Abstract.

The relevance of the article is determined by the need to study money laundering in the digital economy since the gradual transition of the state economy to a digital format, including the emergence of electronic money, the spread of electronic banking and the use of other information technologies, leads to the emergence of new methods and schemes for money laundering, which requires the simultaneous identification of contemporary risks of counteracting this type of crime and the search for ways of improving such activity. The purpose of the article is to study the current status and to search for ways to improve the fight against money laundering in the digital economy. Abstract logical, comparative legal methods and critical analysis were used to achieve this goal. It has been found that advances brought by the digital economy were profitable tools for money laundering. The negative consequences of money laundering have been discussed, which updates the task of finding optimal areas for counteraction. It is concluded that such areas are as follows: improving the IT infrastructure of banks, establishing relationships between banks and law enforcement agencies, preventing cybercrime, improving the financial monitoring system, ensuring the interaction of financial monitoring entities and law enforcement agencies. The conclusions and provisions set forth in the article are aimed at improving state policy in the field of combating money laundering, taking into account the challenges of the digital economy.

Keywords: digitalization, e-money, e-banking, cybercrime, financial monitoring.
Resumen

La relevancia del artículo está determinada por la necesidad de estudiar el lavado de dinero en la economía digital desde la transición gradual de la economía estatal a un formato digital, incluida la aparición del dinero electrónico, la difusión de la banca electrónica y el uso de otras tecnologías de la información. Conduce a la aparición de nuevos métodos y esquemas para el lavado de dinero, lo que requiere la identificación simultánea de los riesgos contemporáneos de contrarrestar este tipo de delito y la búsqueda de formas de mejorar dicha actividad. El propósito del artículo es estudiar el estado actual y buscar formas de mejorar la lucha contra el lavado de dinero en la economía digital. Se utilizaron métodos legales comparativos, lógicos abstractos y análisis críticos para lograr este objetivo. Se ha encontrado que los avances de la economía digital fueron herramientas rentables para el lavado de dinero. Se han discutido las consecuencias negativas del lavado de dinero, lo que actualiza la tarea de encontrar áreas óptimas para contrarrestar. Se concluye que tales áreas son las siguientes: mejorar la infraestructura de TI de los bancos, establecer relaciones entre los bancos y las agencias de aplicación de la ley, prevenir el delito cibernético, mejorar el sistema de monitoreo financiero, garantizar la interacción de las entidades de monitoreo financiero y las agencias de aplicación de la ley. Las conclusiones y disposiciones establecidas en el artículo tienen como objetivo mejorar la política estatal en el campo de la lucha contra el lavado de dinero, teniendo en cuenta los desafíos de la economía digital.

Palabras Claves: digitalización, dinero electrónico, banca electrónica, cibercrimen, monitoreo financiero.
Introduction

The globalization of the world economy, the development of information and telecommunication technologies give rise both to positive changes and to a range of problems. One of them is money laundering, which is a significant threat to the financial and economic stability of the state and affects the level of its socio-economic development. Money laundering is transnational in nature due to the development of the digital economy and the availability of instruments that help to hide the proceeds of crime. International Monetary Fund reports indicate that the current volume of money laundering operations in the world ranges from $620 billion to $1.6 trillion, which is about 2%–5% of world GDP (Masadeh, Hassan, 2018).

Thus, every state should not only promote the digitization of the economy but also consider potential threats and take measures to counter them. In particular, the Decree of the Cabinet of Ministers of Ukraine dated January 17, 2018 stipulates that one of the principles of development of the digital economy and society for 2018-2020 is:

- to accompany digitization by increasing the level of trust and security, i.e. information security;
- cybersecurity;
- protection of personal data;
- inviolability of the rights of digital technology users;
- strengthening and protecting trust in cyberspace.

