FINANCIAL CRIMES IN THE CONTEXT NATIONAL ECONOMIC SECURITY

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Abstract: This article is devoted to studying financial crime, which poses a threat to national economic security. The analysis of the problem is carried out on the example of Ukraine, examining the level of financial crime and general trends of its impact on the economy. The relevance of the research is to find problems and methods of combating financial crime and reducing its negative impact on the economy of countries, which is a real problem for the economy of Ukraine today. The purpose of the study is to determine the impact of financial crime on national economic security on the example of Ukraine. During the study, the methods of statistical analysis were used, particularly the method of determining the average values, trend analysis, and correlation analysis with the definition of Pearson's coefficient.

Keywords: Financial Crimes, National Security, Shadow Economy, Cyber Crime.

1 Introduction

The weakest point in a country's national security is its economy. That is why financial crime has a significant impact on the country's overall economic situation and threatens national economic security (Saddiq & Bakar, 2019). With the strengthening of financial globalization and the world economy, states are trying to liberalize foreign economic relations and international capital mobility on the one hand. However, on the other hand, control over the functioning of the monetary system is weakened, and it forms a place for the development of financial crime in this environment (Getmanenko, 2020).

It should be noted that criminal financial fraud is also changing with the development of the economic environment. If illegal encroachment of assets of various organizations, bribes, and corruption was the biggest problem for the whole world, today, the world is faced with a new form of financial crime cybercrime. Depending on the level of development of the country, financial crimes have their own characteristics and types. At the same time, financial crimes are committed at all levels of the country, from the individual to the state level. Depending on the level of corruption in the country, officials focus their efforts on the types of financial crimes that are important to them. Thus, when most efforts are directed at minor, individual financial crimes, crime at the state level thrive. This is one of the key problems of developing countries with rather high corruption levels (Schneider, 2010), including Ukraine. It is safe to say that financial crimes have a significant negative impact on the economy (Saddig & Bakar, 2019; Achim & Borlea, 2020). At the same time, given the scale of such crimes, the issue of national economic security becomes quite relevant not only to study from the scientific point of view but also to preserve national security. It forms the relevance of the study and allows us to form its purpose.

The purpose of the study is to determine the impact of financial crime on national economic security on the example of Ukraine.

2 Literature overview

According to Achim and Borlea (2020), financial crimes represent an economic publicly dangerous encroachment. The group object of financial crimes is characterized as public relations related to the formation, distribution, and use of financial funds. The subject of financial crimes consists of assets and securities of the state, regions, and municipalities, assets and property of enterprises and organizations.

In turn, Monica-Violeta et al. (2021) noted that financial crimes lead to a violation of the financial norms of the state for which economic and legal liability is established. Signs of financial crimes manifest themselves in unlawfulness, guilt or causing harm...", financial crimes are performed "intentionally or carelessly."

Analysis of the characteristics of typical schemes and methods of committing financial crimes allows identifying several general features indicating the fact of committing financial crimes (Mazarr, 2016):

- Availability of unreliable information in the documents of the primary accounting;
- False information about the counterparty;
- Changes in accounting reporting associated with a sharp and unreasonable increase in the size of the asset and frequent change of organizational and legal forms of the enterprise;
- Committing major transactions with firms registered in states providing significant tax benefits and not disclosing information on suspicious financial transactions;
- Evasion from paying taxes and fees;
- Concealment of the part of the profit from economic activity, resulting in a distortion of tax reporting;
- The use of numerous intermediaries with a dubious reputation in economic transactions and financial operations.

It is characteristic that the participants in the financial and economic activities of the enterprise in the commission of financial crimes use current legislation as a tool to achieve certain criminal goals. Thus, the essence of financial crimes consists not only in encroachment on the economic order established by the state but, first of all, in the performance of financial crimes in frames of legal, financial, and economic activities. As an example, in the field of taxation, it is possible to propose a definition of the scheme for the commission of tax crimes - this is the established procedure for the actions of taxpayers and the persons assisting them, aimed at the illegal decline in tax income in violation of the tax minimum limit defined by tax, customs, civil law, and international law; as well as to evade responsibility for unlawful actions in the field of taxation through the measures taken to mislead state bodies on the legality of this minimization with the help of methods that were developed with the involvement of third-party vocational lawyers and auditors in order to use in specific sectors and areas of economics to conceal taxable revenues and property, accounting and tax reporting distortions (de Rosa et al., 2010).

