# **Crypto-Currencies: Can Investors Rely on them as Investment Avenue?**

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### **ABSTRACT**

The purpose of this study is to examine investors' perceptions about investing in crypto-currencies. We think that investors trust in crypto-currencies is largely driven by crypto-currency comprehension, trust in government, and transaction speed. This is the first study to examine crypto-currencies from the investor's perspective. Following that, we discover important antecedents of crypto-currency confidence. Second, we look at the government's role in crypto-currencies. The importance of this study is: first, crypto-currencies have the potential to disrupt the current economic system as the debate is all about impact of decentralization of transactions; thus, further research into how it affects investors trust is essential; and second, access to crypto-currencies. Finally, if Fin-Tech companies or banks want to enter the bitcoin industry may not attract huge advertising costs as well as marketing to soothe clients' concerns about investing in various digital currencies. The research sheds light on indecisiveness in the context of marketing aspects adopted by demonstrating investors are aware about the crypto.

Keywords: crypto-currencies, faith, investors, government, fin-tech, marketing, investment, anxious

### I. INTRODUCTION

People have been transacting with fiat currency since its inception. It has become easier to trade and transact. Following the global financial crisis of 2008, the first kind of cryptocurrency, Bitcoin, was launched in 2009. It was created by Nakamoto (2008), an unidentified group or individual who created Bitcoin as the first digital currency enabling easier day-to-day transactions between individuals.

Bitcoin was the first digital currency, designed to make day-to-day transactions between individuals easier. Bitcoin is run without the use of a middleman like banks or monetary institutions. It is a type of peer-to-peer transaction in which one does not have to divulge one's identified in order to complete a transaction. Unlike present practice, the bank acts as a mediator or intermediary, knowing the identities of both the buyer and the seller, raising concerns about personal data privacy. The Bitcoin platform has made cryptocurrency trading and transactions much easier and more autonomous, all while protecting private details and information. Choosing this type of transaction has given some people the ability to interact freely and discreetly.

Bitcoin was the world's first digital coin to leverage the blockchain network. It's made up of computers from all around the network who participate in a transaction log (Bohme et al., 2015). By preventing fraudsters from using the currency more than once, this blockchain offers one of the most secure security mechanisms. The blockchain system is based on proof of work, which ensures that all miners agree on the same structure.

Cryptocurrency is a sort of digital currency that allows for greater anonymity and security. People also prefer cryptocurrency because of its decentralized market structure, which means that the government cannot manipulate its value. Only on their own turf might the government legalise or prohibit the manner of acquiring or trading cryptocurrencies. The first anecdote is about the unsuccessful executive from Corporate America (Conway, 2019).

Mr. Conway invested his saving into the crypto-currency Ethereum and due to the price movements, over the shorter period of time it made him millionaire. It is to agreed that not everyone who makes the cryptocurrency investment follows the similar financial successful Nonetheless, it is a vivid illustration of a investors' faith in a different sort of money through a unique type of middleman - a digital currency exchange Gemini.

The goal of the research paper is to investigate investors trust in crypto-currencies. These currencies have shown volatility reflecting the nature of financial market. Bitcoin, the first crypto-currency, was valued at just USD 0.07 in 2009, but it climbed to an all-time high of USD 20,089 in 2017 (Kjrland 2018). It quickly collapsed, impacting the majority of the investors to incur losses. (Russolillo et al., 2018). Previous study looked at what influences price, such as macroeconomic, technical, and public relations aspects, the theory surrounding the concept such as The Greater Fool (Aalborg 2019);

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Bouoiyour and Selmi, 2016; Ciaian et al., 2016; Garcia et al., 2014; Kjrland et al., 2018a, b). Why would people put their faith in crypto-currency in the face of such potentially dangerous scenarios? Do customers spend in the hope that "another greater idiot would purchase them from him at a higher price later" (Kjrland et al., 2018a, p. 4)? Or is it simply "herd investing," in which unsure customers mimic the actions of others (Bouri et al., 2018)? Are virtual currencies proving be a financial scam? In this study, we pose the following questions: The focal question is having the new age financial instruments is successful in gaining the investors' confidence.

