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THE CRYPTOCURRENCY AML CHALLENGE – SANCTION 2022 NEW THREATS

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Purpose: Paper reviews changes taking place in the cryptocurrency market after the introduction of further sanctions on the Russian financial market. The author notes that cryptocurrencies are used more and more often by companies operating in Russia. The cryptocurrency market remains largely beyond control despite the AML area. It is a source of many threats of money laundering. The paper recapitulates the status of the global trade market choosing settlement cryptocurrency in the context of anti-money laundering.
Methodology: The analysis was based on reports on the market quotation of popular cryptocurrencies.
Findings: The paper includes definitions of new challenges for AML areas.
Practical implications: (if applicable) What outcomes and implications for practice, applications and consequences are identified? How will the research impact the business or enterprise? What changes to practice should be made as a result of this research? What is the commercial or economic impact? Not all papers will have practical implications.
Social implications: The application of the proposed solutions will improve the security systems of financial sector institutions.
Originality/value: The paper provides guidance on how to assess institutional capacity and support the anti-money laundering process.

Keywords: financial market, cryptocurrencies, AML.

Category of the paper: Viewpoint, conceptual paper.

1. Introduction

The harsh sanction imposed on Russian Federation after the attack on Ukraine and the resulting crash Russian international trade exchange has Russian companies scrambling to keep the financial liquidity running. At the outset, it is worth emphasizing that the assets of many companies are spread out among different coteries within the Russian establishment. There is a close link between security, political stability, and the economy. The current situation also poses a challenge to Kremlin.

It is reasonable to speculate that the Kremlin forces to move funds through smaller banks, transaction platforms and accounts of the elite not covered by sanctions, deal in cryptocurrency, and continue to deepen international cooperation with China. There are many uncertain factors in the cryptocurrency market. One of them is the geopolitical situation. Evidently, the market expects any new sanctions imposed on the Russian Federation may also affect on e-commerce area.

There are several ways to predict the cryptocurrency rate. Among these, we can mention, applying machine-learning algorithms, Bayesian probability, Bayesian linear regression, etc. (Shah et al., 2014, p. 409). This type of solution is perfect for sustainable and inclusive economic growth. The Russian invasion of Ukraine made the investment environment more uncertain.

The threat of uncontrolled cash flows may cause perturbations in global financial markets. The essence of cryptocurrencies is the mythical anonymity of their owners. The task of units responsible for counteracting money laundering is to identify the risk of using each means of payment in illegal practices. Central banks and financial supervision authorities perceive a threat to the stability of financial systems in trading cryptocurrency assets.

2. Legal status of cryptocurrency transactions

Nowadays cryptocurrency and other digital assets are considered to be a financial products. For this reason, authorities of states and international organizations introduce legal solutions. In 2015 Switzerland recognized the world's most popular cryptocurrency, bitcoin, as its currency. Thus, the purchase and sale transactions of Bitcoin in Switzerland were exempt from VAT (Wikarczyk, 2019, p. 154). This issue had not to be left without attention by the European Union institution because citizens of the European Union were actively investing in the Swiss cryptocurrency stock exchange. European Union law regulates the conditions for concluding transactions and strong consumer authentication. EU supervisors aim to propose for cryptocurrency service providers to collect information about transfers of cryptocurrency assets. It also allows supervisors to verify the correct application of Directive 2018/843 (AML V).

There is no single superior institution in the European Union responsible for monitoring cryptocurrency transactions. Regarding cryptocurrency transactions, every financial institution is obliged to comply with the standards set by the Financial Action Task Force (FATF). FATF is an international organization founded to combat money laundering. FATF issues recommendations or opinions on money laundering threats in the financial system. In 2014 FATF published a report *Virtual Currencies Key Definitions and Potential AML/CFT Risk* pointing following areas of cryptocurrency transactions threats:

1. high degree anonymity,
2. cross-border transactions and found transfers,
3. lack of central oversight.

