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TRENDS IN COMBATING MONEY LAUNDERING IN THE EUROPEAN CONTEXT

Review paper

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Abstract

The purpose of this study is to evaluate the result of the decisions addressed in preventing and combating money laundering by Romania, together with the other member states of the European Union, following the regulations changes in the field. Against the background of technological developments and new threats, regulators have developed rules and procedures to prevent the exploitation of the financial system for the purpose of money laundering, with clear deadlines for transposition into national law. In order to determine the impact of the joint effort in the fight against money laundering, we analyzed the annual reports of European Financial Intelligence Units for 2018 and 2019 and the reports for the last ten years (2011-2020) of the National Office for Preventing and Combating Money Laundering in Romania. Based on the data from these reports, the study presents trends by using, inter alia, descriptive statistics. The results of our study draw attention to the increase in the number of reports of suspicious transactions, the number of cases sent for investigation to the competent authorities, the number of requests for information or dissemination of information to foreign FIUs, the volume of suspended transactions and amounts seized or confiscated by authorities. Although European Union Member States have responded to the obligation to transpose European directives, further steps are needed to create a common framework for action and reporting, so that the combined efforts have real results in line with the expectations of the European institutions. Through the results presented, the study supports governmental and non-governmental entities, highlighting the areas that need immediate attention.

Keywords: *financial crime evolution, investigations, measures implemented*

1. INTRODUCTION

In the current policies of European bodies, we find permanent concerns to prevent and combat money laundering, the phenomenon being defined in Directive (EU) 2015/849 of the European Parliament and Council of 20 May 2015 on preventing the use of the financial system for the purpose of money laundering or terrorist financing, amending Regulation (EU) no. 648/2012 of the European Parliament and Council.

Directive 2015/849 / EC, in line with the new international standards, starting from a risk-based approach, introduces new, clearer and more detailed concepts and provisions compared to previous directives on: defining new terms, introducing the obligation for EU Member States to conduct a national assessment of the risks of money laundering and terrorist financing, introducing the obligation for EU Member States to maintain and transmit complete statistics, information on the real owners, a register of real beneficiaries, tightening of administrative sanctions, extension and consolidation of cooperation.

The most recent AML directive is Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purpose of money laundering or terrorist financing, and amending Directives 2009/138 / EC and 2013/36 / EU. The new directive sets out a series of measures to operationally combat terrorist financing and ensure greater transparency in financial transactions, strengthen the powers of EU financial intelligence units to help them identify the real beneficiaries of companies and trusts and closer collaboration and cooperation between European FIUs through the existing legal and information framework. As it was mentioned in research studies, before the law there come harder and rarely high-tech groups because the latest technology and software used allows them to conceal traces much better and to hide the evidence that would lead to their conviction (Șcheau and Pop, 2017). In response to these, legislative changes aim to prevent the risks related to the use of cryptocurrencies, to secure financial transactions to and from high-risk countries and improve the access of FIUs (financial intelligence units) to documentation, by the creation of central data extraction systems, i.e. centralized registers of bank accounts and payments, in all Member States.

The phenomenon of money laundering alongside terrorist financing represents a major problem within the EU, where there is an urgent need for effective measures to combat and counteract its effects. The repercussions specter is on the stability, integrity, reputation and performance of the financial, economic sector (Shaikh et al. 2021). That's why, regarding to research in the field more efforts need to be made to fill the gaps through empirical analyzes on measuring the size of the informal sector, identifying the determinants, their mechanisms and correlation, the effects on economic and financial crimes (Elgin and Erturk 2018).

The aim of this paper is to assess trends in Romania and other Member States in terms of AML as a result of decisions addressed in this field at European level. Regulators have developed rules and procedures to prevent the financial system from being exploited for money laundering purposes, with clear deadlines for transposition into national law.

Starting from the hypothesis of transposing directives into national law, our study assessed the evolution of some issues, provided for in European legislation, clearly related to the fight against money laundering, such as suspicious transactions, suspended transactions, cases disseminated to competent authorities and international cooperation in the field of money laundering.