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We could debate to come to conclusion regarding the same subject matter for the following reasons: The impact of the unbelievable volatility impacts all the participants including the individual investors, largest financial institutions which can disrupt the global economic system. (Demirer and Kuran, 2006; Vigna and Casey, 2016); The advent of the present industrial revolution and emerging block-chain technologies could possibly pose a threat to the conventional way of exchanging information between two machines.

The increasing acceptance of crypto-currencies have led the way for IoT related applications. Now, there is set of business are linking the produces. Sony's automobile, for example, foreshadows a future of M2M crypto-payment. "In this scenario, crypto-currency becomes the value transfer medium, and all of the sensors, computers, and systems connected with cleaning our floors or transporting us about link to the global Internet of value, eventually supplanting conventional payment methods" (Biggs, 2020, p. 1).

This paper highlights to study the aspects such as first, crypto-currencies have the ability to interrupt the present financial system; hence, additional research into the impact on investors trust is required; second, access to crypto-currencies is becoming more convenient. Many investing firms, for example, are already offering Bitcoin services to facilitate financial activities.

As a result, the impact of governments on investors' perceptions of bitcoin investing should be examined further. Surprisingly, there is no theoretical discussion of this topic in marketing literature. These discussions have largely focused on shifting away from traditional financial institutions and toward crypto-currencies, such as Bitcoin, which allows for greater transparency (Burcak et al., 2018). However, there has been little, if any, emphasis on crypto-currencies in marketing literature. The majority of contemporary talks on the subject are taking place in the context of information systems (Morisse, 2015).

Recent crypto-currency research has been divided into various topical groups, which are as follows: the technology itself, critical perspectives on crypto-currencies, economics, finance, accounting, taxes, and regulation (Holub and Johnson, 2018). Holub and Johnson (2018) noted in their comprehensive literature review on the topic of crypto-currencies across various disciplines that the majority of the research is focused on technological and business aspects, such as economics, finance, accounting, and taxation, with only a small amount of work dedicated to trust. Previous study has underlined the importance of trust (Black, 2005; Fleischmann and Ivens, 2019; Ofori et al., 2017; Sas and Khairuddin, 2015; Kumar et al., 2020), indicating that it is essential and a significant driver of customer adoption of the technology. A significant exception is Marella et al(2020) .'s research on trust, which examined online Bitcoin debates and identified functionality, dependability, and helpfulness as essential variables.

We hope to make numerous contributions to study on this area with this publication. First, we identify crucial predictors of crypto-currency trust. The research indicates investors are more inclined to trust and invest in crypto-currencies if they are familiar with them. Second, we discuss the government's involvement in crypto-currency. We contribute to and enhance the literature on confidence in government by arguing that, as predicted, faith in government has a large and positive link with trust in crypto-currency and transaction speed. Finally, we talk about future study prospects in the domain of investors attitudes and views regarding crypto-currencies, which is important because the number of products we can buy with crypto-currencies is growing.

We add to and improve the e-commerce marketing literature by demonstrating that transaction speed with cryptocurrencies is both excellent news for customers and a warning to banks, as investors expect faster, more secure, and authenticated financial transactions.

We contribute to and enhance the marketing literature on e-commerce by demonstrating that transaction speed with crypto-currencies is both good news for customers and a sharp warning to banks, as investors anticipate faster, more secure, and authenticated financial transactions. Finally, our findings contribute to decision-making anxiety research, particularly in the context of marketing investments, by demonstrating that investors could have knowledge of crypto-currencies and trust in their respective governments while also reaping the convenience of crypto-currencies, such as transaction speed, while still being particularly bothered about them.

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#### II. WHAT EXACTLY IS A CRYPTO-CURRENCY?

