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Cryptocurrency: Evidence from North Macedonia

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Abstract: *Cryptocurrency as a novel concept in finance, has lately attracted wide attention in the financial market. However, there is a divided opinion when it comes to embracing or ignoring them. Some are optimistic about their future, and others believe that the skepticism that surrounds them will strongly contribute to their disappearance from the market. The first part of the paper will give a brief background about cryptocurrencies and their associated advantages and disadvantages. The second part of the paper will focus on providing an overview of the cryptocurrency situation in North Macedonia, where they are currently unregulated. Since no legislation would protect consumers in case of fraud, the proper regulatory framework in this sphere is an urgent problem that requires immediate attention. Additionally, this paper will offer a small insight into other Western Balkan countries in this regard, where the situation is like in North Macedonia.*

1. INTRODUCTION

From a historical retrospective, the currency has always been evolving. It all started from gold and silver into metal coins and then eventually to paper or fiat money, used in today's economy. The fiat money is supplied by a country's central bank and protected by the government through regulations and laws, establishing the trust and value of the same.

However, recent digital developments and advancements led to the evolution of the currency over again. The late explosion and bust of virtual currency markets around the world have hit the financial system and institutions, placing cryptocurrency in a significant position in the portfolios of the financial market participants. The first triumphant cryptocurrency that changed the physical dimension of the currency was Bitcoin, created by Satoshi Nakamoto back in 2009. This led to the creation of thousands of other cryptocurrencies in the years that followed, surpassing 8.000 in 2021.

The abrupt invasion of cryptocurrencies in the financial markets created chaos for the regulatory bodies, who are still struggling to formulate policies and the proper legislation. Part of the reason behind this is the complex nature of cryptocurrency, but also the advantages and disadvantages that surround the same. This is particularly true in the case of developing countries such as North Macedonia, where regulators are still trying to figure out how to regulate, tax, and control cryptocurrency.

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2. BRIEF BACKGROUND ON CRYPTOCURRENCY

Though there is yet no strict definition of cryptocurrencies, in the latest research they are defined as a digital representation of value, not issued by a regulating authority, which does not exist in physical form, and in certain cases can be used as an alternative to money (European Central Bank, 2015). Cryptocurrencies use complex cryptography which allows for the creation and processing of digital currencies and transactions across decentralized systems. This is one of the main features that make them difficult to counterfeit (Sovbetov, 2018). They typically work through blockchain technology, a public ledger distributed over a network that records transactions executed among network participants, and serves as a public financial transaction database (Gatteschi et al., 2018).

The invention of cryptocurrencies began as an act of insubordination against the corruption of the traditional financial system. For a variety of reasons, these trends gained popularity after the global financial crisis a decade ago. After the crises, people stopped trusting financial institutions and shifted their attention to the use of cryptocurrencies as a substitute for traditional money (Goriacheva et al., 2017). In 2008, Satoshi Nakamoto, an anonymous creator, presented the world with Bitcoin, the first form of cryptocurrency that received serious attention (Nakamoto, 2008). With operations built on peer-to-peer information exchange technologies, Bitcoin is the trailblazer of many of the standards for digital currency (Mitchel, 2019). The code of this currency is a product of computer-based complex mathematical equations, which limits the number of possible Bitcoins to 21 million coins. This can be considered as an advantage of Bitcoin over other official currencies, whose new emissions are impacted by their depreciation and inflation, whereas the Bitcoin rate is determined by the ratio of demand and supply (Zahorodniy & Partyn, 2018).

Currently, more than 8.000 different types of cryptocurrencies are being traded worldwide. Apart from Bitcoin, there are various other types of virtual money which are referred to as an altcoin. Many altcoins have been developed to fix the shortcomings of Bitcoin. Initially, there was no great interest in altcoins, but as time went by, the views on cryptocurrency changed, thus more and more people started investing in all sorts of digital currencies (Zhao, 2015).

