

The Transformative Potential of Cryptocurrency

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COMP 211: Inquiring Minds: Foundation Analytical Comp

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November 22, 2023

Abstract

Keywords: Cryptocurrency, Technology, Economy, Regulation, Institutions

In the rapidly evolving landscape of the Digital Age, cryptocurrency has emerged as an influential force in a journey to reshape our financial institutions. Following a rise in paperless commerce, there has been a new push towards utilizing digital currency altogether. This research will seek to examine the profound impact that cryptocurrency has in stimulating global economic transformations while acknowledging the potential for bridging financial gaps and challenging existing financial borders. It is crucial to explore the intersection of technology and finance as it relates to cryptocurrency because it signifies a pivotal moment in the evolution of our financial system, all while opening the door for new opportunities in economic growth. Utilizing a range of diverse perspectives, this research will study the rise of digital currencies through previous real-world applications and anticipation for future developments. There have been interactions between nations and cryptocurrencies that are ripe for analysis to determine the benefits and drawbacks of implementing digital currency nationwide. With an emphasis on the role of institutions and government regulations, this research strives to illustrate the profound shifts that are occurring in modern finance and the potential societal and economic implications that come with these changes.

Introduction

In a world where digital innovations continuously redefine our lives, a revolutionary phenomenon is reshaping our financial landscape: cryptocurrency. Utilizing complex cryptographic techniques and blockchain technology, cryptocurrency exists as a currency purely in the digital realm. Its transformative ability has already begun altering the status quo by challenging the way we understand money, borders, and commerce. This new concept has put society at a crossroads between tradition and innovation. There may never be a perfect time to implement change in the foundation of our global financial system, so would it benefit us to embrace the possibilities of this new currency? Unlike other technological advances, the inclusive power of cryptocurrency allows it to involve the entire general public, leading to a worldwide debate on how best to approach the situation. The rise of cryptocurrency presents a transformative opportunity for global financial systems, challenging existing borders and bridging financial gaps between nations and individuals. Our current transaction systems employ traditional banking frameworks that involve an intermediary between individuals or businesses. The decentralized nature of this new digital currency allows for a more direct peer-to-peer transaction structure and begins to transcend any geographical borders that may have existed prior. The absence of a need for intermediaries in the banking process also helps to build financial bridges between those who may live in underbanked or unbanked populations in developing countries. The economic empowerment that cryptocurrency brings urges those in disadvantaged circumstances to join the dynamic global economy and better equip them to participate in international trade and commerce. The advanced capabilities of cryptocurrency provide it with the opportunity to alter societal norms by addressing better routes of global trade and conventional commerce through the creation of new avenues for financial inclusivity,

acknowledging the positive and negative social and economic implications that stem from this paradigm shift.

Background Knowledge

To fully grasp and analyze the potential impact that cryptocurrency can have on our global economy, the fundamental details about it must be clear. Cryptocurrency was introduced into the world in 2008 by an anonymous person under the pseudonym Satoshi Nakamoto. They released a whitepaper titled *Bitcoin: A Peer-to-Peer Electronic Cash System*, and in early 2009 mined the first block of Bitcoin blockchain. Despite the rapid popularity growth of Bitcoin and other Alt-coin, the founder's identity is still hidden 15 years later. Just like the whitepaper's name suggests, cryptocurrency is a decentralized digital currency, meaning it involves no government or financial institutions to mediate a transaction between two people and control the currency. The only ones involved in the exchange of goods or services are the two peers. It uses complex cryptographic techniques to ensure the transactions are secure and to deter unauthorized parties from manipulating or counterfeiting the currency. The decentralized networks that cryptocurrency operates on are based on blockchain technology. Essentially, this blockchain is a ledger that records all transactions across a network of computers which helps to promote transparency and security. The only requirement to be able to use this electronic cash system is having an internet connection, which is a growing statistic as our world continues to navigate the advancements of the Digital Age. At the end of 2021, 63% of the world's population regularly uses the internet (The World Bank, 2021). This increases the global accessibility of this form of currency, beyond people who may live in unbanked or underbanked populations. More important than other features it may provide, cryptocurrency must hold the attributes of a strong form of money for the argument in favor of implementing it worldwide to be viable. According to

Ammous (2018), Bitcoin has characteristics such as durability, scarcity, portability, divisibility, etc. that establish it as a strong medium of exchange. Despite cryptocurrency still being new and having a relatively volatile market, the strong attributes that Ammous described have pushed certain people and places into exploring this option more.

