

Ministry of Education and Science of Ukraine

# ODESA NATIONAL UNIVERSITY OF TECHNOLOGY

International Competition of  
Student Scientific Works

# BLACK SEA SCIENCE 2023

## PROCEEDINGS



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# **BLACK SEA SCIENCE 2023**

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## FORENSIC AS A MODERN METHOD OF FIGHTING CORPORATE FRAUD

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***Abstract.** The peculiarities of the spread of corporate fraud at Ukrainian enterprises are determined in the work, the urgency of introduction and popularization of the innovative method of forensics is outlined. The peculiarities of forensic procedure at enterprises for combating corporate fraud are determined. Modern forensic approaches to determining the risks of fraud are analyzed and innovative solutions are proposed to improve the methods of forensic procedures.*

*Forensic is the most effective, modern method of combating corporate fraud, which acts not only ex post facto as a tool to investigate the facts of fraud, but also to prevent the occurrence of such facts. The main difference between forensics and auditing is the conduct of a larger-scale study, which includes not only financial and legal aspects, but also issues of information security.*

*The aim of the research is to analyze corporate fraud, its causes and structure in the domestic market, study and highlight the importance of using the method of forensics in combating corporate fraud, understanding the reasons for ineffectiveness of traditional methods and their differences with forensics, popularization of this method and widespread use by companies, which will help increase the economic security of enterprises, which will lead to increased profits, faster expansion and increase the level of international prestige of Ukraine.*

*Undoubtedly, the war in Ukraine imposes significant restrictions on the functioning of the internal audit, because the issue of the physical safety of employees has come to the fore. We hope that the process of rebuilding Ukraine is not far off. But foreign investors seek to receive guarantees regarding the targeted development of their funds, and this is where forensics will help.*

**Keywords:** forensic, financial fraud, economic crimes, audit, enterprise.

### I. INTRODUCTION

The economic and financial activities of enterprises are always subject to a number of internal and external risks. But internal risks are expressed by the most negative consequences from their occurrence. The most common internal risks are fraud by company employees who take advantage of the insecurity of internal security systems and act illegally. It is clear that such actions need to be fought and there are methods for this. But standard methods cannot always prevent fraud.

Even as the level of corporate fraud is on the rise, business owners and managers continue to perceive the cost of conducting fraud detection procedures as such, which exceeds the damage caused by employees

So, the relevance of studying the topic of corporate fraud and such an innovative method of dealing with it as forensic is related to an increase in the level of corporate

fraud for two reasons, the first is wartime in the state (managers are more focused on how to save the enterprise and employees), the second is the insufficiency of using traditional methods to resolving this issue.

## II. LITERATURE ANALYSIS

### 2.1. CORPORATE FRAUD AND ITS STRUCTURE

At a time when domestic enterprises have more and more business processes, and the process of managing and controlling them has not yet been perfected, one of the main, most acute and urgent issues is corporate fraud. That's right, according to the annual report "Report to the nations 2020" from one of the world's largest associations of certified fraud investigators, it follows that the total amount of losses incurred by the company in 2020 as a result of corporate fraud reaches 3.6 billion dollars. The average damage caused by fraud for one company was \$1.5 million, and the annual loss of profits was about 5 percent per enterprise [1, 35]. Fraud itself within companies, as of 2019, ranked 3rd in the business risk rating [2].

On the territory of our state, the situation is no better. Only 3% of respondents in Ukraine engaged an external forensic expert in connection with the most severe fraud case, compared to 20%. According to the PricewaterhouseCoopers Global Economic Crime and Fraud Survey 2020, about 51% of respondents in Ukraine suffered from fraud in the 24 months studied, 59% of fraud cases in Ukraine were committed by company employees, and only 59% of Ukrainian organizations investigated fraud. On average, one enterprise accounts for 2 to 5 incidents per survey respondent in the world [3].

Therefore, we can see that forensic as a method of combating corporate fraud has not yet received sufficient publicity and popularity in its application, and outdated methods of struggle have not been effective enough, so the disclosure of corporate fraud and the introduction of forensic are extremely important for every enterprise today.

