**DeFi Blockchain:**

*Master Decentralized Finance and Cryptocurrency Technology*

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# Chapter 1 – The Future Of Finance DeFi

One could argue that Bitcoin and much of the universe of cryptocurrency networks that exhibit some degree of decentralization could fall under the heading of DeFi. According to DeFi Pulse, the next largest DeFi category is decentralized exchanges (DEXs), with a size of $1.9 billion. OTC lending desks are sometimes referred to by other terms, including "centralized finance (CeFi)." However, as noted above, terms such as "CeFi" and "DeFi" risk oversimplification and confusion.

Many DeFi protocols such as Maker have centralized assets as collateral, such as USD Coin (USDC), a relatively centralized USD-backed stablecoin. Another term we have come across to describe digital asset lending firms is "private lending," which we also find somewhat confusing and less meaningful. While the terms "trusted" and "untrusted" are sometimes used to distinguish between digital asset lending platforms and DeFi, in reality some level of trust is required for both. In the case of DeFi, the administrative keys to the smart contracts are often retained by the founding teams for software upgrades or emergency shutdown of the protocol, and some level of trust in the reliability of the underlying code of the smart contracts is also required of DeFi users.

It is important to note that many higher crypto DALP deposits were likely subsidized for reasons of user acquisition and growth, and questions remain about the longer-term sustainability of the high APRs currently offered on crypto deposits. DeFi lending is even more concentrated than DALP lending, with only three platforms-Aave, Maker, and Compound-representing 98% of the total market value tied up in DeFi lending platforms.

These estimates are preliminary and the methodology will be described in more detail in an upcoming research report.

DeFiCoins.io is dedicated to providing you with informative knowledge that you can implement and make money investing in the right project. DeFi Coins is dedicated to keeping its readership up to date with the latest trends in the DeFi marketplace.

The emphasis on automation of DeFi also implies the absence of human actors or the possibility of human intervention in managing DeFi. Although the complete elimination of the possibility of human management is the ultimate goal for many DeFi protocols and applications, this is not yet the case for much of DeFi today.

# Chapter 2 - How to buy and trade cryptocurrencies

Classic exchange process Peer-to-peer crypto exchanges Brokers and CFD trading Derivatives exchanges. Types of cryptocurrency exchanges Centralized exchanges Decentralized exchanges Hybrid cryptocurrency exchanges. Cryptocurrencies are a fairly new concept for many people. The first to see the light of day was Bitcoin in January 2009, and as you can see, the crypto industry is still in its infancy. One of the biggest businesses in the crypto sphere is owning cryptocurrency exchanges with significant daily profits.

And new concepts like decentralized exchanges or derivative exchanges are popping up almost every day. In this article, we will focus on the types of cryptocurrency exchanges and try to compare decentralized exchanges with centralized ones to help you understand the differences. How to buy and trade cryptocurrencies Traders want to buy cryptocurrencies and trade them with each other. This is why crypto exchanges are so important in this industry. They allow them to buy, sell, and trade their cryptocurrencies instantly.

Some of them also serve as fiat gateways, so you can even use your bank account or credit card to buy some cryptocurrency assets. There are different approaches to crypto exchanges. Some exchanges focus on convenience for the customer, others offer low trading fees, some try to educate their customers from the beginning, and on the other hand, there are those that are aimed at the professional traders.

**Let us talk about the ways you can buy and trade cryptocurrencies. You have several options on how to do it.**

**1. Classic exchange method** The classic method of cryptocurrency exchanges focuses on trading similar to the stock market. Using your fiat money or another cryptocurrency, you can exchange your assets by placing a limit order, which is recorded in an order book and waits there until it is filled, or by placing a market order, which is immediately matched against requests from buyers and sellers already available in the exchange's market depth (DOM).

**2. Peer-to-peer crypto exchanges**

This type of exchange is not limited to cryptocurrencies, p2p exchanges are also very popular in traditional markets. Their representatives are over-the-counter counters (OTC) where you buy or sell an asset from other people or companies, but confidentially. There is no order book and no direct impact on the price of the underlying asset. A typical example in the crypto space is the website LocalBitcoins.com, where supply and demand meet, i.e. they trade peer-to-peer. Mostly without intermediaries, but some OTC trading desks may be used, which charge fees for intermediation. OTC is primarily used for large volumes of cryptocurrencies that may have affected the price of the traded asset. It is usually used by large venture capital firms, hedge funds, and last but not least, cryptocurrency miners.

**3. Brokers and CFD trading.**

By using a broker, buyers and sellers can find a counterparty for their trade, which can be the broker itself. The intermediary (broker) collects a fee for the trade but provides security for both parties. A broker can also allow users to use CFD trading, which allows you to trade almost any asset from stocks to cryptocurrencies. In CFD trading, unlike traditional exchanges, neither party owns the physical asset.