This points are prerequisites for simultaneous digital development and the corresponding prevention, elimination and management of associated risks (The Order of the Cabinet…, 2018). Considering the above, it is obvious that today, in view of the global nature of the digital economy and money laundering, all countries have been given a complex task, which necessitates the theoretical elaboration of the aforementioned issue. An analysis of recent publications and research shows that a number of works have been devoted to the development of the digital economy and to counteracting money laundering. In particular, S. Mojsoska notes that the advent of cyber-laundering and e-money laundering began in the 1990s with the development of the Internet. The term
cyber-money laundering includes money laundering through the Internet, e-banking and e-money. The main advantage of money laundering through the Internet is the short time it takes to complete the electronic transfer of funds and conceal the proceeds of illicit criminal activity. Thus, criminal proceeds come from regular, legal flows. In particular, $300 billion is laundered in the world every month (Mojsoska, 2015).

The widespread use of electronic money products, which is increasingly replacing bank accounts, has led to the definition of “electronic money” at the regional level (Directive 2009/110/EC) and the obligation on states to counteract money laundering (Orlean, 2017). G. Khoyini, H.M. Sarayi, S. Kabiri emphasize that e-money and e-banking, as a result of the digital economy, are a very valuable tool for money laundering since they allow getting the best results from criminal activity with minimal cost. Given that these new technologies have a number of benefits for citizens, they cannot be ignored; therefore, the state is tasked with pursuing a systematic policy to prevent mass money laundering (Khoyini, Sarayi, Kabiri, 2016).

Moreover, the situation is further complicated by the fact that crimes committed by bank officials destabilize the banking system (Reznik et al., 2017). Whereas the banking system is an important component of the system of finance and crediting, its purpose is to ensure the stability of pricing policy and to organize the functioning of the country’s payment system (Klochko, Kulish, Reznik, 2016). However, the scientific community discusses the search for optimal ways to counteract money laundering in the digital economy. H.D. Gambarov examining the issue of counteracting money laundering in African countries, which annually lose about $50 billion through illicit financial transactions, fraudulent tax evasion and money laundering schemes, concludes that the regional cooperation of African states is urgent to counteract this crime. At the same time, the opinion of the scholar that “blocking illegal financial transactions and money laundering are crucial to conserving financial resources within the country and the continent as a whole” is also important (Gambarov, 2018).

P. Utama is convinced that the success of counteracting money laundering consists both in the effective investigation of already discovered facts of money laundering and in
creating the conditions for deterring the activity of money laundering (Utama, 2016). According to Z. Moh and M. Ach, a key aspect of counteracting money laundering is to focus on conditions that create opportunities for such criminal activity. Authorized entities should focus not on the offender, but on the sources of money laundering (Moh, Ach, 2018). Thus, analysis of recent publications shows that the issue of money laundering is urgent, due to the increase in this socially dangerous activity in the digital economy and, accordingly, the damage to the financial and economic interests of the state.

Methods and materials

Several methods were used to investigate money laundering, including the comparative legal method, which revealed the existing approaches to counteracting money laundering. Critical analysis method was used to find the most optimal areas for counteraction to the specified socially dangerous action. In turn, the abstract logical method became the basis for generalization of the material, its logical presentation starting from the negative consequences of money laundering for the socioeconomic development of the state and ending with a list of areas for anti-money laundering activity.

The methodological basis for the study of current status and prospects of anti-money laundering in digital economy are general and special scientific methods: logical and semantic method, statistical method, comparative and legal method, method of critical analysis, abstract and logical method. Thanks to the logical and semantic method the concept and general features of money laundering were revealed, the consequences that cause the money laundering activity in the condition of digital economy were disclosed. This method was also used to expose the content of e-money and e-banking, which are the product of digital economy and common money laundering tools. Statistical method was used to show the current state of money laundering activity in the world and financial loses of countries to which it leads. Comparative and legal method allowed to reveal the existing in domestic and foreign theory and practice approaches to counteracting money laundering. In turn method of critical analysis became the basis for critical evaluation of these approaches and finding the most optimal areas for counteraction to the specified socially dangerous action. Moreover the abstract and logical method became the basis
for the abstract logical method became the basis for generalization of the material, its logical presentation starting from the negative consequences of money laundering for the socioeconomic development of the state and ending with a list of areas for anti-money laundering activity.

