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Central Bank Digital Currencies: To issue, or not to issue, that is the question- Legal and Economic Implications in the EU and, the Albanian Perspective

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ABSTRACT: This research paper aims to serve as an added value to enrich the literature regarding the Central Banks Digital Currency and all its possible implications impacting the financial system. Our focus is on analysing CBDC from different perspectives, by analysing the motivations and concerns that lead countries with different economic conditions to introduce for their public this innovation as well as, to analyse the implications it poses due to significant fields of banking sector at whole, in terms of commercial banks, monetary policy of central bank or all the spikes that may happen in financial stability. The imminent allocation of crypto currencies has been the catalyst which has prompted Central Banks of various countries in Europe and beyond, to launch complex studies focusing on the implementation of macroeconomic policies in the context of digital currency issued by Central Banks. In prima facie overview, this process will be accompanied by various challenges, ascertained these challenges in the economic field but also in the legal one. This research paper, inter alia, aims to analyse the legal regulatory framework at the level of the European Union, taking into account the potential implications, material and procedural difficulties as well as, the economic effects that may derive from the issuance of digital currency issued by Central Banks. Along with analysation of EU legal framework in this research paper shall be analysed also the perspective of the Republic of Albania, as a candidate country for membership in the European Union which has the obligation to harmonize legislation with the aguis communiter.

KEY WORDS: digital currency, central bank, CBDC, European central bank, legal framework.

INTRODUCTION

The recent trends of Bitcoin and its broad popularity in public as well as the significant decrease of cash usage has influence central banks all over the world to think about all these activities and

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how these trends have impacted the role of central bank. ¹In this context central banks are making researches if they need to implement a form of digital money that is broadly accepted as central bank digital currency (CBDC). ²So far, the banking system has only been recognized with two forms of money issued by central bank. These types of money are presented to the public as cash and reserve deposits. The public is authorized to use these forms of money through commercial banks. Specifically, the public has the right to use only cash which they can use through their bank accounts in commercial banks.

The situation *ut supra* mentioned can change if the central bank decides to implement a digital currency issued by the central bank.³ In this regard, public relations and access to money will be directly affected because the digital currency issued by the central bank will be another form of money.⁴ Implementation of a CBDC would lead to a competition between the forms of money mentioned above. The public will most likely have a choice and based on their characteristics will choose the money that best suits their needs.⁵

The tremendous progress that technology has made recent years has changed several fields of economy with its impact. A huge development is done in terms of innovation in the financial sector. There are several theories about pros and cons that innovation may contribute in a society because technology may initiate progress as well as, it may be a factor for adverse effect in economy. The financial system has faced these questions as well as problematic conditions that new area of digital currencies introduced as crypto currencies has appeared.

There are many 'technical' issues with CBDC emissions. Within the scope of this paper, one of the issues, lies in the area of legal restrictions related to the Central Banks' right to issue digital currencies and the question that arises over the legality of the CBDC as a method of payment. Thus, a very important issue is whether central banks are legitimate to issue CBDC? Considering that most of the legislation for the creation of central banks was created before electronic money and crypto currencies, this issue is not a surprise for researchers in this field. From a formal material point of view, central banks cannot issue their own electronic currencies until the relevant legal amendments have been made in this regard. Amendments to banking legislation, but not only, which will need to be implemented, will require cooperation from the legislature as well as from the banking sector specializing in monetary policy. Legal differences in the framework of CBDC regulation in different countries can lead to a reorganization of resources, especially at the

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¹ Dyson, B., & Hodgson, G. (2016, January). Digital cash: Why central banks should start issuing electronic money. Retrieved November 29, 2019, from Positive Money website:

 $https://positive money.org/wpcontent/uploads/2016/01/Digital_Cash_WebPrintReady_20160113.pdf$

² Idem

³ Grym, A. (2018). The Great Illusion of Digital Currencies (Vol. 1). Retrieved from: https://helda.helsinki.fi/bof/bitstream/handle/123456789/15564/BoFER2018.pdf? sequence=1&isAllowed=y

⁴ Idem.

⁵ Idem.

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time of financial inflows. Thus, the monetary authorities of the various states should coordinate their work in the context of amending the legal regulatory framework for the implementation of the CBDC.

The Economic perspective of CBDC.

Basic Concepts of CBDC.

Digital method of money is the new era that has appeared as a consequence of rapid technology in the world and served for the public as a necessary tool for making transactions. There are various definitions of digital money by recent researchers as a need for the trend of nowadays to become familiar with these methods. In the report published by CPMI (2015) digital money is explained as "a value saved electronically in an electronical device", and has introduced a categorization of digital money. The first group of legalized electronical money means e-money that is controlled by central bank and regulated by law and, the second group belongs to the crypto assets that has no regulation and can be only be denominated in their own unit of values.

Crypto- assets are used for general payments among two parties, who's their identity is unknown, for various purposes and cross-border ways in an easy way. The main characteristic of e-money types, is that they are not necessary linked with a particular account as it works in traditional banking systems when transfers are processed. The way how e-money works is that all information is encrypted and transferred as crypto codes. Other forms of e-money can be processed via internet through devices like smartphones. Digital currencies are categorized in the market as soft currencies and hard currencies which have special features that distinguish from each other. PayPal and credit cards are known as soft currencies because they have the ability to authorize the cancelation of transaction made in the event of possible fraud by third parties. While, the ones that are considered as hard currencies are those which authorize only the non-reversible transactions. Hard currencies used in general by public are Bitcoin or Western Union. Virtual currencies are considered as a form of digital money that is uncontrolled by law but is implemented and secured by its own developers from the virtual community that are part of (ECB, 2012). This method of digital money is available only through internet and have comparable features to physical traditional currency event though the mechanism used is not the same and have big differences in this context. Another definition of digital money is done by EBA (2014) which state in the published report that digital money is used as manner of payment, it has the ability to be transferable and to be traded via electronic way confirmed by different not necessarily legal persons or entities. It is also conducted in the report that digital currencies cover both categories as virtual currencies as well as the crypto-currencies. The increasing trend of crypto currencies has contributed as an emergence for well-known companies such as Apple or Dell etc., to include in their method of payments the method through digital currencies.

