

AN INTRODUCTION TO CRYPTOCURRENCY AND SMART INVESTMENT

Vilsee Shandilya

Amity International School, Noida

DOI: 10.46609/IJSSER.2022.v07i01.009 URL: <https://doi.org/10.46609/IJSSER.2022.v07i01.009>

Received: 11 Jan. 2022 / Accepted: 20 Jan. 2022 / Published: 31 Jan. 2022

ABSTRACT

Many activities in our daily lives have been merged with the internet and have become more efficient and flexible as a result of the rapid advancement of information and communication technology. The rapid growth of online users has generated new business concepts, such as bitcoin, which have enabled virtual world concepts to thrive. A new business phenomenon has emerged, which is called cryptocurrency. This paper explores the nuances of cryptocurrency including the pros and cons, investment techniques and its usage in the real world. As an eight-year-old technology, cryptocurrency is an encrypted, peer-to-peer network that facilitates digital bartering. With the invention of Bitcoin, the first cryptocurrency, long-standing and unchanged systems of financial payment have been radically transformed. The paper also analyses investment risks in Bitcoin as well as other currencies for describing the impact on Indian citizens.

Keywords: Cryptocurrency, Bitcoin, Coins, Blockchain, Invest, Funds

Introduction

Cryptocurrency, a relatively young and volatile asset class, is a digital asset conceived as a medium of exchange between individuals in which coin ownership is recorded and stored in the form of a computerized database. Cryptocurrency can be utilized to secure transaction records, control the creation of additional coins, and verify the transfer of coin ownership. Cryptocurrency, also known as virtual or digital currencies is unique to the effect that it lacks a centralized authority. This makes it impervious to government intervention, political maneuvering, and manipulation, imparting an appearance of transparent trusted third-party transactions.

Cryptocurrency uses distributed ledger technology i.e. blockchain, which acts as a public financial transaction database, to create decentralized control. Each transaction in the bitcoin log is organized into a block, which is linked to a chronological record of everything that has ever happened on the blockchain.

Cryptocurrency pricing uncertainty and volatility can frighten and jeopardize mainstream adoption. The value of cryptocurrencies has been known to drop to hundreds, if not thousands, of dollars. Because the dangers of trading cryptocurrencies are substantial and speculative, it is critical that you understand them before you begin. Despite the rise in fraud and theft, many experts praise the security of Bitcoin investments, at least in terms of cybersecurity, if not investment stability, thanks to secure blockchain technology.

To comprehend the dangers of crypto money, one must first comprehend the properties of the blockchain upon which it is built. Bitcoin, founded in 2009, is the most popular cryptocurrency. Bitcoin is regarded as digital gold. Ethereum is a worldwide computing platform that supports many other cryptocurrencies, and a vast ecosystem of decentralised apps exists (DApps). Large-scale cryptocurrency generation and use include power concentration among a few operators and owners, substantial energy consumption, market opacity, major price swings, and unlawful transactions. Some urge for increased regulation of cryptocurrencies, ranging from no regulation at all to partial regulation or prohibitions, as a result of these risks and unrealized gains.

There is no doubt that cryptocurrency and digital token-based business models will continue to exist, but understanding the risks of emerging markets and their underlying technologies will not only protect investors, but will also provide regulators with a steady hand to show entrepreneurs how to manage their projects' "risks" in a way that cannot be done retrospectively.

Let us now look at the current situation in India. Due to the significant volatility in the virtual coin trading arena and many ups and downs within two weeks, cryptocurrency investments have become a topic of debate in recent weeks. Payment processors and banks in India are hesitant to participate in bitcoin exchanges due to regulatory uncertainties. Top Indian authorities have branded cryptocurrency a Ponzi scheme. The reliance on bitcoin exchanges has become risky, and malfunctions in cryptocurrency withdrawals and deposits are on the rise.

Digital currencies have both positive and negative characteristics, but the fact remains that there are enough large firms and businesses looking for methods to incorporate digital currencies and capitalize on digital benefits, so the concept of digital currencies is unlikely to fade away anytime soon.

