

RESEARCH PAPER

Financial Monitoring in the Bank as a Market Instrument in the Conditions of Innovative Development and Digitalization of Economy: Management and Legal Aspects of the Risk-Based Approach

Viktoriia Vovk^{1*}, Yuliia Zhezherun², Olena Bilovodska³, Vitalina Babenko⁴ & Alevtyna Biriukova⁵

Received 7 August 2020; Revised 7 September 2020; Accepted 18 October 2020; Published online 30 October 2020 © Iran University of Science and Technology 2020

ABSTRACT

The article examines foreign and domestic experience in organizing financial monitoring systems, systematizes the requirements for its implementation in Ukraine. The basic legal norms, enshrined in the joint directives of the European Parliament and of the Council of the EU, and underlying the national financial monitoring systems of the EU countries and Ukraine have been also analyzed. Taking into account the fact that the risk-based approach is the main basis for the effective implementation of all FATF recommendations, the nature of the risk of money laundering / financing of terrorism and the criteria for their assessment have been investigated. A scheme of improving the process of financial monitoring in a bank has been developed, as well as a number of measures have been proposed to raise the level of adhering to the legislation in the field of anti-money laundering and counter-terrorist financing by the banking sector.

KEYWORDS: Anti-money laundering; Counter-terrorist financing; Customer risk; Financial monitoring; Risk-based approach.

1. Introduction

Digital technologies are actively penetrating all spheres of public life, and the combination of technology and traditional finance is changing the existing formats and ways of work of business entities. Business digitization allows the latter to use the latest technology to carry out financial transactions, and this may lead to an increase in the level of shadowing of the economy and the risks of money laundering/financing of terrorism (ML/FT). Due to the specific nature of their

Corresponding author: Viktoriia Vovk
victoriavovk@ukr.net

activities, banks are constantly faced with various risks, in particular the risk of their use by clients to launder illicit proceeds. Under such circumstances, building a risk-based approach (RBA) in the system of financial monitoring in banks is the primary task of AML of funds.

Most experts put the beginning of AML of proceeds at 1970, when the adoption of the Bank Secrecy Act in the United States took place, which required financial institutions to keep accounting records of transactions for 5 years. And already in 1986, actions aimed at ML were legally classified as a crime under the Money Laundering Control Act. Thus, the preconditions for the development of a financial monitoring system in the USA were laid. For banks, it became the cornerstone to achieve parity between complying with the requirements of bank secrecy, defined by contractual relationships with customers, and the obligation to provide relevant information. Table 1 outlines the requirements of European Union (EU) countries and Ukraine for financial transactions to be monitored.

Department of International Management, Kyiv National University of Trade and Economics, 19, Kyoto str. Kyiv, Ukraine

Department of Finance and Banking, Cherkassy Educational-Scientific Institute of Banking University, 164 V. Chornovil St, Cherkassy, Ukraine.

^{3.} Department of Economic Cybernetics and Marketing, Kyiv National University of Technologies and Design, Nemyrovycha-Danchenka Street, 2, Kyiv, Ukraine.

International E-commerce and Hotel&Restaurant Business Department, V. N. Karazin Kharkiv National University, Kharkiv, Ukraine.

Department of Civil Law №2, Yaroslav Mudryi National Law University, st. Pushkinskaya, 77, Kharkiv, Ukraine.

Tab. 1. Requirements for conducting financial monitoring in EU countries and Ukraine			
EU countries (Directive (EU) 2015/849) [3]	Ukraine (The Law of Ukraine 361-IX) [19]		
when establishing a business relationship;			
occasional transaction amounting to \geq EUR 15 000;	money transfers (including international ones) without opening an account for \geq UAH 30000, or equivalent in foreign currency, bank metals, other assets;		
trading in goods, when carrying out occasional transactions in cash amounting to ≥ EUR10000;	transactions with virtual assets, including cryptocurrencies amounting to ≥ UAH 30000;		
money transfer amounting to ≥EUR 1000;	all foreign and domestic money transfers and cash transactions - deposit, transfer, receipt for the amount of \geq UAH 400 000;		
bets and winnings in lotteries, casinos, etc. amounting to:			
≥ EUR 2 000;	≥ UAH 30 000;		
suspicious financial transactions			

In the conditions of implementation of the European integration strategy of Ukraine, the issues of forming competitive environment, additional jobs creating and reducing unemployment, increasing social and economic protection of the population are of particular importance [21]. Investigation of the role of banking institutions that play a significant role in the economic development of the EU countries and makes it possible to determine the peculiarities of the development of their financial service markets [15].