All of the above-mentioned factors can facilitate the process of money laundering (FATF, 2014, pp. 9-14). Money laundering is the process of changing large amounts of money obtained from crimes into origination from a legitimate source. Money laundering also includes attempts to bypass sanctions on companies trading with Russia. Unfortunately, it is possible if cryptocurrency trading mechanisms are used.

From a technical point of view, the digital cryptocurrency system is entirely decentralized. It is based on peer-to-peer technology with no authorities oversight (Madam et al., 2015, p. 1). In turn, the common opinion cryptocurrencies are widely used for anonymous transactions. Each anonymous transaction carries a risk of money laundering.

Regulations and definitions of *anonymity* and status of cryptocurrency transactions used by local governments vary by country. The European Union Directive 2015/2366 (PSD2) defines the technical standards and authentication of transactions (applies to traditional transactions and third-party providers), in the United States federal law is open to interpretation for cryptocurrency status. It should be noted that in the United States, cryptocurrency transactions are a topic of anti-money laundering regulation depending on the person engaged in these activities (Holman et al., 2018, p. 28). Last year The People's Republic of China banned cryptocurrency trading and mining but Salvador adopt the most popular cryptocurrency Bitcoin as an official currency. In many respects, this is due to the difference of views of State authorities of various countries. In the European Union, the United States, Canada, Latin America States, Australia and New Zealand mining and trading of cryptocurrencies are legal. Depending on special circumstances, there may be certain conditions or limitations on the trading or mining of cryptocurrency. The November 2021 Library of Congress identified 42 countries, where are some restrictions on trading or mining cryptocurrencies and 9 which absolute bans on cryptocurrency transactions. Cryptocurrencies in Algeria, Bangladesh, China, Egypt, Iraq, Marocco, Nepal, Qatar, and Tunisia are prohibited (Regulation, 2021, p. 63). Interestingly, the status of cryptocurrencies in Ukraine and Russia was completely different before the war than it is today. The approach of both the Russians and Ukrainian authorities was very restrictive to cryptocurrencies. On 16 March 2022 Ukraine legalized the crypto sector by "On virtual assets Act". Russian Duma passed a bill to remove taxes on digital asset sales. Russia's Sber bank is preparing to launch a cryptocurrency provider platform and the Management othe f Russian Central Bank announcreatingeate the digital ruble (Anderesen, 2022).

One hypothesis suggests the idea behind cryptocurrencies was the creation of currency functioning outside of the main currency market. It is not surprising that exist some cryptocurrency exchanges that operate in countries that do not enforce anti-money laundering standards. When Russian troops invaded Ukraine, most of the West countries imposed sanctions. All of the western financial institutions (banks, payments institutions, and payments systems like Visa or MasterCard) blocked service to Russian financial institutions. The cryptocurrency trading restrictions in Russia are introduced very slowly. Popular cryptocurrency exchange *Binance* curbed services in Russia.

Ongoing discussions about cryptocurrency and sanctions raise several legislative initiatives. The most important is the project of *Potential sanctions Evasion with cryptocurrency* with was reported in American Congress in May 2022. Some members of Congress have expressed concern that sanctions may be bypassed by cryptocurrency transactions (Busch et al., 2022, p. 1). According to the U.S. Secretary of Treasury Janet Yellen Russian “sanctions, evasion using cryptocurrency exchange has likely been limited in scale”. It is worth asking what it really means and how it is possible that The Congress of the United States consider additional oversight to a global cryptocurrency exchange. It is a lot of doubt, but you can read about some proposals for new resolutions in the *Congressional Research Service*. Some of them assume increased supervision of cryptocurrency transactions in light of concerns about their use in evading sanctions by Russian business entitles (Busch et al., 2022, p. 3).

In March 2022, the governments of Western countries considered an attempt to bypass the sanctions Russian suggestions of using payments for gas and oil contracts in cryptocurrencies for settlements. On March 11th Ukrainian vice-Prime Minister Mykahailo Fedorov urged crypto coins companies to stop all dealing with Russians. The concerns and appeals of the Ukrainian authorities in this matter may suggest that it would indeed be possible to use cryptocurrencies in inter-state settlements.