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To present an outline of a Crypto-currency, we draw on marketing the financial services. Crypto-currency is a sort of digital currency that operates on similar coded networks and is based on encryption. In other words, it is encrypted, and decentralization of transactions.

Cryptography is the foundation for crypto-currency encryption, and it guarantees safe encoding of specified rules (Morrise, 2015; Narayanan et al., 2016). Despite the presence of centralised institutions in virtual currencies (Trautman, 2014), they are typically opposed to central banking systems. The key characteristic of this type of decentralization is a ledger, sometimes known as a blockchain. The blockchain is the underlying technology that permits such innovation in crypto-currencies (Johansen, 2018). Blockchain technology enables users to maintain all transactions in a shared digital ledger, ensuring that all transactions are known and should be trusted, given that the currencies are transparent. Each transaction has its own cryptographic hash algorithm, and each transaction is encrypted in a unique way (Kelly, 2014). All transactions are saved in "blocks" and are linked together in a "chain" of history. Miners validate such transactions to prove that they took place. Blockchains are utilized for more than just cash; they are also employed in asset management, crowdfunding, supply chain management, copyright management, and identity management (Elsden et al., 2018). We use financial innovation theory to demonstrate that crypto-currencies differ in terms of degree of innovation, ranging from little or no innovation to significant generational shifts (Hileman and Rauchs, 2017).

Despite the increasing number of crypto-currencies, there are still significant issues associated with such technology. Aside from technological factors, there are difficulties with the amount of technology acceptability, as well as political, legal, and regulatory challenges (Greebel, 2015). In terms of marketing issues, in early 2018, social media platforms such as Facebook banned promoting financial items that were deemed to have misleading or deceptive marketing tactics, such as binary options, crypto-currencies, and initial coin offerings. The aim of this study is on investors impressions of Crypto-currency.

### III. HOW DOES CRYPTO-CURRENCIES WORK?

Cryptocurrencies are based on blockchain, a distributed public ledger that keeps track of all transactions that are updated and maintained by currency holders. Cryptocurrency units are formed through a process known as mining, which involves employing computer power to solve complex mathematical problems that result in coins. Users can also purchase the currencies from brokers and store and spend them via encrypted wallets. You don't possess anything concrete if you own cryptocurrency. What you have is a key that allows you to transfer a record or a unit of measurement from one person to another without the assistance of a trusted third party. Although Bitcoin has been around since 2009, cryptocurrencies and blockchain technology applications are still emerging in financial terms, with additional uses planned in the future. The technology could someday be used to trade bonds, equities, and other financial assets. Cryptocurrency can be seen of as a means of exchange, a negotiable instrument, a property, and the subject of a contract. Tax incidences are relevant for cryptocurrency depending on the transaction and the authority of legislation to tax such transaction. Income tax, gift tax, wealth tax, value-added tax, service tax, inheritance tax, transaction tax, capital gain tax, property tax, and other taxes are all possible. Cryptocurrencies are also, by definition, convertible virtual currencies, as they can be exchanged into fiat currencies like pounds, dollars, and euros, making them more useful for business transactions. They are a relatively new phenomena, with Bitcoin being the first to receive widespread recognition as a digital currency capable of settling transactions after its anonymous creation in early 2009.

## IV. THE INVESTORS'S IMPRESSION OF CRYPTO-CURRENCIES

Information System theory such as (TAM) is a popular analytical technique in the context of technology adoption (Davis, 1989). Folkinshteyn and Lennon (2016) conducted a comprehensive evaluation of the literature from the standpoint of TAM and its expansions.

Researchers discovered a set of characteristics that influence technological acceptability based on perceived ease of use, utility, and risk considerations for developers and end users.

According to researchers, purchasing Bitcoin is complicated since customers are unfamiliar with intermediaries and do not trust them. However, the lack of efficient middlemen, transaction speed, and economical cost of transactions have made the option more appealing. Investors typically trust the blockchain technology that powers crypto-currencies. A normal shopper would first open an account before acquiring Crypto-currency. In regards to Bitcoin we can trace all of the phases in the process. To begin, digital currency address is generated. There are two sorts of keys generated: one is private to safeguard the

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account, and the other is for distribution. Following that, monies will be sent through a bank and directly into the recipient's wallet (Folkinshteyn and Lennon, 2016).