The purpose of this work is to substantiate theoretical foundations, to develop methodological recommendations for improving the system of financial monitoring in the bank on the basis of RBA, taking into account the experience of EU countries.

Financial monitoring is a set of measures taken by the entities of financial monitoring in the field of prevention and counteraction, including state financial monitoring and primary financial monitoring [19].

The implementation of financial monitoring instruments at the legislative level, in particular in banking, has shaped the offer of ML banking services. For example, in response to the introduction of the requirement for a permanent notification of large cash transactions, a tendency to split large sums of money appeared. Persons interested in legalization of funds began to deposit such funds in amounts not exceeding the set thresholds into accounts opened with different banks, or even into accounts opened in different units of the same bank. Another example is gaining full control of the bank, in particular through its acquisition, by persons involved in laundering of proceeds obtained by criminal means.

2. Materials and Methods

The methodological basis of the study is a set of scientific techniques and methods of scientific

knowledge, including historical-legal and formal-logical methods (in the study of financial monitoring legislation in the EU and Ukraine), methods of coefficient and graphical analysis (in the construction of time series of the Corruption Perceptions Index and the shadow economy). The empirical base of this study consists of judicial practice materials of Ukrainian and EU legislation of financial monitoring, data from the European Commission, Financial Action Task Force (FATF), World Bank, MONEYVAL, National Bank of Ukraine (NBU), Ministry of Finance of Ukraine (MFU), State Financial Monitoring Service of Ukraine (SFMSU).

Based on the fact that ML/FT risk assessment of bank customers takes into account the impact of geographical, customer type and service risks to calculate its level, it is proposed to use the following formula:

$$ML/FT = \frac{Igeogr + Iclient + Ioper}{3}$$
 (1)

 $0 \le I geogr, I client, Ioper, ML/FT \le 100$

It has been proposed to calculate the levels of risks that are part of the ML/FT risk assessment of bank customers according to the following formulas:

to assess geographical risk:

$$Igeogr = \frac{SAI + (100 - CPI) + (II \div 120) + (RLI \times 100)}{4}, \quad (2)$$

where Igeogr – Geographical Risk Index; SAI – Shadow Economy Index; CPI – Corruption Perceptions Index; II – Instability Index; RLI – Rule of Law Index.

to assess customer type risk:

$$Iclient = \frac{ARI + ACSI + PSFM + ICTA}{A},$$
 (3)

where Iclient – customer type risk index; ARI – activity risk index; ACSI –atypical capital structure index; PSFM – share in the capital of a person who is not subject to financial monitoring; ICTA– index of conformity of the type of open account of the type of activity of the person.

• to assess service risk:

$$Ioper = \frac{SCT + SAT + SATFI + SOC}{4},\tag{4}$$

where Ioper – service risk index; SCT – share of cash transactions; SAT – share of anonymous transactions; SATFI – share of atypical transactions with financial instruments (derivatives, stock, etc.); SOC – share of operations with cryptocurrencies.

To solve the problem of determining the probability of risk, it is advisable to use Bayes's theorem (alternatively Bayes's law or Bayes's rule), which allows to calculate the probability of an event subject to another statistically related event (the posterior probability).

$$P\left(\frac{H}{E}\right) = \frac{P\left(\frac{E}{H}\right) \times P(H)}{P(E)} = \frac{P\left(\frac{E}{H}\right) \times P(H)}{P\left(\frac{E}{H}\right) \times P(H) + P(E/not\ H) \times (1-P(H))}$$
(5)

where P(H) is a posteriori estimation of the probability of hypothesis H;

P(E) is the full probability of event E;

P(H) and P(E) are the marginal probabilities of observing H and E respectively;

P(H/E) is the posterior a conditional probability of hypothesis H subject to true event E;

P(E/H) is the probability of occurrence of event E given that hypothesis H is true (ia conditional probability). Where H and H are events and $P(E)\neq 0$.

Therefore, the calculation of the level of geographical risk (*Igeogr*) according to Bayes's formula will look like this:

$$Igeogr = \frac{In \times 0.33 (\sum^{n} I_{n-1})}{0.25 \left(\sum^{n} \frac{1}{3(\sum^{k} (I_{n} \times 0.33(\sum^{n} I_{n-1}) + (I_{k} \subset N) \times (1 - 0.33(\sum^{n} I_{n-1}))} \right)}{(6)}$$

where N is the set of SAI, CPI, II, RLI indices; n is the quantitative order of indices from the set N:

kis the quantitative order of indices from the set N, which is $\neq n$;

 I_n is the Index of the n-case from the set N; I_k is the Index of the k-case from the set N; I_{n-1} is the Index of the set N, which is $\neq I_n$.