It should be noted that the essence of financial security is boiled down to the ability of state bodies to provide the following (Mishchuk et al., 2020):

- Economic development of the country;
- Stability of the payment and settlement system and financial discipline;
- Maximum elimination of the shadow economy;
- Elimination of capital leakage abroad from the real sector of the economy;
- Neutralization of the external influences of global financial crises and negative impacts of international economic actors (for example, transnational corporations);
- Rational distribution and use of financial resources of the budget system;
- Attraction of borrowing funds for the development of the economy;
- Prevent crimes and administrative offenses in the financial sector.

Finance traditionally is considered by the theory of law in two aspects: as a set of centralized and decentralized cash funds and a set of public relations on formation, distribution, and use of these funds (Abed & Gupta, 2002). In this regard, the group object of financial crimes can be described as public relations related to the formation, distribution, and use of cash (monetary) funds.

3 Materials and research methods

The methodological base of this study was comprised of a set of scientific methods for the study of financial, economic, and legal processes and phenomena. The methodological basis of the study was the dialectical method, which is the general scientific method of knowledge. Particular scientific methods were also used in the paper: historical, comparative-legal, formal-logical, system-structured, etc. As an additional methodological framework of the study, methods of analysis of causal relations, methods of scientific classification, and principles of formal logic were applied. The study's theoretical base was the work of experts in the field of theory of law and state, criminology, criminal, constitutional, administrative, civil, environmental law, and political science, sociology, economics, and regional policies. In the process of work on the article, the main state concepts and theoretical approaches of different scientists were studied to investigate the problems of ensuring national and economic security, countering financial crime. In order to carry out empirical research, the methods of statistical analysis, determination of average values, trend analysis was carried out. Also, the Pearson correlation coefficient was calculated.

4 Result

Starting a conversation about the country's security, usually, first of all, try to figure out what is its national interest. As a rule, the primary national interests, the interests of the "high" policy include the foreign policy interests of the state related to ensuring its safety and integrity as a certain socio-economic, political, national and historical, and cultural community, with the protection of the economic and political independence of the state (Agwai, 2014). Three words are key ones in this definition: integrity, independence, and safety. Based on this approach, under the main national economic interest, it is likely to understand the overall interest of citizens in the preservation of the national economy as a whole, as a system that has independence in decision making (Akimova et al., 2020; Neu & Wolf, 1995). The latter can otherwise be called political independence since the economic independence of any country seems to be a utopia today. In its totality, the task of preserving integrity and independence is nothing more than security tasks. Thus, the main national economic interest, understood in this way, stems from the structure of the world economy divided into separate sovereign, independent, self-sustaining, and competing complexes. At the same time, it can be clearly defined that the main tool for ensuring national economic security is an effective budget, which is necessary to support and develop the economy. That is why this study will assess the impact of financial crime on the state economy and, in particular, that part of the economy that is not taxed. However, before carrying out an empirical study, it is worth investigating the overall state of financial crime. For example, around the world, most crime is related to consumer fraud, with the percentage 35% of all consumer's finance operations. In recent decade, cybercrime became another problem for national security. Every third transaction in the world is also crime-related. Cybercrime is increasing at a very high rate, with a 73% increase in 2020 (PWC, 2021). The development of electronic technology creates the ground and new tools for the development of financial crime. The issue today is widely discussed and requires research and modeling of development.

It is interesting to note that tax evasion is only 8%, and is the lowest of the compiled rankings (Fig.1). Considering that the world economy is largely shaped by developed countries with high levels of state control over crime and low levels of government corruption, we can conclude that states exercise effective oversight over the financial activities of organizations to ensure the national security of their countries. However, that the issue of crime is always determined at the legislative level of the individual country, therefore, it is possible to study trends in the world as a whole, but the study results will be not informative. Let us consider examples of the influence of financial crimes on financial security by the example of Ukraine. This country occupies 117th place out of 180 countries by corruption (WEF,2020). To begin with, let us define that financial criminal offenses in Ukraine are those that fall under the regulation of the Criminal Procedure Code of Ukraine. Interestingly, since 2020 fictitious entrepreneurship has not been a criminal offense; the unlawful appropriation of the property has become a criminal offense since 2014. Let us identify the main financial criminal offenses that impact the national economic security of Ukraine (Table 1).