The value of the currency, which fluctuates with the economy, determines the global economy. Due to their non-inflationary nature, cryptocurrencies lack the flexibility of centralised currencies. The cheap transaction fees of cryptocurrencies are one of their most appealing features. Cryptocurrency is not physical money that can be carried around and traded for goods and services in the real world. It does not rely on banks to authenticate transactions because it is a digital peer-to-peer payment system. Cryptocurrencies are attractive to tax fraudsters because they are not controlled by national governments and exist outside of their direct control. Decentralized currency is one of the cryptocurrency's advantages, but it is also one of its disadvantages, as it means that Bitcoin investments are not controlled. Investing in cryptocurrencies is comparable to swapping money in a different nation.

This demonstrates that cryptocurrency consumers consider the high volatility of the price as their only benefit from Bitcoin, as it leads to bigger potential rewards.

Background

For safety purposes, cryptocurrency exchange units are protected by cryptographic protocols that encrypt sensitive data transmissions, and only the owner of the private key to these funds can trade cryptocurrency. The cryptocurrency process uses digital protections to ensure security of transactions.

Cryptominers use the network to detect blocks and add pending transactions to ensure the entire process is irreversible. The block discovery process currently takes about 10 minutes per block, resulting in a fixed amount of new bitcoins per block being mined which is currently at 6.25 BTC / block, but is halved roughly every four years. Bitcoin software becomes publicly available and mining begins, the process by which new bitcoins are created and transactions are recorded and verified on the blockchain.

Unfortunately, in 2014, Mt.Gox was the first major cryptocurrency exchange to be hacked, resulting in the theft of 850,000 BTC, estimated at \$ 460 million (current value is \$ 9.5 billion). It took until the end of 2016 for bitcoin to return to its original value after this unprecedented situation.

Bitcoin price peaked at \$ 60,000 in April 2021 a new record and coincided with the launch of Coinbase cryptocurrency exchange, a sudden rise in value in early 2021 after \$ 20,000 was reached in December 2020.

Among the thousands of cryptocurrencies created since then, Bitcoin remains the most prominent and most widely recognized - the first cryptocurrency - both in terms of value and popularity. Bitcoin is considered the best cryptocurrency in the world in terms of market value, but its creation remains a mystery.

Bitcoin's creators are somewhat cryptic, but we know a lot about cryptocurrency's history, which may influence your investment decisions and trading decisions. Bitcoin and other cryptocurrencies compete with traditional currencies such as dollars and euros, which are known in the cryptocurrency community as fiat currencies.

While some other cryptocurrencies other than bitcoins are widely used for trade payments, increasingly active exchanges allow holders to exchange them for bitcoins or fiat currencies, providing critical liquidity and flexibility.

Today, the creation of the Central Bank Digital Currency (CBDC) is also underway, and large companies are investing in blockchain technology and cryptocurrencies. Since the advent of bitcoin in 2009, there has been increasing concern that an unregulated global economy among people due to cryptocurrencies could have a negative impact on society.

Some prominent voices in the investment community advised budding investors not to invest in cryptocurrencies such as bitcoin because they are not as secure as initially believed. Cryptocurrency trading has the disadvantage that its value is totally dependent on investor demand; if the market falls, so does bitcoin.

Instead, users need to convert them to the more commonly used cryptocurrencies such as bitcoins before converting to fiat currencies. The most popular cryptocurrencies such as Bitcoin and Ripple are traded on special secondary exchanges like fiat forex exchanges, where you create an account and then transfer real money to buy cryptocurrencies like Bitcoin or Ethereum.

Coinbase is a popular cryptocurrency exchange where you can create a wallet and buy and sell bitcoins and other cryptocurrencies, Microsoft allowing users to buy games with this currency. As an illustration of the growing popularity of bitcoin, new cryptocurrencies are emerging, including Ethereum and Coinbase (which raised \$ 75 million in a funding round, the largest for a Bitcoin company).

In the same year, the Japanese cryptocurrency exchange Mt Gox goes offline and seeks protection in the event of bankruptcy, leaving investors without money ; and in the same year the first sale of Bitcoins takes place, allowing for the first time to attribute monetary value to a

cryptocurrency. Bitcoin is widely regarded as the first modern currency, the first exchange medium that is publicly used to combine decentralized governance, user anonymity, blockchain registration, and embedded scarcity.