To calculate the level of client risk, the formula will look like this:

$$Iklient = 0.25 \left(\sum^{n} \frac{I_{n \times 0.33} (\sum^{n} I_{n-1})}{3(\sum^{k} (I_{n} \times 0.33(\sum^{n} I_{n-1}) + (I_{k} \subset N) \times (1 - 0.33(\sum^{n} I_{n-1})))} \right)$$
(7)

where N is the set of ARI, ACSI, PSFM, ICTA indices;

n is the quantitative order of indices from the set N:

k is the quantitative order of indices from the set N, which is $\neq n$;

 I_n is the Index of the n-case from the set N;

 I_k is the Index of the k-case from the set N;

 I_{n-1} is the Index of the set N, which is $\neq In$.

To calculate the level of operational risk, the formula will look like this:

$$loper = 0.25 \left(\sum_{n=0}^{\infty} \frac{I_{n} \times 0.33 (\sum_{n=1}^{\infty} I_{n-1})}{3(\sum_{n=0}^{\infty} I_{n} \times 0.33 (\sum_{n=1}^{\infty} I_{n-1}) + (I_{k} \subset N) \times (1 - 0.33 (\sum_{n=1}^{\infty} I_{n-1}))} \right)$$
(8)

where N is the set of SCT, SAT, SATFI, SOC indices;

n is the quantitative order of indices from the set N;

k is the quantitative order of indices from the set N, which is $\neq n$; In is the Index of the n-case from the set N;

Ik is the Index of the k-case from the set N; In-1 is the Index of the set N, which is \neq In.

3. Financial Monitoring Legislation

Each EU countries defines its own peculiarities of financial monitoring. However, there are common directives of the European Parliament and of the Council of the EU on which the national financial monitoring systems of the EU countries are based. Ukraine is gradually adapting its legislation to the standards of financial monitoring in accordance with current world and European standards, in particular, the FATF recommendations, norms of the 4th Directive (EU) 2015/849.

3. 1. Legislation and features of EU financial monitoring

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 ML/FT constitutes the main legal instrument in the prevention of the use of the Union financial system for the purposes of ML/FT. The use of financial monitoring in EU countries is based on: the 5th AML Directive, the

Regulation the entering controls on cash (Regulation (EU) 2018/1672) [12], the Directive on Criminalization of Money Laundering (Directive (EU) 2018/1673) [4], and the Regulation on the import of cultural goods (Regulation (EU) 2019/880). The Directive (EU) 2019/1153 on access to financial and other information provides for direct access to the national centralized bank account registries or data retrieval systems by competent authorities, including tax authorities, anti-corruption authorities and Asset Recovery Offices [5]. Directive 2018/1672 was adopted in April 2018, and it modifies Directive (EU) 2015/849. It shall apply from 3 June 2021. However, Article 16 shall apply from 2 December 2018. The implementation of these amendments makes it possible to improve the legal framework for financial monitoring and prevent the banks from being used for ML/FT.

In accordance with applicable law, the European Banking Authority defines the requirements for financial institutions for the organization and conduct of financial transactions with customers and identifies breaches of the law. Each country must have a Financial Intelligence unit (FIU) – the national center for the receipt and analysis

information of AML/SFT. When FIU confirmed of violation of the legislation of AML/SFT than sends it to law enforcement, supervisor or other competent authority. The scheme preventing ML/FT across the EU is shown in Fig. 1 [6].

3. 2. Ukrainian legislation of financial monitoring

The basis of the Ukrainian legislation on based financial monitoring is on FATF. recommendations of The **FATF** Recommendations are recognized as the global anti-money laundering/counter-terrorist financing (AML/CFT) standard. The main legal acts regulating the implementation of financial monitoring in banks of Ukraine are:

- The Law of Ukraine 361-IX, dated 6 December 2019, which enters into force on 28 April 2020 [19]:
- The Law of Ukraine 2121-III, dated 7 December 2000 [18];
- Regulation 417, dated 26 June 2015, approved by the Resolution of the Board of the NBU [13];
- Instruction 373, dated 18 August 2016, approved by Resolution of the NBU Board [8];
- Order of the MFU 584, dated 8 July 2016 [11].