Table 1. Top 5 cryptocurrencies market capitalization

		January 2021		November 2022		
N.	Currency	Price	Capitalization	N.	Price	Capitalization
1.	Bitcoin (BTC)	$35.724	$667.320.519.657	1	$16.600	$319.337.757.181
2.	Ethereum (ETH)	$1.229	$140.576.634.356	2	$1.196	$146.446.263.414
3.	Tether (USDT)	$1.00	$24.333.048.444	3	$.99	$65.880.684.724
4.	Polkadot (DOT)	$16	$15.099.931.127	10	$5.5	$6.314.307.112
5.	XRP (XRP)	$0.2772	$12.555.994.634	7	$0.38	$6.314.307.112

Source: (CoinMarketCap, 2021)

Generally, the main ways to invest in cryptocurrency are the following (Bondarenko et al., 2019): (1) Trading – buying and selling through cryptocurrency exchanges. This method is recommended to more experienced investors; (2) Mining – the use of powerful computing to create the cryptocurrency. This method is generally safe but less profitable; (3) Cloud Mining – the purchase of computing power for rent; (4) Initial Coin Offering (ICO) – release of cryptocurrency, a process through which you can raise funds for the development of the project. This method is the most profitable, but with a higher associated risk.

3. THE LEGALIZATION OF CRYPTOCURRENCIES

Regulators in various countries have yet not established a consensus in determining the legal status of cryptocurrencies, leaving cryptocurrency transactions in a grey area. Generally, most of the countries have initially issued government warnings about the dangers and risks associated with investing in the cryptocurrency markets, stipulating the fact that many of the organizations that facilitate such transactions are unregulated. A few countries have further updated their laws on Anti-Money Laundering (“AML”) and Combating the Financing of Terrorism (“CFT”) to include cryptocurrency markets, and instructed the financial institutions that facilitate such markets to pay attention to the same. Some countries have imposed restrictions, or entirely banned investments in cryptocurrencies, as well as, barred financial institutions from facilitating transactions that involve cryptocurrencies (The Law Library of Congress, 2018). Below you can find a summary of cryptocurrency regulation across a few countries around the world:

Table 2. Cryptocurrency regulation in certain countries

Country	Cryptocurrency Status	Regulatory Framework
Australia	Property	• In 2017, the government enacted a bill that made digital currencies subject to the AML/CFT regulatory framework. • Taxed as an asset for capital gains.
Canada	Virtual commodity	• In June 2014, amended Canada's Proceeds of Crime (Money Laundering) and Terrorist Financing Act, to include virtual currencies, including Bitcoin. The Act is regarded as the world's first national law on digital currencies, and certainly the world's first treatment in the law of digital currency financial transactions under national anti-money laundering law. • Subject to income tax.
U.S.A.	Property, Currency, Investment instruments	• The responsibility for monitoring cryptocurrencies lies on a state level. Cryptocurrencies fall under the regulatory scope of the Bank Secrecy Act (“BSA”). This implies that cryptocurrency exchange service providers must get a license from Financial Crimes Enforcement Network (“FinCEN”), and adhere to AML/CFT regulations. Furthermore, The US Securities and Exchange Commission ("SEC") treats cryptocurrencies as securities and suggests that securities laws are applicable. • Taxed as property. Payment of wages in cryptocurrencies is subject to income tax and salary tax, and payments in cryptocurrencies to independent contractors are taxed by applying the self-employment tax.
China	Virtual Commodity	• In March 2018, China’s central bank – The People’s Bank of China ("PBOC"), banned any existing virtual currencies. Previously, in 2017, it also banned ICOs and domestic currency exchanges.
Japan	Property	• Cryptocurrency exchange businesses are regulated with the amendment of the Payment Services Act, which took effect on April 2017. Additionally, cryptocurrency exchange businesses are required to comply with AML/CFT obligations. Japan has one of the most progressive regulatory frameworks. • Subject to income tax – treated as miscellaneous income, rather than capital gains.
Switzerland	Property, Payment token	• Regulated by Financial Market Supervisory Authority (“FINMA”) in 2017. AML/CFT regulations are applicable. • Subject to wealth tax – taxed as foreign currency.