According to a report in the Bitcoin Magazine, one of the first attempts at creating a cryptocurrency actually dates the creation of Bitcoin by about 20 years, but it is difficult to imagine the creation of bitcoins, let alone the hundreds of other digital currencies launched since then, without previous attempts at cryptocurrencies and electronic money decades before the launch of bitcoins.

It helps to understand how much capital, capital gains, interest or dividends and other income forms and investment value can be generated by an investment. When and how you make money depends on your investment type. Certain types of investment have tax incentives, at least for some investors. These investments can sometimes provide more diversification or different returns than more traditional investments such as stocks, bonds, and cash.

Many alternative funds seek to minimize fluctuations in the value of their investments and reduce risks by dividing them between different types of assets and / or using sophisticated trading strategies, alternative investments usually have low correlation with standard asset classes such as stocks and bonds, however alternative investments can be negative and / or correlated with other investments, including traditional ones, especially during a financial crisis. Some investors hope that alternative investments will bring positive returns throughout the entire business cycle.

Alternate investment is an investment in assets other than cash, stocks and bonds, for example, capital markets, commodities, and tangible assets. These traditional investments are commonplace for most individual investors.

There are many types of investment vehicles and some of them may turn out to be more profitable depending on your monetary goals. Traditional investing relates to investing in well-known assets (such as bonds, cash, real estate and stocks) with the expectation of capital gains, dividends and interest income.

If you are just getting started or are unsure of alternative resources, traditional investing is a great option. Before investing, it is recommended that you explore the differences between traditional and alternative assets. This doesn't necessarily mean buying a house or becoming a homeowner - you can invest in REITs - which are similar to real estate mutual funds - or online real estate investment platforms that attract investor money.

Mutual funds and Exchange-traded funds (ETFs) - Both products usually have a large number of shares and other investments in the fund making them more diversified than a single share. Mutual funds are a group of assets (like stocks) that you can buy by combining your investment money with other investors, and as such, AIFs can sometimes be traded or traded as hedge funds like options to retail investors.

Hedge fund strategies are investment funds that invest in relatively liquid assets and employ a variety of investment strategies to get a high return on their investment. They are most often created by investment banks and offered to hedge funds, organizations or retail investors.

As alternative investments become more and more part of the investment landscape and become more accessible to different types of investors, it becomes more and more important to know them for both current or new investors and investment professionals seeking to accelerate their careers.

In addition, the availability of a wide variety of alternative investments makes them a viable option despite investor risk tolerance or market perception. By diversifying your investments, you can find the combination of risk and probable return that suits your needs. By diversifying and distributing your money across different types of investments, you can reduce the risk of losing money.

Invest as long as possible and don't enter or leave the markets, make money on top of the money you've already made. Make your money work harder with traditional investments that can increase your wealth over time. Rather than funneling your earnings into a bank account to sit back, take advantage of traditional investments to get a bigger return on your money without complicated the case.

Most accounts can invest in government bonds, bonds or go public, property market research, hedge funds, private loans or invest in precious metals. When investing in cash, money is usually invested in low-risk short-term investments such as certificates of deposit, money market funds and high-yield bank accounts.

Assets can come in handy for stable cash flow depending on how you allocate your funds, however, if you successfully set up your account, the alternative resources will have a high return on investment. The key to a good long-term alternative asset investment is portfolio management.

Discussion

Bitcoin is a digital currency created from two different things. The first part is code. Bitcoin was first developed in 2009 by a person (or group) known as Satoshi Nakamoto. Satoshi is anonymous, but his or her true identity is believed to be American computer programmer Hal Finney.

Bitcoin is the first computer program that controls a currency. Bitcoin is just a digital string of characters called a 'string' or 'hash.' This string can be used to make digital currency transactions. Think of the string like a debit or credit card that works through a central processing unit.

The Bitcoin string, like any number, can be represented as a base 16 code. The first eight digits are your country code and the last four are the number of the payment you want to pay with the money.

Bitcoin has had a shaky start since its inception in 2008, but it's recently found great success in India. The Reserve Bank of India (RBI) recently refused to recognize bitcoin as legal tender following warnings about trading risks from its Financial Stability Report, but this hasn't slowed bitcoin down in India. Last year at this time, there were only four bitcoin exchanges operating in India. Today there are close to 20 different exchanges available for Indian traders to use—and this number will continue to grow as more and more people become interested in trading cryptocurrency. There are now 100,000 Indians who own bitcoins and the country has been growing as one of the largest markets for miners and traders of cryptocurrency.