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Differences between Digital money vs. CBDC.

The crypto currencies have its own features that make difference in comparison with other digital methods of money. ⁶To begin with, the first characteristic that distinguish crypto currencies from other digital e-money is that crypto currencies are not centralized and controlled by an institution or legal authority. According to CPMI (2015), crypto currencies, in financial terms are not defined as liabilities of a certain institution while other forms of digital money usually are considered as liabilities of balance sheets that belongs to the issuers that authorize them to operate and, in this manner, allow other components to take part on the action. ⁷

The digital currencies should be collateralized as by legal authorities or central banks individual basis with a fiat currency in order to avoid the risk that may be posed by presenting a new currency on the market to the public. ⁸Along with the perspective of ING, also another researcher Preiss (2018) in his study concluded that the main distinguish that stands between these two forms of emoney is that CBDC are e-money issued by central banks and in this regard CBDC are the liability under an obligation to central bank while in terms of crypto currencies this thing do not happen. ⁹ Policymakers often compare crypto currencies as the new gold because of both similarities that will be examined as follows. As for safety, both, gold and Bitcoin (digital money) are very safe because gold is very hard to replace it as another one type of fake, as well as it is difficult to steal it. In the same logic, thanks to the technology that makes it available to operate, Bitcoin is very hard to be replaced in an improper way because it is encrypted. ¹⁰

Gold and Bitcoin are the same even in terms of rarity because both are known as limited "resources" but it is unknown yet which will be the first that will be disappear and cannot resist the actual market. As for the value that characterize both gold and Bitcoin is nearly the same because gold has been used since the beginning as a valuable materia used for jewelleries, or as a medium of exchange with a high value. The same logic is nowadays with Bitcoin which has filled the banking sector gaps in terms of payment transactions that has helped users to send transactions worldwide without many necessary data's.

Both are volatile in terms of its price but Bitcoin is more trust less comparing with gold taking into account its value in its begging which was very high, nearly \$25,000 per coin while later it decreased drastically, such a thing is rare to happen with gold. After all this similarity it is

⁶ Nian, L., & Chuen, D. (2015). Introduction to Bitcoin. Handbook of Digital Currency, 5-30. Retrieved from: https://www.researchgate.net/publication/285601622_Introduction_to_Bitcoin

⁷ Idem

⁸ ING (2018)

⁹ Preiss, R. (2018). National Government Digital Currencies Versus Globally Distributed Cryptocurrencies: in Depth. Retrieved from: https://cointelegraph.com/news/national-government-digital-currencies-versus-globally-distributed-cryptocurrencies-in-depth

¹⁰ Idem.

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important to mention that if data of crypto-currencies usage continue to grow this poses a significant risk for monetary policy because it can be identified as a car without driver which let to be understood very bad consequences for the economy and not only. Here comes the benefit of CBDC that in the same context can be called as a car with a driver in to direct the appropriate direction. By studying the economy and its aggregates we can say that a significant impact is also in terms of inflation related to CBDC issuance. Let us explain the dynamics of this impact through the following formula.

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DR = DN- (p \times Bt-1)

DR = (Expenses - Income) + I \times Bt-1 - (p \times Bt-1)
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The objectives of a government are related to full employment; price stability, adequate rates of long-term growth, balanced regional development as well as a balanced balance of payments. When there is a budget deficit then we say that expenditures are greater than revenues and thus the government can solve it by issuing more money but this would jeopardize the independence of the central bank and also lose confidence in the public because their money will be depreciated due to the dynamics that inflation brings. Inflation is the rate at which prices rise. If inflation rises, then the real deficit will deepen. Putting this aspect in the CBDC issuance landscape then we say that in times of crisis digital currency would be a solution for central banks. Increasing inflation in this way would create ground for digital currency.

Approach of Authorities and Different Governments for CBDC globally.

Some of Central Banks all over the world have done some work regarding further research on this issue. The early stages on implementing CBDC consist on some pilot projects and experiments how to adopt this kind of currency in banking sector.

Bank of Canada is the one who has done an advanced work related to the possibilities of issuing a CBDC. According to the working paper published in their website they have undertaken a project called Jasper to coordinate the predicted process where the Canadian dollar issued via electronically could have. Other central banks like Bank of England, Monetary Authority of Singapore have considered this issue as a tool of cross-border interbank transactions in the future with similar pilot projects.

According to the report published from Yao (2018), Bank of China has settled up a kind of institution related to Digital currency particularly for CBDC. ¹¹They are doing researches to

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¹¹ Yao, Q. (2018, January). A systematic framework to understand central bank digital currency. Retrieved from Science China Information Science website: https://doi.org/10.1007/s11432-017-9294-5

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explore the possibilities as well as pros and cons for issuing a CBDC in their country and the impact it would have in payment characteristics. 12

Another perspective is stated by central bank of Denmark which has no intensions to create a possible mechanism to issue e CBDC after concluded on a detailed analysis which states that risks of a CBDC are more than the advantages it may bring to the financial system.¹³

A report of Norges Bank (2018) concluded that is introducing a CBDC will happen in their country it should be well managed and structured in that way that banks and financial institutions to have the probability to afford credit but in any case, if cash goes on low levels the CBDC will be a very good opportunity and solution. ¹⁴

Monetary Authority of Singapore similar as Bank of Canada has undertaken a pilot project published on 2017 to experiment and to test the consequences that may bring the issuance of digital money from central bank in terms of methods of payment etc.

