

# Financial fraud in the banking sphere: essence, types and current state

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## Abstract

The article examines the problem of the spread of bank fraud. It has been established that most banking institutions identify fraudulent actions as the main threat to their security - loss of financial resources, distrust of customers and partners. The article investigates theoretical approaches to the concept of "financial fraud". Characterized the main ways of committing fraud in the banking sector. The article reveals the full cycle of banking fraud. By bank fraud we mean a set of criminal acts and manipulations committed for the purpose seizure of funds of a commercial bank or its customers. An analysis of the frequency of fraudulent acts and losses incurred as a result of banking fraud in Ukraine during 2017-2021 years.

**Key words:** financial fraud, bank fraud, manipulation, consequences.

## Introduction

The problem of fraud, illegal money laundering is global for the banking sector, financial institutions around the world. Ukraine is no exception. Bribery, corruption, fraud – disincentives that have an inhibitory effect on economic development at the national and global levels. Scientific and practical research of Western economists shows that the increase in corruption by 1% slows down 1 Article prepared by the National Research Foundation of Ukraine "Optimization and automation of financial monitoring processes to increase information security of Ukraine" and its reduction by 1% leads to GDP growth of 0.72% (Rodchenko S.S., Zhivko Z.B., 2020, p. 91).

The effective work of banks depends on the formation and implementation of an effective system for detecting and preventing financial fraud in them, which has negative consequences for both banks and their customers, as well as the entire banking sector.

Currently, there are many types of financial fraud in banks, which is accompanied by significant losses for all participants in the banking market, undermining the reputation of banks, this is associated with the emergence of new challenges, threats and risks for them. At the same time, the mechanisms for combating financial fraud and their use are inadequate to modern conditions. In general, there is no effective system for detecting and preventing financial fraud in Ukrainian banks.

## Material and methods

Were engaged in researches of essence, ways of detection and prevention of fraud and financial fraud., Becker G., Glebov O.A, Egorova O.Y, Yermoshenko A.M, Kovtun N, Kryshevich O.V, Kulik V.V,

Melnyk S. S., Mikhailovskaya Yu. V., Savchenko M. S., Tkachuk I. B., Chernyshov G. M., Chizhov O. V. and others.

However, less attention is paid to the definition of features, types, cyclical nature of financial fraud in banks, its typology and classification, mechanisms for its detection and prevention, as well as areas for their improvement in Ukraine. The importance and insufficiency of research on this issue determines the relevance of the research topic of this work, determining its purpose and objectives.

### **Results and discussion**

Financial fraud is an unscrupulous activity that is quite common in banks. The activities of financial fraudsters often have negative consequences long before the social rules prohibiting it are formalized. Intensive transformation processes in modern financial markets, their automation and virtualization, expansion of remote interaction between banks and their customers, significant influence of outsiders on software and hardware of banks, increasing the number of cases and volumes of financial fraud. in banking institutions.

We can single out such unacceptable for society ways of taking financial resources as: violent, fraudulent and theft. Mostly losses in the field of financial relations are caused by financial fraud in banks, the fraud of which is based on fraud. A group of scientists under the auspices of Pierre-Laurent Chaten “divides the negative consequences, or problems that can be encountered by banks involved in illegal operations, into reputational, operational and legal. When it comes to financial fraud, the list should be added to the financial problems” (Shaten P.-L., 2011, p.19).

Financial fraud in banks indicates a lack of ability of banks to ensure their financial security at the appropriate level, which allows for financial crimes that inevitably lead to loss of financial resources, as well as deprivation of a banking license or bankruptcy of the bank. Loss of reputation and trust in the bank, lawsuits, severance of business relations, loss of market share and prospects – these are the “non-monetary” consequences of fraud in banks.

Levin V.V. and Kozlov D. N., believe that “fraud is a global phenomenon that invents new and new ways to legally withdraw money from banks”. This emphasizes the constant relevance and need for detailed work on the scientific deepening of knowledge and approaches to detecting financial fraud (Levin V.V., Kozlov D.N., 2013, p.28).

Chernyavsky S.S., investigates financial fraud from the point of view of criminology and proposes to understand it as “a set of interconnected, common in forensic characteristics of selfish encroachments on financial resources of the state, businesses and citizens committed by deception and abuse of office” (Chernyavsky S.S., 2010, p. 56). This position on the part of criminology needs to be adapted when using this concept in banking research.

