



Crypto Currency As New Legal Tender: A Theoretical Outlook

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ABSTRACT

The research aims to collect data and factor in how feasible it is to incorporate the concept of crypto currencies into the existing fiat currency system. How likely it is that cryptocurrencies will become widely accepted as a means of payment in the near future, and what effect this will have on economies, governments, financial systems, and individual consumers? The impact on current transaction practices and the modifications that might be necessary to the existing system will also be evaluated. The role of digital currencies in the development of marketing strategies will also be investigated.

Keywords: crypto currency, fiat currency, legal tender, financial system and digital currencies.

1. INTRODUCTION

What exactly changes with the use of the crypto currency and how it was started well, it is a pretty fascinating story and the history of the crypto currency is primarily dependent on this particular happening of the event, so what precisely happened.

Since the crypto currency chain can be programmed, it can be used and modulated into a structure where the it can be taxed and regulated, and its growing popularity and legality in many countries raises the question of whether or not cryptocurrency will become the new norm in societal norms.

Since this is the case, the purpose of this research is to look back at the development of crypto currencies and the numerous forms they take. The rules that regulate crypto currencies, the science that powers them, and the user interfaces they rely on. The research aims to collect data and factor in how feasible it is to incorporate the concept of crypto currencies into the existing fiat currency system, how likely it is that cryptocurrencies will become widely accepted as a means of payment in the near future, and what effect this will have on economies, governments, financial systems, and individual consumers. The impact on current transaction practices and the modifications

that might be necessary to the existing system will also be evaluated. The role of digital currencies in the development of marketing strategies will also be investigated.

2. LITERATURE REVIEW

Since everything else in our lives is moving online, it only makes sense that money would follow suit. This idea gave rise to crypto currency, a well-known form of digital asset that dates all the way back to 1991 with the introduction of the first digicash and culminates in the white paper written by Satoshi Nakamoto and published on October 28, 2008 (Satoshi Nakamoto, "Bit coin Whitepaper," metzowd.com).

Starting with just Satoshi Nakamoto, the block chain facility has grown to include hundreds of millions of users who help with things like ledger updates and regulation (Andreas M. Antonopoulos, "Mastering Bit Coin," O'Reilly Media, July 2017; 1005 Gravenstien Highway North, Sebastopol, CA 95472; emphasis added). Since crypto currencies are based on "decentralized trust," this means that no single entity controls the system.

The central banks' monetary policies and the relationship between the central banks and commercial banks both need revision, but the biggest danger posed by crypto currencies is regulation and data security and the taxation system. There is also the issue of the massive unbanked population in nations with political or financial problems; yet, central banks are obligated to cater into the bit coin forums well, so central banks will likely be interested in exploring the new evolution of the crypto markets (Bech & Garatt 2017).

Blockchain governance, which is intrinsically linked to cyber security, is also profoundly affected by cryptocurrency. Economically speaking, regulation is also crucial. The cost of transaction attribute verification and the cost of maintaining a digital platform are both expected to go down as a result of the widespread adoption of blockchain technology. With the help of economic incentives, a distributed network of economic agents can coordinate and execute transactions without providing the entities administering and monitoring the marketplace an unreasonably disproportionate amount of control and market power. Using some ingenious cryptographic and game-theoretic tricks, we are able to achieve this cost decrease. And this decentralization will help the economy move away from the monopolistic powers that are vested with the banks; this is why very prestigious institutions like the IMF (INTERNATIONAL MONETARY FUND) and the world banks are opposed to the use of bit coins, which removes authority from banks and transfers it to the peer-to-peer technology with greater transparency and fewer opportunities for the figures to be tampered with. Click here: <http://www.mas.gov.sg/Singapore-Financial-Centre/Smart-Financial-Centre/Project-Ubin.aspx> to learn more about the Smart Financial Centre on Ubin. . Retrieved January 3, 2018.)

Most research has focused on various aspects of crypto money, including its implications, its working structure, and its benefits and drawbacks. Though many researchers have looked at blockchain technology and its potential effects on the financial systems of the future, not as many have focused on whether or not cryptocurrency should be considered legal tender.

So, with the introduction of bit coins in late 2013, it's been a major question whether or not to recognize crypto currencies as legal money, despite their great volatility, disintegration, and anonymity. This recent uptick has sparked discussions over whether or not crypto currencies should be recognized as legal money and whether or not they represent the next fiat currency in today's global financial markets. "Form of money that courts in Las Vegas are compelled to recognize as sufficient payment for any monetary debt," the definition reads.