Impact Based on Integration

The depth of integration that we choose to pursue with cryptocurrency directly correlates to the level at which it impacts us. Whether allowing cryptocurrency as an alternative legal option or acknowledging it as a country's official tender, deeper integration results in more profound benefits. These benefits consist of things such as reduced costs, higher security, and faster transactions. In his article in the *Georgetown Journal of Affairs*, Catalini (2018) discusses the implications that would appear in relation to cybersecurity, the government, and the digital economy in general. The use of blockchain technology throughout a digital economy is economically beneficial, "... [it] is associated with a reduction in two key costs: the cost of verification of transaction attributes and the cost of launching and operating a digital platform" (p. 37). By avoiding this position of control and operation that is necessary with traditional fiat currencies, a more efficient way of transacting is created with lower costs. It evades the fees levied by banks such as exchange fees or wire transfer fees. The decentralized blockchain also makes big strides in the cybersecurity world, "... [the] protocols increase the costs an attacker has to sustain to affect a large number of users or to access large amounts of data, as by design there is no central repository of data... that can be hacked" (p. 38). This plays directly into a heavily supported counterargument for the use of cryptocurrency, which involves the safety of all of our currency being digital. However, due to the lack of centralization, it is safer from hackers than the central banking system we use now. There is no quick way for a hacker to access everyone's

personal data since it is spread out amongst the servers, rather than being congregated in one central area online.

In the last few years, there have been countries that have chosen to adopt cryptocurrency as a nationwide legal tender in their country in hopes of benefitting from reasons similar to what Catalini discussed. El Salvador became the first country in the world to officially embrace cryptocurrency entirely. They, "... required all businesses to accept the cryptocurrency..." developing nations like El Salvador are ideal candidates for cryptocurrency adoption. More than half its citizens rely exclusively on cash, rather than credit or debit cards. Some 70 percent of households have no bank account..." (Belsie, 2022). This is a perfect example of the ability that cryptocurrency has to make the economy more inclusive and accessible. Whereas their previous physical currency excluded a large amount of their population that was unable to have a bank account, the option of cryptocurrency being used as legal tender across the country opened the doors in a new way. El Salvadoran citizens can now participate better in their economy and make transactions easier. The example of this country was one where they transitioned towards cryptocurrency being an official tender of the country, which is in a sense, "all-in" on cryptocurrency.

Cryptocurrency holds a lot of the same benefits on a smaller scale if it can be effectively integrated as another legal option. This particularly holds true for small, local businesses that benefit from having quicker access to funds. The same author who described the benefits from a nationwide perspective, Catalini, worked with Bernstein to analyze the specific impact of digital currency on small businesses. While it seems this impact may be smaller than what we see in El Salvador's example of a nationwide change, small businesses are responsible for employing about half of all Americans, meaning they "...play a critical role in our economy". The size of

these businesses typically means they are prone to financial fragility and struggle to deal with the high percentage of consumers that utilize credit cards and other forms of delayed payment. Digital currencies can make a world of difference, "...small businesses would experience not only lower costs but also faster access to funds. This would drastically improve their liquidity and cash buffers, and help them survive negative economic shocks and thrive" (Bernstein & Catalini, 2022). The main argument lies in the idea that cryptocurrencies are effectively facilitating real-time payments, something we see lacking in the US payment system. The accessibility that comes from digital payments would boost transactions for small businesses and help keep them afloat. This affects the country on a more individual level as these businesses bring a sense of local stability to cities everywhere.

Western Ideology as a Gateway to Financial Inclusion

Financial inclusion continues to stand as the foundation of the cryptocurrency revolution as it emphasizes the fundamental principle that everyone deserves equal access to financial opportunities. This "equal" ideology is at the heart of a large part of Western life and traditions, meaning it comes as no surprise that researchers are arguing about the role that Bitcoin or other cryptocurrencies may play in altering the global balance of power, particularly with Western institutions. In her article focusing on this exact topic, Andrea O'Sullivan argues that "...Bitcoin can be viewed as an extension of the Western liberal tradition that exalts individual autonomy, property rights, and the freedom of association... it is perhaps the purest distillation of these values...it is perhaps the surest vector of propagating true Western values to greater numbers of human populations" (O'Sullivan, 2018). Her argument sheds light on the broader socio-cultural context in which cryptocurrency operates, emphasizing its alignment with these core principles of Western society. The decentralized nature of cryptocurrency works to symbolize these

