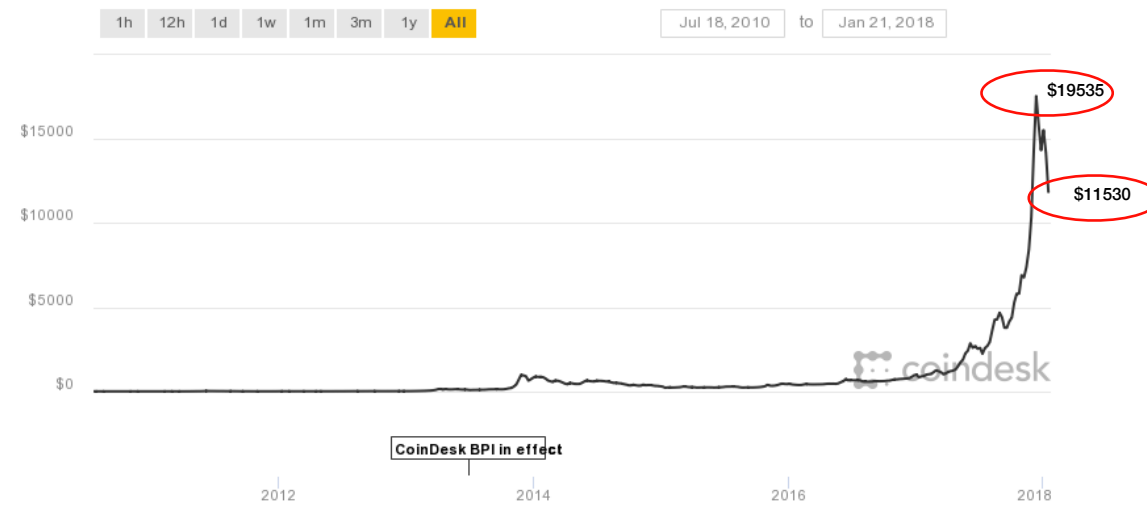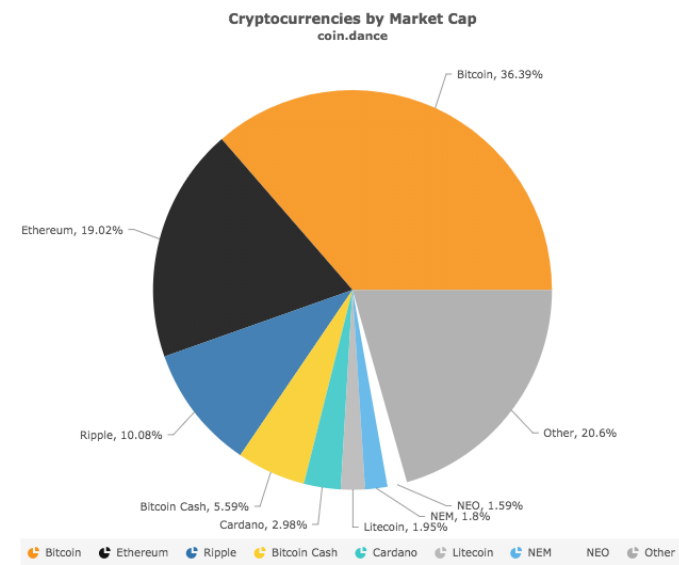# Why Bitcoin is a long-term investment opportunity

London Value Investing club

- Rahul Chaudhari

- Mobile banking apps developer/consultant. Nokia, Motorola, fintechs (Monitise & IE) and banks (Natwest/RBS).

- Cryptocurrency enthusiast and value investor. Not an analyst.

- Long on Bitcoin (BTC), Bitcoin Cash (BCH) and Ethereum (ETH).