For achieving the objectives, we analyzed the annual reports of European Financial Intelligence Units for 2018 and 2019 and the reports for the last ten years (2011-2020) of the National Office for Preventing and Combating Money Laundering in Romania. Data collected from

these reports, was processed using descriptive statistics. The result show that in consideration of transposition of European directives there are an increasing trend of all analyzed issues .

We can say that the need to fight money laundering has both a social and an economic motivation. Social motivation refers to the effects of organized crime, which tends to internationalize and negatively affect the normal relations between members of national communities (Achim and Borlea, 2021), and even globalized, generating instability. Economic motivation stems from the effect that money laundering has on the principles of market economy functioning and financial market integrity, by undermining financial institutions (Mugarura, 2011). All regulations, guidelines and rules in the field of preventing and combating money laundering denote both the topicality and the importance of the issues addressed in this study.

The rest of the paper is presented as follows. The section 2 refers to transposing Directives into national law, analysis of suspicious transaction in EU, compliance against money laundering in Romania from the perspective of suspicious transactions, suspended transactions, cases disseminated to law enforcement authorities and international cooperation. The conclusions, implication and recommendation are presented in section 3.

2. ANALYSIS OF AML TRENDS IN EUROPEAN CONTEXT

2.1. Monitoring the work of transposing Directives into national law

The European Commission's enforcement activities in the field of Fighting against money-laundering and counter terrorism financing are focused on ensuring the timely and correct transposition of the 4th and the 5th Anti-Money Laundering Directive on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing.

Both directives promote the highest standards for anti-money laundering and to counter terrorism financing. The communications and reports stress the need for the full implementation of these two directives while underlining that a number of structural shortcomings in the implementation of the Union's rules on anti-money laundering still need to be addressed.

As stated in annual report regarding Monitoring the Application of European Union Law 2019 the Commission continued moving forward with infringement cases as several Member States had still failed to implement the 4th Anti-Money Laundering Directive in their national legislation.

The situation of active cases in March 2021 from the perspective of the European Commission's Infringement decision is as follows:

- 4 cases, all of them noncommunication cases regarding Non-transposition of Directive (EU) 2015/849 (4th anti-money laundering directive), in different stages: two of them with reasoned opinion and two of them referral to European Court of Justice;
- 6 cases with Formal notice refer to Incorrect transposition of Directive 2015/849 (4th Anti-Money Laundering Directive), decisions taken between 14/05/2020- 18.02.2021;
- 16 cases with Formal notice and 1 with reasoned opinion, all of them non-communication cases regarding Transposition of Directive (EU) 2018/843, decisions taken between 12/02/2020 -30/10/2020.

2.2 Statistical analysis reports suspicious transactions FIUs EU Member States

The necessity of reporting suspicious transactions by both financial institutions and designated non-financial businesses and professions (DNFBPs) to government FIUs, represents a key element in the AML and CFT systems function (Chaikin 2009). Thus, the EU has provided a clear setting for

the efforts against ML and terrorist financing, through a development of regulations and directives at European level, according to standards adopted by the FATF, revised over time, mandating financial institutions, certain professions and enterprises with informing the Financial Intelligence Unit (FIU) about possible suspicious transactions (Viritha et al. 2015). The research undertaken by Leite et al (2019) on the technology's input in the fight against ML crimes, shows that with the identification of suspicious transactions, the interest of researchers in this field has increased (Leite et al. 2019). The intensification of money laundering actions within different fields of activity has generated the increased involvement of the authorities in regulating the extraction of unstructured data from suspicious activities, based on statistical techniques (Lokanan 2019).

The national bodies created to collect and analyze information relevant to money laundering, associated predicate offences like reports of suspicious transactions from financial institutions and other designated reporting entities, and to disseminate financial intelligence reports about suspected money laundering or terrorism financing to appropriate law enforcement agencies in their country are Financial Intelligence Units (FIUs).

The paper analyzes all available national FIUs Annual reports for years 2018 and 2019, as elaborated and published by European Union member states under the provision of article 44 (3) from Directive (EU) 2015/849, stipulating the obligation to publish complete, consolidated statistics. These reports should contain data such as size and importance of the different sector which fall within the scope of directive, number of suspicious transaction reports, the number of cases investigated, the types of predicate offences, the value of property in euro that has been frozen, seized or confiscated, data regarding the number of cross-border requests for information that were made.