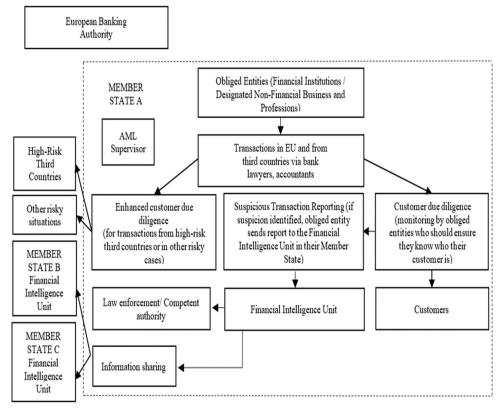


Fig. 1. The scheme of AML/ CFT across the EU [6]

4. Results

4.1. Research of the financial monitoring system in ukraine

According to Art. 6 of the Law of Ukraine 361-IX, the system of financial monitoring of Ukraine has two stages: state and primary. The supervisory authority of the banking sector and non-banking institutions holding NBU general funds licenses is the NBU, which performs the supervisory and regulatory functions assigned to it as a public financial monitoring entity. According to Art. 18 para. 2 of the Law of Ukraine 361-IX entities of public financial monitoring are obliged, taking into account RBA, to carry out regulation and supervision in the sphere of prevention and counteraction, in order to determine the correspondence of measures taken by entities of initial financial monitoring, to minimize risks during their activities, including the identification of signs of an inappropriate risk management system (the risk management system is considered inappropriate, in particular, in the case of multiple, large cash transactions that are suspected of using a primary financial monitoring entity to ML/FT, or other criminal offenses). In Art. 28 it is noted that a specially empowered body SFMSU conducts national risk assessment systematically, at least once every three years [19].

It should be noted that the risk of ML/FT is the possibility of conducting financial transactions aimed at concealing funds of illegitimate origin, concealing criminal purposes for their further use, or evading compliance with the relevant legislation. This particular form of risk requires not only effective methods of assessment and

regulation, but also a single, integrated approach that will be applied by banking institutions in the process of performing the financial monitoring function.

The risk of involving a bank to ML/FT has two major components: the risk of conducting transactions of a doubtful nature; the risk of violation of requirements of the relevant legislation [2].

MONEYVAL praised the role of the NBU in implementing a RBA to building a ML counteraction in banks. The system MONEYVAL report states that the NBU is working to provide banks with an understanding of the nature of transactions, reseiving information about banks in order to provide understanding and identification of risks of ML/FT [9]. NBU regulates and controls banks' foreign exchange operations. Including defines requirements for banks to identify, analyze, evaluate and manage ML risks of each bank and banking sector. The major national risks in Ukraine identified by experts MONEYVAL: corruption; shadow economy; illegal economic activity; activity of conversion centers; organized crime expansion; high cash circulation; FT risk etc.

In 2018, Ukraine scored 32 points (0 points - highly corrupt, 100 points - very clear) on the Corruption Perceptions Index (CPI) and ranked 120th among 180 countries. According to the Ministry of Economy of Ukraine, the level of the shadow economy decreased by 2% and amounted to 30% of the official GDP, which is the lowest level since 2009 (Figure 2, Figure 3).

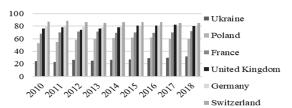


Fig. 2. Dynamics CPI in some EU countries and Ukraine in 2010–2018 [20]

Properly applied, a RBA offers the following benefits: flexibility - customers are exposed to different risks of ML/FT implementation, which changes; throughout the service time of such

client; efficiency - banks have the ability to really assess and mitigate specific risks; proportionality - resources should be directed to the places where the greatest risks are identified.

Ukraine

Poland

Poland

United Kingdom

Germany

Poland

Average (unweighted)

Fig. 3.Dynamics the shadow economy in some EU countries and Ukraine in 2010–2018 (in % of official GDP) [14, 22]

In subparagraph 311, paragraph 2, section I of Regulation 417, the RBA refers to a bank-defined system for managing the risk of ML/FT, and taking appropriate measures in a manner and to the extent that ensure the effective minimization of such risks, depending on their level [13].

