INTRODUCTION

During the 1800s, the United States banking system was undergoing a transition to central banking. The history of the Second Bank of the United States shows that during this shift there was a debate to determine who should control the money supply. Today, the world is undergoing a transition to a cashless society through the use of digital currencies. On January 3, 2009, the release of Bitcoin (B/BTC), the world’s first fully decentralized digital currency, sparked a revolution. Unlike traditional currencies that are issued by central banks, Bitcoin has no central monetary authority. Because of Bitcoin’s growing mainstream adoption, economists have been exploring the viability of countries adopting centralized or decentralized digital currencies. Based on this research, it is too early to speculate if the path toward a cashless society will be centralized or decentralized. This is because there is no alternative digital currency that has been implemented. As today’s world is more globalized, any sort of digital currency would have worldwide consequences. Therefore, future research regarding this transition must be taken very seriously.

ABSTRACT

1. Based on the theory of money, cryptocurrencies in their current form are far from perfect. For a decentralized digital currency like Bitcoin to ever be adopted at an official level, every country would have to give up sovereignty over their own currency.

2. Although cryptocurrencies are unlikely to be adopted officially, it is clear that the block chain technology behind it has the potential to change many industries. For example, block chain technology can be used by stock exchanges or auditors to verify transactions between parties.

3. Centralized digital currencies such as ones discussed in the the Deloitte framework shows how the technology behind Bitcoin can be used in a centralized manner. On the surface, this framework is very reasonable as it satisfies all the requirements of the theory of money. Additionally, central banking would work similarly to today’s system. However, the incentives for consumers to adopt such a currency are dismal. Despite this, the Deloitte framework provides a new way for businesses to transfer money without the need for ACH or a wire transfer.

4. Centralized digital currencies can be used as a new form of monetary policy. Theoretical digital currencies such as the ones outlined in the the Future Tax proposal and the ScotPound proposal can incentivize consumer spending to jumpstart a stagnant economy without adding to a nation’s debt.

RESULTS

On January 3, 2009, the release of Bitcoin, the first fully decentralized digital currency, showed that it is a part of the world’s shift to a cashless society. Unlike traditional currencies that are issued by central banks, Bitcoin has no central monetary authority. It is maintained through a peer-to-peer computer network that operates on a cryptographic protocol. New Bitcoins are created by miners who use special software to solve complex mathematical problems. In exchange, they are rewarded with new units of bitcoin. This provides an incentive for more people to mine bitcoin. Additionally, this incentive helps maintain the integrity of this decentralized system. All transactions are self-verified and posted to a secure public ledger known as the block chain. The invention of a distributed ledger is revolutionary. Essentially, this technology allows value to be exchanged safely without a middleman such as a government or a bank. This paper addresses whether or not any type of digital currency can fulfill the three basic functions of money. Additionally, this paper considers the monetary policy implications of these new currencies. Finally, this paper determines if the path toward a cashless society will lead to a centralized or decentralized currency.

CONCLUSIONS

It is evident that none of the existing or proposed digital currencies discussed in the analysis section are perfect. First, examining these digital currencies using the theory of money shows that each of them have strengths and weaknesses as a medium of exchange, unit of account, and store of value. Second, considering these currencies’ impact on central banking raises the question of what role government plays in a cashless society. Third, understanding the incentives for consumers and businesses to use these digital currencies gives clues to whether they can be feasibly adopted. Based on these findings it is too early to speculate if the path toward a cashless society will be centralized or decentralized. This is because no alternative digital currency has been implemented at a national level. Despite this, a few things can be determined from this study. The technology behind Bitcoin accelerated the debate over the future of money. The Second Bank of the United States shows that the control of the money supply had a significant impact on the course of American history. As today’s world is more globalized, any sort of digital currency would have worldwide consequences. This demonstrates that the world’s transition to a cashless society must be taken very seriously. Further research must be done to determine how future digital currencies play a part in a cashless society. While this answer may be unsatisfying, this unique study outlines some of the important economic questions policy makers must consider before proposing a new digital currency.

HOW DO BITCOINS WORK?

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