**4. Derivative Exchanges**

The last option is to use derivative exchanges. So what is a derivative exchange and what are the benefits of using them? In the derivatives market, you trade the price of the underlying asset, so you can take advantage of different types of benefits to maximize your profit if you trade correctly and successfully. One of the biggest advantages of derivative exchanges is the high leverage when trading instruments like futures or perpetual swaps. Types of Cryptocurrency Exchanges Centralized exchanges CEXes are the most well-known and traditional in the cryptocurrency sphere. They are operated by a company that offers both cryptocurrency-to-cryptocurrency trading and fiat currency-to-cryptocurrency trading. CEX is a place where buyers and sellers meet on a centralized platform, which means someone takes care of your cryptocurrency and is responsible for it. You can use the order books for your trades and even some technical analysis tools on some advanced exchanges.

The biggest advantages are that CEX is easy to use and has great UI and UX that come with fast response. For some exchanges you simply register with your email, enter your password and you are ready to trade. You can be sure that the largest exchanges not only have a good reputation, but also high trading volume and liquidity, so the trading spread is not as large as in some other types, which we will talk about in the next chapters. Some trading platforms like Stormgain or XCOEX go even further and offer liquidity aggregation. This is a process that collects buy and sell orders from different sources, thereby providing traders with prices that are close to the market with a minimal spread.

Customer support, various trading pairs and fiat gateways are often offered by CEXs, and most of the time you can benefit from additional services such as staking, saving opportunities or IEOs (Initial Exchange Offers). They also add services known from DeFi. Some of you may wonder what is DeFi in the crypto world or what is decentralized finance? Simply put, it is decentralized instruments that you may be familiar with from the banking sector, such as lending or borrowing cryptocurrencies, but without an intermediary.

On the other hand, when using CEX, you are not the owner of the private keys. So there is still a small chance that CEX will be hacked, as it happened with Mt. Gox, HitBTC or Coincheck. Some people also feel uncomfortable exposing their private data as part of the KYC process, so this could be a barrier for some people. The most popular centralized exchanges are Binance, Coinbase and Huobi.

Decentralized Exchanges DEX is an alternative to CEX without a central point of failure, no company is responsible for the assets. Compared to traditional CEX, transactions and trading are automated through the use of smart contracts and decentralized applications. This way is much more secure because there is no possibility of security breach when the smart contract is naturally well written. DEX is simply a service platform that connects buyers and sellers who want to exchange their tokens. Since the most advanced blockchain with the largest number of tokens (ERC-20 tokens) is Ethereum, most DEXes work with Ethereum and its smart contracts, most cannot even process bitcoin for trading.

This could change when you get to decentralized finance (DeFi) on an interoperable platform like Polkadot and Cosmos. With their use, the limits for trading will be much lower. Since no company is responsible for running DEX, it's harder for governments and regulators to shut it down. But the price of decentralization for most DEXes is low trading volume, liquidity, speed, and UI, which makes them difficult to use.

Some DEXes are geared towards experienced users only. You cannot ask customer support for help on DEX and they do not offer a fiat gateway like CEX. The most popular decentralized exchanges are Binance DEX and Uniswap.

What is a hybrid cryptocurrency exchange? Quite simply, it is the kind that takes advantage of CEX and DEX. It is a combination of fast transaction speed that you find on centralized platforms and the security you get from keeping private keys. Hybrid types are a new generation of crypto trading marketplace, but still "in development". The most popular hybrid types are Nash Exchange and Qurrex Exchange. Decentralized exchanges vs. centralized exchanges Let us compare the centralized and decentralized exchanges, as the result will be individual for each of you. For better understanding we have used the comparison table. Comparison table centralized vs. Decentralized Exchanges Centralized Exchange (CEX) Decentralized Exchange (DEX) Hybrid Exchange (HEX) UI & UX Easy to use Hard to use

Conclusion It's up to you to decide which type of cryptocurrency exchange is best for your needs. If you want to buy your cryptocurrencies with fiat money, you should use CEX or HEX. The same is true if you want to trade many different altcoins, as DEX is usually limited to ERC-20 tokens or a limited number of cryptocurrencies. Traders who want to manage their taxes and statistics on all trades can use some centralized exchanges that can help them with that. DEXes and hybrid exchanges are geared more toward more experienced users who want to use their hardware wallets exclusively and have every Satoshi under their full control.

But they sacrifice some other qualities that centralized exchanges offer.

User experience, high trading volume and liquidity, and additional services like Initial Exchange Offerings (IEO), DeFi products, and so on. Bottom line: if you choose a reputable and well-secured CEX, you can earn even more crypto by using their features like staking or lending, so your cryptocurrency actually works for you even when you are sleeping - and that counts!