Banks are subjects of initial financial monitoring. Using a RBA as a mechanism to AML/CFT, as well as to prevent risky activity, the bank independently determines the relevant indicators and the list of clients not subject to enhanced financial monitoring measures. The main tasks of banks as subjects of initial financial monitoring are:

- identification of the person conducting the financial transaction subject to financial monitoring in accordance;
- ensuring detection and registration of financial transactions subject to financial monitoring in accordance;
- assisting employees of the authorized body in carrying out the analysis of financial transactions subject to compulsory financial monitoring;

- taking measures to prevent the disclosure (including audited entities) of information provided to the notified body and other financial monitoring information (including the fact that such information is provided);
- keeping documents relating to the identification of persons who have carried out a financial transaction subject to financial monitoring in accordance with the Law of Ukraine 361-IX, and all documentation on the implementation of the financial transaction within five years after such a financial transaction [19].

In 2018, SFMSU received and processed 9871608 financial transaction reports subject to financial monitoring. Among them, the largest share is financial operations with the features of mandatory financial monitoring (96.93%) and financial transactions with the features of internal financial monitoring (2.55%) (Fig. 4). At the same time, in the reporting system the banks send the main part (about 99%) of the reports on the operations subject to financial monitoring [17].

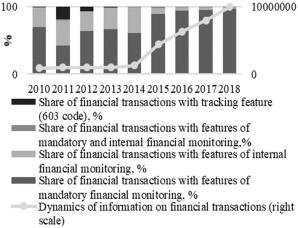


Fig. 4. Information on financial transactions recorded on the SFMSU in 2010–2018 [17]

4. 2. ML/FT Risk assessment of bank customers

Regulation 417 states that the level of risk of ML/FT can be determined using different

categories. The application of risk categories forms a strategy for managing potential risks, providing the ability to monitor and control customers. The Bank determines the level of

customer risk taking into account such components as geographical risk, customer type risk and service risk [13]. The proportion of these categories in the aggregate ML/FT risk assessment may vary depending on the individual bank or its environment. Therefore, each bank should develop its own risk assessment system, which should take into account the peculiarities of its activity and its regulatory regulation [16]. According to Order 584, geographical risk is a risk associated with the country of registration of the client or institution through which he (she) transfers (receives) the funds. Risk assessment by geographical location of the country of registration of the client is performed in relation to the client, whose foreign host country or the country of residence and/or registration, or the institution through which he (she) transfers (receives) the assets is a state, which from reliable sources is known that it: is included in the List of States (Territories) that do not or do not properly comply with the FATF Recommendation; supports terrorist activities, is subject to sanctions, embargoes or similar measures; is referred to the list of offshore zones; has strategic shortcomings in intergovernmental

organizations active in AML/CFT, according to FATF statements [11].

To assess geographical risk, it is advisable to use a decision tree (Fig. 5), built on the basis of the application of formula 1. Possible solutions: 2 -(optimal favorable conditions level geographical risk); 1,3 - conditions with an increased level of geographical risk: 0 unfavorable conditions (high level geographical risk). Using this method of the decision tree, one can also assess customer type risk and service risk by formulas 3, 4. The threshold values of the SAI, CPI, II, RLI coefficients have been substantiated with the help of expert assessments.

Customer-type risk is an existing or potential risk (threat, vulnerabilities) of conduction of ML/FT-related financial transactions by a client [13]. The large size of the customer base of banks makes the sector vulnerable to ML/FT. A client base may include wanted persons and/or persons conspiring with ML offenders. Areas of unacceptably high risk include terrorists, persons on UN sanctions lists, fictitious entrepreneurship (Fig. 6).

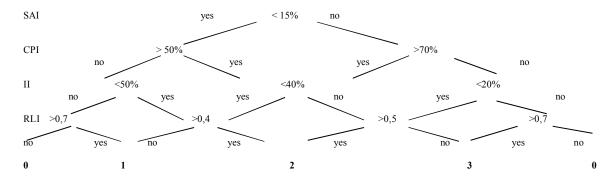


Fig. 5. Decision-making algorithm for geographical risk assessment

The main criteria for assessing the risk of the service include: the amount of a customer's transactions; liquidity of securities with which customers' transactions or securities transactions presence bearer are carried out; unusual/doubtful financial transactions in the insurance process, during export-import transactions, transactions involving buying and selling cryptocurrency, etc. Due attention should also be given to new or non-standard banking products that have not been used before, for example, e-commerce [1].