Another prospect comes from Bank of Sweden which yet has no decision about introducing a CBDC but similar as Banks mentioned above have taken a pilot project to test the possibilities of introducing an E-Krona. The analysis published in their website (Sveriges Riksbank, 2017) are referred to many other researches to adopt for their respective countries as a methodology and to see impact on the viewpoint of monetary policy aspect as well. ¹⁵Their pilot project consists on some limitations related to E-krona such as if it will be decided to implement in the financial system it will not have interest and would be categorized for small payments. ¹⁶

An analytical work has been published related to this issue in terms of Bank of England where is analysed the impact on macro terms and have seen on details the implications that may bring for central banks as well. ¹⁷ It should be said that besides different approaches taken into considerations by different central banks that may distinguish from each other from macro environmental conditions and economic –social conditions as well the most discussed

¹² Idem.

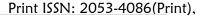
¹³ Central Bank of Denmark (2017)

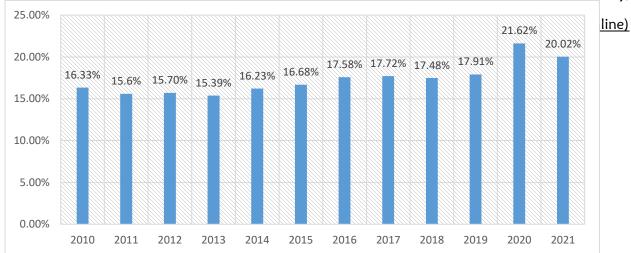
¹⁴ Norges Bank. (2018). Central bank digital currencies (Report No. 1). Retrieved from Norges Bank website:https://static.norgesbank.no/contentassets/166efadb3d73419c8c50f9471be26402/nbpapers-1-2018 centralbankdigitalcurrencies.pdf

¹⁵ Sveriges Riksbank. (2017a). The Riksbank's e-krona project: Report 1. Economic Review, 1, 126 Tucker (2017) "The Digital Privacy Paradox: Small Money, Small Costs, Small Talk" NBER Working Paper No. 23488. Retrieved from: https://www.nber.org/papers/w23488

¹⁶ Idem

¹⁷ Barrdear John and Michael Kumhof (2016) "The Macroeconomics of Central Bank Issued Digital Currencies Bank of England Staff Working Paper No. 605, July Retrieved from: https://www.bankofengland.co.uk//media/boe/files/working-paper/2016/the-macroeconomics-of-central-bank-issued-digital-currencies





characteristic of issuance of a CBDC are related to interest, availability, accessibility or anonymity. 18

Albania Perspective.

The latest tendency as a product of digitalization is the switch of cash with its substitute digital currency that derives also in new payment methods such as digital ones. Albania is one of the countries that is studying this trend in order to highlight the impact it would have in its economy.

It is possible that in near future, following the steps of other countries with comparable economies, cash might be useless since people would be imposed inconsistently to new methods of payment that facilitate their business and gives them more opportunities and benefits, so in other words, cash may become inadequate in terms of medium of exchange and in this regard country may have a gap of having an option of legal tender.²⁰

Chart 1: Share of currency in circulation to the nominal GDP of Albania.

Source: IMF, Eurostat

An important concern consists in terms of operational risk of technology attacks e.g. Virus or malicious software that would lead on catastrophic damage so, the responsible institution, in this case central bank should always have a plan B in such cases. The Albanian Lek is the (ALL) is the currency that will be used as an emergency option in case of failing due to technology problems. ²¹

¹⁸ European Banking Federation. (n.d.) Banking in Europe: EBF facts & figures 2018. Retrieved from European EBF website: https://www.ebf.eu/wpcontent/uploads/2018/09/Banking-in-Europe-2018-EBF- Facts-and-Figures.pdf

¹⁹ Bank of Albania (2020)

 $^{^{20}}$ Idem.

²¹ Idem.

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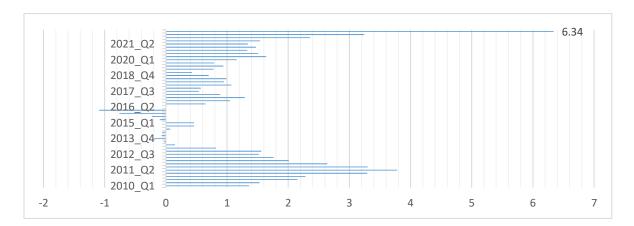
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Interest Rate in Albania averaged 4.29 percent from 2001 until 2020, reaching an all-time high of 8.50 percent in April of 2002 and a record low of 0.50 percent in March of 2020. The central bank of Albania reduced its monetary policy rate by 50bps to 0.5 percent on March 25th, bringing borrowing costs to a fresh record low in an attempt to mitigate the impact of the COVID-19 pandemic on the country's economic and financial health. In addition, the bank's overnight deposit rate was cut by 100bps to 0.9% while the overnight loan rate was kept at 0.1 percent.²²

If central bank would make the decision to go with a lower rate, there would be a very challenging situation due to zero lower bond which is a macroeconomic which appears in cases of interest rate is near zero. In this situation it prompts a liquidity shock and "violates" the central bank objective in terms of balancing and increasing the economic growth.²³

A possible solution in this case might be QE which is a form of unconventional monetary policy in which a central bank purchases longer-term security from the open market. In this perspective it motivates the money supply and stimulate the bank lending and in the other hand the investments. In order to achieve stability of the economy, Albania has used the inflation targeting policy. This rate stands at 6.34 % as the highest rate in the chart 2 which is significantly above the inflation target of Bank of Albania due to the impact of the foreign demand shock. In quantitative terms, the Bank of Albania defines price stability as the keeping of the consumer price inflation rate at 3.0%, in the medium term.

