TRADITIONAL CRYPTOCURRENCIES AND FIAT-BACKED DIGITAL CURRENCIES

Serghei MĂRGULESCU*
Elena MĂRGULESCU**

Abstract

The digital payments space saw vigorous investment activity during 2020 and there have been a plethora of announcements about account based Central Bank Digital Currencies. The cryptocurrency market can be roughly divided into two segments: traditional cryptocurrencies and fiat-backed digital currencies, including stablecoins and central bank digital currencies. 2021 may be the year we see the world's first sovereign digital currency. China's digital yuan or DCEP (short for Digital Currency/Electronic Payments) looks to be nearing completion. DCEP allows China to push forward into the digital era, while still retaining control over its financial instruments. The European Commission and European Central Bank are working together to investigate the policy, legal and technical questions emerging from a possible introduction of a digital euro. But creating a digital currency is actually the easy part. What is more important is how it is linked into the wider ecosystem to ensure the circulation of money and cash flows. Digital currencies are likely to have big implications for the role of central banks and retail lenders and could change the face of the entire financial system.

Key words: *Central Bank Digital Currencies, cryptocurrencies, stablecoins, digital payments, digital euro.*

1. Introduction

Market dynamics and infrastructure vary greatly per country and region but the direction of innovation and change is converging on the same outcome: digitisation and cashlessness. As the world adopts digitalisation in all sectors and societies, there is greater demand for unbanked communities to be banked and for digital banking to enable better choice and control for consumers, greater opportunities for merchants and business, increased cross-border trade and benefits for governments.

As the White paper from Finextra in association with HPS (january 2021) puts it, the reasons for the transition away from cash and towards digital include enabling connection between unbanked consumers, merchants and services through mobile money; greater visibility and view on liquidity for merchants, including real time confirmation and settlement; reduction in fraud and crime by implementing a digital trace and, hence, audit system; financial inclusion; for banks, greater volumes and transactions are welcomed also.

Cashless society initiatives bring greater transparency to governments, including better regulated tax systems and stronger control on fraud.

On the other hand, there are many who argue that this must be resisted with every fiber of our being because traditional currencies replaced with number on a computer screen will be another step towards total Government control over every aspect of your life. Every purchase you make will be recorded. If you have any outstanding debts e.g., fines the money will be removed from any savings you may without consent. Governments will have the power to Confiscate/Suspend/Freeze your account with a few key strokes.

One of the big challenges with digital currencies is the amount of data that comes with them, said recently Raghuram Rajan, former Reserve Bank of India governor. "We need some sort of broader global rules of the game. What are countries going to do with data collected from abroad on who uses their currency? How do you make sure that the usual safeguards on that use are there? If somebody uses a foreign digital currency to buy certain services which could compromise them, can they be liable to espionage and blackmail, et cetera? And those are concerns that are not farfetched in today's world," Rajan told CNBC.

Digital currencies are likely to have big implications for the role central banks and retail lenders play in the world and could change the face of the entire financial system.

While the idea is still being debated, central banks would likely issue digital versions of fiat currencies. The People's Bank of China is already doing pilots while other central banks are considering whether to issue their own.

The cryptocurrency market can be roughly divided into two segments:

- the first segment includes **traditional cryptocurrencies,** which, in essence, are assets and are used as an investment tool.
- the second segment includes **fiat-backed digital currencies**, including stablecoins, and central bank digital currencies.

* Professor, PhD, Faculty of Faculty of Economics and Business Administration, „Nicolae Titulescu" University of Bucharest (e-mail: margulescu@univnt.ro).
** Lecturer, PhD, Faculty of Faculty of Economics and Business Administration, „Nicolae Titulescu" University of Bucharest (e-mail: elena.margulescu@univnt.ro)

2. Traditional cryptocurrencies

Cryptocurrency market

The total value of all the digital currencies exceeded $1 trillion for the first time ever after the leading crypto asset, bitcoin, continued its bull run to the next all-time peak.

Bitcoin, which accounts for around 70 percent of the value of the entire cryptocurrency market, has been deemed *"digital gold,"* attracting more and more large and institutional investors who consider it as a hedge against inflation and the weakness of the dollar. With some critics insisting that the cryptocurrency is a massive bubble, others still bet on its rising value.