UK	Crypto-asset	• The United Kingdom does not have any laws that specifically regulate cryptocurrencies. • Corporations are subject to corporate tax, unincorporated businesses to income tax, and individuals to capital gains tax.
European Union	Financial Instruments	• Currently, European Union has no general regulatory framework related to cryptocurrency. On September 24th, 2020, the EU Commission published a proposal for the regulation of crypto assets: the "Markets in Crypto-Assets Regulation" ("MiCA"). Once adopted and in place, it will be applicable in all EU member states. • Meanwhile, some countries have defined the status of cryptocurrency for taxation purposes. In Bulgaria, cryptocurrencies are taxed as financial assets, whereas, in Denmark and Spain they are subject to income tax.
Bolivia, Morocco, Nepal, Pakistan & Vietnam	N/a	• Ban all activities involving cryptocurrencies.
Bangladesh, Iran, Thailand, Lithuania, China & Columbia	N/a	• Indirect restrictions barring financial institutions within their borders from facilitating transactions involving cryptocurrencies.

Source: (The Law Library of Congress, 2018), (Cvetkova, 2018), (Bolotaeva et al., 2019), (EUR-Lex, 2020)

The acceptance of cryptocurrency appears to be linked with the state of development of a country. Developing countries with weak economies are not quite ready to introduce such payment systems, whereas developed countries are very interested in regulating and taxing the same (Drozd et al., 2017). Additionally, in a few developed countries, central banks are assessing the possibility of introducing a widely accessible Central Bank Digital Currency ("CBDC") into their economies. Currently, two CBDC models are in discussion: a retail CBDC and a wholesale CBDC. In terms of retail CBDC, the Riksbank in Sweden has launched a pilot project to determine the viability of an eKrona for retail payments, though no decision on technology has been taken so far. Another example of a retail CBDC is the Fedcoin, which was proposed in the US in 2014, but the concept has not been endorsed by the Federal Reserve. On the other hand, an example of a wholesale CBDC is the CADcoin in Canada, which has been used in simulations performed by the Bank of Canada in cooperation with Fintech firms and Canadian banks but has not been put into practice yet (Bech & Garratt, 2017).

4. EVIDENCE FROM NORTH MACEDONIA

Recently, cryptocurrencies have become a mainstream topic everywhere, including in North Macedonia. Due to the possibility of quick earnings, this type of investment is increasingly attracting the attention of citizens. In North Macedonia, the segment of cryptocurrency is not yet well regulated by law, thus, in case of fraud, there is no way to get compensated for the associated losses. If citizens get involved in this activity, they are doing it at their risk.

Currently, there is no official cryptocurrency company operating in North Macedonia. The same goes for Albania and Bosnia & Hercegovina. The only countries that have allowed the establishment of cryptocurrency companies in the Western Balkans are Kosovo[3], Montenegro, and Serbia.

[3] Under UN Security Council Resolution 1244/99.

Table 3. Active cryptocurrency companies in Western Balkan

Albania	N/A
Bosnia and Hercegovina	N/A
Kosovo*	Lyocha
Montenegro	Digital Montenegro, Coinmetro
North Macedonia	N/A
Serbia	Round Globe Technologies, ECD, Tradecore, Ulticoin, YourBTMs

Note: *Under UN Security Council Resolution 1244/99

Source: Adapted from (The World Bank Group, 2020)