According to FATF Recommendation 15, ML/FT risks that may arise from the development of new products or new business practices and the use of new or emerging technologies, both for new and existing products, should be identified and evaluated. The most risky for the bank, in the context of the possibility of involvement in ML/FT processes, are cash services, domestic and cross-border transfers, securities transactions, electronic payment transactions (Table 2).

	Least risk areas	Minimal risk areas	
Simplified identification, verification and study activities	 government authorities of Ukraine international institutions or organizations EU institutions, bodies, offices or agencies foreign diplomatic missions public legal entities (their subsidiaries) listed on internationally recognized exchanges individuals who have accounts to receive salary, scholarships, and other social benefits housing cooperative utilities, Internet and television services access providers 	companies that carry out regular (understandable) transactions, pay taxes ordinary citizens who carry out operations for small amounts clients who are not suspected of ML/FT	Minimum requirements for identification, verification and examination
	Greatest risk areas	Unacceptably high risk areas	
Implementation of enhanced identification, verification and study activities	 public figures and their related persons public associations non-profit (religious, charitable) organizations political parties suspicion of fraudulent activity, the status of a "shell company" for the purpose of implementing ML/FT 	terrorists are involved in the operation the participants in the operation are persons on the UN sanctions lists companies that are reasonably believed to be fictitious businesses or "shell companies" for ML/FT	Blocking of assets, refusal to establish (maintain) business

Fig. 6. Results of assessment of customer type risk by the [10]

A customer's level of risk is reassessed by the results of the monitoring carried out by the bank, at least once a year. During the reassessment, a low level of risk cannot be assigned to the client if there is at least one of the risk criteria. Thus, when compiling a list of risk criteria for clients, the bank may take the criteria recommended and fixed by the regulatory body [11, 13] or develop its own criteria depending on the specific nature of the activity.

The process of identification, verification, risk assessment and reassessment play an important

role in financial monitoring. The formation of the customer identification policy is based on AML/CFT international experience, which is implemented in the Ukrainian legislation and banking practice. The essence of this policy is that a bank must develop specific procedures and measures when accepting customers for service, as well as differentiate customers by the degree of risk. At the same time, it is important to pay attention to the country of origin, social status, relations with the authorities, related accounts, business activity of such a client, etc.

Tab. 2. Rating of banking products by NBU financial monitoring department ML/FT risk assessment in Ukraine

Types of banking products and services that a bank provides to clients	Risk	Risk assessment for	
	assessment for	FT	
	ML		
Cross-border transfers sent from Ukraine	8	7	
Domestic transfers	7	8	
Services using cash	7	7	
Account transactions using electronic means of payment	7	6	
Cross-border transfers received in Ukraine	7	5	
Leasing (renting) of an individual bank safe (without description of values)	6	6	
Maintenance of correspondent accounts	6	5	
Securities transactions	7	2	
Cash transfer within Ukraine in the amount of < UAH 5000, and the absence of	3	5	
any indication that such a financial transaction is related to other financial			
transactions in the amount of > UAH 5000			
Service of deposit accounts	5	2	
Operations with bank metals	5	2	
Lending services	4	3	

5. Discussion. Improvement of Financial Monitoring in Banks of Ukraine

Basing on the conducted study of the features of ML/FT risks of bank customers, it is possible to propose a scheme of improvement of their assessment methodology in Ukraine (Fig. 7). The scheme is made according to the legally defined

criteria and stages of risk assessment of ML/FT risks of bank customers. Special attention is paid to the need to comply with the policies of KYC, KCYC, KYBP, KTYC when performing the identification, verification, assessment and reassessment of the risk, and scrutiny of clients.

In order to ensure effective financial monitoring in banks (Fig. 8), it is necessary to strengthen the role of the internal control system and introduce a centralized system of risk assessment of the object of control, which will include maximum, possible and weak risks. It is also important to establish clear criteria for assigning financial transactions to internal financial monitoring, based on specific indicators (ratios).

A promising direction for improving the effectiveness of financial monitoring at a bank is to create a single database of business reputation of economic entities using BigData technology that includes three levels: perfect, under control and doubtful. For the criteria that determine the effectiveness of financial monitoring, it is suggested to use an indicator that would determine the effectiveness of financial monitoring in terms of its cost effectiveness.

