CRYPTOCURRENCY TRADING GUIDE

TRADING THE DECENTRALIZATION OF THE FINANCIAL SYSTEM

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« TRADING THE DECENTRALIZATION OF THE FINANCIAL SYSTEM »

For Beginners & Advanced Cryptocurrency Traders

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PREFACE:

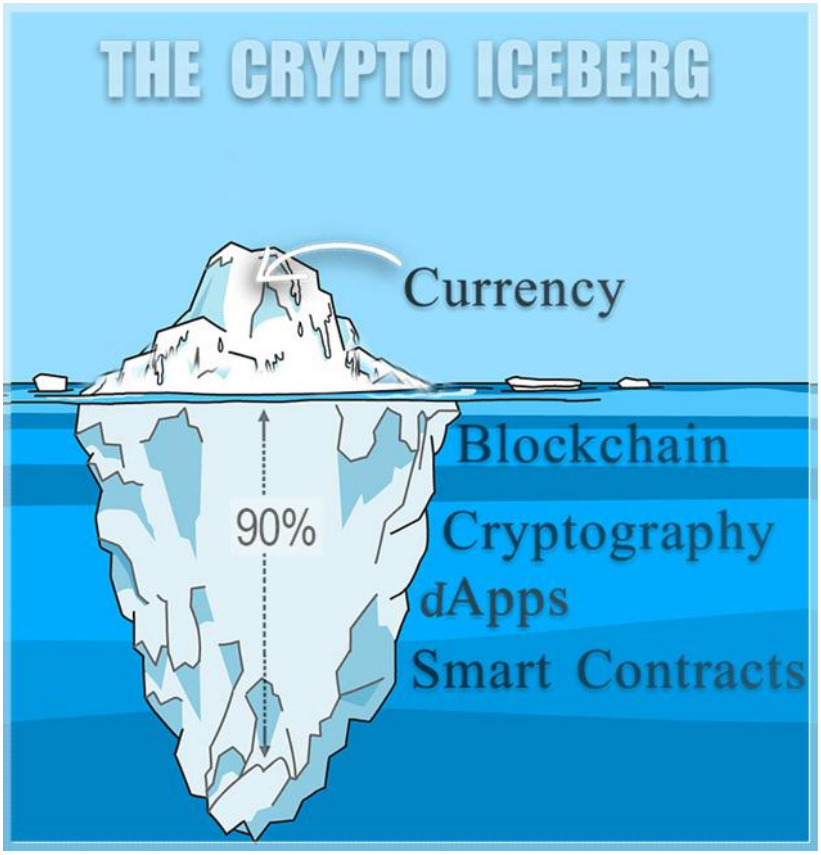
Since 2009, cryptocurrencies have changed the rules of the global financial game. A decade ago, the issue, exchange, and use of digital money without the intervention of a centralized bank was a dream for the financial industry. That dream came true faster than anyone could have predicted. The global penetration of the World Wide Web works as an accelerator to the acceptance of every new technology that aims to serve the emerging needs of people. This is the ultimate goal of every technology, to better meet the needs of people, and nothing else matters.

There are many academics considering cryptocurrencies as a bubble ready to burst, paying a lifetime lesson to everyone involved. These academics simply cannot understand the magnitude of the financial revolution emerging from cryptography. It should be irrelevant for academics if the price of Bitcoin moves from $20,000 to $3,000 and then back to $20,000. What really matters is the technology behind the cryptocurrency ecosystem.

Actually, cryptocurrencies themselves are just a simple application of the Blockchain technology, just the top of the iceberg. Cryptography, Scalable Blockchain, Smart Contracts, Smart Assets, Decentralized Apps, Directed Acyclic Graph, and other technologies are here to stay, and promise to change our financial universe for good.

Nevertheless, from a trader's point of view, price matters, and this ebook includes a wide variety of useful resources and tips in order to help traders understand the behavior of the cryptocurrency market and explain the extreme fluctuations of cryptocurrency asset prices.

Graph-1: Currency is only the top of Iceberg



As in the case of every other major revolution, there are many scammers in the crypto industry, who are trying to take advantage of the lack of regulation and make money by deceiving the public. The World Wide Web includes a great variety of website resources and especially forums (APPENDIX) that may help cryptocurrency traders to avoid these scammers.

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Chapter-1: Introduction to Cryptocurrencies

The New Decentralized Financial Era

Cryptocurrencies are virtual currencies operating as a decentralized network, using cryptography for security, and a public ledger (the Blockchain) to record all transactions. Cryptography is an encryption method that uses advanced techniques to verify and secure transactions, the Blockchain refers to a database that records all coin transfers.