# Chapter 3 – What Is The Value Of Bitcoin?

All of these factors help establish Bitcoin as a type of currency, but they do not explain Bitcoin's exponential price growth and its unique appeal as a store of value. Saving cash, after all, is not considered a good investment strategy - typically, your U.S. dollars will appreciate significantly more in value in an investment vehicle than in cash. Even among cryptocurrencies, Bitcoin is unique because of its value. Someone could create another type of digital asset with the same characteristics and it might never have value (in fact, many have tried and failed). So why Bitcoin? Why does Bitcoin have value?

The missing piece of this puzzle - the piece that both Bitcoin fans and opponents have missed - is the ability to mine Bitcoin. Since anyone can theoretically go through the effort of creating new Bitcoin by processing Bitcoin transactions, it is possible to profit from Bitcoin outside of its use as a medium of exchange. This fact, combined with its enforced scarcity, makes Bitcoin such a medium, and thus a value.

What is the price of a Bitcoin? The price of a single Bitcoin is determined by several factors, including supply and demand, competition, and regulation. The intrinsic value of a Bitcoin can be estimated by calculating the average marginal cost of producing a Bitcoin at a given time, based on block reward, electricity price, energy efficiency of mining hardware, and mining difficulty. On November 10, 2021, bitcoin reached an all-time high of $68,790.

Some authors even go so far as to say that the only intrinsic value of Bitcoin is its utility. "Bitcoin's utility as a store of value depends on its utility as a medium of exchange," John Kelleher, a freelance web developer, writes in Investopedia.

"We assume that for something to be used as a store of value, it must have intrinsic value. If Bitcoin is not successful as a medium of exchange, it has no practical use and therefore no intrinsic value and is not attractive as a store of value."

It has no intrinsic value and is backed by nothing. Bitcoin supporters will tell you that its value, like gold's, stems from its scarcity - Bitcoin's computer algorithm imposes a fixed cap of 21 million digital coins (nearly 19 million have been created so far). But scarcity alone can hardly be a source of value. Bitcoin investors seem to rely on the greater fool theory - all you need to profit from an investment is to find someone willing to buy the asset at an even higher price.

Cryptocurrency prices change very frequently and remain very volatile. Even just looking at the most popular crypto tokens like Bitcoin, Ether (not to be confused with the Ethereum network for which it is the native token), Dogecoin, Litecoin, and Ripple, there has been a lot of movement in their value. Other cryptocurrencies are also now strong investment options and the Shiba Inu-themed Dogecoin, whose symbol is DOGE, originally created as a joke, is now one of the most popular tokens. You should make smart and informed decisions. You can search up values of coins from CoinSwitch, a trusted and popular platform for trading cryptocurrencies. The reason for this is that cryptocurrency prices can vary slightly from provider to provider, so it is very important to use a single source for this information.

# Chapter 4 – How To Acquire Bitcoins And Its Benefits?

New Bitcoins are generated through a competitive and decentralized process called "mining." This process involves individuals being rewarded by the network for their services. Bitcoin miners process transactions and secure the network with specialized hardware and collect new bitcoins in return.

The Bitcoin protocol is designed to generate new Bitcoins at a fixed rate. This makes bitcoin mining a very competitive business. As more miners join the network, it becomes harder and harder to make a profit, and miners must look for efficiencies to lower their operating costs.

No central authority or developer has the power to control or manipulate the system to increase its profits. Every Bitcoin node in the world will reject anything that does not conform to the rules they believe the system should follow. Bitcoins are created at a decreasing and predictable rate. The number of new Bitcoins created each year will automatically be cut in half over time until the issuance of Bitcoins comes to a complete halt at a total of 21 million Bitcoins. At that point, Bitcoin miners are likely to be supported solely by numerous small transaction fees.

Why do bitcoins have value? Bitcoins have value because they are useful as a form of money. Bitcoin has the properties of money (durability, transferability, fungibility, scarcity, divisibility, and recognizability) based on the properties of mathematics, rather than relying on physical properties (like gold and silver) or reliance on central authorities (like fiat currencies). In short, Bitcoin is backed by mathematics. With these properties, all that a form of money needs to obtain value is trust and acceptance.

In the case of Bitcoin, this can be seen in the growing number of users, merchants, and startups. As with all currencies, bitcoin's value comes only and directly from people willing to accept it as a form of payment.

What determines the price of bitcoin? The price of a bitcoin is determined by supply and demand. When the demand for bitcoins increases, the price increases, and when the demand decreases, the price decreases. There is only a limited number of bitcoins in circulation and new bitcoins are created at a predictable and decreasing rate, which means that demand must follow this level of inflation to keep the price stable.

Since the Bitcoin market is still relatively small compared to what it could be, large amounts of money are not required to move the market price up or down, and therefore the price of a Bitcoin is still very volatile. Bitcoin price over time: can bitcoins become worthless? Yes. History is full of currencies that have failed and fallen into disuse, such as the German Mark during the Weimar Republic and more recently the Zimbabwean dollar.

Although previous currency collapses were usually due to hyperinflation making Bitcoin impossible, there is always the possibility of technical errors, competing currencies, political problems, and so on. As a rule of thumb, no currency should be considered absolutely safe from failures or difficult times.

