

How Does Trust In Government Institutions Affect The Demand For Cryptocurrencies?

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ABSTRACT: A cryptocurrency is a digital, decentralized currency that runs on networks based on blockchain technology. The study covers three years, from 2018 to 2021, during which cryptocurrencies reached monetary values of up to 66,002 USD. However, there still needs to be a greater understanding of these digital assets and their underlying technology, including how they work and why people are driven to invest in them. I hypothesize that trust in institutions affects the demand for cryptocurrencies in different regions across the globe. I analyze data on cryptocurrency usage and adoption, and provide insights into the factors that drive the demand for cryptocurrencies. The findings of this study are important for policymakers, financial institutions, and investors seeking to understand the relationship between trust in institutions and the demand for cryptocurrencies. Finally, this paper also contributes to the ongoing discourse on the role of cryptocurrencies in the global financial system.

KEYWORDS: Behavioral and Social Sciences; Digital Currencies; Cryptocurrencies; Trust; Trust in Institutions; Factors affecting demand for Cryptocurrencies.

■ Introduction

In this study, I focus on cryptocurrencies. Cryptocurrencies are a form of decentralized digital currency that rely on complex blockchain technology for their operation.¹ This technology uses encryption algorithms to create alternative payment systems and virtual accounting systems. Unlike traditional currencies, they are highly volatile and not managed directly by central banks. As a result, they can be easily transferred from one place to another and have the potential to be quite profitable.

Due to the unpredictability of cryptocurrencies, investing in them requires careful consideration and research. Additionally, the history of cryptocurrencies is shrouded in mystery, with their origins and early development still needing to be discovered.² Due to this, the relationship between trust in institutions and cryptocurrencies is unclear.

Cryptocurrencies are also important as their transactions are fast, digital, secure, and worldwide, and due to various contingencies, fraud is negligible. Cryptocurrencies use various encryption technologies, such as public-key cryptography, hash functions, and digital signatures, to secure transactions and prevent counterfeiting. It is also important because of the digital platform it uses, which is known as blockchain. Blockchain is a platform that allows cryptocurrencies and their digital tokens to operate within it.³ Blockchain technology is used by cryptocurrency to provide a decentralized, secure, transparent, and efficient system for recording and verifying transactions. Any transaction capable of being recorded can look to the use of blockchain, whether medical records, immigration information, birth certificates, insurance policies, etc. All of their data can be stored over a blockchain. According to various articles, Cryptocurrencies have created a paradigm shift in how we view

money. The way we look at buying it and the way we look at spending it.³

This currency goes against one of the founding ideologies of modern society, and that is trust. Human beings have been pioneers throughout history in promoting trust.⁴ We have created multiple organizations that push individuals and societies towards trust.

'Trust' is defined as a firm belief in a particular organization or idea, leading to complete reliability.⁵ While an 'institution' is defined as any establishment that has been set up for a religious, educational, professional, or social purpose.⁶ For example, when citizens of a country are voting, they usually choose a reliable candidate who provides them a sense of comfort; therefore, they trust their country in that candidate's hand and vote for them.

In this literature review, I focus on trust in public institutions and its effect on the demand for cryptocurrencies. I define trust as the trust that citizens of a country have in their government and its institutions. These include public banks, government-issued standardized currencies, and other government-owned or managed institutions.⁷ The psychological phenomenon of trust in the public is affected by numerous factors that range from government policies and programs to the country's economic history.

I base this study on the observation that the value of various cryptocurrencies, such as Bitcoin, rose significantly during the pandemic, leading to the number of investors in it increasing rapidly. This is where the relation between trust in institutions and cryptocurrencies comes in. Most surveys show that the pandemic decreased confidence in public institutions as governments were considered incompetent and unreliable when their lack of infrastructure to fight the virus was exposed. This, in turn, led to a reduction in the usage of public institutions

and led to people investing in decentralized and unstandardized assets such as cryptocurrencies.⁸ This resulted in a massive surge in their value, with Bitcoin increasing in value by 1,788% from Jan 2019 - Jan 2021.