First of all, it is important to note that there are two concepts for interpreting the concept of "corporate fraud": legal and general approaches. The legal approach is based on the definition of concepts through the prism of the laws of Ukraine, and the general one defines corporate fraud more broadly. Igor Shevtsov defines corporate fraud as the deliberate actions of employees, management or owners of a company related to the abuse of the trust granted to them for personal purposes and to the detriment of the interests of the company, that is, the author understands the concept of corporate fraud as an internal phenomenon [4]. On the contrary, Artem Kovbel defines corporate fraud as the actions of any third parties, not only personnel, that damage the company's business activities, that is, as an external phenomenon [5].

In accordance with the provisions of the International Standard on Auditing ISA (ISA) 240, fraud is an intentional act by one or more persons among management, management personnel, employees or third parties, which consists in the use of deception to obtain improper or illegal benefits [17].

The causes of fraud, according to Western experts, are three main factors, and if they intersect, then with a high probability there is a risk of fraud in the enterprise (Fig. 1.1).

The first factor is the incentive, which means that the person must have good reasons, incentives, or benefits from committing fraudulent acts. The next factor for committing various kinds of fraudulent activities is the possibility, that is, the enterprise must have such conditions (poor control methods, careless security service or problems in the management apparatus) that provide the subject with space to commit illegal actions. The third factor is the attitude, that is, the subject understands that his actions harm the company, and conducts consistent fraud.

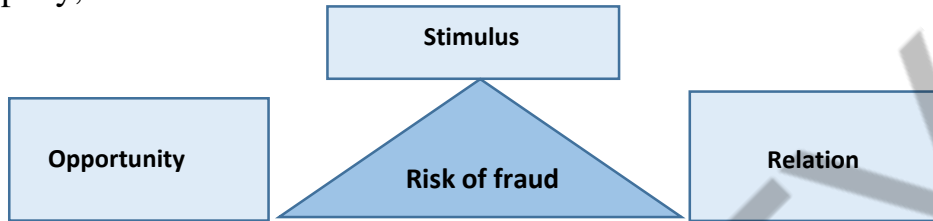


Fig. 1.1. Fraud Triangle

Source: [author's own development].

It is worth noting that Ukrainian companies, which today are not able to fight corporate fraud on their own, according to statistics from the study of the «YouControl» portal, six out of ten companies do not use any systems and programs to control and track possible risks. Almost half of the respondents either do not assess risks or conduct an informal assessment “by eye”, 50% of companies maintain internal controls and strict adherence to procedures, and only 32% regularly train employees on company policies and operating procedures [6].

It should also be noted that companies with a large number of employees, according to a study conducted by Kreston GCG, faced fraud cases more often than companies with a smaller number of employees (Figure 1.2):



Fig. 1.2. Comparison of the level of fraud by the number of employees in the company

Source: compiled on the basis of a study conducted by the auditing company "Kreston GCG" [7, 35].

According to the report of the Association of Certified Fraud Investigators [8], the generalized portrait of the average fraudster looks like this: he is a man aged 34-48 years, a diligent employee with a higher education, who has been working in the company for quite a long time (at least 5 years) and takes one key positions in its structure and it is possible that such workers can simply be found more often in large companies, since the salary in such companies is higher, and the level of prospects and opportunities is better, which attracts diligent workers aged 34 and older.

Also, note that there is also a correlation between the level of fraud according to the company profile. Thus, regional companies have the lowest level of fraud, national companies have a slightly higher level of fraud, and international companies experience fraud cases more often (Figure 1.3):

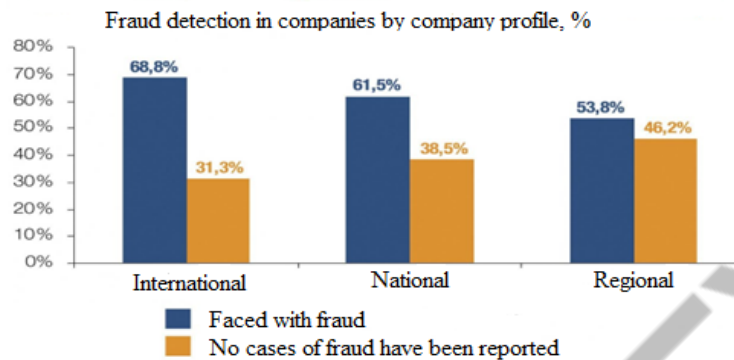


Fig. 1.3. Comparison of Fraud Rates by Company Profile

Source: compiled on the basis of a study conducted by the audit company "Kreston GCG" [7].