Bitcoin could more than double in price by the end of the year as more firms allow customers to use it to make purchases, says Michael Novogratz, the founder of cryptocurrency investment firm Galaxy Digital. The price of the crypto coin blew past an all-time high driven by Tesla's announcement that it had bought $1.5 billion worth of bitcoin. The company also said it will allow customers to buy its electric cars with the coins.

A long-time crypto enthusiast and investor, Novogratz said that other companies would consider moving excess reserves into bitcoin, perhaps as a hedge against inflation or against a falling US dollar. In a world where central banks issue digital currencies, bitcoin and Libra may find a place

Cryptocurrency bitcoin and Facebook-backed Libra could play a role in a world where central banks globally begin to issue their own digital currencies, Raghuram Rajan, former Reserve Bank of India governor, told CNBC.

Rajan called bitcoin a "speculative asset" while Libra has been designed for transacting. Both could have different roles to play when central banks begin to issue digital currencies.

Bitcoin is a "decentralized" cryptocurrency meaning it has no central authority governing its issuance, unlike fiat currencies. It is built on so-called blockchain technology, which at its simplest level, is an immutable public ledger of bitcoin transactions. Bitcoin has often been criticized as being a speculative asset. Legendary investor Warren Buffett said earlier this year that it has "no value."

Libra takes a more centralized approach. It is a project that was proposed by a Facebook-led consortium of companies last year. But Libra drew heavy criticism from regulators, particularly because of its ties to Facebook and its murky track record of data privacy.

The idea is for Libra to be a so-called "stable coin" which would be backed by a basket of global currencies. That would keep its value stable in contrast with the volatility that has been seen in bitcoin. Libra has scaled down some of its ambitions. Earlier this year, the Libra Association applied to obtain approval from regulators to issue a digital currency backed by one currency. That would mean the consortium's digital coin may be equivalent to a euro or a U.S. dollar, for example.

Rajan said that bitcoin is a "speculative asset" rather than one that is used for transactions on a large scale. He said investors have often flocked to bitcoin when traditional assets such as bonds are less attractive. "In that sense, bitcoin is a little bit like gold, in fact, gold has some value because we value it for jewelry, but bitcoin you can't even do that. Nevertheless it has value because others think it has value," Rajan said.

"On the other hand, Libra is an attempt to create a currency which is used for transacting. And that, the whole idea is not to hold it as a speculative asset which increases in value … but use it for transactions. So the ultimate underlying value is going to be from the central banks, they're going to preserve the value, not of Libra but of what Libra can be exchanged into," he added.

But ultimately there will be competing private digital currencies with different roles. "So the bottom line I think is different private currencies will do different things and it may be bitcoin has value going forward just as a store of value, or as a speculative asset. While Libra may be the kind of currency which is used more for transacting," Rajan said.

Cryptocurrencies, particularly bitcoin and ethereum, started gaining more institutional support last year, triggering another massive rally. Payments companies Square and PayPal have recently backed cryptocurrencies, along with influential hedge fund heads such as Paul Tudor Jones and Stan Druckenmiller. International payment system Visa is moving towards allowing its cardholders to buy and sell cryptocurrencies in countries where it does not contradict the local legislation According to the company, it has partnered with the First Boulevard neobank in the United States, which would allow Visa clients to buy, store and sell digital assets via the Anchorage cryptocurrency bank.

Visa's announcement follows rival credit card major Mastercard, which announced last week it will begin allowing clients to make payments in certain cryptocurrencies on its network this year.

The key change is that Mastercard's current crypto partners, which include Wirex and BitPay, have to convert the digital asset into traditional currencies before making a transaction. The credit card major now wants to support digital assets directly instead. "This change will also cut out inefficiencies, letting both consumers and merchants avoid having to convert back and forth between crypto and traditional to make purchases," Mastercard said.

3. Fiat-backed digital currencies

China

The cashless, digital revolution is on its way, and while the West has so far failed to come up with any comparable scheme of its own, China's is almost at the finish line already.