Peter Lilly considers financial fraud: “as any kind of successful financial crime and other fraudulent activities that lead to the formation of monetary amounts, which later pass through bank accounts” (Lilly P., 2005, p. 27). The formation of monetary amounts, which then have to go through the banks, rather inaccurately describes the category under study. Therefore, in our opinion, the elements of financial fraud in banks (crime, fraud), identified by this scientist, only partially characterize the definition under study.

The International Federation of Accountants describes fraud as the acquisition of an improper or unlawful advantage (ISA № 240). In our opinion, this position tries to associate fraud with any unscrupulous economic and financial activities, and the allocation of illegal and illegal benefits, in terms of financial fraud, is not significant.

The Association of Certified Fraud Investigators (ACFE) provides the following definition of “fraud”: “use of official position for personal gain through the use of property or resources of the organization” (ISA № 240). Fraud is studied here from a purely practical point of view.

Summarizing scientific approaches to the essence of the term “financial fraud”

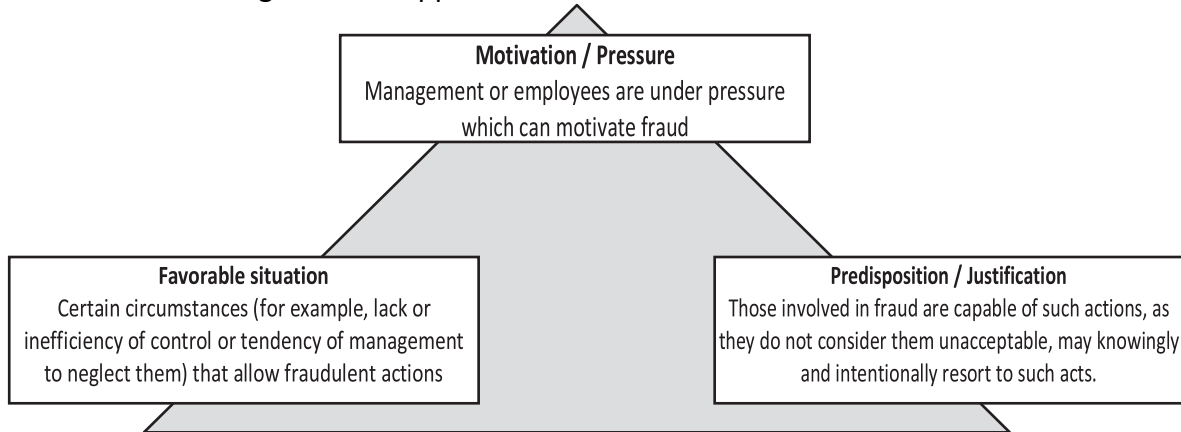


Figure 1 – The triangle of fraud (three conditions of its occurrence)

Source: (Rodchenko S.S., Zhivko Z.B., 2020, p. 81)

The subjects of financial fraud are persons, including employees and owners of banks, in addition, banks can be both violators and victims of financial fraud, as well as conscious or unconscious means. The implementation of operations and services by banks depends on the security of banking software, from unauthorized interference in them, i.e. as banks are protected from dishonest actions of third parties aimed at seizing financial resources of the bank or its customers, etc. (e.g. card fraud and manipulation).

At the same time, the stability of the banking system, the abandonment of the “second”, “gray” and “black” shadow economy and the transition to “white” – the key to the development of socio-economic, political, technological spheres of each country. According to a study by Ernst & Young in the framework of the Memorandum of Cooperation with the Ministry of Economic Development, Trade and Agriculture of Ukraine, the National Bank of Ukraine and the State Statistics Service of Ukraine (Global study; Prevention of fraud; Report of the State), covering 33 countries, Ukraine’s shadow operations in 2018 year accounted for a quarter of official GDP – 846 billion hryvnia, 23.8%. At the same time, 19.7% of GDP (UAH 702 billion) is the cash shadow economy, and 4.1% of GDP (UAH 144 billion) is domestic production of goods for own end use (non-monetary shadow economy). For the Czech Republic, Poland, Slovenia, Slovakia, Croatia, Bulgaria, Bosnia and Herzegovina, and Serbia, the shadow economy ranged from 10.1% to 26.9% of GDP. In March 2020, the level of the “shadow” decreased by 1% of GDP to 31% compared to January-March 2019. The projected value of the shadow economy for Ukraine in 2025 is 45.95% of GDP (according to research International Association of Certified Public Accountants) (Leonov S.V., Kuzmenko O.V., Koibichuk V.V., Kushnerev O.S., 2021). Unfortunately, Ukraine is among the top five countries with the highest shadow economy, along with Azerbaijan, Nigeria, Sri Lanka and the Russian Federation.