The EU Member States had the obligation to transpose into national legislation the recent EU Directives 849/2015 and 843/2018 on AML with transposition deadline June 2017 and January 2020 respectively, reports of suspicious transactions (STR) or reports of suspicious activities (SAR) received by FIUs in 2018 and 2019, according to the data presented in the national reports prepared by these bodies.

There is no specific rule or standard as to what constitutes suspicious activities. The urgent important pressing concern of the financial institution is how to report Suspicious Transaction Report (STR) adequately and avoid any friction or enforcement with the authority –FIU (Yasaka, 2017, p.3). European regulations only state that entities subject to anti-money laundering laws must complete own-initiative reports and submit them to the FIU if they have reasonable suspicions that the funds involved in the transactions come from illegal activities. Financial and non-financial institutions have the obligation to comply with the provisions and to perform permanent monitoring of transactions in order to identify suspicious activities (Alkhalili et al. 2021).

Of the 27 Member States, no full reports or suspicious transaction data were found for 7 Member States, and no reports were found for four countries for any of 2018 and 2019, and for 3 countries no reports or data on RTS for 2019 were found.

As shown in Table 1, for a number of 15 states out of the 20 for which there are reported data, there was an increase in the number of suspicious transactions received by FIUs, an increase numerically between 117 STR Bulgaria and 146,493 unusual transactions The Netherlands, respectively percentage increase between 4.21% Bulgaria and 65.46% Malta. For five states, the reported suspicious transactions decreased between 73 Cyprus transactions and 7,454 Belgium transactions, respectively between 1.74 percent Czech Republic and 22.29 percent Belgium.

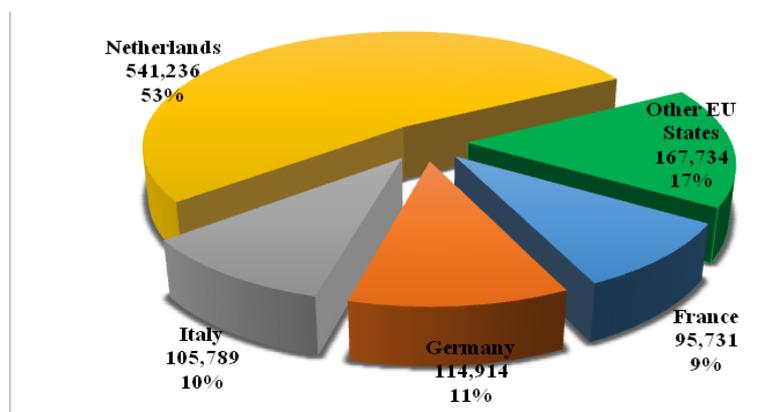
Table 1 Evolution of STRs in European countries

	2018	2019	Numerical evolution, suspicious transactions 2018-2019	Percentual evolution, suspicious transactions 2018-2019
Austria	3.494	3.656	162	104,64
Belgium	33.445	25.991	-7.454	77,71
Bulgaria	2.777	2.894	117	104,21
Czech Republic	4.028	3.954	-74	98,16
Cyprus	1.836	1.763	-73	96,02
Estonia	3.758	5.241	1.483	139,46
France	79.376	95.731	16.355	120,60
Germany	77.252	114.914	37.662	148,75
Italy	98.030	105.789	7.759	107,91
Latvia	6.617	5.264	-1.353	79,55
Lithuania	1.368	1.501	133	109,72
Luxembourg	55.948	52.374	-3.574	93,61
Malta	1.679	2.778	1.099	165,46
Netherlands	394.743	541.236	146.493	137,11
Poland	3.622	4.100	478	113,20
Romania	11.993	15.841	3.848	132,09
Slovenia	758	1.038	280	136,94
Spain	6.419	7.288	869	113,54
Sweden	19.383	21.709	2.326	112,00
Hungary	10.397	12.342	1.945	118,71

Source: Authors` processing

The growing number of reports containing suspicious transactions is due to the increase in the number of entities required to prepare such reports, training of staff with responsibilities in this field and last but not least changes to the internal organizational framework of the FIU or national legal framework.