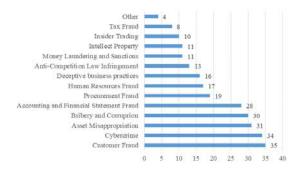


Figure 1 – The most common financial crimes in the world during 2020 Source: (PWC, 2021).

Table 1: Dynamics of financial crimes that have an impact on the national economic security of Ukraine								
Type of crime	2013	2014	2015	2016	2017	2018	2019	2020
Contraband	196,00	129,00	110,00	94,00	102,00	125,00	133,00	114,00
Fictitious entrepreneurship	891,00	858,00	885,00	681,00	784,00	715,00	248,00	0,00
Counteracting legitimate business								
activities	78,00	122,00	120,00	127,00	189,00	161,00	158,00	124,00
Illegal Possession of Property	0,00	15,00	30,00	78,00	82,00	70,00	130,00	90,00
Laundering of illegally obtained								
property	291,00	296,00	221,00	159,00	243,00	242,00	283,00	348,00
Misuse of budget resources	48,00	34,00	24,00	15,00	21,00	18,00	23,00	16,00
Tax evasion	3069,00	1899,00	1748,00	1203,00	1009,00	1099,00	852,00	910,00
Evasion of payment of the unified								
social tax	147,00	89,00	53,00	48,00	37,00	48,00	35,00	44,00
Bringing to bankruptcy	130,00	48,00	46,00	44,00	59,00	27,00	31,00	26,00
Fraud on financial resources	337,00	347,00	133,00	63,00	61,00	58,00	76,00	142,00
Illegal privatization of state property	26,00	46,00	29,00	10,00	26,00	17,00	22,00	16,00
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Source: Procecutor General's Office Of Ukraine, 2021

It is interesting to compare the data on criminal offenses in Ukraine and the world. In particular, in Ukraine, the largest number of crimes (52%) is related to tax evasion (Fig.2). At the same time, in the world, this figure is not significant.

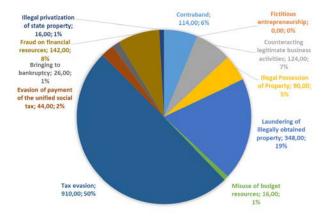


Figure 2 – Structure of financial crimes in Ukraine in 2020 Note: Procecutor General's Office Of Ukraine, 2021.

Despite the state's strong control over financial crimes, the number of criminal cases related to financial crimes is rapidly decreasing. For example, if in 2013 there were more than 5,000 criminal cases, in 2020, the total number of cases is 1,830. The determination index R2 of criminal cases related to financial crimes shows a high level of descending process regularity (85%), which could eventually lead to the reduction of the number of criminal cases by half in the next two years. There is also another negative trend in the fight against financial crime (Fig 3).

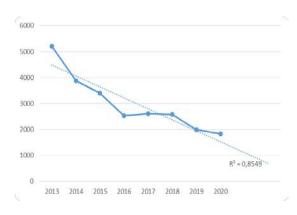


Figure 3 – Dynamics of financial criminal cases in Ukraine and their forecast by the trend method, units Note: Prosecutor General's Office Of Ukraine, 2021

The main actions of controlling bodies are aimed at the entrepreneurial activity. However, there are very few criminal cases related to the criminality of the government and officials. For example, in 2020, only 16 criminal cases related to the misuse of budgetary funds were recorded. This confirms the high level of corruption in government. However, to understand how effective the fight against financial crime is, it is necessary to determine its impact on the economy.

Most indicators that characterize the level of national economic security are related to growth development product (GDP). These are indicators of the deficit ratio, repayment of public debt, yield of government bonds, and the volume of international reserves to GDP. However, in our opinion, the more informative indicator is the level of the shadow economy, which in Ukraine has a significant impact on economic security since it amounts to about 30% of GDP.

Table 2: Volume of the shadow economy in Ukraine for the period from 2013 to 202	Table 2:	Volume of the shadow	economy in U	Ukraine for the	period from	2013 to 2020
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Indicator	2013	2014	2015	2016	2017	2018	2019	2020
GDP, \$ billion	183310	131805	90615	93270	112154	130832	153781	155582
Shadow economy level, % to								
GDP	30,0	36,0	35,0	33,0	32,0	29,0	27,0	30,0
Volume of shadow economy, \$								
billion	54993,0	47449,8	31715,3	30779,1	35889,3	37941,3	41520,9	46674,6

Source: Minfin, 2021; Ministry of Economy of Ukraine, 2021.

