshi> (data zvernennia: 23.06.2021).

Stadnyk, M. (2020). Vplyv COVID-19 na svitovu ekonomiku. Visnyk MSFZ Svitovyi dosvid. Ukraїnska praktyka, 3. Available from: <https://msfz.ligazakon.ua/ua/magazine_article/FZ002118> (data zvernennia: 25.06.2021).

Vyhisvska, I. M. (2006). Upravlinnia ryzykamy v bukhalterskomu obliku. Zbirnyk naukovykh prats Kirovohradskoho natsionalnoho tekhnichnoho universytetu. Ser. Ekonomichni nauky, 10. 22 – 27. Available from: <https://core.ac.uk/download/pdf/81587789.pdf> (data zvernennia: 28.06.2021).

Umantsiv, H. V. & Novikov, V. V. (2021). Hlobalna kryza ta yii vplyv na formuvannia finansovoi zvitnosti pidpriemstv. Zbirnyk naukovykh prats Heopolityka Ukrainy: istoriia i suchasnist, 1 (26). 188 – 200. Available from: <http://geopolitics-of-ukraine.uzhnu.edu.ua/> (data zvernennia: 30.06.2021).

Rabtsun, O. (2020). Vplyv spalakhu COVID-19 na skladannia finansovoi zvitnosti. Praktyka MSFZ, 5. Available from: <https://ibuhgalter.net/material/954/19002> (data zvernennia: 05.07.2021).

Bykova, H. (2020). Zastosuvannia MSFZ 9 pid chas pandemii: roziasnennia vid Minfinu. Debet-Kredyt. Available from: <https://news.dtkt.ua/accounting/individual-transactions/61864> (data zvernennia: 07.07.2021).

Berzin, P.; Shyshkina, O.; Kuzmenko, O. & Yarovenko, H. (2018). Investigated innovations in the risk management of the business activity of economic agents.
Marketing and Management of Innovations, 4. Available from: <http://nbuv.gov.ua/UJRN/Mimi_2018_4_2> (data zvernennia: 07.07.2021).

Dovhan, Z.; Kravchuk, I. & Karaś, P. (2017). Successfully described the financial instruments market as an institutional approach. Financial Markets, Institutions and Risks, 1(1). Available from: <http://nbuv.gov.ua/UJRN/finmarinsr_2017_1_1_5> (data zvernennia: 07.07.2021).

Sakun, O. & Yevtushenko, Y. (2017). Described in detail foreign experience of financial instruments of assistance to investment development. Visnyk Khmelnytskoho natsionalnoho universytetu. Ekonomichni nauky, 3(6). Available from: <http://nbuv.gov.ua/UJRN/Vchnu_ekon_2017_6(3)_15> (data zvernennia: 07.07.2021).

Riven bezrobittia v Ukraini. Minfin: veb-sait. Available from: <https://index.minfin.com.ua/ua/labour/unemp/> (data zvernennia: 08.07.2021).

Civilian unemployment rate. U.S. BUREAU OF LABOR STATISTICS: website. Available from: <https://www.bls.gov/charts/employment-situation/civilian-unemployment-rate.htm> (data zvernennia: 09.07.2021).

Priami inozemni investytsii. Minfin: veb-sait. Available from: <https://index.minfin.com.ua/ua/economy/fdi/2020/> (data zvernennia: 12.07.2021).

GDP (current US$). THE WORLD BANK: veb-sait. Available from: <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD> (data zvernennia: 16.07.2021).

Pro zatverdzhennia Natsionalnoho polozhennia (standartu) bukhhalterskoho obliku 13 "Finansovi instrumenty": Nakaz ministerstva finansiv Ukrainy vid 30 lyst. 2001 r. № 3559. Available from: <https://zakon.rada.gov.ua/laws/show/z10501#Text> (data zvernennia: 27.07.2021).

Potentsiinyi vplyv spalakhu coronavirusu na finansovu zvitnist. BDO Ukraina: veb-sait. Available from: <https://www.bdo.ua/ua/insights-2/information-materials/potential-effects-of-the-coronavirus-outbreak-on-reporting-periods> (data zvernennia: 30.07.2021).

Oblikova stavka Natsionalnoho banku. Natsionalnyi banku Ukrainy: veb-sait. Available from: <https://bank.gov.ua/ua/monetary/stages/archive-rich> (data zvernennia: 02.08.2021).

Metody khedzhuvannia ryzykiv. Buklib: veb-sait. Available from: <https://buklib.net/books/32887/> (data zvernennia: 06.08.2021).

Mizhnarodnyi standart finansovoi zvitnosti 7 «Finansovi instrumenty: rozkryttia informatsi» vid 1 sich. 2012 r. Available from: <https://zakon.rada.gov.ua/laws/show/929_007#Text> (data zvernennia: 09.08.2021).

Metodychni rekomendatsii vid Natsionalnoho banku Ukrainy «Shchodo vidobrazhennia finansovykh instrumentiv v bukhhalterskomu obliku ta finansovii zvitnosti v umovakh nevyznachenosti, shcho vynykla vnaslidok coronavirusu» vid 5 trav. 2020 r. Available from: <https://zakon.help/article/finansovi-instrumenti-buhgalterskii-oblik?menu=195> (data zvernennia: 10.08.2021).