At the level of the European Union, the first 5 positions viewed through the prism of the number of STR received from the reporting entities are presented according to chart no. 1.



Source: Authors` processing

Figure 1 European states 2019 Top five suspicious or unusual transaction

It is found that the Netherlands alone surpasses all other European Union countries in terms of the number of unusual transactions. It should be noted that the FIU Netherlands is administratively operating under the Netherlands Police and policy-wise under the Ministry of Security and Justice. Head of FIU-the Netherlands is the only authority who can declare an unusual transaction as suspicious transaction after further investigations

Analyzing the data reflected in Table 1, data contained in the annual reports of FIUs, we conclude that in order to ensure a real comparability between states from the perspective of the number of STR it is necessary that the data provided have the same unit of measurement. From this perspective, the results highlighted in the situations presented must be viewed with caution, as there are very large variations between countries in terms of the number of transactions that are suspected. The data allow us to decide with certainty as to the trend at the level of each Member State, but not at the European level.

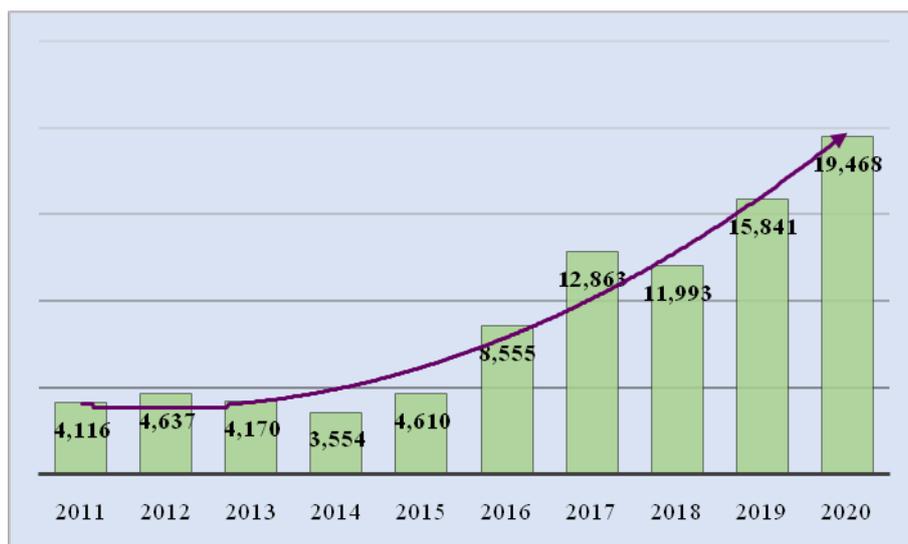
Thus, the comparative study of the annual reports for 2018 and 2019 shows that steps have been taken at the national level of the European states in terms of STR quality, increasing the number of required reporting entities, the way of reporting (in most cases on dedicated electronic platforms and in predetermined formats), or indications of suspicion considered when drawing up the STR. However, we maintain the opinion formulated in a previous study, according to which as about quality of these reports there are not robust data regarding the outputs of STRs analysis, there are not a monetary value of suspicious transaction nor link between STRs and results of analysis of STRs which were submitted from FIU to prosecution or law enforcement authorities (Cotoc et.al, 2020).

2.3. Descriptive statistics on anti-money laundering compliance in Romania

The directives issued by the European Parliament on money laundering and financing of terrorist acts were transposed into Romanian national legislation by Law no. 129 of 11 July 2019 for preventing and combating money laundering and terrorist financing, as well as for amending and supplementing normative acts and Emergency Ordinance no. 111/2020 of July 1, 2020 on amending and supplementing Law no. 129/2019 for preventing and combating money laundering and terrorist financing, as well as for amending and supplementing some normative acts. The normative acts issued include European measures to combat money laundering: new reporting entities are introduced, such as gambling providers, authorized persons providing financial or business advice, the reporting limit for cash transactions is reduced from 15,000 euros to 10,000 euros, the definition of the real beneficiary of a company is modified, the virtual currencies and their trading are regulated in an incipient form.

2.3.1. Suspicious transaction reports

Analyzing the data provided by the reports of the National Office for Preventing and Combating Money Laundering (NOPCML) - Romanian Financial Intelligence Unit for a period of 10 years, between 2011-2020, there is a trend of continuous increase in the number of suspicious transactions reported, as it could be seen in chart no. 2. This trend is similar to that observed in most Member States.