The National Bank of the Republic of North Macedonia ("NBRM") actively monitors the views of the regulatory bodies of the EU regarding cryptocurrencies and their handling. According to the European Banking Authority ("EBA") and the European Securities and Markets Authority ("ESMA"), cryptocurrencies can rarely be treated as financial instruments and/or electronic money. In most cases, they are not covered by laws in the financial field. In the absence of regulation, the usual safeguards that apply to regulations in the financial sector do not apply to cryptocurrency, therefore consumers are at great risk. The current legal framework in North Macedonia (Law on Payment Operations, Law on Banks, Law on Foreign Exchange Operations, Law on the Unit of Currency in the Republic of Macedonia, as well as the Law on the Use of the Unit of Currency in the Republic of Macedonia) does not recognize the term cryptocurrency or digital asset, which is the case with most of the countries around the world.

Furthermore, according to NBRM, the general views on cryptocurrencies are in line with those of European financial regulators. It points out that cryptocurrencies do not have the status of deposits, and there is no mechanism in which clients can be reimbursed through the Deposit Insurance Fund, as in the case of funds invested in banks that have licenses for establishment and operations. Following the Law on Payment Operations, all payments are made in denars through the transaction account of the participant in the payment operations of the country. In rare cases, cryptocurrencies may be treated as electronic money, provided that several criteria are met, such as being issued by an authorized electronic money issuer. If cryptocurrencies have an investment nature in the background, i.e. are subject to trading on regulated platforms in the country and abroad by authorized participants, in that case, they can be considered financial instruments.

The first time that the NBRM officially addressed the public on cryptocurrencies, was right after the ONECOIN scandal in 2016, which turned out to be a classical pyramid scheme. It is believed that this announcement came as a result of the news regarding the London financial police launching an investigation into this cryptocurrency, for which NBRM had enough reasons to believe that it is bought a lot by Macedonian citizens. The launch of this investigation was a sufficient reason to stop any operations of this cryptocurrency in the country. NBRM used this opportunity to remind the public that the old Law on Foreign Exchange Operations somehow applies to cryptocurrencies, forbidding Macedonian citizens from having an account abroad and trading on foreign stock exchanges, i.e. forbidding any kind of investment in digital assets. Furthermore, they warned the public about the risks associated with investing in cryptocurrencies, such as the risk of loss of the invested money, the risk of fraud, the risk of volatility, and the risk of blocking certain cryptocurrency platforms due to activities related to money laundering and terrorist financing (NBRM, 2016).

In 2017, NBRM addressed the public with another official statement, as a follow-up to the previous announcement. Once again, they highlighted the dangers of cryptocurrency and warned people to stay away from possible pyramid schemes. Nevertheless, cryptocurrencies are actually traded and mined unofficially in North Macedonia, and so far there has been no case of legal action against someone who participated in these activities. This questionable legal framework has led to the formation of an informal local market of cryptocurrencies.

In 2019, the Ministry of Foreign Affairs announced the "Decision on the transition to the second phase of the association between the Republic of North Macedonia and the European Union". This implied that part of the legislation that was in force during the first phase (2004-2018) ceased to be in force and capital markets were partially liberalized, i.e. the ban on investing in real estate abroad, the ban on investing in securities, etc. were abolished. Additionally, this also implied that the announcements that were made previously by NBRM ceased to apply as well. The grey zone surrounding cryptocurrencies finally became white. However, the risks NBRM warned about were real, leaving citizens to decide whether they accept cryptocurrencies. According to recent announcements, cryptocurrencies will soon be regulated by law in North Macedonia. The Ministry of Finance, the Financial Intelligence Office ("FIO"), and other financial regulators are in the process of determining the solutions to this issue, which will be implemented in the new Law on Prevention of Money Laundering and Financing of Terrorism (FIO, 2020).

The situation is pretty similar in the rest of the Western Balkans. The table below presents a synopsis of the regulatory framework related to crypto assets.