China's central bank is nearly ready to issue its own sovereign digital currency, according to Mu Changchun, deputy director of the People's Bank of China's payments department. Researchers at the bank have been working on the currency for five years. According to reports, China's central bank would launch its digital token through a two-tier system, under which both the PBOC and commercial banks are legitimate issuers.

But according to crypto-expert Simon Dixon's theory, if your account is full of digital currencies that are backed by the government then, if the bank fails, the deposits are guaranteed because they are in the wallet. "So, this could be a major contentious moment between banks and governments" and "the governments are getting ready to allow banks to fail," Max Keiser says.

The PBOC said it wouldn't rely on blockchain exclusively, and would instead maintain a more neutral stance on which technology it decides to use. Blockchain, otherwise known as distributed ledger technology, is the framework that underpins cryptocurrencies like bitcoin. The digital yuan will be linked to the holder's smartphone number, with transactions taking place through an app. Users will be able to transfer money between accounts by tapping phones, much like having physical cash change hands. The currency will be legal tender, so it could be exchanged without needing a bank as an intermediary. The size of transactions would be limited based on identity verification. A phone number alone would permit only small transactions, while providing proof of identity or a photo of a debit card would raise the limit. Speaking with a bank representative in person could allow for the cap to be removed entirely. Suspected criminal activity will be uncovered via transaction histories.

China is expanding trials of its sovereign digital currency in the capital Beijing, the nation's most populous city of Shanghai and leading tech hub Shenzhen this year. The digital currency was projected to replace cash in circulation. But China's new sovereign digital currency could also transform cross-border trade due to its ability to process payments and handle foreign exchange transactions simultaneously. That's according to the former head of the People's Bank of China, Zhou Xiaochuan, who told the Shanghai Financial Forum that one of the major benefits of using a digital system is that it allows both payments and currency conversions to happen in real time.

"If you are willing to use it, the yuan can be used for trade and investment," he said. "But we are not like Libra and we don't have an ambition to replace existing currencies." The Digital Currency Electronic Payment (as it is formally known) was not intended as a replacement for globally accepted fiat currencies like the US dollar and the euro. According to Zhou, rather than challenging foreign exchange regulatory frameworks and monetary systems, Beijing wanted to persuade consumers and overseas merchants to gradually accept digital yuan payments.

The digital yuan will be the first national currency which will not exist in physical form, but entirely online. While currencies of old were traditionally based on something tangible – such as the gold standard – the digital yuan is built on computer engineering. This means the way it is utilized and regulated differs from a normal currency. A digital currency is more easily managed by its parent government, and more traceable and observable. With a government-controlled digital currency, financial crimes such as money laundering and tax evasion become more difficult. It provides increased security for users, even if it reduces privacy. But even more striking to international observers than the implications for personal use is the potential geopolitical impact it could have.

Many are speculating that this new currency will have global ramifications, with Facebook's Libra executive David Marcus noting that China will create a digital currency system that can be entirely out of reach for US authorities, meaning America's financial sanctions would have little effect. He added that if the digital yuan gets widely adopted across the world, many countries could opt for renminbi as an alternative to the dollar for international clearing and settlement services.

While launching studies on its own digital unit as far back as 2014, Beijing has cracked down on the use of all cryptocurrencies, such as bitcoin. Cryptocurrency trading has been halted on some 100 exchanges in the country since 2017, in compliance with regulation on fraud and money laundering. But elsewhere, the Chinese currency is not a threat to bitcoin because it's a highly-centralized digital currency.

The emergence of a digital yuan, as opposed to the standard yuan, is an international gamechanger. As the first currency of its kind, China has the potential to pioneer it as a new global standard in its own transactions and, by using the country's economic muscle, persuade other countries and financial institutions to use it, too. The potential outcome is clear; it may have a serious impact on the US dollar.

At present, the dollar is the hegemonic currency of the world. It is the preferred medium of transaction for many sectors and commodities alike, not least in the realm of finance. Due to its widespread use and the dominance of American financial institutions, the US government has the power to weaponize the dollar as a form of 'extraterritorial jurisdiction' against countries that it doesn't like. If the US sanctions a company or individual, it effectively cuts them off from the global financial system. The banks who serve these individuals rely on the dollar, and thus face penalties if they violate the sanctions.