Bitcoin has proven to be reliable over the years since its inception, and there is a lot of potential for Bitcoin to continue to grow. However, no one is in a position to predict the future of Bitcoin. Is bitcoin a bubble? A rapid price increase does not constitute a bubble. Artificial overvaluation that will lead to a sudden downward correction is a bubble.

Decisions based on individual human actions by hundreds of thousands of market participants are the cause of Bitcoin's price fluctuating as the market tries to determine the price. Reasons for sentiment swings can include a loss of confidence in Bitcoin, a large difference between value and price that is not based on Bitcoin fundamentals, increased press coverage that spurs speculative demand, fear of uncertainty, and old-fashioned irrational exuberance and greed.

There is volatility where Bitcoin holders can make or lose money in unpredictable ways. Apart from speculation, Bitcoin is also a payment system with useful and competitive features, used by thousands of users and businesses. Does not Bitcoin unfairly favor early adopters? Some early adopters have a large number of Bitcoins because they took risks and invested time and resources in an unproven technology that was hardly used by anyone and was much harder to secure. Many early adopters spent a large number of Bitcoins several times before they became valuable, or they bought only small amounts and did not make large profits. There is no guarantee that the price of a Bitcoin will rise or fall.

This is similar to investing in an early-stage startup company that may either increase in value due to its usefulness and popularity, or simply never make the breakthrough. Bitcoin is still in its infancy and was developed with a very long-term perspective. It is hard to imagine how it could be less biased toward early adopters, and today's users may or may not be tomorrow's early adopters.

Will not the limited amount of Bitcoins be a constraint? Bitcoin is unique in that only 21 million Bitcoins will ever be created.

However, this will never be a limitation because transactions can be specified in smaller subunits of a Bitcoin, such as bits - 1 Bitcoin consists of 1,000,000 bits. Bitcoins can be subdivided to 8 decimal places (0.000 000 01) and possibly even smaller units if needed in the future as the average transaction size decreases.

Will not Bitcoin fall in a deflationary spiral? The deflationary spiral theory states that when prices are expected to fall, people will shift their purchases into the future to take advantage of lower prices. This drop in demand, in turn, causes retailers to lower their prices to boost demand, which exacerbates the problem and leads to an economic depression. Although this theory is popular among central bankers as a justification for inflation, it does not always seem to hold true and is considered controversial among economists.

Consumer electronics is an example of a market in which prices are constantly falling, but which is not in a depression. Similarly, the value of Bitcoins has increased over time, and yet the size of the Bitcoin economy has also grown dramatically along with it. Since both the value of the currency and the size of the economy started at zero in 2009, Bitcoin is a counterexample to the theory that shows it must sometimes be wrong. That notwithstanding, Bitcoin is not designed to be a deflationary currency. It is more accurate to say that Bitcoin is meant to become inflationary in the early years and stable in the later years.

The only time the amount of Bitcoins in circulation decreases is when people carelessly lose their wallets because they failed to make backups. With a stable monetary base and a stable economy, the value of the currency should remain the same.

Is not speculation and volatility a problem for Bitcoin? It's a chicken and egg problem. For the Bitcoin price to stabilize, a large economy with more businesses and users must develop. For a large economy to develop, businesses and users will seek price stability. Fortunately, volatility does not affect Bitcoin's main advantages as a payment system for transferring money from point A to point B. Businesses can instantly convert Bitcoin payments into their local currency and reap the benefits of Bitcoin without being exposed to price fluctuations.

Since Bitcoin offers many useful and unique features and functions, many users choose to use it. With such solutions and incentives, it is possible for Bitcoin to mature and develop to the point where price volatility is limited. What if someone bought up all the Bitcoins in existence? Only a fraction of the Bitcoins issued to date are for sale on the exchange markets. Bitcoin markets are competitive, meaning the price of a Bitcoin will rise or fall depending on supply and demand.

Moreover, new Bitcoins will continue to be issued for decades. Therefore, even the most determined buyer would not be able to purchase all existing Bitcoins. However, this situation does not mean that the markets are not susceptible to price manipulation. It still does not take large amounts of money to move the market price up or down, and so Bitcoin remains a volatile asset for now. What if someone develops a better digital currency? That could happen. Right now, Bitcoin is by far the most popular decentralized virtual currency, but there is no guarantee that it will retain that position in the future.

There are already a number of alternative currencies inspired by Bitcoin. However, it is probably correct to assume that it will take significant improvements for a new currency to overtake Bitcoin in terms of the established market, even if this remains unpredictable. It is also conceivable that Bitcoin will adopt improvements from a competing currency as long as it does not change fundamental parts of the protocol.