The new legal status of cryptocurrencies is a response to the new threats arising from the use of this market. At the same time, it is part of the progressive deglobalization process. Russia’s exclusion from the international system SWIFT resulted in the adoption of new transaction solutions used by that country. The question is whether the international trading partners of Russian companies use cryptocurrencies in their settlements?

3. Analysis – cryptocurrency fluctuation rate

The most effective method of examining the effect of economic sanctions imposed on the Russian Federation on the cryptocurrency market is to compare the values of the most popular cryptocurrencies with the dates of sanctions imposed by Western countries.

Table 1.
The impact of sanctions on the cryptocurrency rate

The Sanctions timeline	Entity introducing sanctions	Cryptocurrency (closing rate in USD)		
		Bitcoin	Ethereum	Tether
February 22nd 2022	USA	38248,2	2569,19	1,0007
February 23rd 2022	Australia	37224,6	2637,38	1,0006
February 24th, 2022	UK	38339,2	2596,52	1,0008
February 24th, 2022	USA	38339,2	2596,52	1,0008
February 25th 2022	EU	39209,6	2767,53	1,0007
February 28th, 2022	UK	43188,2	2922,50	1,0003
February 28th 2022	EU	43188,2	2922,50	1,0003
March 1st 2022	Canada	44420,3	2975,81	1,0005
March 2nd, 2022	SWIFT(*)	43912,8	2947,14	1,0004
March 2nd 2022	EU	43912,8	2947,14	1,0004
March 2nd, 2022	USA	43912,8	2947,14	1,0004
March 9th 2022	EU	41929,0	2726,94	1,0004
March 15th 2022	EU	39285,7	2617,43	1,0005
April 8th, 2022	EU	42275,0	3193,93	1,0003
April 15th 2022	USA	40560,0	3042,01	1,0002
June 3rd 2022	EU	29700,9	1775,29	0,9994

The abbreviation used in the table: SWIFT – Society of Worldwide Interbank Financial Telecommunication.

Source: own studies based on cryptocurrency exchange investing.com.

Table 1 presents three cryptocurrencies important from the perspective of the theme area of the cryptocurrency market. Bitcoin is the most popular cryptocurrency in the World. Bitcoin's about 44% share of the market cap. Ethereum is considered a second-world cryptocurrency. Tether is a stablecoin cryptocurrency dependent on the USD exchange rate. Thether was very popular in Ukraine and Russian Federation before February 2022 (Salcedo, 2012, p. 18). As you can easily see, the erratic exchange rate fluctuations correspond with the introduction of sanctions. During the Covid-19 pandemic, bitcoin surged by 300% in 2020 in amid speculation (Asumandu et al., 2022, p. 1). Nowadays, the price of Bitcoin and other cryptocurrencies had been dropping, as a result of major turbulences in geopolitical situations for a few decades. There are several sources of this process: investors choose other assets including real estate, commodities and other financial derivatives, inflation after the Pandemic, increasing the interest rate in many countries, and unbound for participation in the issuance of treasury bonds. This could lead to the conclusion that investors look to alternative assets. Changes in the value of cryptocurrencies, especially at the turn of February and March, should be combined with attempts to find alternative payment methods in the ongoing deglobalization process. The current loss of value in the cryptocurrency market may be the result of the actions of Western financial supervision authorities. There is no need to have any particular knowledge of economics to be able to say with certainty that investors had tried to get out of the ruble after its devaluation after all the sanctions at the turn of February and March (Layócsa et al., 2022, p. 14). Then, on the other hand, some people used cryptocurrencies transaction to donate money to the Ukrainian authorities. This only a few factors to cryptocurrency prices.