This demonstrates the global strength of the dollar, but also shows how the digital yuan may change the current landscape. The creation of a new international medium of transaction means that financial institutions, companies and governments now have a new avenue to do business without having to use dollar transactions. This will reduce its global reach. For countries like Iran and Venezuela, heavily targeted by US sanctions, it is an obvious way out. Of course, such a system will be met with a mixed response throughout the world. While beneficial to some countries, it is inevitable that others will not accept their financial systems being re-written and dominated by China.

The digital yuan is set to face political resistance from the US, which is likely to respond by eventually creating a digital currency of its own (even though it's well behind at present). The European Union is also likely to move towards a 'digital euro' to safeguard its own interests.

On the other hand, the digital yuan should be expected to gain traction in countries strongly integrated with China, particularly in Asia, Africa and Latin America. There are many nations who will see the opportunity to diversify from the US dollar as a positive development.

And so arguably, the rise of the digital yuan will prove to be an innovation which will truly hasten a multipolar world. It has the potential to effectively break the monopoly of the dollar as a unilateral, extraterritorial weapon and rewrite the rules of the global financial system in a way which will be shaped by China. It could set off a digital currency race with many other major powers too, fragmenting the existing order whereby the US dollar serves as the underbelly of all things.

The People's Bank of China has agreed a **partnership with the global interbank settlement organization SWIFT,** as part of an effort to internationalize the yuan and develop a digital Chinese currency. The new entity, Finance Gateway Information Service, was registered in Beijing on January 16, 2021 with €10 million ($12 million) as incorporation capital, according to the National Enterprise Credit Information Publicity System, the Chinese government's enterprise credit information agency. SWIFT is the largest shareholder, with 55 percent of the capital owned via a Hong Kong subsidiary, while the China National Clearing Centre, a wholly-owned domestic settlement subsidiary of the PBOC, owns 34 percent. The joint venture emerged after concerns were raised that the US might cut off China or Hong Kong from the SWIFT financial payment network as a result of the Trump administration's sanctions over the Hong Kong autonomy issue. Calls have also been growing from within China for Beijing to reduce its reliance on the US dollar by increasing the global use of the yuan amid worsening relations with Washington.

Also, the central banks of China and the United Arab Emirates are joining their counterparts in Thailand and Hong Kong on a CBDC project investigating cross-border foreign currency payments. **The Multiple CBDC (m-CBDC) project** will see a proof-of-concept prototype developed designed to support real-time cross-border foreign exchange payment-versus-payment transactions in multiple jurisdictions, operating 24/7. It will analyse business use cases in a cross-border context with both domestic and foreign currencies. The project was first developed by the Hong Kong Monetary Authority and the Bank of Thailand and is being run with the BIS Innovation Hub in Hong Kong.

Experts say China's plans have triggered concerns about a new threat to US financial dominance. According to Aditi Kumar and Eric Rosenbach of the Harvard Kennedy School, the digital version of the Chinese renminbi could eventually allow Iran and other countries to more easily evade US sanctions or move money without it being spotted by Washington. They explained in an article for Foreign Affairs that one day it might be possible to transfer the digital currency across borders without going through dollar-based international payment systems.

Former US Treasury Secretary Henry Paulson has argued that the threat to the dollar's status as the world's preferred currency is "not a serious concern." He claimed that even if a digital yuan proves to be highly mobile around the world, the US dollar is widely trusted, and oil and other key commodities are still priced in it. However, according to the CEO of Sino Global Capital Matthew Graham, digital yuan could encourage other countries and people overseas to get on board with China's technology and currency.

With Beijing pushing for greater use of the yuan internationally, the Chinese currency could rise to the status of the world's third-largest reserve currency in 10 years, according to a forecast by Morgan Stanley. The share of the yuan in global foreign exchange reserve assets could more than double from its current level of two percent and surpass the share of the Japanese yen and the British pound, the bank's analysts said in a report released on Friday, cited by CNBC. According to their estimates, the Chinese currency, officially known as the renminbi or RMB, could reach five to 10 percent of reserve assets by 2030.