# Chapter 5 – How To Store Your Cryptocurrency?

After peaking in late 2017 and subsequently losing popularity, cryptocurrencies such as Bitcoin have seen another significant surge in 2019 and 2020, surpassing their previous highs. With this development, the number of hacking attacks that have become known has also increased. With many investors still unaware of the system and how to protect their investments, hackers are coming up with increasingly sophisticated methods to steal funds. Some of the most noticeable thefts have taken place in secret: Some hacks even blatantly redirect tokens intended for one wallet to another. Victims watch as their tokens are stolen without being able to do anything about it.

Cold storage (or offline wallets) is one of the safest ways to store bitcoin, as these wallets are not accessible over the internet, but hot wallets are still convenient for some users. Those interested in the most secure storage should consider a hardware wallet for long-term bitcoin and cryptocurrency storage. Just as we store cash or cards in a physical wallet, bitcoins are also stored in a wallet - a digital wallet. The digital wallet can be hardware-based or web-based. The wallet can also be stored on a mobile device or on a computer desktop, or it can be kept secure by printing on paper the private keys and addresses used to access it. But how secure are these digital wallets?

The answer to this question depends on how the user manages the wallet. Each wallet contains a set of private keys, without which the Bitcoin owner cannot access the currency. The biggest threat to Bitcoin security is if the individual user loses the private key or if it is stolen. Without the private key, the user will never see their Bitcoins again.

In addition to losing the private key, a user can also lose their Bitcoins due to computer malfunction (crashing a hard drive), hacking, or physically losing the computer that holds the digital wallet. Below, we take a look at some of the best ways to keep Bitcoin safe. Hot Wallet Online wallets are also known as "hot" wallets. Hot wallets are wallets that run on internet-connected devices such as computers, phones, or tablets. This can be a vulnerability because these wallets generate the private keys for your coins on these internet-connected devices. While a hot wallet can be very convenient because it allows you to quickly access your assets and make transactions, they also lack security.

This may sound far-fetched, but people who do not adequately secure these hot wallets can have their money stolen. This is not uncommon and can happen in a number of ways. These wallets are meant for small amounts of cryptocurrencies. You could compare a hot wallet to a checking account. Conventional financial wisdom says that you should only keep money in a checking account for spending, while most of your money is in savings accounts or other investment accounts. The same could be said about hot wallets. Hot wallets include mobile, desktop, web, and most exchange-held wallets.

It is important to note that holding cryptocurrencies in an exchange wallet is not the same as holding them in your personal wallet. Exchange wallets are custodial accounts provided by the exchange. The user of this type of wallet is not the owner of the private key for the cryptocurrency held in that wallet. If the exchange were to be hacked or your account compromised, your funds would be lost. Cryptocurrency exchanges do not provide SIPC or FDIC insurance, which makes keeping cryptocurrencies safe especially important.

The phrase "not your keys, not your coin" is a frequently repeated concept on cryptocurrency forums. As mentioned earlier, it is not advisable to store large amounts of cryptocurrencies in a hot wallet, especially not in an exchange account. Instead, it is recommended to transfer the majority of funds to your personal "cold" wallet. Exchange accounts include Coinbase, Gemini, Binance, and many others.

These wallets are connected to the internet, which makes them a potential target for attack, but they are still very useful for making quick transactions or trading cryptocurrencies. The next type of wallet and the most secure option for storage are cold wallets. The simplest description of a cold wallet is a wallet that is not connected to the internet and therefore presents a much lower risk of being compromised. These wallets can also be referred to as offline wallets or hardware wallets. These wallets store a user's address and private key on a device that is not connected to the Internet and usually have software that works in parallel, allowing the user to view their portfolio without putting their private key at risk. Perhaps the most secure way to store cryptocurrencies offline is a paper wallet.

A paper wallet is a cold wallet that you can create on certain websites. It then generates both public and private keys that you print out on a piece of paper. Accessing cryptocurrencies with these addresses is only possible if you have this piece of paper. Many people laminate these paper wallets and keep them in lockers at their bank or even in a safe at home. Paper wallets have no user interface other than a piece of paper and the blockchain itself.

A hardware wallet is usually a USB drive that securely stores a user's private keys.

This has serious advantages over hot wallets, as it is unaffected by viruses that might be on your own computer, as the private keys never come into contact with your network-connected computer or potentially vulnerable software. These devices are also usually open source, so the community can decide on their security rather than a company declaring it safe to use. Cold wallets are the most secure way to store your Bitcoin or other cryptocurrencies.

However, in most cases, setting them up requires a bit more knowledge. Anyone interested in owning cryptocurrencies should definitely learn about secure storage and the concepts of hot and cold wallets. Physical Coins More and more services are popping up that allow bitcoin investors to buy physical bitcoins. The coin you buy has a tamper-proof sticker that covers a specific bitcoin amount. To buy a physical coin, you may have to pay a slight premium on the value of the Bitcoin you are buying due to the cost of manufacturing and shipping the coin itself. Other Safety Precautions Back up your entire Bitcoin wallet early and often.