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Crypto-currencies to greater extent are perceived as fraudulent (DeVries, 2016), and the question of investor's belief is under-researched, particularly what generates trust. Blockchain technology is the foundation for establishing trust. Because transactions are stored in the ledger and everything is logged, the transaction's architecture places trust at its heart, which should lead to an increase rather than a decline in trust (Folkinshteyn and Lennon,2016). As a result, Bitcoin and other alternative currency become decentralised brands that are not reliant on a single authority (Huymayun and Belk, 2016). Sas and Khairuddin (2015, 2017) guided investigation of trust in relation to Bitcoin technology, namely the necessity to study degrees of reliane on technology, social trust, and institutional trust. Such levels can lead to an examination of concerns with trust with users, exchanges, merchants, miners, and governments. Decentralization, uncontrolled elements, embedded knowledge and reputation, transparency, cheap cost, and easy and rapid transactions are Bitcoin characteristics that are crucial to user trust. However, weaknesses might occur as a result of users' password troubles and the possibility of assaults, blunders, or dishonest partners. Transactions are performed with recognised exchanges or socially authorised traders to reduce such dangers. Extending their application into financial services, crypto-currencies are employed as investments and crowdfunding initiatives, such as the rapidly growing ICOs (initial coin offerings) through which firms may raise funds (Elsden et al., 2018).

### The Ability to Understand Crypto-Currencies has a Positive Influence on Crypto-Currency Confidence

Users of digital currencies may not be equipped with banking and payment aspects Furthermore, little is known about the factors that contribute to Crypto-currency acceptability in the first place (Glaser et al., 2014; Kristoufek, 2015). It is vital for customers to understand how crypto-currencies work, yet explaining how crypto-currencies work to novices may be challenging. There are now a number of crypto-currencies on the market, each with its unique set of characteristics that may be difficult to comprehend, reducing the education requirements of potential investors.

As a result, buyers who have a poor comprehension of a product are more likely to have doubts about the product and the brand (Doney and Cannon, 1997). Furthermore, people are more likely to be persuaded to make a judgement and, ultimately, a decision to accept or reject something if they have adequate knowledge. According to Zhou, trust antecedents in emerging technology adoption include valuation trust (e.g. cost—benefit analysis), cognitive processing trust (e.g. observations that confirm an initial view), personality-based trust (e.g. individual outlook on others' motivations), and institution-based trust (e.g. interaction that really is comparable to earlier interactions, potential legal recourse, regulations) (2012). (2017, Mahomed)

## **Government Trust Impacts Crypto-Currency Trust Favorably**

Crypto-currencies and its accompanying technologies are unprotected in terms of money and transfer, and they are not approved by governments in the majority of circumstances. The prefix "crypto" is followed by the term "currency," implying that crypto-currencies have the same features and functions as government-backed currencies. Crypto-currencies, on the other hand, are operated by non-governmental organisations in the vast majority of situations, if not all (Sas and Khairuddin, 2015). Cryptocurrencies enable a peer-to-peer transaction system as an alternative to central banks. (Abramowitz, 2014). Furthermore, crypto-currencies provide value by providing customers with a level of anonymity and autonomy that has the potential to upset centralised financial and governmental institutions (Carroll and Bellotti, 2015). Peer-to-peer transactions have been greeted with government antagonism due to a lack of confidence (Abramowitz, 2014). This is due to the fact that customers may buy crypto-currencies using government-backed money, but what they end up with is an unregulated intermediate digital currency. As a result, authorities may be capable of making use of peer-to-peer protocols by putting them into the well legal frameworks. Furthermore, government regulation of crypto-currencies may provide the essential work effectively to strengthen institutional trust and investor confidence in the peer-to-peer transaction system (Zarifis et al., 2014). Governments have been advised to build their own crypto-currencies to avoid the systems becoming a conduit for fraudsters and corrupt officials (Inman, 2018).