The level of corporate fraud is also increasing due to the fact that, according to statistics, before being caught, fraudsters manage to cause considerable damage several times to one company (Figure 1.4):

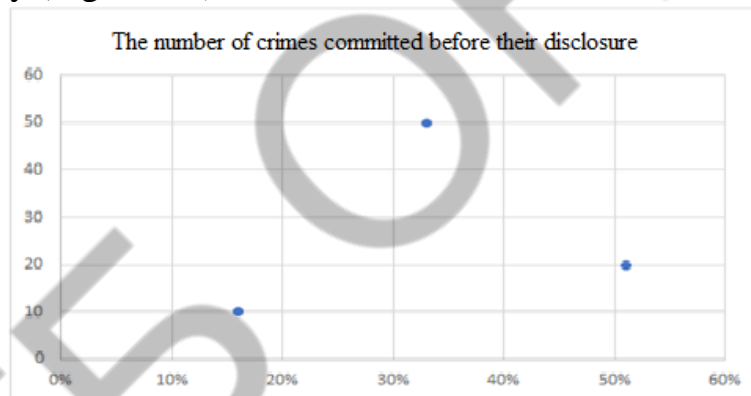


Fig. 1.4. The number of committed crimes in the field of corporate fraud before their disclosure [9].

Looking at the data, it's safe to say that businesses need to use better anti-fraud practices and use them on a regular basis. Corporate fraud also includes corruption and bribery, for example, commercial bribery, “kickbacks” in transactions, agreements on special overpricing or underpricing. By the way, in Ukraine, these two types of fraudulent activities are among the most risky for business. According to statistics from Transparency International for 2022, Ukraine ranked 122nd in the ranking of the most corrupt states, which also affects international relations and the reputation of our state, and in 2021, 117 out of 180 countries [8, 34].

For a better understanding of corporate fraud and its structure, it is also advisable to make a comparison with the proportion of corporate fraud types in Ukraine and the world.

Table 1.1. The structure of corporate fraud in Ukraine and the world in 2020

Types of fraud	The world average	Ukraine
Corruption	32	43
Billing	29	18
Check and payment tampering	22	8
Expense reimbursements	21	11
Skimming	20	8
Cash on hand	20	14
Noncash	16	22
Financial statement fraud	16	7
Cash Latency	14	9
Payroll	13	5
Register disbursements	3	2

Source: built on the basis of data [8].

It is also important to reveal the topic of the impact of digital technologies on the economic processes of an enterprise, namely, the threats of using such technologies for fraud in enterprises. In 2020, statistics showed that about 1120 leaks and cyber attacks were recorded in Ukraine [10]. Most often, Ukrainian enterprises attack consumer programs. Such programs are automatically installed on your computer when you click on an unfamiliar or insecure link or when you open a message in the mail. After that, the program begins to require money to return or not distribute certain information or return access to a computer device.

In the struggle, companies that do not have a built complex of protection against corporate hackers will not be able to effectively deal with such manifestations, so they should turn to specialists with many years of experience [11].

Here are the types of corporate fraud as a result of cyber attacks that affected enterprises in Ukraine (Fig. 1.5):