- Focus is only on the fundamentals and underlying value.
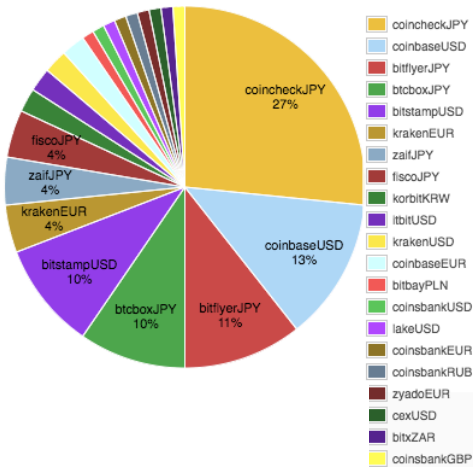
Historic price performance of Bitcoin

$19535

$11530

$15000

$10000

$5000

$0

CoinDesk BPI in effect

2012   2014   2016   2018

Cryptocurrencies by Market Cap
coin.dance

Bitcoin, 36.39%

Ethereum, 19.02%

Other, 20.6%

Ripple, 10.08%

NEO, 1.59%

NEM, 1.8%

Bitcoin Cash, 5.59%

Cardano, 2.98%

Litecoin, 1.95%

Bitcoin | Ethereum | Ripple | Bitcoin Cash | Cardano | Litecoin | NEM | NEO | Other

Bitcoin global trading volume

https://bitcoincharts.com/charts/volumepie

Based on the last 30 days.

by market

- coincheckJPY
- coinbaseUSD
- bitflyerJPY
- btcboxJPY
- bitstampUSD
- krakenEUR
- zaifJPY
- fiscoJPY
- korbitKRW
- ltbitUSD
- krakenUSD
- coinbaseEUR
- bitbayPLN
- coinsbankUSD
- lakeUSD
- coinsbankEUR
- coinsbankRUB
- zyadoEUR
- cexUSD
- bitxZAR
- coinsbankGBP

coincheckJPY 27%
coinbaseUSD 13%
bitflyerJPY 11%
btcboxJPY 10%
bitstampUSD 10%
krakenEUR 4%
zaifJPY 4%
fiscoJPY 4%

by currency

- JPY
- USD
- EUR
- GBP
- KRW
- RUB
- BRL
- PLN
- ZAR

JPY 54%
USD 29%
EUR 9%

- "A purely peer-to-peer version of electronic cash that would allow online payments to be sent directly from one party to another without going through a trusted financial institution".
  -Satoshi Nakamoto, 2008

- Instead, the underlying trust is underpinned by cryptographic proof with an immutable record of irreversible transactions on a globally distributed **decentralised technology** referred to as the Blockchain.

- Like any form of **currency**, Bitcoin can now be readily exchanged for goods and services and is steadily gaining acceptance as a viable form of payments around the world with countries in South East Asia e.g Japan. leading the way.

- However, Bitcoin lacks several primary attributes of fiat currencies e.g. **coinage, central bank, government backing and unlimited supply** and the **US** Commodities Futures Trading Commission (**CFTC**) to officially **designate Bitcoin as a commodity in 2015**.

- The CME and CBOE have already commenced futures trading on Bitcoin by virtue of it being a commodity.

- Bitcoin is not a fraud or Ponzi scheme.

- Holy trinity of money: currency, commodity and technology .

- Technology backed by open source code that is continuously peer-reviewed by security experts and developers around the world.

- A technology protocol that so far has been never hacked in mature production environment.

The Bitcoin economy

- A commodity is a basic good used in commerce. e.g. food-stock, livestocks, metals (gold, silver etc) and energies.

- Commodity value = Scarcity * Utility * Demand

- More scarce a useful resource, more its demand and the more it appreciates in value.

- Bitcoin as a commodity is more **analogous to gold** than fiat currencies.

Bitcoin v Gold v Fiat comparison

	Scarce	Durable	Portable	Divisible	Authenticity Verification	Storage	Fungibility	Counterfeit protection	Payments
Gold	✔	✔	✘	!	!	✘	✔	!	!
Bitcoin	✔	✔	✔	✔	!	✔	!	✔	✔
Fiat	!	!	✔	✔	✔	!	✔	!	✔

✔	Yes
✘	No
!	Neutral

Excellent medium of exchange and store of value alongside gold.