Through this literature review, I will investigate how trust in public institutions affects the demand for cryptocurrencies and the various factors affecting this phenomenon.

■ Discussion

Demand For Cryptocurrencies:

A cryptocurrency is a digital currency in which all transactions are maintained by a decentralized system using cryptography technology. They are based on digital coding, also known as blockchain technology, a decentralized, distributed ledger system that is used to record transactions securely and transparently.⁹ Cryptocurrencies are generated through a process called mining. This does not refer to mining in caves but instead to massive, decentralized networks of computers located all over the world, which initiate a cryptocurrency transaction; the transaction is broadcast to the network of users, who then validate it using complex mathematical algorithms. After the user solves the algorithm and validates the transaction, the user is rewarded with a certain amount of cryptocurrency, which is newly created as a reward for their efforts. Investments can be made in cryptocurrencies through various mobile apps and online platforms such as Coinbase, Binance, Kraken, Robinhood, and eToro. These platforms allow users to buy, sell, and store cryptocurrencies.¹⁰ The value of cryptocurrencies differs from one type to another. As of 2022, over 1,583 types of cryptocurrencies are listed in the market, which all differ in their code.¹¹ Some of the most popular types include Bitcoin, Ethereum, Tether, and Dogecoin.¹² Another thing to consider is that each Cryptocurrency is in limited supply; Bitcoin, for example, only has a stock of 21 million coins, of which 90% have already been produced. Bitcoin is in short supply because of its design. The creator of Bitcoin, known by the pseudonym Satoshi Nakamoto, set a limit on the total number of bitcoins that can ever exist. This limit is 21 million bitcoins, which is hard-coded into the Bitcoin protocol.¹³ Cryptocurrencies work very differently from any centralized or government-regulated form of currency. It does not have a geographically or politically discreet real economy in which it is dominant, as stated in the paper written by Brett Scott.¹⁴ This has led to people characterizing cryptocurrencies as digital assets instead of currency. However, there is no denying that cryptocurrencies are a perfect alternative to the current system of government-regulated currency.

These digital currencies have many advantages, including facilitating cheaper and faster money transfers, and they are useful as remittance tools. As they are decentralized, they do not collapse at a single point of failure. Cryptocurrencies showcase a high-risk and reward system, sometimes leading to high profits. Bitcoin, one of the most popular cryptocurrencies, has been used as an intermediary currency to help facilitate trade between other currencies. It also has the potential to facilitate small-scale international commerce.¹⁵

However, with these advantages come some drawbacks. These include cryptocurrencies' highly unpredictable nature and how quickly their value can rise and fall. Cryptocurrencies are thus highly volatile. Another major drawback is that digital currencies need to be regulated. The lack of regulation of cryptocurrency refers to the absence of clear and specific rules and laws that govern the use and trading of cryptocurrencies. In many countries, investments in cryptocurrencies are illegal. Another major factor that leads to decreased cryptocurrency usage is highly conservative people, who are cautious about changing technology. For example, the older generation is apprehensive about using technology and investing online as they like to do things 'the old-fashioned way.' Lastly, very little is known to the general public about the origin of cryptocurrencies and the method by how their value is decided. This goes against the current system of centralized currencies, where it is known which factors affect the value of that currency, and its regulators are known in the form of the government. It also goes against one of the founding ideologies of human society, and that is trust. Also, since it is not well known who runs these currencies, investors usually invest knowing only the high risk involved with dealing with this currency.¹⁶

Now that we understand what cryptocurrencies are and how they work, we have to look into the factors affecting the demand for them.