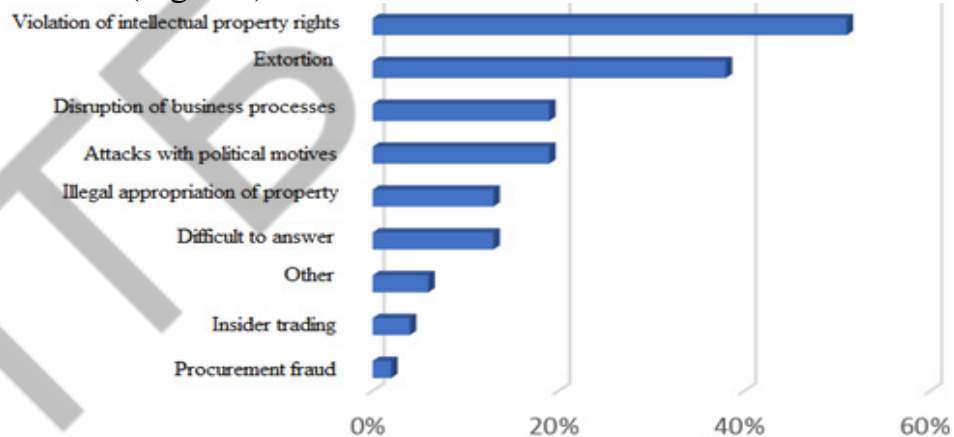


Fig. 1.5. Comparison of types of corporate frauds as a result of cyberattacks that affected enterprises in Ukraine [12].

So, summing up the description of the structure and analysis of corporate fraud in general, we can conclude that corporate fraud in Ukraine is flourishing and can lead to fatal consequences for business, to slow down the development of our state and to the loss of international prestige. It should be noted that on the territory of our state there are enterprises that maintain accounting and reporting inappropriately, primarily because of their own management interest in illegal enrichment. Corporate fraud is very common, and the fight against it is only gaining relevance from year to year.

Synthesizing the above facts into a single whole, we can conclude that the market needs new, innovative approaches to minimizing fraud in companies.

**2.2. Theoretical foundations of forensics**

A tool that innovatively combines all of the above methods is forensic. This tool has not yet been widely used in Ukraine, but has already proven itself well in Europe and the world. The modern concept - forensic, came into circulation quite recently, so it has not yet received an unambiguous definition. This concept comes from the Latin word forensic, which literally translates as public discussions.

If we consider the studies of scientists, then in order to fully disclose the definition of the concept of “forensic”, they should be separated into a separate table (Table. 2.1):

Table 2.1. Scientific approaches to the interpretation of the meaning of the concept of "forensics"

Author	The definition of "forensics" is...
Semets A.[14]	the process of studying the reporting and business operations of the company in order to develop measures to respond to fraud, manage it and prevent it on the basis of an expert judgment on the existence of facts (violations of current legislation by employees and management of the company; falsification of accounting and tax reports; cases of embezzlement or improper use of assets; corruption and abuse of authority; risk of fraud).
Doan M., Makki D. [15]	detailed analysis and study of the financial and economic activities of the organization, aimed at identifying illegal actions of employees or third parties related to encroachment on the financial resources of the organization.
Roik O. [16]	independent financial investigations conducted both internally and externally to identify financial risks or evidence of fraudulent activity on the part of company employees.
Rekhman A., Khashim F. [17]	a multidisciplinary industry that handles and disputes civil, criminal, economic and financial claims (business or personal) based on theories, methods and procedures of various fields (law, audit, accounting, finance, economics, psychology, sociology and criminology).

Source: summarized by the author based on [14-17].

After analyzing the author's definitions above, we can conclude that Doan M., Makki D. consider the concepts of forensics as an independent investigation, Rekhman A., Khashim F. as a complex of sciences, and Semets A. as a process. But some scientists liken the concept of "forensic" with identical concepts like a forensic audit or just an audit, so it is advisable to analyze and highlight the differences between forensic and audit, if only because most entrepreneurs do not have a full understanding of why order an audit every year.

The appointment of a forensic can be considered as measures to combat corruption, bribery, verify the virtue of counterparties, and simultaneously as measures to solve crimes, return lost funds, form an evidence base for representing the perpetrators in court, and also prevent future manifestations of fraud. Moreover, in the forensics of the method, there is no algorithm of actions that must be followed, which allows a wider analysis of the potential risks of fraud, the possibility of using any information and the ability to make assumptions. There is no doubt that forensic is more effective than an audit or inspection by law enforcement agencies of a business. Unlike the intervention of third parties before making decisions based on the results of

the audit, forensic allows the customer to make a choice regarding the use of the evidence and data collected. This can be either the usual dismissal of an employee, subject to the return of a significant part of the funds, or the filing of materials with the court.