Comparing the size of the shadow economy and the total number of open financial criminal cases, it can be concluded that the figures since 2016 have a different trend (see figure 4).

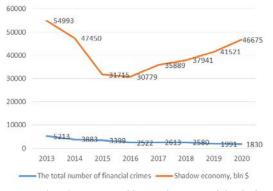


 Figure 4 – Comparison of financial crimes and the shadow economy in Ukraine
Note: Minfin, 2021; Ministry of Economy of Ukraine, 2021.

The Pearson coefficient between the two indicators is 0.51, which indicates that the correlation between the volume of registered financial crimes and the level of the shadow economy is low. So, we can draw the following conclusions:

- The fight against financial crime in Ukraine is not proportional to the real demands of economic development;
- The average level of the shadow economy for the understudied period is 31.5%, but the shadow economy size has an increasing trend. At the same time, the number of financial crimes related to non-payment of taxes has a rapidly decreasing trend, which indicates an ineffective fight against this phenomenon.

So, financial crimes have a significant impact on the national economy. They are expressed in the under-receipt of funds by the budget from various types of entrepreneurial activities or the misuse of budgetary funds. The analysis has shown that the average indicator of the shadow economy is 31.5% for the last seven years. Therefore, analysis of the fight against financial crimes shows that the opening of criminal cases to a greater or lesser extent has an insignificant impact on the overall development of the shadow economy.

5 Discussion

As mentioned above, financial crimes related to the digital economy are becoming very important today with the digitalization of the economy. Implementation of the concept of an electronic (digital) economy, which appeared at the end of the 20th century and rapidly acquiring new forms, currently entails truly revolutionary changes in the classical business model and in the business sector. The concept of a digital economy in a narrow sense is reduced to the so-called e-commerce carried out by means of information and communication technologies. The e-commerce itself represents any forms of business transactions (business to business (B2B) and a business to consumer (B2C)), under which the parties interact through electronic devices and networks, primarily via the Internet. E-commerce is becoming a tool of financial crimes aimed at consumers. In Ukraine, for example, in 2020, the worth of such kind of damage is \$8.9 million, 78% of which was recovered thanks to the work of the cyber police (National Police of Ukraine, 2020).

Assessment of the influence of the digital economy on the national and global economy, and also inevitably on the entire social sphere, is very important due to the increase in crime problems, which is also upgraded by the electronization and digitalization of society. In special literature, it is noted that cybercrime can be associated not only with the problems of information security, but also with the threats of statehood, the military-industrial and production complex, the infrastructure of life support.

Today, speaking of economic and financial crimes, it is advisable to allocate into an independent category the crime in the field of digital economy. It is not by chance that in criminal statistics, when taking into account the crimes of the economic orientation, the acts committed using computer and telecommunication technologies began to be allocated. The electronic medium significantly makes it difficult to identify the offender, and, therefore, his expulsion and criminal prosecution that entails the emergence of one of the characteristic features of crime in the field of digital economy - multi-episodescence of criminal activity (Frunza, 2015). Digital technologies in the hands of even one person, not to mention organized criminal groups, can turn into an instrument of crimes with unprecedented force. There are cases when adolescents alone managed to destabilize or fully paralyze the air traffic control system, to interfere with the work of large online retailers, and manipulate the bidding on the NASDAQ Stock Exchange.

Among the leading means of countering cybercrime, part of which is a crime in the field of digital economy, M. Herke and his Swiss colleagues call the modernization of computer systems and comprehensive judicial programs to speed up the investigation and automation of search procedures in various law enforcement databases; integration of information security measures based on the development and promotion of technical means of protection; creating and improving the legal framework adequate to modern cyber-threats; compliance with a reasonable balance between respect for the right to receive and disseminate information and control over information processes (Gerke As Cited in Achim & Borlea, 2020).

Since a significant part of economic transactions today is performed in the so-called international space – the Internet -the crime in the field of digital economy has a transboundary character. Based on this, it is impossible to bypass the question of international cooperation in the field of counteraction to this phenomenon. In addition, there are a number of acute issues of legal regulation of the turnover of the cryptocurrency, which legislative and law enforcement agencies are faced with. First, what legislation the emphasis should be made to: the law on digital financial assets in which it is not written what are domain names, mining agreement, etc., or on special laws related to information security? Second, how to embed into existing legislation the concept of digital currencies of central banks? (Saddi, & Bakar, 2019).