# Speed of a Transaction has a Favorable Impact on Crypto-Currency Confidence

Investors are constantly subjected to rising banking transaction fees and significant delays in financial transaction recognition across many shops. Investors are turning to cryptocurrency for both value and efficiency because it provides significant improvements in anonymity (Baur et al., 2015), cybersecurity (Wang and Vergne, 2017), large financial trades (B€ohme et al., 2015), significantly lower, if any, transaction fees (Dierksmeier and Seele, 2018), and faster transaction settlement with guarantee of settlement (Chiu and Koeppl, 2017). In general, crypto-currencies enable direct financial transactions between parties, whether B2B, B2C, or C2C (B€ohme et al., 2015).

### Crypto-Currency Trust has a Detrimental Impact on Investing Anxiety

Despite the fact that there are several crypto-currencies in circulation today, security concerns remain a source of concern (Todorov, 2017). Recent studies have shown evidence of hacking in crypto-currency exchanges, adding to customers' concerns about their use (Girasa, 2018). Attacks and hacking tactics aimed at stealing coins, ransomware, or tracking crypto-

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currencies are possible (Chohan, 2019). In addition, inconsistent pronouncements regarding crypto-currency from various media outlets and government bodies have sparked social anxiety over digital currencies (Hong, 2018). Furthermore, risk-averse investors are getting concerned about missing out on the extraordinary returns that may be made when coins undergo fast valorization suddenly (Chang, 2018). Trust in crypto-currencies negatively influences loyalty to banks.

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Crypto-currencies, unlike traditional financial systems, are based on decentralised trust. For example, we used to put our faith in the financial organisation and its database to keep our money safe and to accurately display us what we possess, our transactions, and our savings (Shareef et al., 2018). Crypto-currency transactions, on the other hand, do not go via a trusted intermediary but rather through a deregulated peer-to-peer method. FinTech businesses, for example, are distinguished by innovation and adaptability and are referred to as crypto-currency enterprises. There is a new generation of non-banking financial institution members, thanks to decreased, if any, switching costs and younger generations being digital omnivores. These individuals display a lack of brand loyalty as well as bank loyalty. FinTech businesses' disruptive effect on customers might pose a serious danger to traditional banking institutions' survival (Swacha-Lech, 2017).

#### Anxiety over Investments has a Detrimental Impact on Bank Loyalty

Customers that are less hesitant to invest in crypto-currencies are more loyal to the various coin-based digital currency suppliers (Floh and Treiblmaier, 2006). Investors who engage in high-frequency crypto-trading, on the other hand, are frequently tormented by worry and sadness (Grall-Bronnec et al., 2017). Worse, many customers are concerned about the legal status of crypto-currencies and how their governments may respond (for example, through policy) (Grinberg, 2012; Yahanpath and Wilton, 2014).

# Between Faith in Crypto-Currencies and Loyalty to Banks, there is a Mediating Impact and Worry

Many disruptive technologies are already breaking down traditional regulatory systems to the benefit of investors. Crypto-currencies have difficulties because they lack both a central issuer and value stability. Investors are concerned about the trustworthiness of Crypto-currencies as a day-to-day money because the market continues to experience severe highs and lows in terms of value (Luther, 2016). Future confidence in crypto-currencies, according to Harwick (2016), is dependent on both steady purchasing power and financial intermediaries whose crypto-liabilities circulate as a medium of exchange. Crypto-currencies will be dependant on other non-crypto currencies as long as banks refuse to do transactions in them (i.e., there is no central issuer) (e.g. US dollar, flat currencies) (Khurana et al., 2016).