### **III. OBJECT, SUBJECT, AND METHODS OF RESEARCH**

The object of the study is corporate fraud and the most effective, innovative method of combating it - forensics.

The subject of the study is the theoretical work of foreign and domestic scientists, current legislative and regulatory acts, methodological provisions and instructions, the practice of applying the forensic method in the fight against corporate fraud.

### **IV. RESULTS**

Since it is determined that corporate fraud must be fought with innovative methods, it is necessary to analyze and highlight the reasons why the use of individual methods is not enough to obtain an effective result, and enterprises need one integrated and innovative approach. To do this, we will determine the effectiveness of the use of methods that are now rapidly gaining popularity.

1) Security and control with the help of physical resources and building internal control systems are effective methods to prevent the occurrence of fraud risks;

2) Internal investigations - effective in case of small volumes of the enterprise and the impossibility of attracting specialists;

3) A sudden check is an effective method of obtaining truthful information about the state of affairs in an enterprise or company

4) Legendary verification is an effective method if you need to obtain comprehensive and reliable information about the state of affairs in an enterprise and is most effective in investigating fraud, since the primary source can indicate the methods of fraud and the persons who carried them out.

5) OSINT is an effective way if it is necessary to obtain information from open sources [13].

All of these methods of combating corporate fraud are not comprehensive, which, in turn, partially makes it impossible to effectively detect, investigate, and develop or improve existing control processes to minimize the risk of fraud in the future. One of the main differences between forensic and all other procedures is that forensic acts not only after the fact, but also acts to prevent the risk of corporate fraud. Therefore, under the condition of an independent “check-up” of the business through the forensic procedure, the entrepreneur is not only confident in the transparency of the investigation, but can also choose its goals, to which, accordingly, various methods will be applied, as well as maintain the company’s reputation and be able to solve the problem on one's own. That is, according to the forensic method, the algorithm may differ depending on what the verification is for.

Today, the use of the forensic tool in the fight against corporate fraud is innovative, it is not only the news of the forensic method itself, but also the fact that it uses modern approaches. Therefore, it is advisable to define and reveal the essence of innovative approaches to forensics.

Firstly, the innovativeness of the approach lies in the fact that forensic specialists are involved in the processing of the Big Data system, which allows them to search for the necessary information with advanced tools, use automatic search and thus quickly analyze large amounts of data, use automatic search with artificial intelligence capable of self-learning, identify a large number of facts and collect faster and better evidence. Restore damaged or deleted files and implement automated fraud detection systems.

Secondly, the innovativeness of the approach lies in the fact that forensic offers the use of compliance services. Compliance is an innovative line of business protection from corporate abuse. But so far, Ukrainian business, even if it uses compliance services, most often uses general guidelines for all employees. Forensic proposes to build internal documents in accordance with each category of employees separately, taking into account specific features [18].

Also, innovativeness in the use of forensic is manifested in the possibility of developing, implementing or improving cyber security systems, which makes it possible to prepare for possible attacks from modern viruses and the latest cybernetic fraud techniques. Fraud Investigation includes primarily financial investigation and corporate intelligence services. If financial investigations are focused on internal issues, then corporate intelligence is more likely to be responsible for external relations. Due diligence is one of the front-line services necessary for the economic security of the enterprise, which is included in the cohort of forensic services and allows you to check how potential risks can affect the expected result regarding investments, for example.