Source: Authors` processing

Figure 2 Romanian STRs evolution 2011-2020

The most significant increase is in 2019 and 2020, after the transposition into national legislation of the European AML directives. Thus, the number of STR increased by 3,848 in 2019 compared to those reported in 2018 and by 3,627 increase in 2020 compared to 2019. Percentage in the analyzed period, 2011-2020, the increase of STR is 473%.

We can conclude that this trend is registered as a cumulative result of several decisions that have been made: the introduction of new entities with obligations to report suspicious transactions, the tightening of sanctions applied in case of non-compliance with legal provisions and training conducted by the NOPCML, followed by improving the knowledge and activity of persons involved in ensuring compliance in institutions.

2.3.2. Evolution of suspended operations number and value

According to Law no. 129/2019 to prevent and combat money laundering and terrorist financing, elaborated by Romanian Parliament, one of the important prerogatives of NOPCML is the right to order for a period of 48 hours the suspension of suspicious transactions reported to the office of obliged entities, prior to their execution. The main purpose of this measure is to prevent funds of suspicious origin from leaving the financial system in order to support the efforts of law enforcement bodies to identify, track and block or suspend, as appropriate, illegally obtained funds.

The indicator about the cases in which the measure of suspending transactions was ordered has a significant increase in 2019 and 2020 compared to period 2011-20018 both in terms of number of suspended operations but also in terms of value. (table no 2).

Table 2 Evolution and value of suspended transactions in Romania

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of suspended transactions	4	6	-	13	37	52	232	295	430	781
Value of suspended transactions (mil. euro)	5.100	1.600	28.800	9.300	7.500	12.771	40.380	53.300	86.500	-

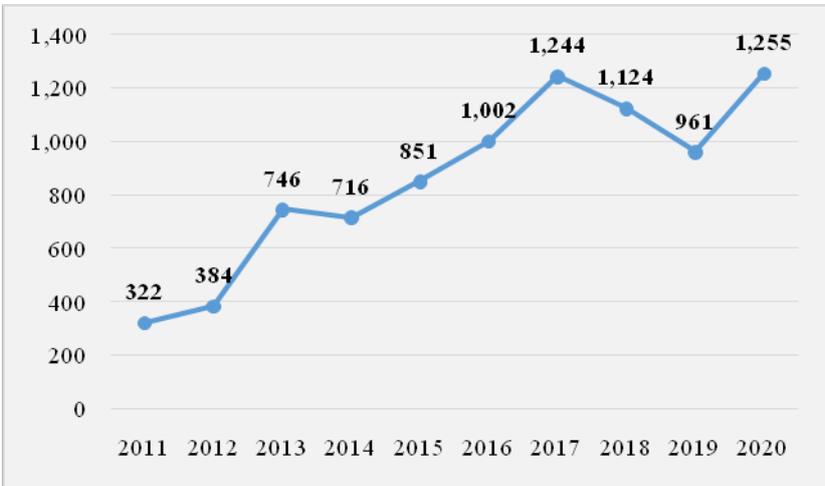
Source: Authors` processing

In 2019 there was a 45% increase in the number of operations, and in 2020 there was an increase of 81.63% compared to previous years. Also, the volume of suspended transactions increased by 33,200 million euros in 2019 compared to 2018, which reflects the Office's assumption of increased competencies.

2.3.3. Evolution of dissemination to competent authorities

The dissemination component ensures the fulfillment of the Office's role of disseminating spontaneously or on request the results of the analyses carried out on the reports received, disseminated either in the form of information or in the form of responses to requests for information.

In Romania, the number of cases analyzed and disseminated to the competent authorities registers a fluctuating evolution, an aspect that is also integrated in the European trends (chart no.3).



Source: Authors` processing

Figure 3 Number of disseminated analysis

As it can see the number of disseminated files registered a continuous increase from year 2011 till year 2017, decrease in next two years thus in 2019 were submitted results to law enforcement authorities in just a 77% cases compared to number of cases send in 2017. The situation was improved in 2020 when the number of cases investigated and disseminated for further investigation or even prosecution was 1.255 the greatest number from all of this period.