In such conditions, the effective and balanced application of international standards is one of the fundamental means of protecting the financial system and countering criminals in obtaining benefits from the crimes committed by them. Inconsistency in the application of standards can lead to the emergence of contradictory rules and weakening cooperation, which, in turn, reduces efficiency, increases the likelihood of failures, and allows financial criminals to use workarounds. Actions such as an analysis of threats for financial stability arising from the disunity of rules at the international level, checking and improving the effectiveness of the implementation of FATF standards, as well as the provision of recommendations and an increase in the amount of financial, logistics, and structural support for state and international organizations operating in the framework of countering Money laundering and financing of terrorism would help to eliminate the manifestations of an imbalance that are able to cause concern about the sustainability of the system (Chambers-Jones, 2012).

Extremely relevant ones today are the problems of countering the laundering of criminal income in a credit and financial system using cryptocurrency. The development of electronic payment systems based on cryptocurrency and the lack of legal regulation of relations among the subjects of this system, the uncertainty of the position of the state to cryptocurrencies as a means of payment allows criminal elements to use cryptocurrencies in criminal purposes to legalize money obtained by illegal way. Electronic payment systems based on cryptocurrency significantly diverged the criminal schemes 'performed' in information and telecommunication networks. Interestingly, manipulating in the field of cash conversion in cryptocurrency even allow civil servants to receive bribes, argumenting the presence of excessive cash by difference in currency exchange courses.

"Merging" of modern financial systems with achievements in the field of information technology, an increasing dependence of the population from a virtual environment, and the lack of legal regulation of relations in electronic payment systems based on cryptocurrency - all of this led to a significant increase in computer and economic crimes. Financial fraud in digital networks is also a threat to the economic security of the state. Financial fraud today is distinguished by its multipleness and ability to continuously improve. Due to the active development of new technologies, financial fraud also does not stand still, constantly developing new and new techniques that acquire intellectual character. The laundering of criminal income today is often carried out precisely by cryptocurrency (Lui & Ryder, 2021). Therefore, the system of measures to combat such fraud should be thoughtful and practically proven, and should also contain the interaction of society with law enforcement agencies. At the same time, the most important thing is that these events should be aimed at preventing such economic crimes, rather than to eliminate their consequences. There are urgent issues of the nature of the taxation of cryptocurrency, operational-search activities and a preliminary investigation into cases of crimes committed using digital technologies, the problems of confiscation of virtual assets, the 'legalization' of criminal income and fraud using new digital financial instruments. The issue of financial crime in the context of digitalization is becoming more and more relevant. Practice shows that this crime is growing by 70% in the world for the last year (PWC, 2021). As for Ukraine, the use of cryptocurrency is unregulated for its residents, and therefore many cases remain open for lack of corpus delicti (National Police of Ukraine, 2020).

6 Conclusion

Financial crime is widespread throughout the world. It has many manifestations and is carried out at all levels of the economy, from the individual financial crime and business level to the state level. It cannot be argued that national security is only affected by national-level financial crimes related to budget theft. To a greater extent, the impact occurs at the stage of filling the budget through taxes and contributions, and this is the subject of financial crime of the population, entrepreneurs, and people in business. Global experience shows that financial crimes related to non-payment of taxes are not significant in their number compared to other types of crimes. This is due to the fact that, in general, the level of economic development statistics are formed by developed countries, which have low levels of corruption, which allows counteracting financial misconduct effectively. This study is based on the example of Ukraine, which belongs to developing countries. Today Ukraine is marked by a reasonably high level of corruption at all levels. Particularly high levels of tax crimes can be traced, while criminality at the national level remains practically unpunished. Studies have shown that about 31.5% of the money flows in the country are shadow, indicating that financial crime still has a significant impact on national economic security. At the same time, studies of crime control in the country show that they are not effective. Despite the statistical indicators that show several times crime rate reduction in the country, the level of shadow economy remains approximately at the same level for seven years. A comparison of the dynamics of financial crimes and the shadow economy showed a low correlation of 51%. However, in addition to the problems of the real economy, the issues of other financial crime types, which are related to e-commerce crime and cryptocurrency transactions, become relevant today, in the period of digitalization development. In world practice, these problems are almost the most widespread, as practically every third transaction carried out on the Internet has a fact of fraud. In Ukraine, cybercrime is also rapidly developing but does not impact the economy as in developed countries.

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