You can buy and sell bitcoins by connecting to exchanges and trading bitcoins for other currencies. It's not difficult: you need to register, buy bitcoins with your currency and then wait for them to arrive in your wallet. You can then send them to your recipient's bitcoin account and they'll get the message immediately.

A bitcoin exchange is a digital marketplace where traders can buy and sell bitcoins using different fiat currencies or altcoins. A bitcoin currency exchange doesn't actually handle any of the trading—instead, it connects buyers and sellers and takes a cut of the profits. Currently, there are three main bitcoin exchanges in India. They are Zebpay, Unocoin, and Coinsecure. Zebpay is one of the most popular choices for people looking to buy bitcoin in India because it's an easy-to-use app that facilitates instant transactions at low rates. It also supports buying and selling cryptocurrencies such as Bitcoin Cash (BCH), Ethereum (ETH), Litecoin (LTC), Ripple (XRP) and Dash (DASH).

Zebpay has its own wallet that users can use to store their cryptocurrencies which offers support for Indian rupees (INR). However, the company only allows deposits INR from banks within India. Unocoin is an Indian Bitcoin company headquartered in Bangalore with over 1 million customers across the country. The company also operates a network of Bitcoin ATMs across India. Coinsecure provides a Bitcoin wallet to store your cryptocurrency with both online and offline storage options available for its users.

There are some influential people who have contributed a lot in the field of Bitcoin.

The Winklevoss twins, who became bitcoin's first billionaires, had devised a novel solution to store their crypto fortune. In the year 2018, they detailed their approach to secure private keys, which control access to bitcoin and provided a blueprint for their exchange platform Gemini's security architecture.

Barry Silbert is the Chief Executive Officer and founder of Digital Currency Group. In January 2016, Digital Currency Group acquired CoinDesk, a leading source of Bitcoin news, which runs the annual Bitcoin industry conference, Consensus. The firm has invested in more than 100 Bitcoin- and blockchain-related companies and is the world's leading firm for investing in Bitcoin-related companies, landing Barry Silbert the enviable nickname "The King of Crypto."

Silbert's company also owns Genesis, a trading firm focused on digital currencies, and Grayscale, a company focused on digital currency investing. Silbert also started the Bitcoin Investment Trust, an ETF that tracks the price of Bitcoin.

The future of cryptocurrency is bright. The world is quickly adopting this new form of currency, and many governments are considering regulations to govern it. Bitcoin has exploded in popularity only recently. In only one decade, it has gone from a basic idea to a globally traded commodity with a market cap of over \$200 billion. And this growth will only continue as more countries around the world adopt it.

Governments around the world are considering regulations for bitcoin and other cryptocurrencies because they're worried about its impact on their economies and banks. However, there is hope that governments will embrace bitcoin and other types of cryptocurrency rather than try to shut them down entirely—much like how states around the US have embraced ride-sharing services like Uber or Lyft instead of trying to ban them outright.

Investing in cryptocurrency is a hot topic and one that has been getting a lot of attention in recent months. Cryptocurrency and blockchain technology are quickly becoming mainstream, with even

major players like Apple and IBM investing in it. It's not hard to see why so many people are excited about the future of cryptocurrency: blockchain technology will change everything from banking to real estate transactions, so it's no wonder people are excited about the potential.

But there are many different opinions on what we should do as investors. There's hype around cryptocurrencies and the future of investment, but there's also skepticism and uncertainty.

Bitcoin is still the most popular coin on the market. In fact, Bitcoin has been around since 2009 whereas other coins have come and gone within just a few years of being introduced. For those who are skeptical about Bitcoin's sustainability as an investment opportunity, consider this: Bitcoin was trading at \$1 in 2010 and today it trades at over \$4,000.

As a cryptocurrency investor, the following pointers must be kept in mind. Cryptocurrencies are not backed by any government or central bank. They trade on unregulated and unsecure exchanges. Crypto prices fluctuate in an unpredictable fashion. The transactions can be erased without trace, potentially resulting in catastrophic losses and one must be wary of the fraudulent schemes and scams abound in the cryptocurrency industry. It is a project that must be undertaken with knowledge and caution.