**Results and Analysis**

We consider it feasible to begin by summarizing the main results and their justification with the general features of money laundering. O.Ye. Korystin determines that money laundering is a negative socioeconomic phenomenon, which is based on the concealment of illegal origin of income, the distortion of information about the nature of its origin, location, movement, ownership of such income, as well as providing with a legitimate appearance when the person is aware that these tangible goods are illegally obtained proceeds, and other actions, directly or indirectly related to the registration of the actual relationship of ownership, use, disposition of income or with the concealment of its illegal origin (Korystin, Cherniavskyi, 2009).

I.I. Bilous (2019) emphasizes that money laundering is a complex process of carrying out legal financial transactions, during which the illegal origin of this income, and in some cases, the true owner of the money is concealed. Moreover, the scientist draws attention to the fact that in the context of globalization, various schemes of money laundering become transnational are associated with organized crime, which is a significant threat to the financial and economic security and stability of the state. In particular, money laundering

1. impairs the reputation of the financial sector;
2. increases the outflow of capital;
3. reduces investment;
4. degrades the international image;
5. promotes the development of organized crime;
6. leads to unfair competition, stratification of the population in terms of income and an increase in the share of informal income;
7. weakens the social system;
8. exacerbates disproportions in the distribution of the tax burden, etc.

It should be emphasized that money laundering contributes to the growth of the shadow economy, while today it is almost impossible to accurately estimate its scale. Moreover, money laundering contributes to an increase in the level of corruption that is still quite high today and reduces public confidence in government agencies and institutions (Kulish et al., 2018).

At the same time, V.H. Lyseitseva (2016) believes that money laundering for the country in which it takes place has a positive effect since the management of states with taxes paid by persons engaged in money laundering can solve many financial problems of the country. However, this only applies to proceeds from crime, which are laundered through offshore territories that are attractive in terms of low taxes and weak financial control. Although it does not appeal to high-level states, since offshore profits are not profits of these states, economic sanctions can, therefore, be applied to countries that do not pay due attention to anti-money laundering (Kulish, Andriichenko, Reznik, 2018). However, given the number of negative consequences of money laundering, the issue of counteracting this phenomenon should be one of the priorities of the state and its structures.

I.M. Takhtarova (2015) supports the opinion that money laundering is a complex process, involving many operations that are carried out by various methods and are constantly being improved. At the same time, the scientist emphasizes the existence of several money-laundering models, namely: two-phase, three-phase and four-phase models. Accordingly, the main stages of a two-phase model are money laundering through the exchange of money for banknotes of another denomination or other types of currencies and recycling, in particular, giving pre-laundered money the appearance of receiving it from legitimate sources. The most common is the three-phase model, which involves the implementation of the placement stage, the layering stage and the integration stage, which can take place simultaneously or in part over one another. The four-phase model for the structuring of the money laundering process is usually used by UN experts. The main stages of money laundering under this model are as follows:
1. getting rid of cash and transferring it to the accounts of figureheads;
2. the distribution of available funds, while foreign experience shows, the
distribution of cash is often made at currency exchange offices, casinos and
nightclubs;
3. masking the traces of the crime, i.e. taking all measures to prevent the stranger
from knowing where the money was received and with whom they were
distributed;
4. integration of money supply or investment of laundered capital into high-
yielding business sectors.

According to I.M. Takhtarova, at each stage of the above models, there is no
connection with a predicate offense, which determines the method and mechanism of
money laundering, and therefore the scientist proposes to supplement their structure with
a “zero phase” associated with the commission of the predicate offense (Takhtarova,
2015).

V.L. Ortynskyi (2016) notes that the research results show that the choice of the
money laundering method depends on the sphere to which criminals have access
(entrepreneurial activity, public services, banking, etc.). Law enforcement agencies show
that money laundering most often involves the financial-banking system, where dubious
operations are a way of concealing a crime. In confirmation of the above I.H. Honcharenko
notes that in 2018, more than 99% of reports received by the State Financial Monitoring
Service of Ukraine were received from banking institutions, which makes their activity an
object of special attention in terms of counteracting money laundering (Honcharenko,
2019). In particular, N. Joveda, M.T. Khan, A. Pathak believe that in the digital economy,
and given the potential threats, the state should invest, first and foremost, in the IT
infrastructure of banks. Moreover, there must be an interaction between banks and the
law enforcement agencies of the state, which will allow banks to promptly notify law
enforcement agencies of any suspicious transactions (Joveda, Khan, Pathak, 2019).