Bitcoin reward halving

Total Bitcoins in circulation	16,817,713
Total minable Bitcoins	21,000,000
Total Bitcoins left to mine	4,182,288
Total Bitcoins mined per day	1800
Inflation rate per annum	3.98%
Total Bitcoins per day after halving	900
Inflation rate after halving	1.8%

*The **reward halves every 210,000 blocks or every 4 years (next halving in 2020)** so that after next halving, the **reward will drop to** a daily production of **900** bitcoins resulting in lower liquidity. This is typically factored by the market in the run up to the halving.*

For a current world population of approximately 7.4 billion (and rising), 16 million bitcoins are scarce if every single person wanted to adopt it - only 1 out of every 462 people could have ONE full bitcoin; or every person could only ever own approximately 0.00216 BTC.

Bitcoin tends to becomes deflationary and scarce in the long term. The silver lining is you don't have to buy ONE full Bitcoin. Bitcoin is highly divisible and you can buy as low as 0.00000001 BTC.

Incentive loop

"In this sense, it's more typical of a precious metal. Instead of the supply changing to keep the value the same, the supply is predetermined and the value changes. As the number of users grows, the value per coin increases. It has the potential for a positive feedback loop; as users increase, the value goes up, which could attract more users to take advantage of the increasing value."

— Satoshi Nakamoto, 2009

Incentive loop
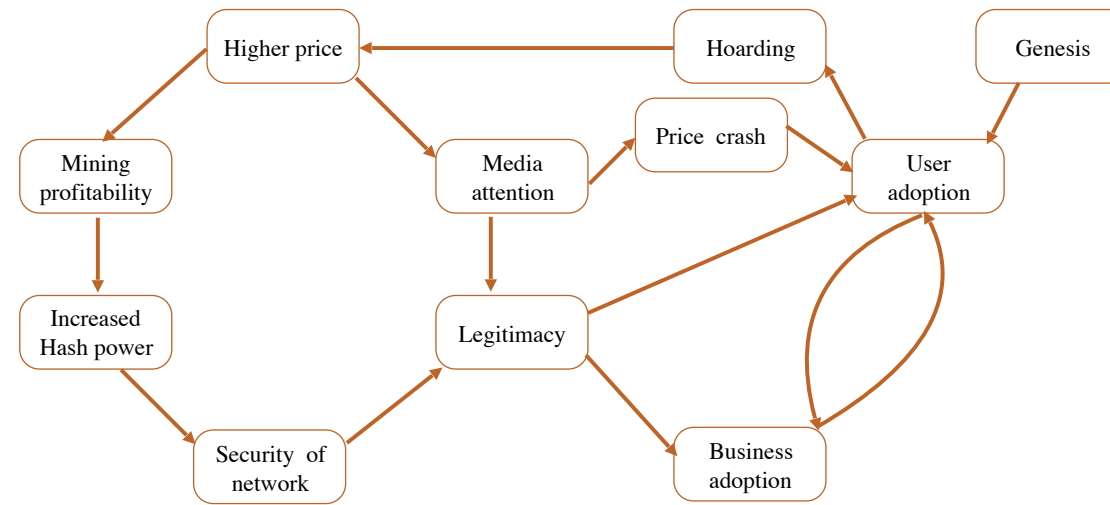
Incentive loop

Regulation is good

- More credibility and recognition, positive impact on Bitcoin

- Weed out speculators and weak hands

- Protect investors and pave the way for more mature investment products such as ETFs and pension funds.

- More exchange audits means your Bitcoins are safer.

What is the value of Bitcoin

- According to the US Federal reserve, it costs only about 12 cents to produce a $20 note yet people place trust in the US government for its full value and redeem ability.

- In late 2016, the Indian central government suddenly launched a massive demonetisation drive declaring ₹500 and ₹1000 notes as illegal tender with immediate effect. The sudden nature of the announcement and prolonged cash shortages in the weeks that followed created significant disruption throughout the economy. Trust can sometimes also remove redeem ability.

- The actual market value for Bitcoin is driven by demand and supply factors and the fact that Bitcoin enjoys a healthy and growing market currently sitting at $220Bn. Bitcoin is an excellent store of value and a medium of exchange and this gives it a sought after utility value.