Western ideals of a stronger sense of self-reliance and individual sovereignty, rather than relying on a central authority. It also provides users with a stronger sense of ownership and protection over their personal assets due to the reliable cryptographic techniques employed. Her argument also analyzes how cryptocurrency extends Western ideals even more so than our current institutions. Since this manner of digital currency "... allows individuals to transfer value independently of established monetary and trade controls... [it can] undermine dominant methods of controlling social behaviors by controlling financial behaviors..." (O'Sullivan, 2018). The freedom that cryptocurrency provides is even more than what our current institutions follow, which is why it is at risk of altering the balance of power that Western society holds over the rest of the world. After all, one reason cryptocurrency was created was to provide individuals with the liberty of more financial options, and O'Sullivan's argument shows it is doing exactly that. Regardless, these observations work within the transformative potential that can be released with a wider adoption of cryptocurrencies. The sense of financial independence can challenge existing socioeconomic structures that exist in non-Western societies and hopefully push toward a culture with more inclusion and liberal values.

Bridging Financial Gaps and Breaking Down Financial Borders

Financial inclusivity involves bridging previously existing financial gaps that may exist between individuals and the rest of the economy, and instead providing opportunities for economic growth for everyone. The adoption of cryptocurrency in El Salvador is a great example of this. As cryptocurrency continues to grow, governments will play a role in expediting the growth and benefits of this digital currency for the whole population. The Editorial Team (2023) at the World Litigation Forum analyzed that, "By compelling banks to work with cryptocurrency businesses, [they] can potentially unlock a range of benefits. It can enhance financial inclusion,

as individuals and entities involved in the crypto space gain access to traditional banking services”. They go on to compare how it will affect banks and crypto-related businesses in unique ways, “collaboration...can stimulate innovation and growth in both sectors. Traditional banks can leverage the strengths of blockchain technology to improve their processes, enhance security, and lower costs... cryptocurrency companies can access a wider range of financial services, such as business accounts and payment processing, that are essential for their growth”. There is an aspect of cryptocurrency that is unique and beneficial solely because of its separation from the traditional banking system. That does not insinuate that a partnership cannot provide benefits to both parties. Due to the foundation of our monetary system being strongly rooted in the physical currencies that we are accustomed to, a connection between cryptocurrency and the banking industry would likely provide a smoother transition for people. This relationship could in turn work towards higher levels of inclusivity as it affects people around the world who can participate in one or the other: crypto banking or traditional banking. Regulation from the government can also benefit the growth of cryptocurrency from a more cohesive viewpoint.

As cryptocurrency continues growing worldwide, different countries and governments are approaching it differently. These differences have built walls between countries that are entering the digital currency realm with an open mind and those that are not. The International Monetary Fund specifically addresses these contrasting national approaches. Whereas “At one extreme, authorities have prohibited the issuance or holding of crypto assets by residents or the ability to transact in them or use them for certain purposes, such as payments... at the other extreme [there are] some countries [that] have been much more welcoming and even sought to woo companies to develop markets in these assets” (Narain & Moretti, 2022). These stark differences in response tactics have created a sense of fragmentation in global responses. The

IMF specifically calls attention to the different regulatory frameworks that may be produced as a result of these differences, and how cryptocurrency was meant to bring countries together rather than separate them. The IMF also calls for a more cohesive global response to this emerging topic that is coordinated, consistent, and comprehensive. Similarly, Golubev (2023) calls for the creation of “...a conducive environment for the growth of cryptocurrencies... global collaboration is crucial. International bodies, governments, and the crypto industry must work together to shape a regulatory landscape that is adaptive, resilient, and inclusive”. If this approach is taken by countries, there will be a stronger confidence instilled in the benefits of cryptocurrency and continue to provide the ability for innovation to happen in a safe space.

Cryptocurrency’s decentralized and digital structure battles existing borders between countries, particularly impacting international trade dynamics. Trade contributes substantially to global efficiency and acts as an opportunity for countries to expand their markets and access goods or services that would not have been available to them domestically. With our standard fiat currencies, international trade involves exchanging money to fit other currencies which increases transaction costs in general due to its difficulty. We see high exchange fees between currencies and lengthy waiting times as banks work to process cross-border transactions. In an analysis of the potential effects that cryptocurrency can have on international trade, “The integration of cryptocurrency in international trade offers significant potential to reshape global economic dynamics. By reducing transaction costs, expediting processes, and offering enhanced security, cryptocurrencies, underpinned by blockchain technology, promise to revolutionize international trade practices” (Golubev, 2023). In a very basic sense, it seems obvious that a digital currency that is available to be used by any country that desires it would be better equipped to handle cross-border transactions. However, there are a lot of details that need to be

specifically examined that cryptocurrency still manages to address. Its benefits go beyond these operational efficiencies in the transactions. Cryptocurrency can provide a cost-effective method of transferring funds between these developing nations where banking systems are not yet available for all. This act works to democratize financial systems and provide those in less fortunate circumstances, that may be present in an unbanked population, to have access to financial services and partake specifically in international trade on a smaller scale. This is where we see the culmination of the ideas of bridging financial gaps and challenging existing borders in the same space. By creating these financial bridges between those who may not have previously been able to engage in conventional ways of commerce or international trade, we are also tearing down the existing borders of lack of accessibility that were present within these nations or individuals' lives.