**Table 1 – Classification of financial fraud in a commercial bank**

Classification feature	Characteristics of financial fraud in a commercial bank
Reasons for determination	Financial fraud due to external factors; internal factors
The environment of manipulation	Financial fraud caused by external manipulation (by customers and third parties); internal (by a commercial bank)
Degree of coverage	Systemic financial fraud; local
Sphere of origin	Financial fraud in banking operations; when providing banking services
Direction of manipulations	Financial fraud aimed at seizing the financial resources of a commercial bank, avoiding financial obligations to a commercial bank or acquiring the rights of a financial claim against a commercial bank; on the financial

	resources of the client of a commercial bank
The method of acquiring financial resources	Financial fraud, which involves the direct acquisition of financial resources; which provides for the acquisition of financial claims; which involves the avoidance of financial obligations
Number of participants	Financial fraud involving one person (when the person of the fraudster coincides with the deceived person, i.e. imitation of the loss of financial resources in himself); 2 or more people
Involvement of persons	Financial fraud committed by the owners of a commercial bank; senior management of a commercial bank; heads of independent and subordinate divisions of a commercial bank; employees of a commercial bank (except for the heads of a commercial bank); customers of a commercial bank
The novelty of the implementation	Pioneering financial fraud (first committed within the commercial banking sector); first implemented (not pioneering, but first implemented in a specific commercial bank); re-implemented
Mechanism of influence	Financial fraud with an impact on the technological and software complex of a commercial bank; procedural procedure for decision-making in a commercial bank
Place of commission	Financial fraud committed directly in a commercial bank; committed remotely
Frequency of implementation	One-time financial fraud; several times; constantly (systematically or regularly)
Benefit orientation	Financial fraud in favor of a commercial bank (as an institution); the owner of a commercial bank; an employee of a commercial bank; commercial bank client; a third party
Degree of realization	Financial fraud is partially realized; implemented; termination; warned
The scope of the commission	Financial fraud, which led to minor losses of financial resources; significant; critical
Ability to detect	Detected financial fraud; not detected
Focus of financial consequences	Financial fraud aimed at reducing profitability; to increase losses
The nature of the manifestation of the consequences	Financial fraud with immediate consequences; with consequences that depend on the occurrence / non-occurrence of a certain event; with consequences that manifest over time
Form of manifestation of consequences	Latent financial fraud; partial concealment; hidden, with elements of distraction (transfer of responsibility)
Degree of danger of influence	Financial fraud, which is dangerous for the operation of a commercial bank; increased danger; incompatible with further operation

Source: (Melnik S.S., 2017, p. 90)

Despite the prevalence of banking fraud, its variants in the Ukrainian banking sector are insufficiently studied. There are certain types of lists of bank fraud, but they characterize only some of its fragments, and therefore have significant shortcomings. These include: focusing on some aspects of bank fraud, subjectivity and incomplete consideration of all fraud facts. For example, the DGF generates types of financial fraud in banks that have a temporary administration or are already being liquidated. The State Financial Monitoring Service (SFMS) focuses on detecting financial fraud in operating banks. The Prosecutor General's Office of Ukraine (GPU) and the Ministry of Internal Affairs (MIA) focus on accounting for quantitative indicators of financial fraud in the provision of banking services. The National Bank of Ukraine (NBU) identifies the main problems of the banking sector in the growing share of troubled assets of banks, deprives banks of licenses, paying attention

only to cases of fraud that caused bankruptcy of some banks or public outcry. The Ukrainian Interbank Association of Payment System Members (EMA) (Ukrainian Interbank Association) mainly focuses on financial fraud with bank cards and singles out such types as fraud in: “acquiring system, ATMs, Internet, DBO systems, using” methods of social engineering (Prevention of fraud). For example, EMA for banks and online payment and credit services is implementing a permanent project “DB Incidents”, which aims to “automate the collection and verification of information on incidents of payment and credit fraud” (Ukrainian Interbank Association). In reality, the Financial Investigation Service (SFS) has not started its activities.

As we can see, due to such a variety of state bodies involved in Ukraine, there is no systematic accounting of banking fraud according to its standard designs and they depend on the body of accumulation of fragmentary information and its target processing, according to its powers.

This is why it is not possible to organize effective measures to detect, counteract and prevent manipulation with sufficient accuracy, without further depletion of banks by excessive or insufficient measures to combat fraud, which adversely affects their financial condition.

