

The Economics of Bitcoin



What You Will Learn

What gives Bitcoin value?

What is supply and emission and why does it matter?

What is market capitalization and liquidity?

- What are some important statistics about Bitcoin?
 - Some of the numbers in this lecture may be out of date, but economic principles are timeless. Numbers are as of July 2017





Why does Bitcoin have value?

Why does Bitcoin have value?

- Derived from trust that someone else also values it.
- If you use BTC as payment, trust that someone else will also accept BTC
- Shared acceptance of value
- Intrinsic rarity and fixed supply



Bitcoin has value because everyone thinks it does!

It may seem strange, but you experience this concept every day!



- Cryptocurrencies
- Trust in the governing body that issues the currency
- Trust that others will also accept that the currency has value

 Trust that others will also accept that the currency has value

The existing economic system runs on fiat currency, but fiat has the same intrinsic value that Bitcoin does.

I.e. you can't eat dollars or Bitcoin, but both can be exchanged for food.

Ethos

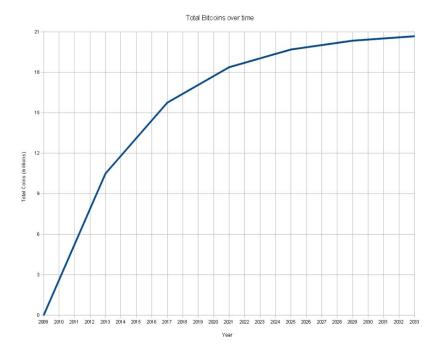
So it has value, but what is a fair price?

- Economics!
 - Supply and Demand

The price of Bitcoin is dependent on how much people want to buy and how much people want to sell

Supply of Bitcoin over time







The supply of Bitcoin increases over time until a maximum of 21 million coins. Gold operates similarly in that there is a maximum fixed supply not determined by anyone



Bitcoin has an Emission Rate and Market Cap

- A certain predefined number of Bitcoin get created in every block
 - Currently 12.5 BTC/block
 - Halves every 4 years ("The Halvening")
 - Cap of 21 Million
- Market Capitalization can be calculated
 - (Price of coin)*(Current Supply of Coins)
 - Gives an estimated "valuation" of a coin



You may start to notice that many of these concepts can be applied generically. We are generating a framework to understand the crypto market as a whole!



Fiat has a supply too!

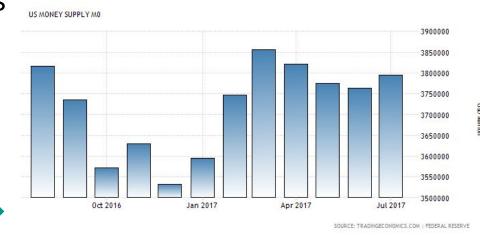
- "Narrow Money"
 - From Trading Economics website

The supply of USD is determined by the Federal Reserve who is trying to ensure economic stability

Supply of USD over time



As of July 2017, the supply of dollars was ~38 Trillion





The purpose of these parallels is to show that the economic principles that govern Bitcoin are no different than the economic principles that govern everyday economic activity



Market Depth and Liquidity

- Liquidity is the amount of value available in a market
 - Highly liquid markets are easy to buy/sell in
 - Market depth is the amount of open orders there are on the market





Liquidity and depth are important for any asset. Bitcoin is highly liquid with a large daily trading volume. Bitcoin is easily exchangeable into many fiat currencies.



Bitcoin Fast Facts

Other important things that govern Bitcoin's price

Bitcoin Fast Facts	
Capped Supply	Yes, 21 Million
Current Supply	Around 16.49 Million
Market Capitalization	\$54.97B
Block Time	10 Minutes
Algorithm	SHA-256
Emission Rate	50% reduction every 4 years starting with 50 BTC per block



Coins have a variety of specifications which influence their value. There is a great deal of fundamental analysis that can be done to help determine market potential of a coin.





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