"This target is not unrealistic in light of the financial market opening in China, the growing cross border capital market integration we see across equities and fixed income and an increasing proportion of China's cross-border transactions being denominated in RMB," Morgan Stanley international strategist James Lord said. More and more central banks worldwide have been gradually stockpiling yuan in their coffers. According to Morgan Stanley, at least 10 regulators added the currency to their forex reserves last year, with the total number of holders reaching 70.

International Monetary Fund (IMF) data shows that the renminbi share in global reserves has doubled since it was included in the IMF's basket of major reserve currencies in October 2016. Back then, the share of the yuan amounted to one percent, and now it stands at 2.02 percent. Its main rivals – the yen and the British pound – have a 5.7 percent and 4.43 percent share respectively. The US dollar accounts for almost

62 percent of global forex holdings and the euro for over 20 percent.

Russia

After discussing the launch of the digital ruble with local banks, the country's financial watchdog says it will present a more detailed concept for the national digital currency by summer.

Russia's central bank initially revealed that it was assessing the possibility of creating a digital form of the Russian national currency in its report published in October 2020. The digital ruble is meant to exist along with cash and non-cash rubles and will allow private and corporate users to freely transfer digital rubles to their electronic wallets and use them on mobile devices.

The head of the Central Bank of Russia, Elvira Nabiullina, said on the 18th of February, that the regulator received detailed feedback from the banking community in its October report, in which the regulator introduced the digital ruble as a possible new form of national currency. According to the official, most lenders support a two-level model of the digital ruble, which allows banks to open wallets for their clients on the central bank's platform and conduct operations.

"We will develop a more detailed concept and start discussing it with the public, market participants, and banks at the beginning of summer," Nabiullina said. She added that the next step will be launching and testing a special platform. The adoption of the new form of the currency will also require amending legislation. The new form of the Russian currency is to be test-launched as soon as 2021 in the Crimea. Earlier this year, Russia's central bank said that the digital ruble may be used for international money transfers, but only after its global peers establish their sovereign digital currencies.

More than 30 financial regulators are currently working on their national digital currencies, according to First Deputy Governor of the CBR, Olga Skorobogatova. Given the pace of the development, several countries may launch the new form of currencies over the next 5-7 years, the official added.

The development of digital currencies may challenge the SWIFT international banking payment system and could eventually make it redundant, the Central Bank of Russia (CBR) has said. "Then we can deal with direct integration issues. In this case SWIFT it may not be necessary, because it will be a different kind of technological interaction," Skorobogatova said at an online meeting earlier this week. However, the global banking network may become one of the platforms for the new form of national currencies, she added.

Meanwhile, Russia's largest lender, Sberbank, has applied to the national financial regulator to set up a blockchain platform for its own digital token called Sbercoin. The project may be launched as early as this spring. Sberbank sent the application for the platform to the Central Bank of Russia at the beginning of the year, Director of the Transaction Business Division Sergey Popov revealed earlier this week. He said that the registration was required by the law on digital financial assets, which came into force in Russia on January 1,2021.

However, Sberbak still has to resolve some issues linked to the digital currency, such as the taxation of digital financial assets as well as how the token can be used. According to the bank's top manager, Sbercoin can be used as a "digital promissory note," as this form can open "new opportunities" if it replaces the paper one. **Sbercoin could actually be a stablecoin**. Unlike bitcoin and other cryptocurrencies, stablecoins are pegged to fiat currencies, and Sberbank's token will be pegged to the Russian ruble.

The most commonly used stablecoin is issued by Tether. By March 2020, Tether's market capitalisation was more than USD 4.6 billion, but its use is almost entirely limited to the crypto-asset market. Other examples include Fnality and JPM Coin. Facebook recently announced that it was launching a new stablecoin named Libra in cooperation with a group of multinational corporations, with the currency being operated by an umbrella organisation called the Libra Association.