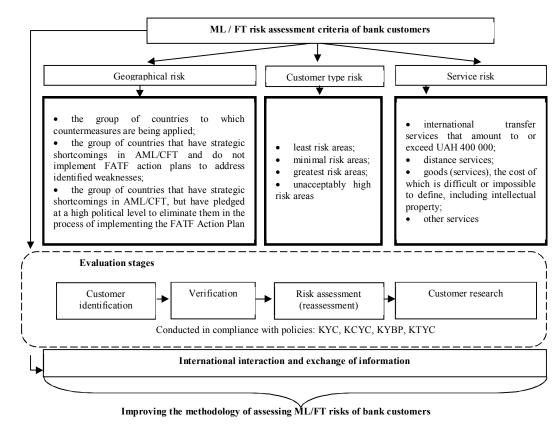


Fig. 7. Scheme of improving the methodology of assessing ML/FT risks of bank customers in Ukraine

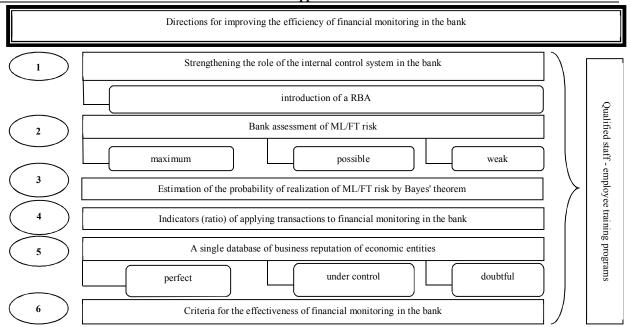


Fig. 8. Directions for improving the efficiency of financial monitoring in the bank

In order to improve the system of financial monitoring, the bank should: not enter into contractual relations with a client, if it is suspected that he (she) is not acting on his own behalf; not establish or maintain correspondent relations with banks if there are doubts about their location and conduct of activities at the place of registration, appropriate location supervision, and with banks maintaining such relations; not establish or maintain correspondent relationships with banks that do not meet generally accepted standards and do not take appropriate AML/CFT measures; heightened security measures when establishing relationships with non-resident banks that are incorporated in countries that do not provide for supplying and disclosing information about financial transactions of individuals.

As a result, this will reduce the risk of ML/FT or other illegal activities and, which is important for the successful activity of the bank, improve its image and enhance its public confidence.

6. Conclusion

Expanding of transnational boundaries of financial capital movements, as well as the growth of the shadow economy and the level of terrorist threat, determine the need to reform the financial monitoring system taking into account the best practices of EU countries. Therefore, the article analyzes the level of the shadow economy and the Corruption Perceptions Index in EU countries and Ukraine.

The above indicators highlight the need to continue the process of reforming the national legislation on the organization of the financial monitoring and bringing it into line with EU requirements and standards. It is proven that the RBA is the main basis for effective implementation of all FATF recommendations. The study of the basic legal rules governing the procedure of financial monitoring in banks leads to the following conclusions:

- the systems of financial monitoring management in different countries are based on common directives of the EU, but have certain features defined by national legislation;
- the financial monitoring system consists of two levels: primary and state (primary financial monitoring entities are banks, insurers (reinsurers), insurance brokers, credit unions, pawnshops and other financial institutions, payment institutions etc.;
- the main entities of state financial monitoring are the central bank, which performs supervisory and regulatory functions for the banking and non-banking institutions, and specially authorized body that implements the state policy in the sphere of AML/CFT);
- in accordance with the RBA, the entities of the primary financial monitoring should identify, assess and understand the risks they are exposed to, and take appropriate measures to minimize them;
- the main types of ML/FT risks are reputation, operational, compliance and concentration risks,

and a bank sets the level of customer risk taking into account such components as geographical, customer, service risks.

A number of measures to improve the effectiveness of the financial monitoring system have been proposed, their implementation will increase the awareness of the risks that accompany banking operations and reduce the risks of ML/FT to an acceptable level, that will ultimately help meet social needs and protect national economic interests. It has been proven that banks that use integrated control measures, that being different for each bank, increase the effectiveness of the detection and control of threats due ML/FT, have greater competitive advantages in the market.