Forensic audit using the methods of performance audit, financial audit, investigative audit and correctness audit. Such an audit expresses an opinion about the facts of corporate fraud and damage, but requires an evidence base, which can be collected through the implementation of mechanisms included in the forensic service category. The relevance and uniqueness of forensic is also in the fact that after the investigation, forensic specialists provide support in court cases and represent the interests of the customer. And since the lion's share of unscrupulous employees are engaged in the appropriation of the assets of enterprises, it is important to dwell on the analysis of this aspect. In the rating system, the threat is considered as the activity of individuals or groups of individuals who can harm the company through their activities. Vulnerability is considered as criteria and features of assets, a product or type of service that attracts fraudsters to their appropriation or the sum of criteria that produce various risks for control activities in matters of economic security of enterprises. The consequences are seen as damages from the implementation of corporate fraud in the appropriation of assets to fraudsters that do not belong to them, but belong to the company. The cross section of the triangle is the basis for assessing the level of risk of fraud and the basis for analyzing the possibilities for recovering lost assets. Therefore, the first stage in the analysis of fraud in the misappropriation of enterprise assets by attackers is the stage of identifying risks and threats to the economic security of an enterprise, which should use various tools: fraud risk filtering, brainstorming, analysis of the nature, impact of threats and vulnerabilities, the impact of risks, analysis of leaks of priority mistakes.

Risk identification begins with the identification of ways and methods aimed at obtaining the assets of the enterprise illegally by malefactors. Weaknesses, which are threats of fraud risks, are simultaneously investigated, and suspicious financial transactions are monitored. Next, a study is made of the system for countering the theft of property, and the consequences for criminals in accordance with the law are also examined. After that, opportunities to collect evidence for criminal investigation of illegal actions are determined and the location of criminals and owners of embezzlement of company assets is established. The risk identification process is most often carried out in accordance with standard threats, but as technology evolves, it is advisable to constantly update and take into account the challenges and innovative fraud threats of today. Given the variety of risks, a holistic set of analytical measures should be used to strengthen protection, counteraction and facilitate the investigation of fraud. Summing up from this stage of the analysis, it should be noted that it is decisive in the development and implementation of analytical activities, and shows the prerequisites for the transition of standard counteraction and investigation of cases after the fact, to qualitatively innovative proactive protection and minimization of corporate fraud.

The next criterion of economic security is vulnerability, so the second stage of the analysis is the assessment of the risk of vulnerabilities of security systems and the assessment of the probability of its occurrence. First, a list of the main factors that contribute to the existence of vulnerabilities is determined, then the appropriate level of risk before the occurrence of fraud is established, then the assets are filtered in accordance with the risk of fraud before them, the machinations with which the fraud was committed are studied, and the guilty parties are identified. Based on the results of this stage, a report is formed, which indicates the list of potential points of vulnerability and what impact they may have on the assets, as well as what measures should be taken to eliminate the vulnerabilities.

The assessment of the risk of vulnerabilities for the economic security of the company is carried out in accordance with the identified risks and threats, as well as situational opportunities for fraud, carried out on the basis of the following methodology. The calculation method is based on the following indicators:

the general level of risk for which the calculation is made according to the formula:

$$3P_{Bk} = pH_{Bk} \times pB_{p\Pi} \quad (4.1).$$

where  $pH_{Bk}$  – the level of consequences of the realization of a risk event;

$pB_{p\Pi}$  – the level of probability of occurrence of a risk event;

the net level of risk, which is calculated according to the formula:

$$Y_{PBK} = 3PBK * EI_{yp} \quad (4.2).$$

where  $3PBK$  – general level of risk;

$EI_{yp}$  – effectiveness of risk prevention tools;

the efficiency factor of the risk assessment tools:

$$Kelp = Y_{HBK} / BY_{BK} \quad (4.3).$$

where  $Y_{HBK}$  – biased consequences of the implementation of a risk event;

$BY_{BK}$  – costs of prevention of the consequences of the realization of a risky event.

And to assess the risk of misappropriation of assets, an expert assessment scale is used, reflected in (Table. 2.4).

Table 4.1. Scale of expert risk assessment [21]

Categories of tools	Scores
Low (the risk is more likely, but if it occurs, the consequences will be negligible)	1 - 3
Medium (the risk will probably occur, and the consequences of its onset will be medium)	4 - 6
High (the risk will definitely take place and the consequences of its occurrence will be high)	7 - 9

The last criterion in the triangle for assessing the economic security of enterprises for the appropriation of assets is the consequences of the influence of risks and threats. This assessment is based on: implementation of a structured, meaningful assessment of the vulnerability of identified threats to the economic security of the enterprise; collecting data on the economic, social, micro-sectoral consequences of the impact of identified risks and threats to the economic security of the enterprise; collecting data on the effectiveness and efficiency of mitigating measures taken to mitigate identified risks and threats to the economic security of the enterprise.