## **Transaction Speed**

We add to the current literature by arguing that investors reliance in digital coin based currencies is bolstered by awareness of crypto-currencies, government trust, and the speed with which transactions with crypto-currencies may be completed in minutes. The transaction may often be authenticated round the clock (Medium, 2018). Furthermore, the speed of transaction for crypto-currencies is both good news for investors and a warning to banks, as customers anticipate faster, more secure, and authenticated financial transactions.

The first finding is that traditional financial institutions such as Banks must be able to provide an arrangement that allows peer-to-peer transaction records and fast processing across domestic trades, stock exchanges, deposits, withdrawals, foreign currency, and global exchanges in order to remain competitive and relevant. They must be able to communicate with coin-based digital currency suppliers first and foremost. JP Morgan just launched their own crypto-currency, the "JPM Coin," which is the first bank-backed crypto-currency in the United States. JPM Coin will be utilised to settle client-lender payments; however, cross-border payments and corporate debt services will be moved to the blockchain. While the JPM Coin and its capabilities are still in their infancy, lagging far behind the big crypto-providers, JP Morgan realised that if they did not interact with crypto-currency, they risk losing their client base in the not-too-distant future. Because the crypto-currency business continues to disrupt and progress the financial sector, FinTech firms may wish to sell, advertise, and promote their usage of crypto-currencies in order to convert more clients with almost no switching costs.

#### **Anxiety about Investing**

Our findings contribute to irrational and indecisiveness, particularly in the context of marketing investments, by revealing that investors can have knowledge of crypto-currencies and trust in their respective governments while also enjoying the benefits of crypto-currencies, such as transaction speed, but still be concerned about them. The findings, on the other hand, show that individuals were not too nervous on average. This might be due to the fact that crypto-currencies in this context or for this application are so new that some worry is to be expected. In fact, it's possible that customers anticipate some amount of fear. This study shows that regardless of why individuals are anxious, their emotions have little effect on their opinions toward investing in and trading crypto-currencies. In the favour of reality if additional research are done to investigate this finding, it would sugguest that FinTech firms and banks (should they choose to enter the Crypto-currency market) do not need to spend time and money on marketing, advertising, and promotions to try to allay investors' anxiety about their adoption of various

digital currencies. Rather, this would free up resources for FinTech firms and banks to focus on marketing, advertising, and promoting the variables (such as expertise, trust in government, and transaction speed) that appear to promote intent to invest in crypto-currencies.

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# V. CONCLUSION, FUTURE RESEARCH AND LIMITATIONS

Our findings, like other research, had certain limitations. Furthermore, crypto-currencies are governed by different policies and legislation in different nations. Some governments, such as the United States and Australia, are supportive of crypto-currencies, while others have banned Bitcoin transactions (e.g. China, Vietnam). We believe that the current research will be expanded in a number of ways. Future studies should, for example, look at confidence in crypto-currencies in various circumstances (e.g. Germany, Australia). Germany is one of the few European nations that permits the use of Crypto-currency. Second, the report did not look at the effect of income on Crypto-currency trust. People with lesser earnings have greater investing constraints than those with higher incomes, which may affect their faith in any investment (Eckel et al., 2005). Third, we did not distinguish between customers with high Internet proficiency and those with poor Internet competency. In the sphere of online behaviour, customers' own proficiency and self-efficacy impact them (Eastin, 2002). It's extremely possible that bitcoin may become the global economy's future. More research is needed, however, because there is still a lack of understanding of how bitcoin value works and how bullish and bearish patterns affect the cryptocurrency market in general. Bitcoin is the future of the global economy, although they were concerned about the cryptocurrency's volatility rate. Future study might look into people's Internet skills and compare them to their impressions of crypto-currencies and their faith in them. Finally, we examined customers' overall attitudes on crypto-currencies rather than their actual investing behaviour in bitcoin or other assets. Investors with expertise in investing and risk-taking should be compared to investors with little or limited experience in investment in future study. Despite its limitations, we have highlighted the key characteristics that influence customer trust in crypto-currencies in this article.

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### ADDITIONAL INFORMATION

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