Unlike the increasing evolution of the reported transactions, the number of cases analyzed and disseminated by NOPCML does not have a homogeneous evolution in the same sense with STR, the indicator is influenced by Romanian FIU technical and human capacity of processing the received information. This variation conducts to conclusions that a better organization of human resources is necessary and the informational / technical endowment of FIU to analyze in the same rhythm the information received from the reporting entities.

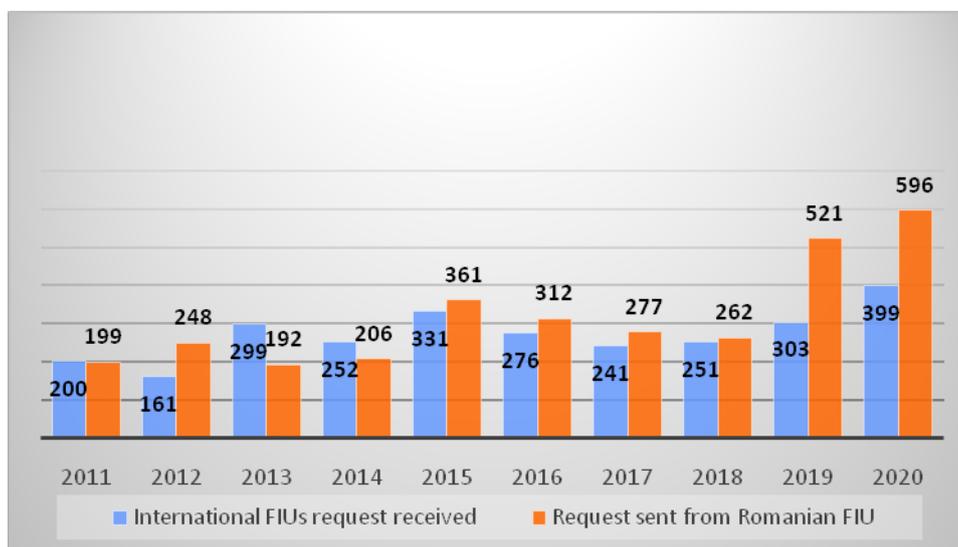
2.3.4. Exchange of information between Romania and international FIU

In the context of globalization, the complexity of transactions and the integration of financial flows in international markets, technological innovation of the global dimension of criminal organizations and the ingenuity of criminals to exploit gaps in national legal systems, one of the

important aspects of Article 53, paragraph 1, sentence 3 of Directive 849/2015, is to improve international cooperation in the common fight against money laundering. An effective step is the development of the FIU network and the global collection and analysis system (Gelemerova 2009), as well as the strengthening of cooperation, because lack or poor evaluation is the main obstacle of the system to prevent and combat money laundering (Ponomarenko et al. 2018).

International communication between FIUs is based on reciprocity through the Egmont Secure Web network at international level between FIU members of the group and through FIU.NET at European level. There is a constant exchange of information between national bodies in the field, consisting of requests for information, spontaneous information, cross-border transaction reports (e-commerce reports such as Paypal and Amazon) and suspicious transaction reports.

The improvement of Romania's international cooperation is reflected in the increase in the number of requests sent by Romania to other FIUs, more significant in 2019 and 2020 compare to previous year, in the increase in the number of requests received from other FIUs, but also in the increase in the number of suspicious transaction reports; no less than 7,460 reports of suspicious transactions were received through international communication networks in 2019.



Source: Authors` processing

Figure 4 Romanian FIU and International FIUs cooperation

As it can see the number of international FIUs request received slightly increase , reaching in 2020 to the greatest number (399) instead the requests sent from Romania FIU reached almost double in 2019 compared to 2018, which shows an intensification of Romanian AML body activities.

3. CONCLUSIONS

Our study has achieved its proposed goal to determine the impact of recent changes in AML European directives, thus confirming that European regulations contribute to increasing the fight against money laundering as they are implemented in national legislation.