In 2019-2021 alone, the DGF submitted 4,217 reports of criminal offenses in the banking sector worth more than UAH 352 billion in losses, with 72% of the book value of the assets of insolvent banks (UAH 365.9 billion) – these are loans. In addition, the DGF notes the most common types of fraud, which led to the loss of financial resources in Ukrainian banks:

- ✓ artificial bankruptcy of legal entities – bank borrowers;
- ✓ loans secured by “technical” securities;
- ✓ withdrawal of funds by placing on correspondent accounts in foreign banks with questionable reputation;
- ✓ placement of assets in the temporarily occupied territory (AR Crimea) and in the area of anti-terrorist operation;
- ✓ void security agreements (The Guarantee Fund).

DSFM also detects financial fraud in existing banks and notes that banks are the most active in reporting among the subjects of primary financial monitoring. Banks send the main part of notifications on transactions subject to financial monitoring – “during 2020, 98.92% of the total number of notifications on financial transactions were received from them” (Report of the State Financial).

DSFM distributes the main tools used in schemes of embezzlement of funds from banks, and methods of embezzlement as follows:

- “garbage” securities (stocks, bills);
- debt obligations of enterprises that have signs of fictitiousness;
- transfer of the right of claim;
- converting funds into cash.

And the most common ways of stealing funds from Ukrainian banks DSFM recognizes:

- “issuance by banks of loans to borrowers affiliated with their owners; issuing loans to companies with signs of fictitiousness;
- withdrawal of property from bail by transferring ownership to third parties;
- withdrawal of funds through correspondent accounts in foreign banking institutions” (Typological research).

One of the most significant manifestations of fraud in domestic banks is the withdrawal of funds from insolvent banks, the use of organizational schemes, pseudo-bankruptcy of the bank and the withdrawal of money in favor of the bank’s owners and its top management. That is, loans were provided to related parties, fictitious persons, purchase of securities at several times inflated prices, increase in the valuation of collateral, etc.

Funds were also withdrawn through their placement on correspondent accounts in foreign banks (a total of 14 insolvent banks, including “Tavrika” and “Kievan Rus”, “Delta”, “Finance and Credit”, etc.) and deposit of currency in accounts with European banks (CB “Finance and Credit”, Credit Dnipro, Delta Bank, Privatbank, Prominvestbank, VAB Bank, “Khreschatyk”, “Diamat Bank”, “Terra Bank”) and others.

Thus, as we see, the management of Ukrainian banks and their majority owners, where financial fraud has been detected, are the main fraudsters in withdrawing financial resources from them. Their activities have led not only to the insolvency of their banks, but also to the fact that depositors and other creditors cannot fully rely on the fulfillment of financial obligations to them, as a significant part of financial resources has been withdrawn from banks. The purpose of such fraud was to seize financial resources in excess of the authorized capital of banks and manipulations were carried out for a short time (usually no more than 1 month) before the introduction of a temporary administration, which led to the bankruptcy of the bank. The bank’s financial resources were provided in the form of loans, purchase of revalued assets, liquidation of liquid and valuable assets, necessary financial obligations to banks related to the bank’s management and owners were not fulfilled, baskets were removed through correspondent accounts in foreign banks, warranty cases and financial payments under guarantees.

In Ukraine, banking fraud is also developed, which causes the loss of banks’ funds due to unscrupulous seizure of the borrower and the subsequent staging of his bankruptcy. A characteristic feature of this fraud is that the financial fraudster is the top management and owners of the borrower-legal entity, which, after obtaining a loan, simulate the loss of their business.

Banking fraud, which causes banks to lose money through lending to people affiliated with their owners or management, is also quite common.

One of the most common types of fraud in domestic banks is lending secured by illiquid assets, which makes it impossible to repay if the loan is not repaid. Such scheme lending is one of the main reasons for the significant difference between the estimated and book value of assets of banks included in its liquidation estate.

Another type of widespread financial fraud in the banking sector of Ukraine often occurs during consumer lending – fraud, lending to fictitious persons or persons who have provided lost or forged documents.

Also, in Ukraine, financial fraud is common, which leads to the loss of bank funds due to unfair release of collateral for loans, providing or receiving fake collateral (illiquid securities), etc. (PJSC “Forum”, “Axiom”, “Bank Cambio”). In general, “on the balance sheet of banks that are being liquidated and managed by the DGF”, garbage “securities worth over UAH 12.75 billion are accounted for” (Seventy percent of securities). This is almost 70% of the total portfolio of securities of insolvent banking institutions. The analysis of operations carried out during the liquidation of banks shows that: trading in securities with signs of fictitiousness is one of the most popular elements of “schemes” of withdrawal of funds from banks.