The main factor that affects the demand for cryptocurrencies is their value: the higher the value, the more demand. Indeed, this is a fairly obvious factor. The next factor which affects cryptocurrencies is their limited supply. The currency's demand will increase if there is a limited supply of cryptos. Meanwhile, if more cryptos are supplied, the demand will decrease.¹⁷

Another major factor contributing to the demand for cryptocurrencies is the psychological factor called 'fear of missing out' and curiosity. Fear of missing out is the feeling of apprehension that one is missing out on information, events, experiences, or life decisions that could make one's life better.¹⁸ This factor indicates that a person will invest in crypto simply because they do not want to miss out on purchasing them. They believe that if they do not invest in cryptocurrencies, they will live to regret it. This psychological factor is especially apt for these digital currencies as they are something that not only has great potential but also are something very different from anything that exists in the world at this moment. This leads to curiosity and more people investing in cryptocurrencies and therefore leads to higher demand for them.¹⁹

Another factor that affects the demand for cryptocurrencies is the ease of transfer of money from one place to another. According to Brett Scotts, cryptocurrencies are one of the most popular means of transferring money as they have the potential for small-scale international trade and to be used as an intermediary currency between other, more dominant currencies. Thus, they may be useful for remittances. Also, Bitcoin and other cryptocurrencies also have the potential to serve as mobile wallets and as a replacement currency for countries with an unstable national currency. Various other uses of Cryptocurrencies also affect their demand.

I hypothesize that a decrease in people's trust in their government and institutions affects the demand for cryptocurrencies. The main reason for this is when people lose confidence in their government, and the government's monetary institutions. This could be due to various reasons, including but not limited to the head of the government then, lack of effort to improve the country's financial state after previous financial issues, poor dealing with the pandemic, and the form of government in which the person lives. All these issues lead to more and more people moving away from centralized currencies and moving to non-government-regulated and decentralized digital currencies.²¹ I will discuss this in more detail in the section titled – How does trust in institutions affect the demand for cryptocurrencies?

Trust In Institutions:

Trust in institutions is essential for the progress of any country. Trust is the very foundation upon which the world's public institutions are built. Trusting in a public institution is important as it helps maintain social cohesion.²² Simply put, when the public trusts government institutions, it leads to the success of the government's policies and regulations. If trust in these institutions were lost, it would lead to chaos in that specific region. Trust in institutions is also crucial in providing a sense of safety for citizens of that country.²³

Trust in institutions has always been unpredictable, as it depends not only on people's beliefs but also on the reliability of the government. This trust also varies from country to country. Countries with financial issues in the past usually have citizens who need to be more trusting in their public institutions. While countries, where the government has been more stable tend to have citizens who are more trusting of their institutions.²⁴

During the pandemic, it was observed that there was a massive decline in the trust in the government and its institutions. It was recorded to be the lowest that this trust has ever been. This was because governments needed to handle the COVID-19 virus better. People felt as though their governments were incompetent and unreliable.²⁵ The methods of stopping the spread of the virus were considered poor, and the lack of proper infrastructure in many countries was exposed to the waves of the virus as there needed to be more oxygen cylinders or beds in hospitals for most of the population in many countries. In European countries, millions of people saw a pay cut or lost their jobs. These people were supposed to be reimbursed by the government. However, when 3,000 households in Italy were surveyed, it was shown that only 12% of people were fully compensated.²⁶ This led to an even greater decline in trust in public institutions.

As we move towards a new normal, trust must be rebuilt between the government and the public. This will take a very long process. Matthew Bishop takes the view,²⁷ and examines various factors which need to be fixed to rebuild trust in governments, such as the construction of better health facilities, promotion of social welfare, and compensation for all economic losses.

In conclusion, when there is a decline in the trust in institutions, people move away from the conventional centralized currencies from governments to decentralized cryptocurrencies, which are almost entirely different from the current system of currencies. Only little is known about how cryptocurrencies function and their existence, but investing in them completely abandons the ideology of trust. As discussed in a paper by economist Greg Rosalsky,²⁸ in which, he talks not only about the importance of trust in our society but also about how we are moving towards cryptocurrencies and their digital blockchain coding, which does not focus on trust.