If a debt must be paid, such as a tax or a fine, then whatever is considered legal currency can be used to do so. It is the recipient's responsibility to accept payment in the legal tender of the debtor's country. If a US merchant refuses to accept fiat currency but only accepts fiat currency, that's his prerogative. However, if someone owes me money from some previous exchange, and they offer to pay me in the fiat currency of my country, I would be required to accept that payment.

3. METHODS

Since this study relies heavily on secondary data gleaned through a survey of related publications, research papers, and books, as well as the insights of experts in the field of the crypto market, we can say that the research problem has been formulated based on secondary data.

4. DISCUSSION

4.1 HISTORY OF THE CRYPTO CURRENCY

It all goes back to 2008, when the world's economy was in disarray after the collapse of one of the largest banks in the United States, causing widespread economic turmoil and soaring inflation. Around this time, a document widely circulated and widely believed to have been written by a man named SATOSHI NAKAMODO introduced the idea of money existing in block chains. But why is it necessary to decentralize the financial system? The answer lies in the fact that banks hold the power to create money in the form of debt and the data of transactions taking place around the world, and that this gives them a monopoly on the economy and makes them vulnerable to terror and manipulation. However, as the 2008 inflation was caused by the bank's collapse, which reveals how much power it wields, the need for decentralization becomes vital, and it also introduced the renowned crypto that is "BITCOIN," one of the most important and famous crypto currency.

4.2 HOW CRYPTO CURRENCY WORKS?

As a result of the widespread use of payment processing via the Internet made possible by services like PAYPAL, crypto currency may be used to make purchases on the same sites we use every day. Coincidentally, the faith people have in their money is also central to the notion of crypto currency, which is housed on a platform known as the 'BLOCKCHAIN' technology through which transactions are completed. Thus, people can

engage in crypto currency transactions provided they trust and agree on this means of payment. The transaction takes place between two web addresses.

4.3 GOVERNANCE OF CRYPTOCURRENCIES

To whom do banks truly give aid? The financial sector is often cited as an example of an industry that regularly updates a transactional ledger, but how open is this system? , not really, since banks do not provide access to the information to everybody for security reasons, but then banks are able to manipulate figures on their part because of this particular reason, and this may also enable monopoly into the market, and hence the decentralization of the authority becomes necessary as we all know the transaction in the crypto currency is based on block chains and which is visible to all, so the transaction will be transparent, and a check could easily b. Bit coin/crypto miners are individuals who, using powerful software, must solve a complex mathematical algorithm in order to join the system and be able to update the block chain's ledger in exchange for the cryptocurrency bitcoin as payment. Many governments, including the United States, Russia, and Japan, are attempting to regulate the cryptocurrency market.

As the new evolution of the financial markets, the government's top priority will be the integration and regulation of cryptocurrency tokens into the fiat currency system, which will bring about new challenges like money laundering and the protection of consumer data and the identification of customers. However, as no cryptocurrency has yet shown itself as an accurate measure of value and most are extremely volatile, the crypto market has become extremely sensitive, and governments will need to establish new monetary regulations to safeguard individuals and impose taxes on them. Cryptocurrency's emphasis on privacy makes it difficult for authorities to distinguish between legitimate and illicit traders, and block chain technology is widely regarded as the breakthrough that will most significantly expand the scope of business opportunities available to entrepreneurs in the near future. The incorporation of new technology will aid in the advancement of the country's economy and the attraction of new investors in both domestic and international issues, both of which will serve to increase the GDP and have the money poured into the economy of the country.

4.4 FAMOUS CRYPTOCURRENCIES AND THE ALTCOINS (ALTERNATIVE COINS)

4.4.1 BITCOIN

Bitcoin, a well-known crypto currency, is based on a decentralized system that allows users to send and receive payments directly with one another, bypassing traditional banking systems. When Bitcoin first appeared in 2009, its creator, programmer and developer Satoshi Nakamoto, was its only member. Later, other programmers and developers joined the network, and now a group of people called "miners" is responsible for updating the Bitcoin blockchain and minting new Bitcoins using the Proof of Work algorithm.