Some banks, according to the DGF, often use fraudulent manipulations such as: deliberate errors in the documents on the encumbrance of collateral (cadastral or serial numbers of units, accommodation addresses, etc.), taking collateral for loans at higher cost.

Recently, banking fraud has developed, leading to the loss of banks’ funds due to the location of borrowers or their property, collateral or guarantors, whether outside Ukraine or in the temporarily occupied territories, the war zone. Borrowers registered in these territories used this to avoid repaying the loan.

A modern type of banking fraud is unauthorized interference in the work of banking programs to ensure cash flow, ATM and card services, and so on. This type of fraud is carried out in

the form of: phishing, vishing, cash-trapping, skimming, sniffing (interception of card data using a network traffic analyzer), etc.

According to the EMA, “Ukraine is the leader of the top 5 countries on whose cards attempted fraudulent transactions, and a leader among countries where fraudulent card transactions”.

The following types of financial fraud were used by bank employees in Ukraine:

- execution of loans by a bank employee to a bank client without his knowledge;
- distortion of information about the borrower by the bank employee in order to provide him with a loan in order to receive bonuses;
- transfer of money / repayment of credit to other accounts or to other borrowers;
- manipulation of the grace period or free credit card service;
- withdrawal of household deposits off the bank’s balance sheet;
- double-entry bookkeeping by the banking institution, unauthorized write-off of funds from clients’ accounts;
- replacement of new banknotes in foreign currency with old and damaged ones, which are difficult to sell for a full face value;
- making duplicate keys from the vaults of bank customers’ cells.

In general, the fight against financial fraud in Ukrainian banks is focused on the following main areas:

- ✓ direct control over the implementation of financial transactions;
- ✓ indirect control over the implementation of financial transactions;
- ✓ moral control (selection of bank staff and intermediate control for his loyalty to fraud).

However, there are also some positive features in the fight against fraud in Ukrainian banks.

The arsenal of tools to combat banking fraud in Ukraine includes:

- development by the NBU of a list of signs of fraud and recommendations to reduce the risk of fraudulent transactions in banks;
- detection of risky (scheme) operations by the NBU during bank inspections;
- providing the NBU with information to law enforcement officers on organized criminal activity and using it to detect, stop and prevent it;
- seizure of financial assets of banking institutions in which large-scale financial fraud was detected;
- exchange of necessary information between banks and payment systems;
- finding out the place of commission of crimes and card accounts used by fraudsters, banks, where the stolen funds were received;
- blocking fraudsters’ accounts and entering information about them in the interbank “black” list;
- Ukraine’s accession to international educational programs for payment card holders and the release of special media to inform them;
- increasing the level of quality and quantity of DSFM requests;
- intensification of cyber police work;
- creation of a mobile application for checking counterfeit payment cards seized during the arrest of fraudsters.

According to the NBU, the regulator has zero tolerance for fraudulent actions and involvement of banks in scheme operations. If this happens, then both the perpetrators of the fraud and the banks that committed it must be punished. “The NBU has received a wider range of sanctions that can be applied – from restricting transactions to imposing a fine of up to 1% of the share capital” (The NBU has published).

Of great importance for the effective counteraction to fraud is a detailed analysis of the scheme operations detected by the NBU during the inspection of banks and timely information about new types of fraud and finding ways to detect them.

The effectiveness of anti-fraud, along with other measures (improvement of legislation, optimization of cooperation between different law enforcement agencies, improving the material and technical base of special units, etc.), also depends on the appropriate level of activity and professional capacity of law enforcement to detect fraud. The current needs of the practice in effective counteraction to financial fraud currently do not have adequate scientific support. The obsolescence of scientific methodology, in general, complicates the development of effective methods for investigating such crimes.

## Conclusions

Financial fraud has negative consequences for the stability of the financial system of the state as a whole. The negative impact is manifested in the slowdown in the spread of non-cash payments, the spread of public distrust in banks, the shadowing of financial transactions. Ignorance of the mechanisms of bank fraud complicates the process of identifying and combating it.