Chart 2: Albania Inflation



Source: Bank of Albania's calculation based on CPI data (INSTAT).

²³ Idem.

²² Idem.

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Although the flexibility of a small country helps to reduce the risks to it, there are several sources of risk that can have negative consequences for the real economy and the labour market of any deterioration in the economic environment. Banks dominate financial intermediation in Albania, and so any decline in the real sector's ability to repay loans after such a deterioration could quickly lead to increased lending to banks.

Over the past 10 years, Albania's macroeconomic performance based on real GDP growth has been relatively successful in the region compared to a group of competing economies with similar characteristics in the region, in the Western Balkans. Real GDP growth averaged higher than Serbia, Montenegro and Macedonia, and lower than Kosovo. In the last two years, Albania has been positively oriented, realizing the highest level of annual production growth in the region.

The volatility of the Albanian economy can be explained to a considerable extent by its opening, as it is amplified by the sectorial and geographical concentration of trade. A key feature of Albanian foreign trade, along with most exports, is their high sectorial and geographical concentration. Exports mainly go to neighbouring countries, so the economy depends largely on developments in the local region.

The growth of foreign currency lending in many Central, Eastern and South-eastern European countries has prompted the expansion of analysis and research in this area. In Albania, similar to other countries in the region, the study of the main determinants of foreign currency lending is quite important. In Albania, this phenomenon began as a feature of private firms and quickly spread to households. In general, foreign currency borrowing is more attractive due to a number of factors related to lower rates for the US dollar and euro loans, compared to those of local currency lending.

The euro is stronger over the US dollar as a result of the gradual appreciation of international markets and the strengthening of trade agreements between Albania and the European Union. Risk of concentration is one of the main risks in the financial system where among the main indicators we analyse, non-resident loans have appeared with an increasing trend in recent years. The Albanian financial sector is focused on banks, accounting for about 90% of the weight of assets to GDP. Investment funds, which are mainly owned by large banking groups, account for 4.2% of GDP. To ensure a sustainable financing intermediation for the economy, it is important for banks to have sufficient capital additions in order to fulfil their role as the main financing intermediary even in a difficult environment economy.

Rising public debt as a way to finance the deficit has significant negative effects on the economy, such as inflation caused by rising cash flow. When the Bank of Albania ceases to be financed through the printing of money, the emphasis is on public debt management and the development of a market oriented way of financing the deficit. Macroeconomic policies and government

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programs are closely linked because political influence is the main source of economic fluctuations. Thus, a country's ability to borrow can be seen as the government's willingness to take on rights / obligations that limit the disposable income of individuals in the future.

The Legal Perspective of CBDC.

European Central Bank Opportunity to Issue CBDC.

The European Treaties do not explicitly provide for the ECB to issue the CBDC. Only if this were to be considered a simple technical procedure used for the sole purpose of setting CBDC emission standards, which would always depend on the selected CBDC model, which would have to be integrated into the provisions current treaties in order to avoid amending existing legal acts. In the event that it would be a *conditio sine qua non* the amendment of the treaties, in principle this would have to be done through a new treaty, with specific difficulties related to the need for proper unification and ratification in the EU member states. Exceptionally, through a derogation from Article 129, paragraph 3 of the TFEU, the statute of the ESCB and the ECB may be amended using the prescribed legal procedure. However, derogation is limited to a few specific articles of the Statute, including Article 17 in opening accounts and authorizations by making accessory amendments to the content of the provisions. In the event that substantial changes are made to the content of any of the provisions covered by the derogation, it may be considered as circumventing the nature of the legal proceedings.

In a scenario which may involve the issuance of CBDCs, which goes beyond a technical procedure, for example, the possibility of offering monetary policy lending to member countries, two possibilities are likely to be elaborated. First, the TFEU, Article 128, enables the ECB the right to authorize the issuance by the ECB and the CB should be the only ones to have the status of legal payment mechanism within the EU to issue the CBDC.

One possibility, which would have a limiting impact on the characteristics of the CBDC, would be the unification of the CBDC in a digital form with the banknotes, so that the regime provided for in Article 128 can be applied. This means that the CBDC will have to operate in a very similar way to banknotes, which would correspond to a scenario in which we would not have a CBDC reimbursement. This option would impose denomination-related restrictions because, unlike banknotes, coins are issued by Member States (Article 128 (2) TFEU - unless Member States agree to issue digital coins. Such a scenario would require a legal act by the CoE, because the Council is the instance responsible for adopting specific coins' techniques, which are used to make accurate amounts and provide change when there is no exact figure, as far as while banknotes are only available from 5 EU or more.