The growing number of indicators level that reflect the fight against money laundering is due to the increase in the number of obliged entities to prepare STR, diversification of facilities for electronic transactions, digitization of FIUs internal systems of analysis, filtering, information

processing, elaborated National Risk Assessment, staff training with responsibilities in this field and last but not least the legislative changes at European level transposed at national level including those regarding the tightening of the sanctions applicable in the field. Despite of this, the European laws in anti-money laundering fields still are not totally transpose in national laws and there is a lack of reliable statistics regarding AML measures.

In the context of common rules applied, collaboration between EU Member States is very useful and we recommend extending it from the transmission of information to knowledge of the case studies and investigative modalities used. In this way, best practice models can be adopted by all Member States, while respecting national specificities. Our future research will deal with National Risk Assessments, a requirement of EU Directives and case studies based on these.

Although, as we have shown, money laundering is not a new phenomenon, preventing and combating it has been the concern of international bodies and national authorities for only 20-30 years, and the way in which each state applies these concerns tends to it is increasingly becoming a basic criterion in the assessment by international bodies of the quality of the internal policies of states subject to specific evaluations. The results of this study support governmental and non-governmental entities by highlighting the effect of implementing European and national regulations against money laundering, in order to act accordingly.

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REFERENCES

- Achim, M.V. and Borlea, N.S. (2020). Economic and financial crime. Corruption, shadow economy and money laundering, Springer Nature Switzerland AG. <https://doi.org/10.1007/978-3-030-51780-9>
- Alkhalili, M., Outqut, M.H., Almasalha, F. (2021). Investigation of Applying Machine Learning for Watch-List Filtering in Anti-Money Laundering. IEEE ACCESS. Volume 9:18481 -18496. <https://doi.org/10.1109/ACCESS.2021.3052313>
- Belgian Financial Intelligence Processing Unit. 2019. 26th Annual Report 2019. Available online: https://www.ctif-cfi.be/website/images/EN/annual_report/ar-2019-en-final.pdf (accessed on march 3rd 2021).
- Bundeskriminalamt, Lagebericht Geldwäscherei 2019, Wien 2020. Available online: https://bundeskriminalamt.at/308/files/Geldwaesche_2019_20200623.pdf (accessed on march 3rd 2021).
- Chaikin, D. (2009). How effective are suspicious transaction reporting systems?. *Journal of Money Laundering Control*. 12 (3): 238 - 253. <https://doi.org/10.1108/13685200910973628>
- Cotoc Bodescu, C.N., Scheau, M.C., Achim, M.V. (2020). Anti Money Laundering Effectiveness from a Legal Framework Perspective in Romania and European Countries. In *Proceedings of 19th RSEP CONFERENCES*, pp. 16.
- Egmont Group. Available online: <https://egmontgroup.org/en/content/financial-intelligence-units-fius> (accessed on 1st of March 2021)
- Elgin, C. and Erturk, F. (2019). Informal economies around the world: measures, determinants and consequences. *Eurasian Economic Review* 9: 221-237. <https://doi.org/10.1007/s40822-018-0105-5>
- Estonian Financial Intelligence Unit. 2020. Yearbook 2019, Talin. Available online:<https://www.fiu.ee/en/annual-reports-and-surveys-estonian-fiu/annual-reports>, (accessed on 16th february 2021).
- Financial Analytical Office (FAU) the Czech Financial Intelligence Unit. 2019. Annual report 2019. Czech. Available online: <https://www.financnianalytickyrad.cz/zpravy-o-cinnosti.html> (accessed on february 2021)
- Financial Intelligence Analysis Unit Malta. 2020. Annual report 2019. <https://fiaumalta.org/wp-content/uploads/2020/06/Annual-Report-2019.pdf> (accessed on February 18th 2021)

Financial Intelligence Directorate SANS Bulgaria. 2019. Annual report on the activities. Available online: <https://www.dans.bg/en/msip-091209-menu-en/financialreports30052012-mitem-en> (accessed on January 20th 2021).

Financial Intelligence Unit - Zoll. German FIU. 2019. Annual Report 2019 Financial Intelligence Unit - Zoll. Available online: https://www.zoll.de/fiu_jahresbericht_2019_en (accessed on March 16th 2021)

FIU-the Netherlands, Annual Review 2019. Available online: https://www.fiu-nederland.nl/sites/www.fiu-nederland.nl/files/documenten/fiu-nederland_jaaroverzicht_2019_en_0.pdf (accessed on January 22nd 2021).