In the event of a computer failure, a history of regular backups may be the only way to recover the currency in your digital wallet. Back up all wallet.dat files and keep the backup in multiple safe locations (e.g., a USB flash drive, hard drive, and CDs). Also, assign a strong password for the backup.

Keep your software up to date. A wallet running bitcoin software that has not been updated can be an easy target for hackers. The latest version of the wallet software has a better security system, increasing the safety of your Bitcoins. If your software is updated with the latest security fixes and protocols, you can escape a major crisis thanks to the improved wallet security.

Regularly update your mobile device or computer's operating systems and software to make your Bitcoins more secure. Multi-signature The concept of multi-signature has gained popularity. In this, a transaction must be confirmed by multiple people (e.g. 3 to 5) in order for it to go through. This limits the risk of theft, as a single controller or server cannot perform the transactions (i.e., sending bitcoins to an address or withdrawing bitcoins). The people who can perform transactions are determined at the beginning. If one of them wants to spend or send Bitcoins, he must have the transaction approved by the other members of the group.

# Chapter 6 – Bitсоin Аs Аn Invеstmеnt Strаtеgy

Cryptocurrencies have gained significant traction in recent years, creating excitement especially in the investment sector. In the first week of 2021, the bitcoin price hit a new record high of $42,000. However, right after that, on January 11, the value of Bitcoin fell by more than 20%, while some other cryptocurrencies fell even further. Clearly, you need to know smart ways to invest in Bitcoin and stay on top of this constantly fluctuating market. The massive and volatile price fluctuations show how volatile the crypto world is. It can be really scary, especially if you are new to the unexplored world of digital currencies. If you make a few wrong decisions in the beginning, you can find yourself in debt in no time. Here are 5 smart ways to invest in Bitcoin that will get you going in the right direction. 1. Invest only as much as you are willing to lose Taking financial risks can make some people nervous, while others will jump at the chance and pounce on a potential opportunity. If taking risks makes you nervous, you should think twice about investing in cryptocurrencies as they are extremely volatile. However, if you are a risk taker, invest only a portion that you are willing to lose if things go wrong. You should only invest the amount you can afford to lose. The main purpose of investing, whether traditional or digital, is to add more value to your existing assets and not lose them completely. Therefore, investing in Bitcoin is prudent and one of the smartest methods. Even if you suffer losses, they will not completely deprive you of your assets and they will not be destroyed. Most importantly, there is no rule that says you have to invest the same amount as another person. Just because "A" invested Rs. 10,000 does not mean you have to do the same. It is your decision whether you are willing to take a risk, and if not, that is your decision too.

The important thing is to invest within your limit, that is, within what you are willing to lose, and that is one of the smartest ways to invest in Bitcoin. 2. Keep a healthy crypto portfolio A healthy crypto portfolio includes investments in more than just Bitcoin. This strategy helps minimize losses and maximize gains. Yes, it has its pitfalls, but it's better than investing in just one coin. Cryptocurrencies are extremely volatile in their prices, but having them all fail at the same time seems unlikely. If you diversify your portfolio by investing in different cryptocurrencies, you can hedge against the potential risks involved. This way, you will not be too dependent on a single investment. Gaining something and losing something is better than losing everything. Diversification is one of the smartest ways to invest in bitcoin and can help stabilize profits. While you will not be able to reap all the benefits of a rapidly rising coin, you also will not lose everything if the value of the coin drops. 3. Do not invest based on hype As with any other traditional investment, it's crucial to ignore the hype and filter out the noise when it comes to Bitcoin. When it comes to investing in Bitcoins, do not let what others say guide your decisions. A smart bitcoin investor never makes decisions based on hype and noise because that is highly risky. Relying only on what the crowd says about Bitcoin is not wise at all. The price could suddenly crash and lead to a big loss. It is not easy to make money in the Bitcoin market. You need to have patience and the right knowledge to make worthwhile profits. Instead, a smart way to invest in Bitcoin is to study the market thoroughly, use the knowledge gained to take calculated risks, and ask experts for advice when needed. It is important that you seek advice only from people who have sufficient knowledge about trading and investment strategies, and choosing the right people can be a difficult task. This way you can develop your own strategies and successfully filter out unwanted, inflated information. 4. Start small rather than big Given the short history and highly unpredictable behavior of bitcoin, it is usually advisable to keep your initial investment in bitcoin relatively small. In some ways, buying Bitcoin is like buying any other currency. You must always be mindful that the price will rise and fall compared to other currencies. Even the most experienced investors have only a single-digit percentage of their capital invested in Bitcoin, putting the rest in less volatile investments. Despite the hype and predictions, maintain your investment discipline and do not get carried away by the promises of gigantic upswings. 5. Stay safe Many crypto exchanges still get hacked from time to time. It is extremely important that you choose a platform that has top-notch security measures and invests in regular security audits to ensure a highly secure cryptocurrency trading platform. Since bitcoins do not exist in physical form, experienced bitcoin investors store them in digital wallets. A hardware wallet is a portable offline device that securely stores the private key you need to transfer your Bitcoin holdings from one location to another. Many investors follow "seed backup," which is a backup of the record (i.e., a set of words) that you use to access your Bitcoin wallet. Individuals who own large amounts of Bitcoin engrave their seed phrases on metal plates and then store these plates in a secure location (e.g., a bank vault). The appeal of Bitcoin's finite supply of 21 million became even more apparent in the context of the 2020 coronavirus pandemic. But even before the COVID -19 pandemic, Bitcoin had experienced significant price appreciation over the longer term. It was not a smooth rise, however. Over the years, the Bitcoin price has bounced back and forth, sometimes falling hundreds of dollars in a matter of hours. In the face of such price fluctuations, Bitcoin has provided investors with above-average returns, but in return, they have also taken on above- average risk. In order to make profits investing in Bitcoins, you need to study the subject in depth. This way, you will be more knowledgeable about them and understand the benefits they offer in the crypto world. With this type of investment, you do not have to gamble to make a profit. So, be careful with your decisions because the worst thing you can do is invest in cryptocurrencies that you know little or nothing about.