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It is clear that the authors of the TFEU did not foresee that coins and banknotes could be configured in any form other than physical form. This aspect is confirmed by the second paragraph of Article 16 of the Statute of the ESCB, which explicitly reads that: 'The ECB shall respect as far as possible the existing practices regarding the issuance and design of banknotes.' However, the ECJ may consider a change of situation (in the event of dematerialization) in order to accept that the interpretation of the Statute cannot remain static. Furthermore, Article 16 of the Statute of the ECB and the ESCB requires the ECB to respect existing practices regarding the issuance of banknotes only 'for as long as possible'. If it is proven that the issuance of a digital banknote will be a great necessity, it may be possible to go beyond the traditional practices implemented on this issue and harmonize the legal situation with the factual one regarding the design of banknotes. Another potential complementary option may be to include the CBDC issue under the basic ESCB tasks addressed by the TFEU in Article 127, paragraph 2. For example, it may be indicated that this issue has become a necessity which has led to an increase in dematerialization, in order to complete the possibility of implementing monetary policy, if for example the listed assets are to be accepted as collateral in monetary policy operations - or promote the smooth operation of payment systems.

Once it has been demonstrated that the purpose of establishing a CBDC is in accordance with one of the tasks of the ESCB, it must necessarily be shown that the ESCB has special instruments in accordance with its Statute to implement this process. One possibility is, referring to Article 17 of the Statute, which authorizes the ECB and the CB to open accounts for 'market participants', an approach which is consistent with the purpose of the CBDC and the latter's emission arguments, in the case of CBDC trading, for an international token-based CBDC distribution model, rather than a direct account-based model. Another possibility would be to use Article 20 of the Statute, which authorizes the Supervisory Board to use 'other methods of monetary control'. In the event of the use of Article 20, accounts will have to be taken from the fact that the decision of the Supervisory Board will have to adopt a legal act by the Council of Europe, 'if the methods of monetary control' will be binding on the third parties. The issue of choosing the instrument authorized by the ESCB Statute will again depend on the characteristics of the ESCB.

CBDC as a lawful means of payment.

According to the legal provisions, only banknotes issued by the European System (Article 128 of the TFEU) and coins (Article 11 of Council Regulation EC / 974/98) are legal payment mechanisms in the European area. Assuming that it would be possible, taking into account the limitations provided above, to introduce a CBDC marketability which would be the same as the digital form of a banknote, according to the TFEU, Article 128, this would benefit from the legal status of the payment mechanism. The consequences for the CBBDC to have the status of a lawful payment mechanism, such as the obligation to be accepted as a payment mechanism, would not be legally neutral, as payments must have the technological equipment required to make a payment from the ESCB, thus raising questions of equal access. In this context, consideration should be

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given to the question of whether this will result in an obligation for public authorities to provide these material resources which will affect the public.

In the latter case, as considered above, the CBDC will not have the status of a lawful payment mechanism in the strict sense of the word, within the obligation to be accepted as payment. However, if the ESCB takes steps to exchange the CBDC properly with any currency holder, as opposed to other forms of currency, the security provided by this commitment should be perceived as equivalent to that provided by the legal status of a payment mechanism.

An engagement of this nature may create technical constraints that should be appreciated, e.g. the need to be able to quickly secure a potentially large amount of money. However, in a society where the use of money becomes marginal, a retail CBDC with the legal status of a payment mechanism or covered by the aforementioned exchange engagement would make it possible to maintain the link between public and private money by guaranteeing the mandatory conversion of the latter to the former. This would help maintain trust in the financial system.

Law 'On the Bank of Albania' and Legal Payment Mechanisms.

The activity of the banking market in Albania is regulated by a series of laws and bylaws, which have created a special structure, that of the banking system. At the top of the system stands the Bank of Albania, which in addition to the exclusive banking activity exercised as a bank of the Albanian State, also performs the role of supervisory and regulatory body for banks and branches of foreign banks.

The activity of the Bank of Albania is regulated by a special law, that 'On the Bank of Albania', which contains provisions regarding the competencies of the Bank of Albania and its areas of activity, the elements of legal independence of the Central Bank in order to supervise banking market and achieving its other objectives. ²⁴ Referring to the Law 'On the Bank of Albania', in its Chapter V, the issuance of currency is explicitly provided. This chapter deals with one of the main functions of the Bank of Albania (which is one of the distinguishing features of central banks) is the issuance of currency. This function of the Bank of Albania is also sanctioned in the Constitution of the Republic of Albania, in Article 161, first paragraph, which explicitly states that "It (the Bank of Albania) has the exclusive right to issue and circulate the Albanian currency..."²⁵

Referring to the legal provisions, Article 33 defines "Lek" as the monetary unit in the Republic of Albania. This means that the "Lek" is the national currency (meaning Albanian banknotes and / or coins) that has a legal course within the territory of the Republic of Albania. The legislator determines the exclusive right of the Bank of Albania to issue the banknote and the national

²⁴ Law "On the Bank of Albania"

²⁵ Idem.

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currency, which has a legal course within the territory of the Republic of Albania. But, not the whole amount of banknotes and coins issued are immediately and completely put into circulation. They are put into circulation gradually, in accordance with the requirements of the economy for money, maintaining an appropriate structure of banknotes and coins in circulation. So, it should be understood that there is another notion that is "throwing banknotes and coins into circulation", and with this we should understand the exact date when they were withdrawn from the cash register of the Bank of Albania to supply commercial banks. Which, in turn, make payments to customers. Thus, the date of issue of banknotes and coins from the cash register of the Bank of Albania, will be understood as the issuance of banknotes and / or coins, with legal tender, which will be used as means of payment within the territory of the Republic of Albania. The Bank of Albania realizes the issuance of new issues of Albanian banknotes and coins, making public at least one month ago the official announcement of the Bank of Albania. The official announcement is published in the print and electronic media, thus fulfilling the legal obligation to inform the Albanian public.