India

The Indian government plans to introduce a bill to prohibit "private cryptocurrencies," paving the way to outlaw the likes of bitcoin. The law is set to facilitate the creation of the nation's own official digital currency. The legislation moves to prohibit what it calls "all private cryptocurrencies in India," but allows "certain exceptions" to promote blockchain, the underlying technology of cryptocurrency and its uses. It also aims to provide a framework to set up an official digital coin, issued by the Reserve Bank of India.

India has previously tried to ban virtual currencies, including bitcoin. In 2018, its monetary policy regulator alerted banks that they must stop dealing with them, citing "various risks associated in dealing with such virtual currencies." However, the move was subsequently overturned by India's Supreme Court, bearing in mind that there are millions of crypto investors in India and, as Rahul Pagidipati, the head of a leading exchange, ZebPay, said "Crypto assets and digital government currency can co-exist and together, they can bring tremendous benefits to the Indian economy"

European Union

The European Commission and European Central Bank are working together to investigate the policy, legal and technical questions emerging from a possible introduction of a digital euro.

Having just closed a public consultation on the subject, the ECB says it will now consider whether to start a digital euro project towards the middle of the year as it looks to answer design and technical questions ahead of any decision to actually issue the CBDC. Now, the ECB and the EC have created a joint technical group to look at the policy, legal and technical aspects of the possible introduction of a digital euro. The EC says that one of the reasons a digital euro is appealing is that it could help promote global use of the currency. However, the Commission has also stressed that there are significant issues to address relating to financial stability, financial inclusion, and anti-money laundering and counter-terrorism financing. The public consultation was launched on 12 October 2020, following the publication of the Eurosystem report on a digital euro. Among respondents to the ECB's public consultation, privacy of payments ranked highest among the requested features of a potential digital euro (41% of replies), followed by security (17%) and pan-European reach (10%).“A digital euro solution should not crowd out solutions that come from the private sector. In the ECB report, it is highlighted that such a solution would be complementary to private sector opportunities. There should not be rivalry or competition.” ECB president Christine Lagarde said “A digital euro will never be a substitute for cash. It is a very good supplement and a very good partial substitute for what was being done physically.” “Technology and innovation are changing the way we consume, work and relate to each other,” says Fabio Panetta, member of the ECB’s executive board and chair of the task force. “A digital euro would support Europe’s drive towards continued innovation. It would also contribute to its financial sovereignty and strengthen the international role of the euro.

The Italian Banking Association is to kick of a technicial feasibility study on the use of distributed ledger technology for a future digital euro. The initiative comes at the urging of the European Central bank for EU nations to contribute to the public policy debate around the creation of a central bank digital currency (CBDC) covering the Euro-zone. The experimentation project is divided into two work areas: one involving the infrastructure and distribution model to analyse technical feasibility, and the second focusing on programmability to experiment with use cases that can differentiate the central bank’s digital euro from the electronic payments already available.

The European Central Bank is stepping up its analytical investigations into the potential for creating a central-bank backed digital currency for retail customers, a move which would be "a game changer" for the banking industry, says ECB exec Yves Mersch. "A **wholesale CBDC**, restricted to a limited group of financial counterparties, would be largely business as usual," says Mersch. "However, a **retail CBDC**, accessible to all, would be a game changer. So a retail CBDC is now our main focus." The creation of a retail CBDC would need to address the currency's legal tender status and the relationship between a CBDC and euro banknotes and coins, along with the process by which one could be exchanged for the other. Mersch describes two different ways to design a CBDC - operating either as a decentralised digital token, or based on deposit accounts lodged with the central bank. Of the former, he says: "We are currently looking into the legal questions raised by the potential use of intermediaries to facilitate the circulation of a CBDC and also the processing of transactions in a CBDC. To what extent are we permitted to outsource public law tasks to private entities? And what would be the appropriate extent of supervision over such entities?" The latter approach raises serious policy questions relating to the potential disintermediation of commercial banks and the possibility of digital bank runs, as consumers cash out their accounts in favour of a central bank-issued currency. What, then, could be done to mitigate the impact of a CBDC on the financial system? asks Mersch. "One option could be to remunerate CBDC at below-market rates in order to create incentives for non-banks to rely more on market-based alternatives rather than on central bank deposits. The drawback would be that, in times of crisis, it may become necessary to apply highly negative rates, which could generate criticism from the public and substantially undermine public confidence in the central bank as well as in the basic values of saving which underlie our societies. "Another option is a tiered remuneration system. In line with the functions of money, the first tier could serve as a **means of payment**. The central bank would have to refrain from setting a lower or a negative interest rate in order to keep a CBDC attractive to the public as a means of payment. While the second tier could serve as a **store of value**, the central banks could discourage people from using it as such by setting unattractive interest rates. However, such schemes should draw from the experience of multiple exchange rate regimes. And the repercussions of the intentional use of such schemes need to be subjected to an additional comprehensive investigation." For the moment, the ECB's investigation is purely analytical.