The analysis of the consequences of the impact of risks and threats is to identify the harm that can be caused or has already been caused to the enterprise in the event of each of them. The results of the conducted forensic analysis are formalized by the relevant documents, which indicate the security level of the enterprise for which the analysis was carried out. Such documents are provided to the customer in order to increase the level of security or return embezzled assets through fraud. The final stage of the analysis may be the procedure for applying punitive measures against guilty persons within the company to return funds, planning the stages of contacting law enforcement agencies and providing supporting documents about the damage caused to the company due to corporate fraud, studying reputational risks and developing recommendations for strengthening security to prevent dishonest actions workers.

Summing up the scientific study of the forensic business support model, it can be noted that such a model has four participants: the enterprise under study, the company providing forensic services, fraudsters and law enforcement agencies. And the model itself takes on the form reflected in (Addendum 1).

The use of the forensic model involves a number of problems with its implementation in practice, namely: lack of understanding by the owners of the enterprise of the importance of conducting forensic audits in the company and their attitude to such an audit as an inefficient use of funds; the confidence of the owners that their manager does not steal money and complete trust in the latter; lack of legal regulation of escort forensics; a wide range of various definitions of the concept of forensic, which leads to errors in the interpretation and understanding of the essence of this service. It is clear that for the effective implementation of the forensic method for widespread use, it is necessary to improve both the financial policy of the state and the forensic method itself. The improvement of the financial policy of the state, first of all, should be marked by the creation of a single forensic database on cases of fraud in the Ukrainian market. Such a base would provide Ukrainian enterprises with the

opportunity to exchange information on detected cases of fraud and schemes for their implementation, as well as ways to counter such cases and highlight the reasons and conditions that made it possible for fraudsters to act illegally. It is also advisable to focus on crime prevention by increasing the level of financial literacy of the population, popularizing forensic methods in the fight against corporate fraud and monitoring the market to identify new types of schemes and familiarize participants with them. It is also proposed to create the so-called "Black List of Fraudsters", which involves the inclusion of fraudsters or their accounts, and the reduction of bureaucratic procedures in conducting forensic. The last proposed step to improve the financial policy of the state in the field of introducing the forensic method and minimizing corporate fraud is the recognition and legislative consolidation of the concept of forensic in the Criminal Code of Ukraine, as well as making additions to ensure the evidence base collected in the process of forensic.

Methodological measures to improve the forensic method are: structuring and systematization of forensic methods for individual business areas; destandardization of forensic approaches to provide more opportunities for investigators; development of effective recommendations for assessing the risk of fraud; development of a system of criteria by which it will be possible to investigate the level of risk of fraud at the macroeconomic level. It is also important to separate such ways of improving the forensic method as strengthening international cooperation aimed at the rapid exchange of information, reducing bureaucratic procedures and mutual assistance in identifying and investigating corporate fraud.

As for the practice of applying the forensic method in the fight against corporate fraud, we consider it appropriate to cite several domestic cases, so we interviewed the co-founder of the international audit company Crowe, the senior partner of the «Vigilant Forensic Boutique» company, No. 1 forensicist according to the magazine "Touch" – A. Kovbel. Artem spoke about a recent case of fraud by management in the Ukrainian subsidiary of the Swiss agricultural trader «Mimier Trade S.A.», which was disclosed thanks to his team. According to Artem, the company's financial statements were in good shape, «Mimier» was audited every year, and he could not identify deviations or irregularities on the part of the company's management. The trigger for concern was that contractors began to complain to owners about delays in payments for goods. Therefore, the owners ordered a forensic investigation procedure. Analyzing the data provided by Artem during the interview, we can summarize that according to the triangle of fraud, Yaroslav Gordienko, suspected of committing an offense, had an incentive in the form of benefits from committing a crime, namely, material assets that he bought with his company. Also, Y. Gordienko, had the opportunity to commit such a crime because of the position of the General Director and the complete trust and indiscretion on the part of the company's shareholders. The last factor of the triangle is the attitude, which in the case under study is manifested in the understanding of his misconduct by Yaroslav Gordienko, since he built the «Mimier» clone company and passed it off as a cash company, worked on the signatures of shareholders and financial statements of the company to minimize the risks of exposure. According to the forensics for assessing the economic security of enterprises, threats were identified in the enterprise under study in the form of the activities of the company's top