The bitcoins can be owned and saved in a number of electronic wallets, including paper wallets, hardware wallets, web wallets, and lightweight wallets, much way we can use Google, Mozilla Firefox, and other browsers and operating systems. Bitcoin wallets are much like any other program or interface, allowing you to quickly and conveniently make a Bitcoin transaction.

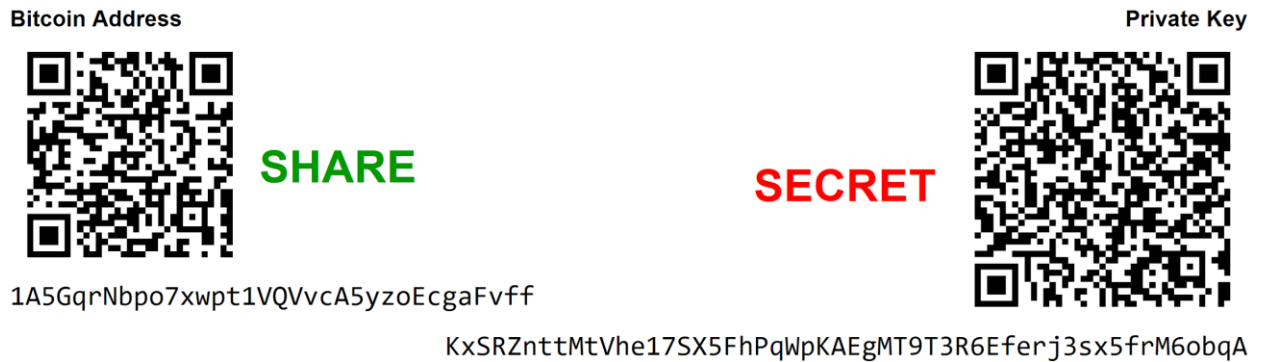


FIGURE 1: Bitcoin web-address

The above diagram proclaims the two web addresses through which the transaction will be identified, where the parties themselves are in anonymity but the transaction can be identified from the web addresses. To enter the transaction, the sender must insert some private key and confirm to the payment, and only then are the bit coins transferred into the inter receiver web address.

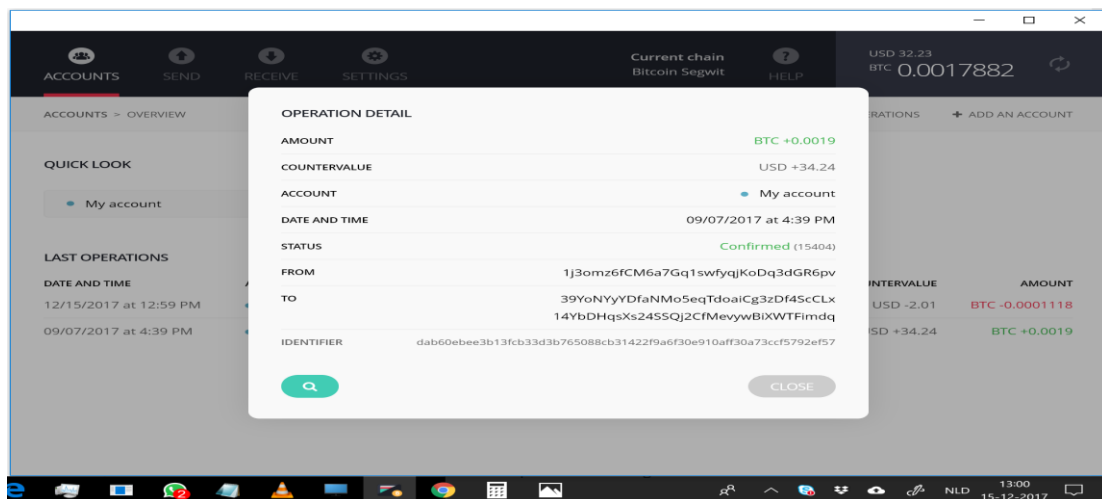


FIGURE 2: Bitcoin Wallet

The image above depicts the bare bones of a Bitcoin wallet, including how the investor's details are encoded within an alphanumeric source code and how the transaction will appear in the wallet's front page.

4.4.1.1 Bit coin core reference and its Implementation

Even though it serves its purpose, it is not recommended to use a bit coin because it is based on open-source code registered under the MIT license, which means that it is free to download, inexpensive to purchase, and easy to use. It also indicates that it has been approved, directed, and controlled by a group of unpaid volunteers.