How Does Trust in Institutions Affect the Demand for Cryptocurrencies?:

According to most sources, cryptocurrencies were first introduced in the year 1990 through the first-ever cryptocurrency called eCash.²⁹ However, until 2018, most cryptocurrencies were almost entirely worthless and showed minimal real potential to be worth any amount. However, since 2019 various cryptocurrencies have gone up in value to almost 50,000 US Dollars, as per CNBC, and some even surpassed this value.³⁰ This coincidentally is the time when the pandemic began. The theory that I want to put forth is that during the pandemic, due to various governments worldwide failing to control the COVID-19 outbreak, there was a massive decline in the trust citizens had not only for their government but also for its institutions. Trust in institutions has always been inconsistent, sometimes citizens trust their government altogether, and sometimes they need to trust them more. However, the pandemic led to one of the most significant government trust declines ever recorded.³¹ This directly relates to a massive increase in the demand for cryptocurrencies.

Trust in institutions also depends on the country's financial past and present government policies. The article published by IE University's global and public affairs shows this.³² Trust in institutions varies from country to country. This is especially true for Latin American, European, and North American countries. The divide is caused in countries where central banks experience lower social trust. These countries have citizens more open to adopting new digital currencies issued by alternative, decentralized institutions.

According to this survey, 27% of Brazilians, 20% of Argentinians, and 18% of Mexican citizens own cryptocurrencies in Latin America. For those citizens who do not own cryptocurrencies in these three countries in Latin America, the study found that the main reason for not holding digital currencies was not due to a lack of interest but simply needing to know how to buy them. In fact, 79% of Argentinians, 78% of Mexicans, and 75% of Brazilians, who do not yet own cryptocurrencies, would be willing to own a digital currency. The reason for this high demand for cryptocurrencies is due to low trust in the government and its institutions. This lack of confidence comes due to the government's response to the financial crisis, as many of the people surveyed felt that authorities had not taken meaningful steps in fixing the issues caused in the year 2008, the year of the great recession. As a result, these countries' governments remain highly unstable, leading to low trust in institutions and higher demand for digital currencies.

On the other hand, most European and US citizens do not own cryptocurrencies because they consider them too risky. Only 29% of Germans, 32% of Britons, 33% of US, 36% of French, and 49% of Spaniards are willing to use a new effective cryptocurrency. These results prove that countries with a more stable monetary history are less open to new digital currencies. These countries also have much more stable and efficient governments and therefore have greater trust in their institutions, leading to lower demand for cryptocurrencies.

This comparative survey further suggests that trust in institutions plays a part in the demand for cryptocurrencies.

One major problem that has come up while talking about the demand for cryptocurrencies is their regulation by the government and the fact that in many countries, trading, owning, and investing in cryptocurrencies has become illegal. The main reason is that these countries' governments have taken this step because they are wary of cryptocurrencies' high volatility and decentralized nature.³³ These countries where cryptocurrencies are illegal can thus not come under this theory's classification.

Lastly, high social trust lowers the demand for various financial assets, including cryptocurrencies. This can be seen especially in China according to a research study about this topic.³⁴ In this research study, we see that higher trust in institutions in China has a negative impact on cryptocurrencies. In comparison, lower trust in social institutions positively impacts cryptocurrencies.

All this data and research show that my inference is correct and that trust in institutions does affect the demand for cryptocurrencies.

■ Conclusion

Therefore, in this study, I can provide evidence to support my hypothesis that trust in Institutions impacts the demand for cryptocurrencies. There is an inverse relationship between them; in areas with a higher rate of trust in public institutions, there is a lower demand for cryptocurrencies. On the other hand, in areas where the rate of trust is lower in public institutions, the demand for cryptocurrencies is high.

However, as trust in institutions is dynamic and likely to change over time, it is difficult to find regions where the demand for cryptocurrencies is consistently high over a long period of time. Further, as shown by the data, regions with issues with their governments remain the regions with the highest demand for cryptocurrencies. This is because citizens of these regions usually feel that their government will let them down again, leading them to invest in a currency not regulated by them.

This is the conclusion brought out by my research study.