The term "currency having legal tender" shall mean banknotes and coins, which may be offered for the payment of a liability and which the creditor is obliged by law to accept. The right to issue banknotes and national currency (also sanctioned in the Constitution) - which the legislator gives exclusively to the Bank of Albania - entails any attempt to produce or issue banknotes and / or national currency (Albanian) by other entities, outside the authority of the Bank of Albania, constitutes a violation of the law, a violation which is considered forgery and the banknotes and coins themselves are considered counterfeit. Consequently, in support and protection of this right, the legislator provides a special provision in the Criminal Code of the Republic of Albania according to which "Counterfeiting or putting into circulation of counterfeit coins is punishable by imprisonment of five to fifteen years." It is the Supervisory Council of the Bank of Albania that, based on article 43/d, determines the nominal value, denominations and configuration of banknotes and coins.

The Bank of Albania is the institution recognized by law, which imports and exports Albanian banknotes and coins, which have a legal course. The quantity and procedures for imports and exports that it performs, are determined by the Bank of Albania itself. In this context, it should be understood that the import of Albanian banknotes and coins, which have a legal tender, is the exclusive right of the Bank of Albania. No other person has the right to import, in fact, any action or attempt in this area is illegal. The Bank of Albania sells Albanian banknotes and coins, whether or not they have a legal tender, for numismatic purposes, by selling them at its counters but also by exporting them to a foreign buyer, in accordance with the rules. Procedural procedure approved by it. In view of its role as a central bank and as the sole issuer of money (banknotes and coins with legal tender), in Article 36 of the Law, the legislator provides the legal obligation of the Bank of Albania to meet the requirements of the economy for money. Regarding the above, the Bank of Albania, in accordance with the drafting, approval and independent implementation of the monetary policy of the Republic of Albania as well as of the approved monetary program, drafts

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the strategy for the issuance of banknotes and coins with legal exchange rate, to supplement consistently the economy demands for money. Thus, in addition to previously issued Albanian banknotes and coins, it anticipates and implements in a timely manner, reprinting of existing issues and / or printing of new issues.

The payment system in the Republic of Albania and internationally, is defined as a set of instruments, procedures and rules for the transfer of funds between participants, based on the agreement between these participants and the system operator. The transfer of funds is carried out through a special technical infrastructure.

The Bank of Albania plays a key role in promoting the normal functioning of the payment system, promoting security and efficiency. To achieve the objective, the Bank of Albania acts as an operator, supervisor and catalyst and reformer. In the role of operator, the Bank of Albania provides settlement and clearing services through the following systems:

☐ ☐ AIPS (high value interbank payment system)
$\Box\Box$ AECH (clearing system of small value payments).

As well as, securities trading, through the system:

☐ ☐ AFISaR (system of settlement and registration of state securities)

The Bank of Albania offers facilities for the net settlement (manually processed in the system) of payments initiated by check, as well as payments with VISA and MasterCard cards, initiated and settled in the national currency, as well as the settlement in cash of the AIPS system of transactions with Government securities (Government bonds and bonds in the national currency - Lek), which are generated through the AFISaR system.

Taking into account the uniqueness of these systems in the Albanian market, the Bank of Albania contributes substantially to the normal functioning of the economy, financial stability, as well as to the efficiency and integration of the markets.

In the role of supervisor, the Bank of Albania regulates, licenses and supervises the clearing and settlement systems of payments and securities. Payment instruments, as an integral part of payment systems are also in the focus of the Bank of Albania. In this way, the Bank of Albania helps to promote an efficient and reliable financial system, as well as maintains public confidence in physical money and other means of payment.

In its role of catalyst and reformer, the Bank of Albania continuously works to support the development of financial markets and efficient and secure payments, through cooperation and

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promotion of developments. In fulfilling this objective, the Bank of Albania uses its expertise in the field of payment systems and shares it with market players through regular consultations and coordinated meetings with representatives of the private and public sector. The National Committee of the Payment System of Albania is an example of the above. The Bank of Albania also promotes developments in the field of payments through various publications and studies.

The National Payment System Committee (NPSC) was established based on the regulation "On the organization and functioning of the National Payment System Committee" approved by the Supervisory Council of the Bank of Albania no. 37, dated 25.06.2014, based on article 3 of law no. 133, dated 29.04.2013 "On the Payment System". The purpose of the Committee is to support and contribute to the increase of the security, stability and efficiency of the national payment system in Albania, in fulfilment of the legal objective of the Bank of Albania to promote the normal functioning of the payment system.

The establishment of the National Payment System Committee is based on the best practices of the European Union in the field of payments, as well as on the needs and specifics of the domestic market. The Committee is a strategic, consultative and communicative entity, whose decisions are aimed at supporting the activity of participating institutions in the field of payments.

Legal Requirements and Needs for Amendment of National Legislation.

In order to ensure financial stability in the Republic of Albania, if the competent state authorities decide to implement the issuance of digital currency by the Bank of Albania, the latter should systematically regulate and monitor the most important payment mechanisms (the essential infrastructure undertaken for authorization, clarification and approval) and enable macroeconomic analysis of the impact on the country through reports. In this context, in order to ensure consumer protection, market reliability and security of the CBDC, based on studies and reports in both theoretical and practical terms, should be deduced with proposals for amending the applicable regulatory framework, in order to implement and CBDC.