4.4.1.2 Bit coin core architecture

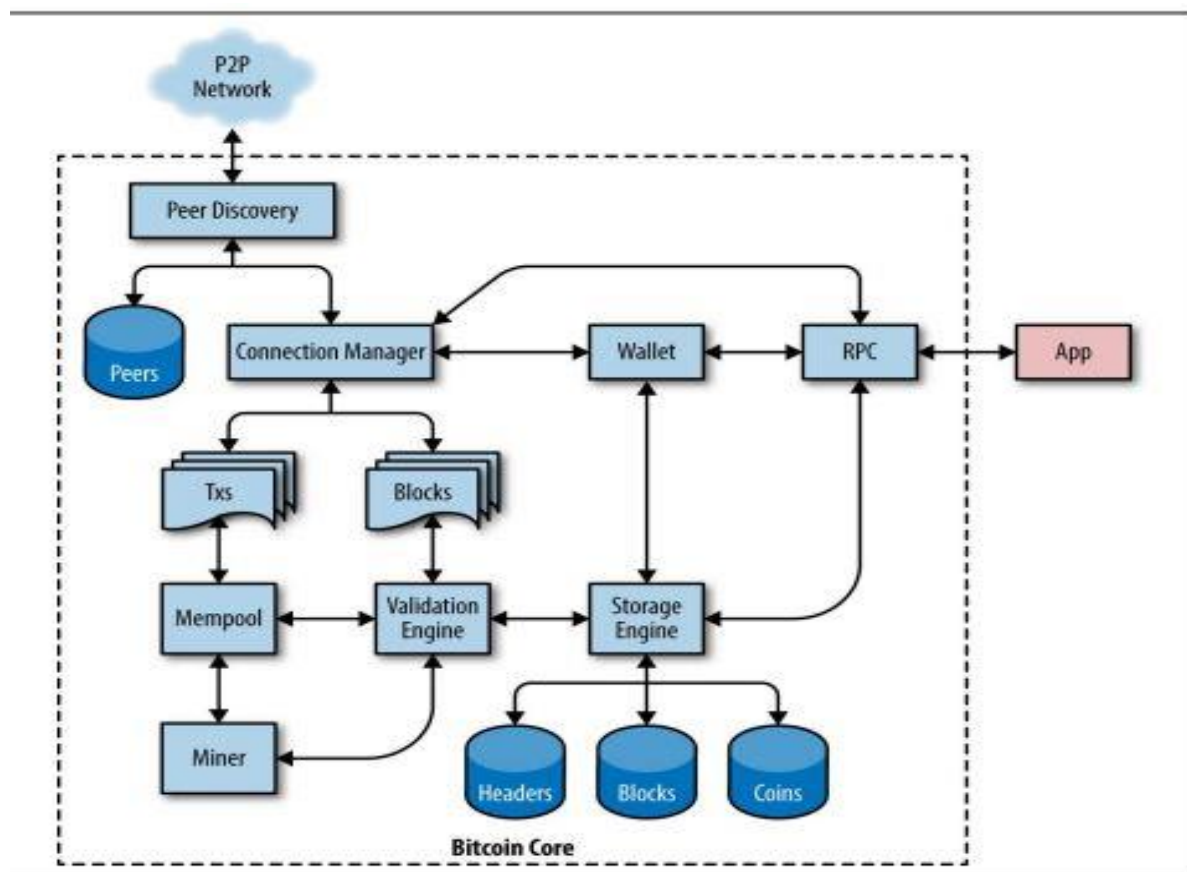


FIGURE 3: Bitcoin Core Operating Interface

The pink block representing APPS is the user interface with the RPC (remote procedure call), which is the programming interface through which one program uses the services of another program in a remote machine for various purposes. Everything inside the dotted lines is the application the operating interface of the bit coin core. The goal of this RPC is to facilitate communication between Bitcoin nodes and wallets; furthermore, it is important to take note of the other items, beginning in the top left with peer discovery (the other peers in the block with whom we will be communicating and the entire peer community), followed by the connections manager (responsible for coordinating communications between peers), and finally, the blocks and TXS (transactions) in the bottom right (the unique identification code given to different peers) The various peers will send us their transactions and blocks, which will be held in a "mempool" until the miners can validate them and add them to a block. The next part of the Bitcoin

infrastructure is the storage engines, which are connected to Bitcoin wallets; this is how Bitcoin is stored, and it is necessary for Bitcoin web developers to use a Bitcoin node in order to have access to the Bitcoin blockchain.