# Chapter 7 – Сryрtосurrеnсy For Business And Its Adoption In Certain Countries

The use of cryptocurrencies is on the rise. According to a recent survey, 33% of Nigerians use or own cryptocurrencies. Cryptocurrencies have become popular as a cheaper solution for sending money across borders. According to bitcoin.com, the Philippine central bank has approved several crypto exchanges as "remittance and transfer companies" in the country. The reliance on remittances and the proliferation of peer-to-peer payments via phone have led to a steep rise in the use of cryptocurrencies in Africa's largest economy. Out of 74 countries in the Statista Global Consumer Survey, Nigerians were the most likely to report using or owning cryptocurrencies. Have you read. 4 Predictions for Blockchain in 2021 - From Cryptocurrencies to Art Cryptocurrencies are democratizing the financial world.

Facebook's Libra cryptocurrency launch has been put on hold - here is why Nearly a third of Nigerians said this applied to them. According to Bitcoin.com, the high cost of sending money conventionally across the border has led many to turn to local cryptocurrency exchanges that cater to expatriate workers and their families. Nigerians also often use their phones to send money to each other or pay in stores.

Recently, companies in Nigeria have added crypto plugins to their phone payment options, providing another way for Nigerians to use cryptocurrencies in their daily lives. The second and third highest rates of cryptocurrency usage in the survey were recorded in Vietnam and the Philippines, respectively. Again, remittances play a role in the widespread use of cryptocurrencies.

According to bitcoin.com, the Philippine central bank has granted several crypto exchanges permission to operate as "remittance and transfer companies" in the country. The government itself is already getting involved in cryptocurrency by partnering with Union bank to set up the blockchain app bonds.ph to distribute government bonds.

Union bank has also set up a Bitcoin ATM in Makati (Metro Manila), showing how cryptocurrencies are slowly entering the country's mainstream. In addition to users in Africa and Southeast Asia, there is another region of the world where many cryptocurrency users can be found: Latin America. Peru topped the list with 16 percent of respondents, while Brazil, Colombia, Argentina, Mexico and Chile all reached double digits. Switzerland, along with Greece, was the country with the highest adoption rate in Europe (11 percent each).

In general, adoption rates were very low in European and English countries. Finally, Japan was the country in the survey where the fewest people reported using or owning cryptocurrencies. Only four percent of respondents said they had experience with crypto products. This is the lowest figure in the survey, along with Denmark. Nigeria topped the list of countries surveyed.

# Chapter 8 – How To Protect Yourself From Crypto Risks?

While there is no hard data for purchase transactions of goods or services transacted in cryptoassets, some indicators of cryptoasset usage suggest a slight pickup in activity. This is reflected in the growing number of ATMs supporting crypto-assets, an increase in options of cards with crypto-asset capabilities, new wallets with expanded coverage of crypto-assets, and growing interest from merchants to accept crypto-assets. The number of ATMs supporting crypto assets is increasing, with the largest number in the United States and Canada (2,643 and 625, respectively). The number of corresponding ATMs in Europe is approaching 1,000, representing 20% of ATMs worldwide, with the largest presence in the United Kingdom and Spain.

In terms of cards that support crypto-assets, there are some new options in Europe that can be loaded with the main crypto-assets, such as Bitcoin, Ethereum or Litecoin. Most wallets target major crypto assets and are becoming increasingly multi-asset oriented, with some supporting nearly 100 crypto assets. With most wallets, users have control over their private keys, as opposed to the less popular options of storing private keys with a third party. Despite the reportedly growing interest from merchants to accept crypto assets as payment, no hard data is available on the underlying transactions. However, it is estimated that purchase transactions of goods or services with settlement in crypto assets are insignificant in Europe.