The History of Crypto at a Glance

Bitcoin is the first decentralized peer-to-peer payment network. The first ever Bitcoin started in a cryptography mailing list sent by the nickname Satoshi Nakamoto in 2009. This is the short history of cryptocurrencies:

□ 1983:

The American cryptographer David Chaum conceived an anonymous cryptographic electronic money called eCash

□ 1995:

The implementation of Digicash, an early form of cryptographic electronic payment requiring user software and encrypted keys in order to withdraw notes from a bank

□ 1996:

Laurie Law, Susan Sabett, and Jerry Solinas (NSA Cryptology Division) published a paper entitled “How to Make a Mint: the Cryptography of Anonymous Electronic Cash”, describing a Cryptocurrency system

□ 1998:

Wei Dai published a description of "b-money", an anonymous, distributed electronic cash system

□ 2009:

Bitcoin creation by Satoshi Nakamoto (nickname) using a SHA-256 cryptographic hash function as its proof-of-work scheme

□ 2011:

The release of Litecoin, using for the first time scrypt instead of a SHA-256 cryptographic hash function

□ 2012:

The official release of Ripple (Ryan Fugger conceived Ripple in 2004)

□ 2013:

Mastercoin is the world’s first initial coin offering (ICO). In November, the world’s first Bitcoin ATM opens

□ 2014:

The world’s largest exchange ‘Mt Gox’ declares bankruptcy. Due to a vulnerability in the protocol, 6% of all circulated Bitcoins were stolen from the “cold storage” of Mt Gox

□ 2015:

The release of Ethereum (proposed by Vitalik Buterin), a revolutionary platform that attracted immediately hundreds of cryptocurrency developers

□ 2017:

The cryptocurrency prices are booming in astronomical levels. The total market capitalization of cryptocurrencies exceeds for the first time 100 billion US Dollars. The global financial and monetary system will never be the same again

Cryptocurrency FAQ

What are Altcoins and Forks?

Altcoins are all cryptocurrencies alternative to Bitcoin. Most altcoins are Forks of Bitcoin. A Bitcoin Fork is a crypto-coin built on Bitcoin's open-sourced protocol (i.e. Litecoin). There are also cryptocurrencies that have built their own protocols including Ethereum, Ripple, Waves, and many more.

How Many Cryptocurrencies are there?

Today, there are more than 1,500 cryptocurrencies available over the internet.

What is the Blockchain?

The Blockchain is an open-source decentralized technology that verifies and records all transactions via the use of a public ledger. After the completion of a certain number of transactions, the Blockchain generates a new block.

-A block is a database entry, which stores information about the present and all previous transactions.

-Each blockchain process is executed using an ecosystem of millions of community computers which store their own copy of the blockchain's records. Only if all copies are in agreement, a block becomes a permanent link in the Blockchain.

What are Tokens?

The ecosystem of cryptocurrencies includes coins and tokens. Tokens are digital projects created through an Initial Coin Offering (ICO) and differ from coins due to their structure. Tokens operate on top of a Blockchain in order to create decentralized applications. These projects trade on cryptocurrency exchanges as common altcoins.

Initial Coin Offerings (ICOs)

An Initial Coin Offering is the introduction of a new altcoin in the cryptocurrency ecosystem. It is the same as an IPO for stocks. The world's first ICO was held by Mastercoin in July 2013.

Bitcoin Mining

Bitcoin mining refers to the process of verifying all Bitcoin transactions and include them in a public ledger (Blockchain). Mining is a completely decentralized process with miners operating in all over the world.

Miners get new Bitcoins as a reward for their efforts. As more miners join a network, mining becomes increasingly less profitable. Note, that NOT every digital currency requires mining and miners.

Delegated Proof of Stake (DPoS)

As mining is too wasteful of energy, a blockchain engineer (Daniel Larimer) built the Delegated Proof of Stake, or DPoS, which is an alternative to the traditional 'Proof of Work' used by most cryptocurrencies. DPoS can handle up to 100,000 transactions per second, whereas Bitcoin can handle only 7 transactions and Ethereum up to 20 transactions per second. There are quite a few platforms that have adapted DPoS including EOS, Steem, Bitshares, Lisk, and Ark.

What are Smart Contracts?

Smart contracts are small self-executed programs that aim to facilitate the exchange of anything of value on the internet. Smart contracts offer maximum security, as they operate exclusively on the blockchain. That means they can eliminate any external interference by performing 100% as they were originally programmed.

Is Bitcoin Anonymous?

Bitcoin is not anonymous, as a public ledger records all transactions. There are other anonymous crypto-coins such as:

- Monero
- Z.cash
- Dash
- Komodo
- Zcoin
- ZenCash
- PIVX, and
- Verge

What Influences the Price of Cryptocurrencies?

As in in the case of every other financial-traded asset, the price of a cryptocurrency depends on the general dynamics of Demand/Supply.