Gelemerova, L. (2008). On the frontline against money-laundering: the regulatory minefield. *Crime law and social changes*. Springer Verlag. 52 (1): 33-55. <https://doi.org/10.1007/s10611-008-9175-8>

Leite, G.S., Albuquerque, A.B., Pinheiro, P.R. (2019). Application of Technological Solutions in the Fight Against Money Laundering-A Systematic Literature Review. *Applied Science- Basel* 9: 1-29. <https://doi.org/10.3390/app9224800>

Lokanan, M.E. (2019) Data mining for statistical analysis of money laundering transactions. *Journal of Money Laundering Control* 22 (4): 753-763. <https://doi.org/10.1108/JMLC-03-2019-0024>

Mugarura, N. (2011). The institutional framework against money laundering and its underlying predicate crimes. *Journal of Financial Regulation and Compliance*. 19(2):174-194. <https://doi.org/10.1108/13581981111123870>

Oficiul National de Prevenire și Combateră a Spălării Banilor Romania. 2021. <http://www.onpcsb.ro/prezentare-onpcsb/raport-activitate> (accessed on April 27th, 2021)

Ponomarenko, V., Kyrkach, S., Pleskun, I., Lovynska, O.I. (2018). Risk-Oriented approach in the primary financial monitoring by banks. *Financial and Credit activity - Problems of theory and practice*. 3 (34):41-51. <https://doi.org/10.18371/fcaptp.v3i34.215357>

Polisen Swedish Police. The Financial Intelligence Unit Annual Report 2019. https://polisen.se/siteassets/dokument/polisens-arsredovisning/fipos-arsrapport/financial-intelligence-unit_annual-report-2019_webb.pdf (accessed on March 18th 2021)

Shaikh, A.K., Al-Shamli, M., Nazir, A. (2021). Designing a relational model to identify relationships between suspicious customers in anti-money laundering (AML) using social network analysis (SNA). *Journal of Big Data* 8: 1-20. <https://doi.org/10.1186/s40537-021-00411-3>

Șcheau, M.C. and Pop, Z. S. (2017). Methods of laundering money resulted from cyber-crime. *Economic Computation and Economic Cybernetics Studies and Reserch*. 51(1): 299-314.

Servicio Ejecutivo de la Comisión de Prevención del Blanqueo de Capitales e Infracciones Monetarias (SEPBLAC) Spain. Activity report 2018-2019. https://www.sepblac.es/wp-content/uploads/2020/09/Activity_Report_2018-2019_2.pdf (accessed on February 12th 2021)

The Council of the European Communities. 1991. Council Directive 91/308/EEC of 10 June 1991. Available online: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31991L0308:EN:HTML>. (accessed on 1st of March 2021)

The Financial Crime Investigation Service Lithuania. 2019. Money Laundering and Terrorism Financing Prevention Report <http://www.fntt.lt/data/public/uploads/2020/10/money-laundering-and-terrorist-financing-prevention-activities-of-the-financial-crime-investigation-service-in-2019.pdf> (accessed on March 21st 2021)

Unit for Combating Money Laundering (MOKAS). 2018-2019. Annual report 2018-2019. Cyprus. Available online: [http://www.law.gov.cy/law/mokas/mokas.nsf/B6860BF4E952069AC2257BDD0042692F/\\$file/MOKAS-2018-2019_ENG.pdf](http://www.law.gov.cy/law/mokas/mokas.nsf/B6860BF4E952069AC2257BDD0042692F/$file/MOKAS-2018-2019_ENG.pdf) (accessed on February 2021)

Viritha, B., Mariappan, V., Haq, I.U. (2015). Suspicious transaction reporting: an Indian experience. *Journal of Money Laundering Control* 18 (1): 2-16. <https://doi.org/10.1108/JMLC-11-2013-0046>

Yasaka, N. (2017). Data mining in anti-money laundering field. *Journal of Money Laundering Control*. 20 (3): 1-13. <https://doi.org/10.1108/JMLC-09-2015-0041>; <https://doi.org/10.1108/JMLC-09-2015-0040>