In our opinion, three principles should be taken into account in order to amend the regulatory framework of the payment system:

- (i) Reflecting the risk of financial stability, rather than the legal form of payment activity;
- (ii) Ensuring operational and financial sustainability end-to-end, through payment chains that are essential for the smooth functioning of the economy;
- (iii) Ensuring that information is needed to monitor payment activity so that potential risk to the financial system can be properly identified and addressed.

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Payment providers will have to be in line with the criteria that the BoA will set for the implementation of the CBDC, before it can start providing CBDC services. This may include a requirement that all entities have appropriate authorizations and be continuously monitored by the BoA. This will require an in-depth analysis of entities' legislation and regulations in order to identify omissions and needs for amendment. We always suggest that this will not be an easy but always consensual process regarding the authorization criteria and pricing requirements for entities that will use the CBDC infrastructure.

In any case, it is recommended that the entities that will provide this service and their regulatory framework be subject to an appropriate regulatory framework, commensurate with the risk they pose and should meet the standards that will be set to implement the CBDC as payment mechanism. This will include ensuring that all entities involved in the CBDC ecosystem are subject to appropriate standards of operational and financial capability in order to mitigate the risks that their operational or financial failure may present to the end of the payment chain. 'Companies of systemic importance' must be subject to standards of operational and financial capacity that reflect the risks they pose, 'and this will apply to entities included in the CBDC provision. Entities will also need to comply with other conduct and standards set by the BoA and other relevant regulators.

The BoA in cooperation with the legislature will need to set standards to ensure that the CBDC payment system is secure and reliable. However, standards should not impose how they should be constructed.

The Bank of Albania and relevant regulators will also need to implement the standards regulatory framework to ensure that the CBDC payment system is secure and stable, open and interoperable.

However, the standards introduced by B.SH, in our judgment, should not dictate how CBDC mechanisms should be constructed or which payment technology should be implemented by service providers. These standards and requirements simultaneously dictate the creation of the payment mechanism scheme to be applied to the CBDC, which can be summarized as:

- i. Standards for interoperability between different service providers, including how payments can be made between different customers and how a customer can transfer their services to another service provider.
- ii. Standards or expectations for a service provider, potentially including minimum security and identity standards. This will serve for sustainability, multi-functionality and consumer protection requirements.
- iii. Guidelines and principles for CBDC applicants.
- iv. The general definition of the standards applied in the CBDC as a payment mechanism (protection of personal data e.g.) and the establishment of the mandate requirement for the use of the identity of legal persons (NUIS).

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v. Rules as to who is responsible in cases where the CBDC application does not go as it should. This may include cases of fraud, failed transactions, cyber risks and privacy.

Harmonization of the regulatory framework with Law No. 9917, dated 19.5.2008 "On the prevention of money laundering and terrorist financing".

The International Organization of Securities Commissions (IOSCO) defines money laundering as "... a wide range of activities and processes aimed at obscuring the source of illegally earned money and creating the impression that they have originated from a legitimate source...". So money laundering is "transferring money laundered illegally or investing to hide the real source." It is a secret activity, it is the process of disguising the real origin of criminal benefits, of transforming them into legitimate capital.

Albanian Law in the definition of money laundering refers to Article 287 of the Criminal Code of the Republic of Albania. According to this article, the subject of the money laundering crime must be aware that the property subject to money laundering must be the product of a criminal offense or criminal activity. To have criminal responsibility according to Article 287 of the Criminal Code requires knowledge and purpose, concealment of illegal income. The punishment for this criminal offense is imprisonment from five to ten years and a fine from five hundred thousand to five million ALL. When this offense is committed during the exercise of a professional activity, in cooperation or more than once, it is punished with imprisonment of seven to fifteen years and with a fine of eight hundred thousand to eight million ALL. The same act, when it has brought serious consequences, is punished not less than fifteen years with imprisonment and a fine from three million to ten million ALL.

Money laundering can have negative macroeconomic consequences. If the crime of money laundering and informality develops to a large extent, then macroeconomic policymakers should consider them. Money laundering makes national tax collection and law enforcement more difficult. ²⁷Money laundering can distort the allocation of resources and the distribution of wealth. It distorts statistics and misleads the authorities into taking appropriate action. In extreme cases, there may be erroneous decisions in forecasts of a fiscal and monetary nature (interest rates and exchange rates). Economic damage can arise not only directly from money laundering, but also from accusations that affect a country's reputation. Such allegations affect the willingness of economic agents, especially those abroad, to conduct business in a particular country such as domestic investment.

Also, in the phenomena of contemporary terrorism, the high level of financing of terrorist activities is particularly evident. The economic base of terrorism is being strengthened more and more

²⁶ The Criminal Code of Albania

²⁷ Idem.

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through the increase of financial means sourced from narcotics trafficking, and other crimes, as well as from the feverish efforts of terrorist organizations to take control of rich territories.

The CBDC payment mechanism system must be constructed in accordance with the requirements of the Money Laundering Act and the rules on the avoidance of Terrorist Financing. This means that the identity of CBDC users must be known, at least by some specialized State Institutions or Authorities, which can assess the legality of their transactions.

DPP responsibilities can be fully taken over by the Payment Interface Providers. However, it is also possible that new business models may emerge with dedicated firms that verify user identity and use new techniques to identify suspicious activity. The field of digital identity is currently undergoing significant developments. Therefore, the current model, where payment providers apply the ban on money laundering using their systems, does not have to be the only model in use if the CBDC is fully implemented.

Harmonization of the regulatory framework with Law no. 9887, dated 10.03.2008 "On the protection of personal data".