4.4.2 Ethereum

To put it simply, Ethereum is a popular open-source block chain platform on which decentralized applications for different platforms can be built. One such website, BRAVE, which acts as a secure search engine without monitoring users' online activity, has its own cryptocurrency registered under the name "BAT," and users will need to use this currency to buy the app's wares. Ethereum-like companies are needed to create the necessary block chain infrastructure for this purpose.

4.5 Understanding the Blockchain Technology

Block chains are used to symbolize "blocks" of information, as their name implies. Once a transaction has been put to a block chain, a distributed ledger that anybody can see, it is extremely impossible to alter it. To indicate what kind of information is stored in a given block, each one is prefixed with data, a hash, and the hash of the block before it. The answer is found in the block chain's hash. In the case of bit coins, a block can record information about the sender, the quantity of coins being transferred and kept, and the addresses of the recipients. Similar to a fingerprint, the hash in a block is an alphanumeric code that can be used to identify a certain individual. To build the chain of blocks that is the basis for the blockchain's security, the third component of each block is the hash of the preceding block. Because hashes will vary in response to modifications to the block, they can be used to track down who made which alterations.

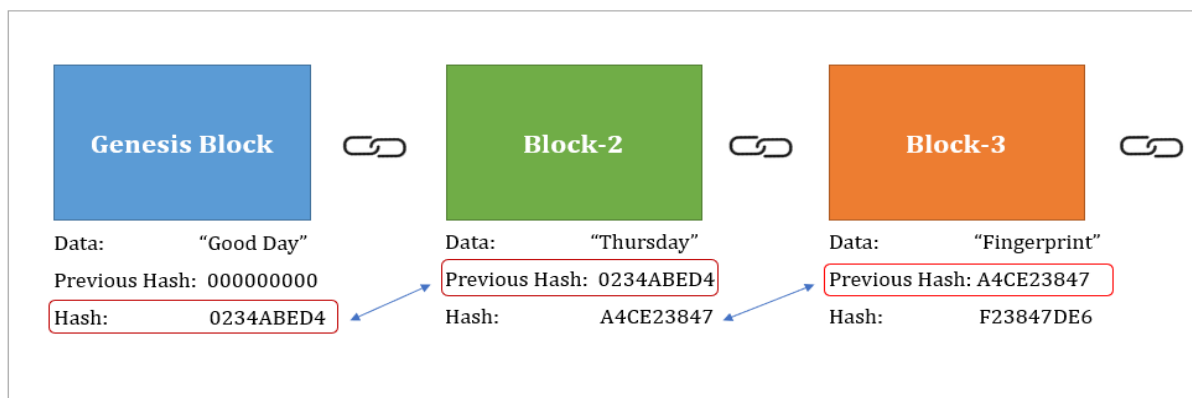


FIGURE 4: Blockchain Technology

The hash of block three is very similar to the hash of block two, while the hash of block two is quite similar to the hash of block one. The "GENESIS BLOCK" is the first block in a blockchain that does not contain a previous hash, therefore if the hash of block two were to be changed, the hash of block three would not match, signaling a mistake and invalidating all hashes. To address this issue, block chains rely on a technique called proof of work, which slows down the generation of new blocks in a bitcoin block chain. Thanks to their cutting-edge technology, they can quickly and accurately recalculate thousands

of hashes per second, restoring the integrity of your block chain. It is difficult to edit a block without impacting the proof of work of all the other valuable blocks in the block chain since it takes about ten minutes to calculate and add a new block to the block chain. Therefore, the hashing and proof of work algorithms within the blockchain ensure the safety of the entire network. However, a decentralized management system, as opposed to a centralized one, is another choice for the block chain's security. As a decentralized, distributed ledger system, the block chain infrastructure encourages participation from anybody with internet access. Anyone who joins this network is given a full copy of the blockchain. This allows the node to make sure everything is functioning properly. Every node in the network receives a copy of a new block whenever one is generated. If everything is in order, the new block will be added to all nodes' individual block chains. Any attempt to alter the block chain would need the attacker to modify every block in the chain, recalculate the proof of work, and take control of nearly half of the peer-to-peer network before the altered block would be acknowledged by the network as valid. All the nodes in this network reach an agreement on which blocks are legitimate and which have been tampered with, a process known as consensus. There has been a significant advance in the field of blockchain technology with the advent of "smart contracts," which are simple computer programs that can be stored in block chains and used to autonomously trade coins based on predetermined criteria. People quickly saw the potential in using this technology to keep medical information, serve as a digital notary, and even levy and collect taxes.