Bank for International Settlements (BIS)

In its annual economic report (June 2020), BIS says that while central banks play a pivotal role in safeguarding the payments system, they also need to foster innovation. One significant way in which they are looking to innovate is through the investigation of Central bank digital currencies (CBDCs) which "deserve consideration" as an additional means of payment.

Last year, BIS surveyed 63 central banks, finding that 70% are currently, or soon will be, engaged in CBDC work. Since then, Canada, Italy and Thailand, among others, have taken significant steps on the issue. The central bankers' bank has previously urged caution on the subject but it now says such digital currencies "could offer a new, safe, trusted and widely accessible means of payment". Benoît Cœuré, head, BIS Innovation Hub, says: "Central banks around the world are stepping up their efforts to study CBDCs and, whether wholesale or retail, the goal is to create safe and reliable settlement instruments for transacting in the digital economy." A group of seven central banks together with the Bank for International Settlements (BIS) have published a report laying out the key requirements for creation of a central bank digital currency.

The report, **'Central bank digital currencies: foundational principles and core features'**, was compiled by the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, the Federal Reserve, Sveriges Riksbank, the Swiss National Bank and the BIS. It highlights the key principles and core features of a CBDC, but does not give an opinion on whether to issue, although the race is clearly on to catch up with China's trailblazing exploits and beat off private initiatives such as facebook's Libra. The document stresses that any introduction should support wider policy objectives and do no harm to monetary and financial stability. Coexistence with cash and other types of money is considered essential, as well as core features that promote innovation and efficiency. "This report is a real step forward...in agreeing the common principles and identifying the key features we believe would be needed for a workable CBDC system," says Jon Cunliffe, deputy governor of the Bank of England. "This group of central banks has built a strong international consensus which will help light the way as we each explore the case and design for CBDCs in our own jurisdictions." While there will be no 'one size fits all' framework due to national priorities and circumstances, a workable CBDC should at a minimum, be:

- Resilient and secure to maintain operational integrity;
- Convenient and available "at very low or no cost" to end users;
- Underpinned by appropriate standards and a clear legal framework;
- Have an appropriate role for the private sector, as well as promoting competition and innovation.

Benoît Cœuré, working group co-chair and Head of the BIS Innovation Hub, says: "A design that delivers these features can promote more resilient, efficient, inclusive and innovative payments.

4. Conclusions

The digital payments space saw vigorous investment activity during 2020 and there have been a plethora of announcements about account based Central Bank Digital Currency (CBDC). Whilst some emerging markets have announced that they have either launched or are launching a CBDC, what many do not realise is that creating a digital currency is actually the easy part.

What is more important is how it is linked into the wider ecosystem to ensure the circulation of money and cash flows. Without it, it is a cart without a horse. It looks like the likes of China are making good progress having understood this construct and other major nations will not stand by watching and as such here will be some interesting developments with numerous pilots in 2021 starting to develop.

References

- The report, 'Central bank digital currencies: foundational principles and core features', Bank for International Settlements;
- Annual economic report Bank for International Settlements (BIS) (June 2020);
- Eurosystem report on a digital euro;
- „ECB moves a step closer to the creation of a digital euro” Finextra 02 October 2020;
- „European Central Bank steps up focus on retail CBDC” Finextra 11 May 2020;
- A regulatory and financial stability perspective on global stablecoins, The ECB Macroprudential Bulletin.