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■ References

1. Bornstein, Brian H., and Alan J. Tomkins. "Institutional Trust: An Introduction." SpringerLink. Springer International Publishing, January 1, 1970. https://link.springer.com/chapter/10.1007/978-3-319-16151-8_1.
2. "Dataspace: Decrypting Crypto: Analyzing Trust, Corruption and the Formation of Speculative Bubbles in the Bitcoin Market." Princeton University. The Trustees of Princeton University. Accessed August 4, 2022. <https://dataspace.princeton.edu/handle/88435/dsp013n204180t>.
3. *Why is crypto so important and should I care?* Conyers. (2021, November 15). Retrieved September 4, 2022, from <https://www.conyers.com/publications/view/why-is-crypto-so-important-and-should-i-care/>
4. Bornstein, Brian H., and Alan J. Tomkins. "Institutional Trust: An Introduction." SpringerLink. Springer International Publishing, January 1, 1970. https://link.springer.com/chapter/10.1007/978-3-319-16151-8_1.
5. Oxford languages and Google - English. Oxford Languages. (n.d.). Retrieved August 4, 2022, from <https://languages.oup.com/google-dictionary-en/>
6. Bornstein, Brian H., and Alan J. Tomkins. "Institutional Trust: An Introduction." SpringerLink. Springer International Publishing, January 1, 1970. https://link.springer.com/chapter/10.1007/978-3-319-16151-8_1.
7. Bornstein, Brian H., and Alan J. Tomkins. "Institutional Trust: An Introduction." SpringerLink. Springer International Publishing, January 1, 1970. https://link.springer.com/chapter/10.1007/978-3-319-16151-8_1.
8. "Dataspace: Decrypting Crypto: Analyzing Trust, Corruption and the Formation of Speculative Bubbles in the Bitcoin Market." Princeton University. The Trustees of Princeton University. Accessed August 4, 2022. <https://dataspace.princeton.edu/handle/88435/dsp013n204180t>.
9. Bornstein, Brian H., and Alan J. Tomkins. "Institutional Trust: An Introduction." SpringerLink. Springer International Publishing, January 1, 1970. https://link.springer.com/chapter/10.1007/978-3-319-16151-8_1.
10. "Cryptocurrency." Wikipedia. Wikimedia Foundation, August 2, 2022. <https://en.wikipedia.org/wiki/Cryptocurrency>.
11. Aguirre, Fernando Gonzalez. "Why Are There So Many Cryptocurrencies?" Bob's Guide, May 13, 2021. <https://www.bobsguide.com/articles/why-are-there-so-many-cryptocurrencies/>.
12. Stump, Westley. "9 Of the Most Well-Known Types of Cryptocurrencies." Equity Trust, May 9, 2022. <https://www.trustetc.com/blog/cryptocurrency-types/>.
13. SPOTLIGHT / Oct 26, 2021. "Times of India." The Times of India. TOI. Accessed August 4, 2022. <https://m.timesofindia.com/business/cryptocurrency/blockchain/tokenomics-demand-and-supply-of-cryptocurrencies/articleshow/87273549.cms>.
14. How can cryptocurrency and blockchain technology play a role in ... (n.d.). Retrieved August 7, 2022, from <https://www.weusecoi>