3.1. The Global Cryptocurrency market

Over the past months, there has been visible depreciation in the value of the cryptocurrency market on exchanges registered in countries subject to the procedures of FATF. This depreciation is influenced by new bills in Western countries. It seems that Western countries' governments and Western Centrals banks will seek to reduce investor interest in the uncontrolled cryptocurrencies market.

Table 2.
The market capitalization of cryptocurrencies

Month	Capitalization of cryptocurrencies (*)	
	2021	2022
January	no data	1748709515429
February	no data	1907002943263
March	no data	2077441880313
April	2198493278845	1692783578175
May	1545927527216	1312526898752
June	1451160927970	862901100470
July	1646869293286	no data
August	2098985079356	no data
September	1929190389957	no data
October	2629910228133	no data
November	2626093789247	no data
December	2192936746699	no data

Capitalization of cryptocurrencies at the end of the month in USD.

Source: own studies based on cryptocurrency exchange investing.com.

In theory, it can be seen that the cryptocurrency market has depreciated so investors should lose interest in such transactions. It can be forgotten that international settlements by cryptocurrencies are still possible and transfers are made very quickly. The question is whether the Russian term "friendly countries" can also mean countries in whist Russian companies also make cryptocurrency transactions? This can be done in countries where both Russia and China are important parts of the economy or defense policy

3.2. Identification of new threats in the Anti-money laundering area

Cryptocurrency providers facilitate a quick exchange of one asset into another by orders on behalf of users. These transactions are difficult to trace. In practice, many providers do not use any KYC (Know Your Customer) procedure. KYC is a process that identifies a customer's activities and nature by verifying identity, suitability, and risks. Russia's exclusion from the international payment system has resulted in the creation of a new underground settlement system. The main task of the AML areas will be the identity verification of cryptocurrency investors. An important task will also be the introduction of legal solutions preventing the functioning in the Western world of assets dependent on political decisions made by-non democratic countries. Cryptocurrencies can be something of an economic weapon. From an economic point of view, without coverage, based solely on political guarantees.

It is necessary to implementation two solutions, in order to verify threats cryptocurrency frauds. The simplest is implementation to cryptocurrency markets of traditional methods of detecting fraud in interbank settlements. It can be simple demographic data (name, surname, identification number of the natural or legal person. In order to determine the beneficial owner of a given transaction. Correct indication of the beneficial owner may be difficult in the case of complicated settlements on the cryptocurrency exchange. It appears that in recognizing the threats of cryptocurrency frauds, the use of customer identification methods based on behavioral data might help. It can be assumed that a criminals using cryptocurrencies are apparent anonymity. For this reason it is better to try to identify suspicious behavior that can be linked to money laundering. On cryptocurrency exchanges, you can theoretically create an infinite number of user accounts and this carries the risk of using the *smurfing* – paying small amounts from many users, the funds posted from the account to the account are de facto to be on the account of one user, the real beneficiary. Another threat that AML teams must pay attention to is *transferpricing*, overstating or underestimating the value of given assets during the transaction. A sudden change in the value of an asset is always suspect. Especially suspicious transactions should be compared in terms of time with the introduced sanctions because cryptocurrencies are the weakest link in the global settlement system.

4. Conclusions

The relationship between the value of the leading cryptocurrencies and the geopolitical situation is obvious (Aysan et al. 2019, p. 516). Counteracting dirty money laundering via cryptocurrencies is an element of the security system of the Western world. Western countries likely have to introduce a cryptocurrency controlled by central banks. Already in 2020, the European Central Bank (EBC) was working on the introduction of the cryptocurrency version of the euro. This project was resumed and now is being run by EBC (Panetta, 2022). Therefore, the most dangerous threat to cryptocurrency transactions – the anonymity of users will disappear. The European Central Bank will have access to the data of users.

However, pending the implementation of these solutions Western financial systems will have to contend with threats of the flow from uncontrolled cryptocurrency exchanges to the traditional currency markets. A sudden inflow of financial resources may even lead to speculation with the less significant traditional currencies and increase inflationary factors.

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