management with its head and coordinator Yaroslav Gordienko, vulnerabilities in the form of uncontrolled activities in matters of economic security by shareholders, and consequences in the form of losses of more than 5 million dollars. During the forensic period, we were involved in the processing of the Big Data system and used innovative approaches to automate the detection of fraudulent activities. After the forensic procedure, according to A. Kovbel, internal control systems were established and the introduction of a compliance system based on forensic analytics was recommended [22].

Summing up the research of this case, we can conclude that the audit did not reveal violations, while using forensic procedures, an effective investigation was carried out and the fraud scheme was exposed, the results were submitted to the court, and one of the persons involved was detained. The next domestic case of using the forensic method in the fight against corporate fraud is associated with one of the largest retail chains in Ukraine that does not want publicity. In the investigation of the fact of fraud, according to Artem Kovbel, corporate intelligence methods based on Big Data were applied, business processes, internal control systems, policies, regulations were analyzed, and management was interviewed. The company conducted proactive audits every year, but the data was distorted. As a result of the forensic procedure, the fraudulent scheme of the chief accountant was exposed in causing losses to the company by more than 22 million hryvnias by withdrawing money through non-commodity transactions to related persons registered with relatives. According to the triangle of fraud, all three sides of the triangle of fraud worked at once: opportunities, namely the system of internal controls, did not work according to the analysis of counterparties in tender purchases for coherence. Procurement was also not carried out according to the procedure. The motive for committing the crime was banal human greed. And the chief accountant, according to Artem Kovbel, found an excuse in the fact that as part of the implementation of work contracts, there was not a single fine from the regulatory authorities [23].

Summing up the research of this case, we can conclude that even conducting proactive, independent audits does not have the same effect in the fight against corporate fraud as forensic, due to the possibility of agreeing with the inspectors, since such an audit is carried out openly with responses to requests, in while forensic can be produced unnoticed by management.

### V. CONCLUSIONS

In the conducted scientific work, a comprehensive study of forensic was carried out as the main and main, but at the same time - an innovative and newest method of combating corporate fraud as the most effective tool for detecting, investigating and preventing illegal actions against the company.

The following should be recognized as the result of the study: it has been established that one of the main constant threats to Ukrainian business is corporate fraud. Based on world experience and various Ukrainian cases of effective elimination of corporate fraud, the expediency of conducting and disseminating forensic procedures in domestic practice has been proved.

An interpretation of the basic determinants of the concept of "forensic" is presented, which allows Ukrainian business to better understand the complexity of this service. It has been proved that due to the constant improvement of corporate fraud methods, approaches to assessing the methods of combating it need to be modernized. Therefore, the latest system of criteria was defined for assessing the level of ensuring the economic security of enterprises from the most common types of fraud, the use of which will allow enterprises to more effectively plan their development strategy and effectively manage the impact of destabilizing factors. The effect of such criteria on the real case of the Ukrainian case of fraud on the assignment of assets is analyzed.

The study of cases of corporate fraud in the Ukrainian market and the analysis of the forensic method showed that all other methods used by enterprises to combat corporate fraud turned out to be ineffective compared to the forensic method. It is also proposed to establish the latest methodology for forensic compliance in enterprises to control and quickly respond to the risks and threats of corporate fraud. Popularization of forensic procedures will stabilize the Ukrainian economy and increase economic indicators at the state level, which, in turn, will reduce the level of fraud. The scientific novelty of the results obtained lies in the deepening of theoretical provisions and the improvement of methods for identifying the risks of corporate fraud and the method of conducting forensic. For the first time, it is proposed to structure and systematize methods and cases from forensic for certain business areas into an automated system based on artificial intelligence.

The practical significance of the results obtained lies in the possibility of their application in certain areas of business.

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