The right to personal data protection in Albania is a constitutional right. In the framework of the approximation of domestic legislation with that of the EU, Albania has made significant steps. It has established the mechanisms required by international obligations to achieve standards in the field of personal data protection, designating the commissioner as the supervisory authority in the field. The commissioner is the institution that protects and promotes the protection of personal data.

Law no. 9887, dated 10.03.2008 "On the protection of personal data", amended by law no. 48/2012, amended by law no. 120/2014 has supplemented and improved the legal framework in the field of personal data protection, creating a legal basis for the protection and guarantee of the rights of data subjects. Through this law, it is intended that Albania be classified in the list of countries, with a sufficient level of personal data protection. Legal interventions are not accidental, they are related to factors such as; the undeniable complexity of the field of data protection, the effects created by the law on social relations, as well as the coordination of more than one sector. ²⁹The law in force on data protection is in line with European legislation, especially with Directive no. 95/46 / EC, dated 24.10.1995, of the Council of Europe. Based on the models of the most advanced countries of Western Europe, such as England, Sweden, Germany, Spain, etc., as well as those of Eastern Europe. ³⁰

²⁸ Law no. 9887, dated 10.03.2008 "On the protection of personal data", amended by law no. 48/2012, amended by law no. 120/2014

²⁹ Idem.

³⁰ Idem.

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It will be essential to consider how privacy is respected and how data is protected in a CBDC system. Privacy and data protection is an issue of concern for policy makers in government and other authorities and should be carefully considered when drafting the CBDC

Each CBDC system will have to comply with the legislation in force in the Republic of Albania. Simply put, this means that users need to have control over how they use their data.

Privacy and data protection in a CBDC system is a political and social issue, rather than a narrow technical question. As discussed above, the CBDC will have to comply with applicable legislation, which excludes anonymous payments.

Some CBDC discussions assume that CBDC is equal to money in circulation and thus should offer the same degree of anonymity in payments. When a payer hands over money to a beneficiary, for example at a store, the paying person receives no information about the payer's identity and there is no digital record linking the payer and the payee. But the fact that the payment of money in circulation provides an anonymous means of payment is a result of the nature of this payment method. The bank does not have a specific way to offer anonymous payment methods.

CONCLUSIONS

The approach of introducing a type of CBDC for the public is under testing process by many countries regarding the benefits and possible implications it may create for the current banking system and financial system in general.

Considering the developments that the use of cash is undergoing in many countries of the world, it is considered reasonable by economic experts to create another form of fiat currency as an alternative in the future, near or far, should be judged by the circumstances of the economy state.

Impacting Financial Stability and Monetary Policy of a country is a sophisticated and complex forecasting that needs further analyses based on the CBDC's design that particular countries will use for their system. A CBDC impact may be reflected also in the shift of inflation targeting policy into price level target policy in order to have a well deduction of future level of prices. As it is mentioned during the analysis of the paper, it is very dependable from the structure or design that the CBDC will have. Regarding this issue, for example, a CBDC that bears interest, has higher possibilities to precipitate in larger volumes in the economic system due to the higher demand that is predicted to have.

An important outcome of this paper is that implementing a CBDC for the public, may cause a big advantage for the economy due to the higher usage of national currency, particularly for the developing countries with concentrated economic conditions.

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A CBDC has been seen as a possible threat in terms of competition for commercial banks. By saying this, we mean that if a CBDC is decided to be offered as interest-bearing, it may pose a range of competition because of the high probability of public to switch their deposits into CBDC. In this cases, commercial banks lose a lot of their profits as far as it is known that deposit accounts are a significant part of their funding for the clients. In this case, the rate that will be held by CBDC may act as a regulator to commercial banks regarding the floor rates that they put for deposit accounts without abusing with their clients.

Another possible solution for commercial banks would be changing their policies regarding the rate of deposit accounts by putting higher rates as long as CBDC features are more beneficial than what they offer in terms of safety etc.

If it is considered as reasonable to implement a policy as above, then we would have the following changes. Higher deposit rates will lead on higher lending rates also, which means higher rate for loans and by impacting the risk on investments which may be higher or on the other hand, the opposite may happen like increasing the possibilities of bank lending, this is dependable by public behavior in new developments cases.

However, there are some incentives to think in a discouraging way because of the possibility of shifting the deposits of commercial banks into CBDC by causing in this way the lack of liquidity in the financial system and a big problem to solve for the central banks. Regarding this issue, some limits should be decided in terms of withdrawing deposits in order to not pose a threat and a collapse in the financial system.

A positive outcome is that implementing a CBDC may improve the whole process of payments through higher speed it provides from the current system and lower costs it has. A CBDC is predicted to enhance and upgrade the payments system regarding the cross-border payments through the advantages it offers.

According the aspect, to issue or not the CBDC, it is still such a dilemma for the various reasons mentioned during the analysis of this research but what is a real fact is that EME countries may have an emerge need taking into account the motivation and the benefits rather than developed countries.

The process under the developing countries should be follow can be customized of their economic conditions in order to direct the appropriate results that accomplish the objectives of central bank and secure the financial stability.

The differences between developed and developing countries are many in terms of need of issuing CBDC or possible implications that they may face during the introduction of the digital money for

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their public. To conclude the range of final statements of this research we think that the hypothesis submitted in the beginning of this research can be accepted, so issuing the CBDC can be beneficial for countries but it is tightly depended on their conditions of implementing, as well as the costs that they should fulfil.

Regarding the legislative panorama, we highly suggest that a tremendous amendment shall be taken into consideration for implementing and issuing the CBDC, in the EU or national level. The harmonization of amendments shall be configured in the same line with the enforce legislation in other areas of the private or criminal law.

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