Scientists also point out that cybercrime can be the source of illicit income in the
digital economy. The origin of this source of money laundering is the modern development
of information technology. Accordingly, the money laundering schemes from cybercrime are (1) counterfeiting of payment cards; (2) access to remote banking systems; (3) online financial pyramids, online casinos; (4) denial of service (Denial-of-service attacks) for the purpose of obtaining personal information. The income and information accumulated in this way are used to convert income into goods through online stores, transfer funds through a variety of payment systems, the conversion into currency and cryptocurrency, the achievements of which are implemented in the financial sector (State Financial Monitoring Service of Ukraine, 2013). Accordingly, counteraction in this area of money laundering should be aimed at improving the activities of cyber police units, which should both search for criminals and prevent these crimes.

However, it is worth noting that without initial financial monitoring, the activities of cyber police units will not be effective in the fight against cybercrime as a source of criminal proceeds. In particular, financial monitoring agencies take the following measures to identify money laundering patterns: (1) field inspections; (2) operational activities; (3) reporting analysis; (4) financial transaction research; (5) currency control (carried out by banking institutions and other currency control agents when making settlements in foreign currency, export/import, transfer of currency valuables). Accordingly, counteraction to money laundering should be carried out in the context of interaction between cyber police units and financial monitoring agencies (State Financial Monitoring Service of Ukraine, 2009).

A.M. Kashpur (2018) attributes financial monitoring to the components of the anti-money laundering system and emphasizes that the improvement and interaction between elements of this system will provide effective counteraction to money laundering. This opinion is supported by V.H. Lyseitseva, who concludes that, given the limited resources of the state in the current conditions, increasing the effectiveness of preventing money laundering is possible by improving the principles of interaction between law enforcement agencies and the interaction of the latter with financial monitoring subjects. At the same time, such interaction must go beyond the state, given the transnational nature of money laundering (Lyseitseva, 2016).
The feasibility of such interaction is confirmed by the study of K. Harummi, V. Rojas. The scientist points to the positive impact of the interaction between the financial intelligence units of Mexico and the United States in combating money laundering. These entities interacted in the form of information exchange, which prevented a number of attempts to launder money and detained those responsible for money laundering (Rojas, 2016). O.D. Vovchak, V.S. Kantsir, I.A. Kantsir emphasize that it is still relevant for states to develop and implement a single method for financial monitoring by entities of primary monitoring, which should be based on the provisions of national legislation, and Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing (Vovchak, Kantsir, Kantsir, 2019).

Conclusions

Financial monitoring is a significant area for preventing money laundering, while its use as an economic and legal instrument requires a number of issues to be addressed. Establishing proper communication between banks and law enforcement agencies, as well as the proper legal basis for such interaction, is one of the ways of optimizing the activity of these entities in the field of anti-money laundering.

Thus, the results of the digital economy development, namely electronic money, e-banking and information and telecommunication technologies, which are used to carry out a number of payment and other banking transactions, have become tools for criminal activity, including money laundering. It is obvious that the negative consequences of money laundering set the task of finding optimal ways of counteracting such socially dangerous action. Considering the scientific developments in this field, we believe that the following areas are as follows:

1. improvement of IT infrastructure of banks and establishment of interconnection between banks and law enforcement agencies;
2. prevention of cybercrime by authorized entities;
3. improving the state’s financial monitoring system and ensuring the interaction of financial monitoring entities and law enforcement agencies, both within and outside the state.

ACKNOWLEDGMENTS

The article was carried out within the framework of projects No.0120U100474 “Development of methods of interaction of law enforcement agencies of Ukraine on counteraction to legalization of criminal measures”.

Bibliographic references


The Order of the Cabinet of Ministers of Ukraine on Approval of the Concept for the Development of the Digital Economy and Society of Ukraine for 2018-2020 and Approval