Table 4. Crypto Assets/ICO-s

Albania	Kosovo*	FBIH	Republic of Srpska	North Macedonia	Montenegro	Serbia
Permitted, Prohibited, Unclear						
Unclear (New law is in the legislative procedure)	Prohibited	Unclear	Unclear	Unclear	Unclear	Permitted
Unregulated, Regulated, Unclear						
Unregulated (New law is in the legislative procedure)	Unregulated	Unregulated	Unregulated	Unregulated	Unregulated	(Partially regulated AML/CFT supervision)
The remit of the Central Bank/Banking Agency						
No	No	No	Unclear	Unclear	Yes (via AML/CFT regulations)	Yes
The remit of the Securities Regulator						
Yes	/	Unclear	Unclear	Securities Commission	Unclear	Yes
The remit of another designated regulator						
		Federal Ministry of Finance				
Licensing						
Not applicable yet	Not applicable yet	Not applicable yet	Not applicable yet	Not applicable yet	Via AML/CFT regulations (issuance/ exchange)	Not applicable yet
Number of firms that applied to regulators (including potential market entrants)						
/	/	/	5	/	/	10

Note: * Under UN Security Council Resolution 1244/99

Source: Adopted from (The World Bank Group, 2020)

According to the research conducted by the World Bank, most of the regulators claimed that crypto-assets are not regulated in their jurisdiction. Exceptions in this regard are Albania - which has already submitted the new Law on Financial Market based on Distributed Ledger Technology (DLT) to the Parliament for approval, and Serbia - where the National Bank has reported that AML/CFT regulations apply to cryptocurrency activities. Additionally, in Montenegro, the AML/CTF regulations imply that some crypto asset intermediaries are subject to licensing obligations by the Central Bank.

5. FUTURE RESEARCH DIRECTIONS

Having in mind that cryptocurrencies are still the focus of speculative investors, large capital movement, and the association with illegal actions, cryptocurrencies can pose great financial aggregate risks, thus urging for further research on several topics. *First*, the literature should work harder on resolving the motives for investing in crypto assets. In that sense, there should be a differentiation between crypto assets as an investment and as a medium of exchange. Furthermore, such findings will help to get to know better the factors determining the value of cryptocurrencies. *Secondly*, the literature should define the proper way to regulate the possession and usage of crypto assets, especially if one knows that large capital movements can be toxic for small and open economies. Moreover, the governments will have more solid conclusions when designing the regulation acts. *Third*, the research should prove the level of financial literacy is crucial to lowering the aggregate financial risks, and proper usage of financial instruments and services. And fourth, but not final, literature should find an argument for central banks or big and well-established financial institutions to use blockchain and Fintech more widely.

6. CONCLUSION

Cryptocurrency is a relatively new concept in the financial market and as such, it is surrounded by suspicion, mistrust, and skepticism. Although it seems like a promising alternative to traditional assets, the number of disadvantages associated with it is very high. Governments around the world are still struggling to establish the appropriate regulatory framework because of the complex nature of cryptocurrency.

The majority of the countries have addressed the citizens by issuing government statements related to one of the following: warning about the risks associated with investing in cryptocurrency markets, restrictions, or entire ban of investments in cryptocurrency, and facilitation of cryptocurrency transactions. Developed countries that have attempted to regulate cryptocurrency have mainly done so by updating their AML/CFT & tax laws and regulations.

In North Macedonia, similar to other developing countries, there is still no appropriate regulatory framework. This has led to the formation of an unofficial market of cryptocurrencies, where citizens participate at their own risk. However, according to recent news, cryptocurrencies will soon be regulated by the new Law on the Prevention of Money Laundering and Financing of Terrorism. This is especially important because when cryptocurrencies are not regulated and the country has no insight into who buys and sells them, they can be easily abused, especially for illegal activities.

However, it is hard to determine what the future of cryptocurrency holds, whether they will evolve and replace traditional currencies, or become entirely obsolete. With its potential for either becoming tremendously successful or unsuccessful, thorough research is recommended for anyone interested in pursuing an investment in the same.

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