Counter Arguments

While the potential benefits of cryptocurrency are profound, addressing the concerns surrounding its implementation is crucial. These counterarguments raise points that must be considered when evaluating the broader implications of widespread cryptocurrency use. Firstly, it is essential to acknowledge that certain environments are in a more suitable position to adopt cryptocurrency right now. Then, as popularity grows and the drawbacks diminish, a more widespread use can be attained. For example, the US dollar is one of the most trusted currencies in the world. That doesn't mean it is always governed in a way that protects the American people above "...well-connected financial actors...". Because of this inherent power that is held by the US dollar over international trade, "... the US government consequently enjoys a prominent position in international affairs, and can exert significant global pressure by virtue of its privileged economic position" (O'Sullivan, 2018). Essentially, the nature of the dollar means that

the government can manipulate the money supply. In the US, it is a relatively safe environment and economy even with the government holding this power. Some countries are not as lucky. Cryptocurrencies "... [have] the total supply... baked into the system's code, [it] is virtually impossible to manipulate. [It is] attractive to those seeking a technologically-ensured stable store of value... [it] has been especially attractive to people forced to live under unstable or toxic monetary regimes, such as is the case in Venezuela" (O'Sullivan, 2018). Because the monetary supply of these cryptocurrencies cannot be manipulated, it takes away power from corrupt governments, like Venezuela. While a digital currency can benefit people in the US in many ways, it is more urgently needed in countries with an unstable economy. This is an important logistical factor to be aware of when thinking about the process of implementation across the world.

A lot of the success with cryptocurrency relies on a strong understanding of the technology and digital tools required to operate it. While the percentage of people across the world who have access to the Internet is steadily increasing, that doesn't imply that the full knowledge of navigating a digital currency is following that upward trend. Being unfamiliar with online banking systems, in general, can cause a hindrance between those underbanked populations that are trying to join the world through cryptocurrency and success. So, while cryptocurrency opens the door to financial inclusivity for many, there must be more steps taken to ensure that everyone can use it correctly. Whether that be instructional videos or books, some resources need to be accessible so that cryptocurrency can be a true benefit to all, rather than an issue. Following the same general idea, the market and price volatility of cryptocurrency can present difficulties. Beyond the nature of it being volatile, this puts those in vulnerable communities in a potential situation of investing without understanding the full risks that come

with something like cryptocurrency. Instead of bringing more people into a financially inclusive world, cryptocurrency would then have negatively impacted those who don't fully understand the market risks. This is why, as active consumers, we must stay educated on new introductions into the financial world. O'Sullivan touches on this idea of volatility because many view it as a barrier to adopting Bitcoin or other cryptocurrencies, even after having the necessary knowledge. She states that "... these potential weaknesses have existed... yet we have not seen the price fall to zero. On the contrary, the price has slowly, but inconsistently, climbed higher. This suggests that the monetary shortcomings may not be as much of a death knell as they appear..." (O'Sullivan, 2018). Cryptocurrency has received a bad reputation for being volatile, but in the long run, it is not nearly as bad as people make it out to be. It is a smart investment for many. From an individual perspective, the decision to utilize cryptocurrency daily is a choice. Being aware of the specific scenarios in which it can benefit one's family and one's money is the best route to finding success in cryptocurrency.

Conclusion

The rise of cryptocurrency represents a pivotal moment in the evolution of our global financial system. Its transformative power lies in both the innovative technology and its ability to bridge financial gaps and challenge existing borders. The ongoing debate surrounding the adoption and regulation of cryptocurrency in different countries is a strong reflection of the tension that exists between tradition and innovation. Collaborative efforts are essential to shaping a cohesive regulatory landscape that works to ensure security and inclusivity while also promoting transformation. As we navigate the dynamic prospect of cryptocurrency, it is crucial to emphasize both education and awareness from the general public. Staying up to date on benefits, risks, and responsibilities by citizens can empower individuals to make informed

decisions regarding the adoption of Bitcoin or other cryptocurrencies. This will lead to a safer and more sustainable acquisition of digital currencies in our everyday lives.

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