Conclusion

Gemini crypto exchange released its 2021 State of U.S. Crypto Report, finding that today's "average" crypto investor is a 38-year-old male with an annual income around \$111,000. However, as the number of crypto investors is set to double this year, according to the report, that profile could change. Today, more than 21.2 million adults, or about 14% of the U.S population, own cryptocurrency such as Bitcoin or Ethereum. Gemini's research revealed that about 13% of those polled shared intentions to purchase digital assets within the next 12 months. Who are tomorrow's crypto investors? Individuals with an average age of 44 and an annual salary of around \$107,000. However, there may be quite a few more women on the list, according to the study's findings. Of the 63% of adults who say they are "crypto-curious," 53% are women. These individuals say they are interested in investing in digital assets but want to learn more first.

The industry is only in its infancy and constantly evolving. It's difficult to predict where things are headed long-term, but in the coming months, experts are following themes from regulation to institutional adoption of crypto payments to try and get a better sense of the market. What is almost certain however is the growing trend of the investors to make a move on cryptocurrency and invest in the same.

References

1. Berentsen, A. & Schär, F. *A Short Introduction to the World of Cryptocurrencies*, Federal Reserve Bank of St. Louis Review, January 2018.
2. Mubarak, M. *A Study on Cryptocurrency in India*, Vijayanagara Sri Krishnadevaraya University, Bellary, August 2021.
3. Marr, B. *A Short History Of Bitcoin And Cryptocurrency Everyone Should Read*, Enterprise Tech, December 2017
<https://www.forbes.com/sites/bernardmarr/2017/12/06/a-short-history-of-bitcoin-and-crypto-currency-everyone-should-read/>
4. Arias-Oliva, M. & Pelegrin-Borondo, J. & Matias-Clavero, G. *Variables Influencing Cryptocurrency Use: A Technology Acceptance Model in Spain*, Frontiers, March 2019
<https://www.frontiersin.org/articles/438810>
5. Hyatt, J. *The Cryptocurrency Tycoons On Forbes' 2021 Billionaires List*, Billionaires, April 2021
<https://www.forbes.com/sites/johnhyatt/2021/04/06/the-cryptocurrency-tycoons-on-forbes-2021-billionaires-list/?sh=3a8a57f625e2>
6. Lam-Balfour, T. & Royal, J. *How to Invest Money: Choosing the Best Way To Invest for You*, August 2021.
<https://www.nerdwallet.com/article/investing/how-to-invest-mone>
7. Hayes, A. & Mansa, J. *10 Important Cryptocurrencies Other than Bitcoin*, November 2021.
<https://www.investopedia.com/tech/most-important-cryptocurrencies-other-than-bitcoin/>
8. *The mistakes to avoid when buying cryptocurrency*, Telegraph Money, Telegraph Money, December 2021
<https://www.telegraph.co.uk/money/consumer-affairs/buy-cryptocurrency-how-bitcoin-cryptocurrencies-work-tips-2021/>
9. Nahar, P. *Future of Cryptos in India: A blanket ban or birth of a new age asset class?*, ETMarkets.com, August 2021
<https://economictimes.indiatimes.com/markets/cryptocurrency/future-of-cryptos-in-india-a-blanket-ban-or-the-new-age-asset-class/articleshow/85489406.cms>

10. Thackerey, J. *5 Inherent Risks of Cryptocurrency*, FEI Daily, July 2018
<https://daily.financialexecutives.org/FEI-Daily/July-2018/5-Inherent-Risks-of-Cryptocurrency.aspx>
11. Tran, H. *Regulation: The solution to Bitcoin's risks and unrealized benefits*, New Atlanticist, July 2021
<https://www.atlanticcouncil.org/blogs/new-atlanticist/regulation-the-solution-to-bitcoins-risks-and-unrealized-benefits/>
12. Levy, A. *Is Cryptocurrency a Good Investment?*, The Motley Fool, December 2021
<https://www.fool.com/investing/stock-market/market-sectors/financials/cryptocurrency-stocks/is-cryptocurrency-good-investment/>