## References

- [1.] Global study on banking fraud. Available from : <https://assets.kpmg/content/dam/kpmg/en/pdf/2020/01/Global-Banking-Fraud-Survey.pdf> (accessed 25.05.2022)
- [2.] Prevention of fraud by methods of social engineering. Available from : <https://www.eximb.com/eng/personal/cards/securityof payments / safety />
- [3.] Report of the State Financial Monitoring Service of Ukraine. K., 2018. 90p.
- [4.] Levin V.V., Kozlov D.N. (2013). Methods and structure of the system of prevention of fraud in consumer lending (part 1). *Financial risk management*. 2013. №1 (33). Pp. 26-37.
- [5.] Lilly P. (2005). Dirty Deals. The secret truth about the world practice of money laundering, international crime and terrorism. Rostov on Don: Phoenix, 2 400 p.
- [6.] ISA № 240 “Auditor’s Responsibility for Fraud in the Audit of Financial Statements” Available from : <http://www.mia.kiev.ua/en/books.html>
- [7.] Melnik S.S. (2017). Classification of financial fraud in a commercial bank. *Scientific Bulletin of Kherson State University*. Issue 23. Part 3. pp. 89-92. Available from : [http://www.ej.kherson.ua/journal/economic\\_23/3/23.pdf](http://www.ej.kherson.ua/journal/economic_23/3/23.pdf) (access date: 24.05.2022)
- [8.] The NBU has published a list of signs of risk and fraud in banks. Available from : <https://uachannel.com/online/2015/11/16/>
- [9.] Rodchenko S.S., Zhivko Z.B. (2020). Financial fraud in the banking sector: essence, types and current state. *Scientific Bulletin of Uzhhorod National University*. Issue 31, pp.103-108. Available from : <http://dSPACE.lvduvs.edu.ua/bitstream/1234567890/3370/1/%d0%b6%d0%b8%d0%b2%d0%ba%d0%be%20%282%29.pdf> (date appeal: 25.05.2022)
- [10.] Seventy percent of securities accounted for on the balance sheet of insolvent banks – “garbage”, and were used to withdraw liquid assets Available from : <http://www.fg.gov.ua/about/prezentatsiji-fondu?start=10>
- [11.] Typological research of the State Financial Monitoring Service of Ukraine for 2021, 2020, 2019, 2018. Available from : <http://www.sdfm.gov.ua/>
- [12.] Shadow economy in Ukraine. Available from : <https://bank.gov.ua/en/news/all/doslidjennya-tinovoyi-ekonomiki-vukrayini--mayje-chvert-vvp--abo-846-mlrd-griven--perebuwaye-v-tini> (date appeal 22.05.2022)
- [13.] Trends in the shadow economy in Ukraine in 2018 // Official website of the Ministry of



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Economic Development, Trade and Agriculture of Ukraine. 2019.

- [14.] Ukrainian Interbank Association of EMA Payment Systems Members. Available from : <https://ema.com.ua/>
- [15.] The Guarantee Fund appealed to the Prosecutor General's Office of Ukraine and the National Anti-Corruption Bureau of Ukraine. Available from : <http://www.fg.gov.ua/news/7732-fond-harantuvanniazvernuvsia-do-heneralnoi-prokuratury-ukrainy-ta-natsionalnohoantykoruptsiinoho-biuro-ukrainy>
- [16.] Chernyavsky S.S. (2010). Financial fraud: methodological principles of investigation: a monograph. Kyiv: Hi-Tech Press, 624p.
- [17.] Chunitska I.I. (2017). Measures to prevent financial fraud and money laundering are prohibited by criminal means. *Problems of economics* № 2, Pp. 282-292. Available from : [https://www.problecon.com/export\\_pdf/problems-of-economy-2017-2\\_0-pages-282\\_291.pdf](https://www.problecon.com/export_pdf/problems-of-economy-2017-2_0-pages-282_291.pdf) (access date: 24.05.2022)
- [18.] Shaten P.-L. (2011). Prevention of money laundering and terrorist financing: A practical guide for banking professionals / P.-L. Shaten et al.: lane with English Moscow: Alpina Publishers, 316 p.
- [19.] Leonov S.V., Kuzmenko O.V., Koibichuk V.V., Kushnerev O.S. (2021). Development of a business process model for automated monitoring of financial transactions by the bank to combat money laundering. *Bulletin of SSU. Series "Economics"*, № 1, pp.9-16. Available from : [https://visnyk.fem.sumdu.edu.ua/issues/1\\_2021/1.pdf](https://visnyk.fem.sumdu.edu.ua/issues/1_2021/1.pdf) (access date: 24.05.2022)