- ns.org/assets/pdf/library/Cryptocurrency%20and%20Blockchain%20-%20Role%20in%20Building%20Social%20and%20Solidarity%20Finance.pdf
15. SoFi. "12 Benefits of Cryptocurrency in 2022." SoFi. SoFi, February 2, 2022. <https://www.sofi.com/learn/content/benefits-of-crypto/>.
 16. "Top 5 Disadvantages of Cryptocurrency." How many disadvantages of cryptocurrency | Motilal Oswal. Accessed August 7, 2022. <https://www.motilaloswal.com/blog-details/top-5-disadvantages-of-cryptocurrency/20617>.
 17. Bloomenthal, Andrew. "What Determines Bitcoin's Price?" Investopedia. Investopedia, July 8, 2022. <https://www.investopedia.com/tech/what-determines-value-1-bitcoin/#:~:text=The%20combination%20of%20supply%2C%20demand,significant%20factor%20affecting%20cryptocurrency%20prices>.
 18. "Fear of Missing Out." Wikipedia. Wikimedia Foundation, August 1, 2022. https://en.wikipedia.org/wiki/Fear_of_missing_out.
 19. Limited, Bangkok Post Public Company. "Cryptocurrency Curiosity Ramping Up." <https://www.bangkokpost.com>, March 18, 2022. <https://www.bangkokpost.com/business/2281054/crypto-curiosity-ramping-up>.
 20. How can cryptocurrency and blockchain technology play a role in ... (n.d.). Retrieved August 7, 2022, from <https://www.weusecoins.org/assets/pdf/library/Cryptocurrency%20and%20Blockchain%20-%20Role%20in%20Building%20Social%20and%20Solidarity%20Finance.pdf>
 21. IE University. "Lack of Trust in Public Institutions Leads to Cryptocurrencies." IE University. IE University, January 31, 2020. <https://www.ie.edu/university/news-events/news/lack-trust-public-institutions-leads-higher-use-cryptocurrencies/>.
 22. Rosalsky, Greg. "Stranger Danger: An Economist's Guide to Overcoming Distrust." NPR. NPR, April 6, 2021. <https://www.npr.org/sections/money/2021/04/06/984040411/stranger-danger-an-economist-s-guide-to-overcoming-distrust>.
 23. "Key Resources." OECD. Accessed August 7, 2022. <https://www.oecd.org/governance/trust-in-government/>.
 24. "Trust in Public Institutions: Trends and Implications for Economic Security | DISD." United Nations. United Nations. Accessed August 7, 2022. <https://www.un.org/development/desa/dspd/2021/07/trust-public-institutions/>.
 25. "How the Coronavirus Crisis Affects Citizen Trust in Institutions and in ..." Accessed August 7, 2022. <https://ejpr.onlinelibrary.wiley.com/doi/10.1111/1475-6765.12419>.
 26. "Working Paper No 646 - CSEF." Accessed August 7, 2022. <https://www.csef.it/WP/wp646.pdf>.
 27. Rosalsky, Greg. "Stranger Danger: An Economist's Guide to Overcoming Distrust." NPR. NPR, April 6, 2021. <https://www.npr.org/sections/money/2021/04/06/984040411/stranger-danger-an-economist-s-guide-to-overcoming-distrust>.
 28. "What Will It Take to Rebuild Trust in 2022?" World Economic Forum. Accessed August 7, 2022. <https://www.weforum.org/agenda/2022/01/rebuilding-trust-government-society-2022/>.
 29. Reiff, Nathan. "What Was the First Cryptocurrency?" Investopedia. Investopedia, July 26, 2022. <https://www.investopedia.com/tech/were-there-cryptocurrencies-bitcoin/#:~:text=The%20first%20cryptocurrency%20was%20eCash%2C%20created%20by%20David%20Chaum's%20company,and%20accepted%20cryptocurrency%20before%20Bitcoin>.
 30. Edwards, John. "Bitcoin's Price History." Investopedia. Investopedia, July 4, 2022. <https://www.investopedia.com/articles/forex/121815/bitcoins-price-history.asp>.
 31. "Covid-19 Eroding Youth Trust in Political Leadership and Institutions: LSE Research." COVID-19 eroding youth trust in political leadership and institutions | LSE Research. Accessed August 8, 2022. <https://www.lse.ac.uk/research/research-for-the-world/politics/the-political-scar-of-epidemics-why-covid-19-is-eroding-youth-peoples-trust-in-their-leaders-and-political-institutions>.
 32. IE University. "Lack of Trust in Public Institutions Leads to Cryptocurrencies." IE University. IE University, January 31, 2020. <https://www.ie.edu/university/news-events/news/lack-trust-public-institutions-leads-higher-use-cryptocurrencies/>.
 33. Bajpai, Prableen. "Countries Where Bitcoin Is Legal and Illegal." Investopedia. Investopedia, July 13, 2022. <https://www.investopedia.com/articles/forex/041515/countries-where-bitcoin-legal-illegal.asp>.
 34. Gu, Leilei, Zhongyang Liu, Sichao Ma, and Hongyu Wang. "Social Trust and Corporate Financial Asset Holdings: Evidence from China." International Review of Financial Analysis. North-Holland, April 22, 2022. <https://www.sciencedirect.com/science/article/abs/pii/S105752192200134X>.

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