These are all major factors affecting directly/indirectly the demand and the supply for a particular cryptocurrency asset:

I. INTERNAL FACTORS

- Necessity of the Project
- The Team Behind
- Technological Efficiency of the Project
- Security/Vulnerability
- Programmability
- Scalability of the Project
- Management's Ability to Achieve its Stated Goals
- Partnership with a Key Player
- Acceptance by an Important Online Merchant
- Listing in a Large Cryptocurrency Exchange
- Total Supply of Coins/Tokens (last but certainly not least)

II. EXTERNAL/DIRECT FACTORS

- Legislative Changes in Key Countries (new regulation)
- Phycology of the Market (this is the subject of technical analysis)

- Existence of Alternative Projects (serving the same needs)
- New/Emerging Technologies (that can create alternative projects in the future)
- Extreme Hacking Activity (can affect the market in many ways)
- Bankruptcy of a Major Player (for example, of a large crypto exchange)

III. EXTERNAL / INDIRECT FACTORS

- New Macroeconomic Conditions in Key Countries
- New Social and Political Conditions
- Interest Rate Risk (as cryptocurrency is an alternative investment to asset classes paying an annual interest rate, such as Treasury Bills, Notes, and Bonds)
- Extreme Volatility in other Financial Markets
- Systemic Risk (every financial asset price includes the risk that the entire system will suddenly collapse, this is called Systemic Risk)

Chapter-2: Storing Cryptocurrencies

Cryptocurrency Wallets & Taxation

Cryptocurrencies can be stored in three (3) major types of wallets (online, software, and hardware wallets).

What is a Crypto Wallet?

A Bitcoin wallet is a software/hardware solution used to store, manage, and transfer Bitcoins/Altcoins. The coins are stored in the wallet as private keys (secret numbers). Moreover, a cryptocurrency wallet works as the essential mechanism behind every cryptocurrency transaction. These are the key functions of a crypto wallet:

- Storing a Variety of Crypto in a Single Place

  A cryptocurrency wallet can store multiple crypto assets in the same place.

- Wallets Store Public Keys

  Every record of a Blockchain includes the seller's and buyer's Public Keys. The Public Key is not confidential information and works like an email address.

- Wallets Store Public Keys with Security

  The Private Key is a very confidential information and works like the password of your email. If someone gest access to your Private Keys, he can also steal your coins.

- Buying/Selling Coins

  A wallet can send a message to another wallet using the Public Key in order to generate a unique transaction ID.

Types of Cryptocurrency Wallets

Different types of crypto wallets offer different layers of protection. The most secure method of storing cryptocurrencies is a hardware wallet. These are all the types of crypto wallets:

(i) PC-Based Software Wallets

(ii) Smartphone-Based Wallets (use the phone's camera to scan QR codes)

(iii) Online Wallets in Central Servers (require online accounts)

(iv) Hardware Wallets

The Cost of Owing a Wallet

Online and software wallets are free but offer limited security. On the other hand, a good hardware wallet costs about $100 and offers much better security. These are the dominant hardware wallets today:

- TREZOR which costs $110 (Bitcoin, Ethereum, Dash, Zcash)
- NANO-S which costs $99 (Bitcoin, Litecoin, Ethereum, Dash, Dogecoin, Zcash, Stratis)
- KEEPKEY which costs $129 (Bitcoin, Litecoin, Ethereum, Dash, Dogecoin, Namecoin, Testnet)

Image: The three hardware wallets in the same order (as mentioned before)

Cryptocurrency Taxation

The classification of cryptocurrency assets and the taxation of gains depend entirely on the country of residence. In Europe, most countries are waiting for a common EU legislation towards cryptocurrency taxation.

Examples of Cryptocurrency Taxation in an International Level

- In the United States, the gain derived from a Bitcoin investment is taxed as "Property". Cryptocurrencies can be classified as business, investment, or personal property. These are some basic tips:
  -The best option for the American traders, is to buy and hold crypto for more than one year (taxes are much lower for over 1 year investment)
  -When you sell a cryptocurrency with a significant profit, keep your money in US Dollars. Do not convert from one cryptocurrency to another
- In the United Kingdom, cryptocurrency money is considered 'Private Money' and no tax is paid if the capital gains don't exceed the £11,300 threshold (this is valid for personal income under £100,000)
- In Germany, cryptocurrency money is classified as 'Private Money', the same way as foreign currencies, and enjoy tax benefits. If owned more than 1 year NO capital gain tax will be paid (if you own crypto for less than 1 year a progressive tax may apply)
- In Russia, citizens are expected to pay 13% on their crypto-related incomes
- In Australia, crypto is classified as 'Property', and there is a capital gain tax

- In Canada, cryptocurrencies are classified as ‘Commodities’, and there is a capital gain tax
- In Korea, crypto trading is still tax-free but there is a timeframe for the introduction of a crypto tax law
- In China, cryptocurrencies are classified as ‘Virtual Commodities’ and there is no tax yet
- In Japan, cryptocurrencies are classified as a ‘Method of Payment’ and there is a capital gain tax
- In Brazil, cryptocurrencies are classified as ‘Capital Assets’ and there is a 15% capital gain tax

Coin Mining Activity

Income from coin mining is taxable in many countries (note that the mining expenses are deductible in the taxable year).

- Coin miners must report their income from mining at the market value of the coin at the time it is received
- In the US, coin mining is taxable by the IRS only if the rewards emerging from coin mining exceeds $400 in any tax year