Singapore is trying to establish itself as a major player in cryptocurrency transactions, while financial centers around the world are wrestling with approaches to dealing with one of the fastest-growing areas of finance.

"We think it's best not to regulate or ban these things," said Ravi Menon, executive director of the Monetary Authority of Singapore (MAS), which regulates banks and financial firms. Instead, MAS is implementing "strong regulation" so that firms that meet the requirements and deal with the multitude of risks can operate, he said in an interview.

There are big differences between countries in how they deal with cryptocurrencies: Japan has only recently allowed dedicated crypto investment funds - although El Salvador has accepted bitcoin as legal tender. In the United States, while there are many opportunities to invest in the burgeoning asset class, regulators are concerned about everything from stable coins to yield-generating products. "Crypto-based activities are basically an investment in a possible future, the shape of which is not clear at this point," said Menon, who has been running MAS for about 10 years. "I think if we do not get into this game, we risk leaving Singapore behind.

Getting into this game early means we can get a head start and better understand both the potential benefits and the risks." The stakes are high for the small island nation, which has already earned a reputation as a global financial center. Singapore needs to increase its security measures to counter risks such as illicit financial flows, Menon said. The city-state is "interested in developing crypto technology, understanding blockchain and smart contracts, and preparing for a Web 3.0 world," he said, referring to third-generation online services. Singapore is not the only place with crypto ambitions. Places as diverse as Miami, El Salvador, Malta and Zug, Switzerland, are also making efforts.

Binance, Gemini Singapore's approach has attracted crypto firms from Binance Holdings Ltd, which has had a series of run-ins with regulators around the world, to Gemini, a U.S. operator targeting institutional investors, to set up store here.

About 170 companies have applied for a license for MAS, bringing the total number of firms seeking to operate under the Payment Services Act to about 400 after the law takes effect in January 2020. Since then, only three crypto companies have received the coveted licenses, while two were rejected. About 30 withdrew their application after speaking with the regulator. Among those that have received a license is the brokerage arm of DBS Group Holdings Ltd, Singapore's largest bank, which is also a pioneer in setting up a digital token trading platform while offering tokenization services.

The regulator is taking its time to review applicants and ensure they meet the high standards, Menon said. The MAS has also increased its resources to handle the high number of potential service providers, he said. "We do not need 160 of them to set up store here. Half of them can do it, but with very high standards, I think that's a better outcome," he said. Menon said the benefits of a well-regulated local crypto industry could extend beyond the financial sector. "Once the crypto economy takes off, we want to be one of the leading players," he said. "It could help create jobs, add value, and I think not only the financial sector but the other sectors of the economy could benefit."

# Chapter 9 – The Future Of Cryptocurrency

Cryptocurrencies have become a global phenomenon in recent years, although there is still much to learn about this evolving technology. There are many concerns and fears surrounding the technology and its ability to disrupt traditional financial systems. Joseph A. Grundfest, a professor at Stanford Law School, recently sat down with us to talk about how cryptocurrencies are currently being used, where mistakes have been made, and what the future holds for this technology.

As a former commissioner of the Securities and Exchange Commission and an expert on financial systems, Professor Grundfest is in a unique position to comment on the future of cryptocurrencies. Grundfest notes that whether you think this is good or bad, this is not entirely true. Cryptocurrencies are not really trustless.

Libra: Facebook's contribution to the cryptocurrency world - Libra - has been hyped in some corners as the answer to a variety of financial problems. Specifically, the platform was designed to facilitate international payments and avoid unnecessary transaction costs and fees. Professor Grundfest acknowledges that the goal is admirable, but he believes the approach has one major flaw. He does not see the introduction of another cryptocurrency as the right solution to minimize payments, nor does he agree with Facebook's attempts to bypass traditional banking systems entirely.

Instead, Professor Grundfest argues that it would have been better if Facebook had created its own bank that could act as the primary financial institution for its users.

The company could have focused on building banking systems tailored to each nation or region to meet regulatory requirements and reduce costs. Once these were established and public trust built, it would have made sense to link the individual systems together to create a global network.

Is stable coin the answer? Stable coins are becoming increasingly popular as a way to back cryptocurrencies with assets that have real value, similar to how U.S. currency used to have the gold standard. These assets can be other currencies or commodities - virtually anything. There are a couple of problems Grundfest has with this approach. One is that it basically recreates a system that already exists.

The other concern is that it could make it easier for fraudsters because it is not as easy to audit and monitor as traditional currencies. Professor Grundfest closed the webinar with some of the stronger applications for cryptocurrencies. For example, for people living in countries with weak currencies, investing in bitcoin may be better than buying local stocks and bonds. The future prospects of cryptocurrencies are still very much in question. Proponents see limitless potential, while critics see nothing but risks. Professor Grundfest remains a skeptic but acknowledges that there are certain applications for which cryptocurrencies are a viable solution.