What is the value of Bitcoin

- Gold market cap is $7.5 trillion.
- $7.5 trillion / 21 Bitcoins gives us a $357,000 price per Bitcoin.
- 8% of the same would give a **current price point of $28,560**.

- Estimated total global value of mediums of exchange and stores of value comes to $72.1 trillion.

If Bitcoin were to achieve 15% of this valuation, its market capitalisation in todays money would be $10.8 trillion.

With 21 million bitcoins in circulation, that would price one bitcoin at $514,000.

source: investopedia

- 1 Bitcoin = 100,000,000 satoshis while $1 = 100 cents. For Bitcoin to be used for day to day payments e.g. buying a coffee or bread. then it must follow that 1 Bitcoin = **$1 million**.

Is Bitcoin in a bubble currently?

- Realm of speculation

- Network Value to Transactions Ratio (NVT) is a new metric proposed by Willy Woo & Chris Burniske to distinguish between Bitcoin price consolidation and crash (similar to the P/E ratio in the value investing world of equities). If the NVT wanders outside of normal range then this indicates a potential for bubble
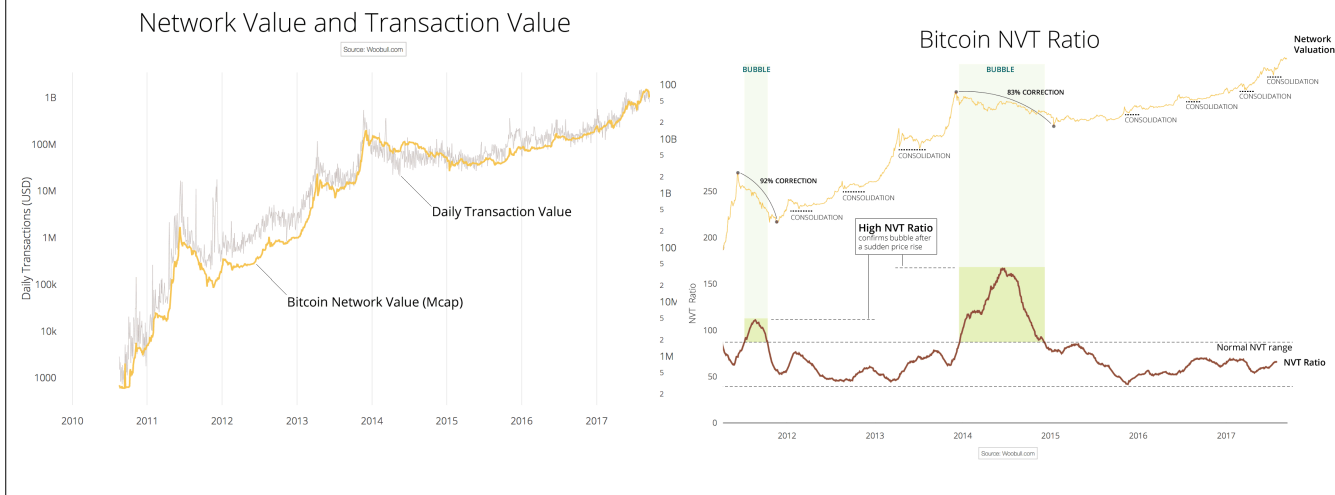
Bitcoin challenges

- Experimental technology in some ways.

- Scaling Issues result in high fees, slower transactions, 3.3 to 7 transactions a second.
- Segwit an improvement on block size and fees - slow adoption.
- Lightning network to the rescue in late 2018. Thousands of transactions per second, negligible fees.

- Software Forks due to disagreements between Bitcoin core team lead to fragmentation of value.
- e.g. Bitcoin Cash (BCH) - 8 mb block size (unlimited size in future)
- Hedge by keeping equal number of forked coins so that value of total holdings remain constant.

Should i buy Bitcoin?

Basic understanding of Bitcoin?

Yes

No

Believe in its long term potential?

Yes

No

Are you worried how the price is doing now?

No

Yes

Congrats! Candidate buy for Bitcoin (& BCH) (ideally only using what you can afford to lose and not more than 1% of your net worth).

Sorry, Bitcoin is not for you at this time.