References

- [1] Babenko, V., Kulczyk, Z., Perevozova, I., Syniavska, O., Davydova, O. Factors of Development of International e-Commerce in the Context of Globalization. CEUR Workshop Proceedings, 2422, (2019), pp. 345-356.
- [2] Berezhnyi, O.M. (Ed.). (2010). Risk assessment and management of use of services to criminal income or financing terrorism at a commercial bank: monograph. Sumy: State Higher Education Establishment the «Ukrainian Academy of Banking of the NBU».
- [3] 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. Available at: http://data.europa.eu/eli/dir/2015/849/oj.
- [4] Directive (EU) 2018/1673 of the European Parliament and of the Council of 23 October 2018 on combating money laundering by criminal law. Available at: https://eurlex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L....2018.284.01.0022.01.ENG.
- [5] Directive (EU) 2019/1153 of the European Parliament and of the Council of 20 June 2019 laying down rules facilitating the use of financial and other information for the prevention, detection, investigation or prosecution of certain criminal offences, and repealing Council Decision 2000/642/JHA. Available at: <a href="https://eur-https:/

lex.europa.eu/eli/dir/2019/1153/oj.

- [6] European Commission (2018). Preventing money laundering and terrorist financing across the EU. How does it work in practice? Available at: https://ec.europa.eu/info/sites/info/files/diagram_aml_2018.0 7 ok.pdf.
- [7] FATF (2019), International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation, FATF, Paris, France. Available at: http://fatf-gafi.org/recommendations.html.
- [8] Instruction 373 of the NBU of 18 August 2016 on the formation of information exchange files between the central executive body implementing the state policy in the field of prevention and counteraction to legalization (laundering) of proceeds obtained by criminal means, financing of terrorism and financing the proliferation of weapons of mass destruction, and banks (branches).
- [9] MONEYVAL (2017). Anti-money laundering and counter-terrorist financing measures: Fifth Round Mutual Evaluation Report. Available at: https://rm.coe.int/fifth-round-mutual-evaluation-report-on-ukraine.
- [10] NBU Financial Monitoring Department (2019). On the national risk assessment in the field of the prevention and counteraction of the legalization (laundering) of criminal proceeds and the financing of terrorism. Available at: http://www.sdfm.gov.ua/content/file/Site_docs/2020/20200109/Zbirka.pdf.
- [11] Order of the Ministry of Finance of Ukraine 584, dated 8 July 2016, On approving the risk criteria for legalization (laundering) of proceeds obtained by criminal means, financing of terrorism and financing the proliferation of weapons of mass destruction. Available at: https://zakon.rada.gov.ua/laws/show/z1047-16.
- [12] Regulation (EU) 2018/1672 of the European Parliament and of the Council of 23 October 2018 on controls on cash entering or leaving the Union and repealing Regulation.

Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.2
84.01.0006.
01.ENG&toc=OJ:L:2018:284:TOC.

- [13] Regulation 417 of the NBU of 26 June 2015, on the implementation of financial monitoring by banks. Available at: http://zakon0.rada.gov.ua/laws/show/v0417500-15.
- [14] Schneider, F. Estimating the Size of the Shadow Economies of Highly-developed Countries: Selected New Results. *CESifo DICE Report*, Vol. 14, No. 4, (2016), pp. 44-53. DOI: 10.21003/ea.V176-03.
- [15] Shkarlet, S., Dubyna, M., Vovk, V. Noga, M. Financial service markets of Eastern Europe: a compositional model. *Economic Annals-XXI*, Vol. 176, (2019), pp. 26-37.
- [16] Smovzhenko, T.S., & Slavyuk, R.A. (Eds.). (2010). Development of the Ukrainian banking system: monograph. Kyiv: UBS NBU.

- [17] State Financial Monitoring Service of Ukraine (2019). Statistical data concerning reports on financial transactions received by the SFMS (2010-2018). Available at: http://www.sdfm.gov.ua/articles.php?cat_id=92&lang=en.
- [18] The Law of Ukraine 361-IX, dated 6
 December 2019, On prevention and counteraction to legalization (laundering) of proceeds obtained by criminal means, financing of terrorism and financing the proliferation of weapons of mass destruction. Available at:

 https://zakon.rada.gov.ua/ laws/show/361-20.
- [19] Trading Economics (2019). Corruption Index (2010-2018). Available at: https://tradingeconomics.com/ country-list/corruption-index.
- [20] World Bank (2019). World Development Report 2019: The Changing Nature of Work. Washington, WB.

Follow This Article at The Following Site:

Vovk V, Zhezherun Y, Bilovodska O, Babenko V, Biriukova A. Financial Monitoring in the Bank as a Market Instrument in the Conditions of Innovative Development and Digitalization of Economy: Management and Legal Aspects of the Risk-Based Approach. IJIEPR. 2020; 31 (4):559-570 URL: http://ijiepr.iust.ac.ir/article-1-1141-en.html