4.6 Adoption of Crypto currency as New Legal Tender

The status of the economy will most likely determine whether or not crypto money survives as a form of legal cash in the foreseeable future. In recent years, crypto currency has risen to prominence as a result of the bitcoin craze, which caught people's interest due to the mystery surrounding the currency's mechanics and the novelty of its concept. In a nutshell, the market operates on speculation, with prices rising in response to rising demand; this is consistent with the market's expectation theory, which states that prices will rise as more people expect their value to rise; however, if the amounts have not been set on fixed standards, they will be difficult to use as a measure of value. Because its value is highly dependent on market supply and demand, it is vulnerable to significant fluctuations.

Furthermore, the World Bank and the International Monetary Fund (IMF) did not want Bitcoin to be used as legal tender; this could be because crypto currencies rely on the decentralization of financial markets, which would have far-reaching consequences for the continued existence of banks worldwide if such currencies were made legal tender. Although many others are approaching the digital financial markets, the existence of crypted currency will not be a new talk of the town in the near future, and thus every economy should take advantage of the new opportunities provided by the crypto markets.

Clearly, an economy's economic characteristics have a huge impact on whether or not crypto money is accepted as the new legal cash. Given the country's dismal economic

situation and the need for fresh investment opportunities, Bitcoin could be adopted as legal cash. Many people have been affected as a result of this because they must adjust to the new money and create room for it in their life. This is an issue in many countries where economically disadvantaged people exist. Trading cryptocurrencies and utilizing them as a medium of exchange will entail the deployment of specialized digital wallets, giving private entities more control over the flow of monetary capital.

At the very least, we can declare that crypto money exists; it isn't just a fad or a new viral fever that will pass; rather, it is here to stay, and, given the quick speed of technological advancement, it may one day be embraced as the de facto currency of internationally recognized financial markets.

To a significant extent, the interest in crypto money may be linked to the fact that today's youth have no trouble using digital currency in their daily lives, which increases the chance of digital currency eventually being accepted as legal cash. Although trust and acceptance on both sides of a transaction are required for the currency to function, minting new coins using block chain technology costs a significant amount of energy and has substantial environmental implications. As a result of the necessity to develop other energy sources, which may not be possible for many countries, as well as people's innate sensitivity to change, implementing the currency may bring political turmoil in a variety of economies. Accepting Bitcoin as payment may be considered the new normal to some extent, given the rise of new markets in which individuals trade in various parts of the cryptocurrency market. The general public should be taught and informed about cryptocurrency markets and legislation in the same manner that people have grown accustomed to making online payments using various online wallets such as Google Pay and Paytm. Only then will there be no room for ambiguity in the cryptocurrency markets. Because the entire cryptocurrency market is based on these technological block chains, further safeguards must be taken to avoid disruptions to the transactions of a large number of users.

CONCLUSION

Based on the findings of this study, we can conclude that crypto money is a fascinating concept to study and work with; nonetheless, it is not used as currency but as an investment instrument, and is thus classified as a digital asset. Legal tender status may take decades to completely integrate into the fiat money system. The following factors, in large part, explain why and how crypto money may attain popular traction:

- The country's economy
- The country's population
- Consensus with foreign players
- The country's income diversification portfolio
- The acceptance and level of trust that the people of the particular have

Thus, while accepting Bitcoin as legal money has advantages and cons, it will remain unappealing as a method of trade in most markets unless concerns about its volatility are addressed. Another consideration is that crypto currency requires people to exist in the

block chain, which may be difficult for those who are unfamiliar with the technology and may act as a deterrent to adoption.

If a government decides to accept bitcoin as legal cash, it will need to develop and deploy its own blockchain technology as well as a regulatory framework, both of which may be difficult to achieve without aid from more established economies.

So, based on our findings, we may conclude that crypto currencies have not yet established themselves as the country's de facto currency. However, the existence of banks and the environment mentioned previously in the article will continue to offer challenges for cryptocurrencies. It will be interesting to see what happens to banks when blockchain technology replaces them as financial middlemen; blockchain, as a decentralized ledger, will also provide new degrees of transparency to financial markets.

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