

Bitcoin: Waxing Institutional Adoption

November 19th 2020



Bitcoin Investment Case

Bitcoin's fundamental characteristics

A potential new international standard

Definition of a Standard

A unit used as a measure, norm, or model in comparative evaluations

Meter: Standard of length

Kilogram: Standard of weight



**Bitcoin, candidate to become
a standard unit of value?**

Standard Meter & Kilogram



Source: Bureau International des Poids et Mesures, Sèvres (France).

The economy is about the production, exchange and storage of goods, services, risks, innovations, contracts...

In order for all of that to happen we need measurements of value in a *standard* unit of value

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Not Manipulated - Non inflationary (2)

History of Standards Comparisons

- US\$ => Inflationary

Annual money supply growth +5.6% on average before 2008 and 20% per year on avg since then

- Roman Denarius => Inflationary

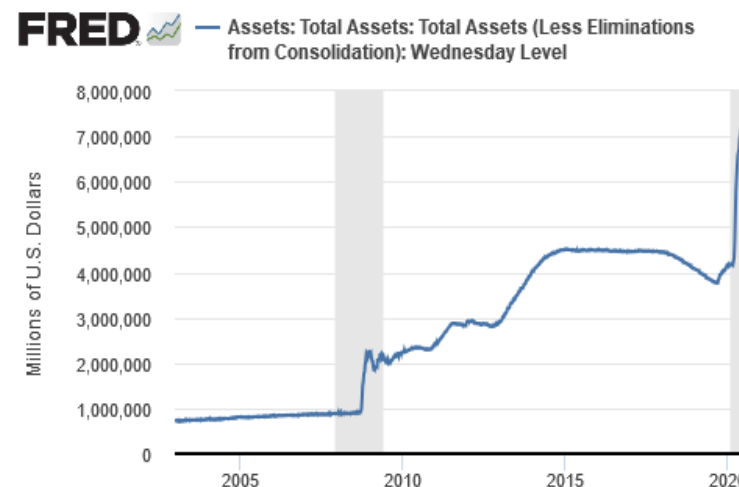
Debasement: % of silver in the Roman Denarius went from four grams of silver when it was first minted. By the time it was discontinued, it contained less than 0.1 gram. Number of coins multiplied.

- Gold => Inflationary?

Money supply in Gold (btw 1.1% & 2.4% per year of added supply growth)

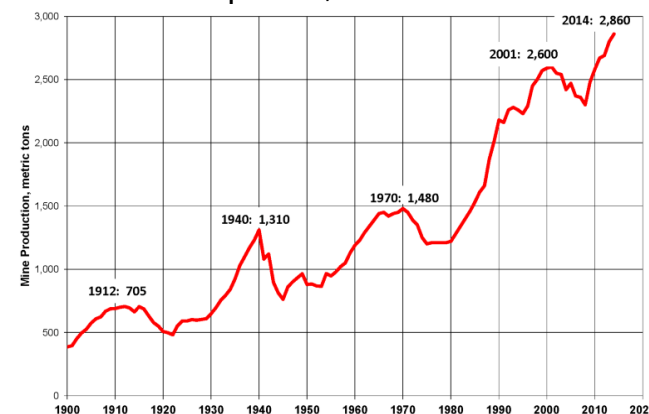
- Bitcoin => Non Inflationary

US Federal Reserve total assets



Source: Board of Governors of the Federal Reserve System (US)

Gold mine production, metric tons



Source: World mined gold production, data from USGS, as of August 17, 2015.

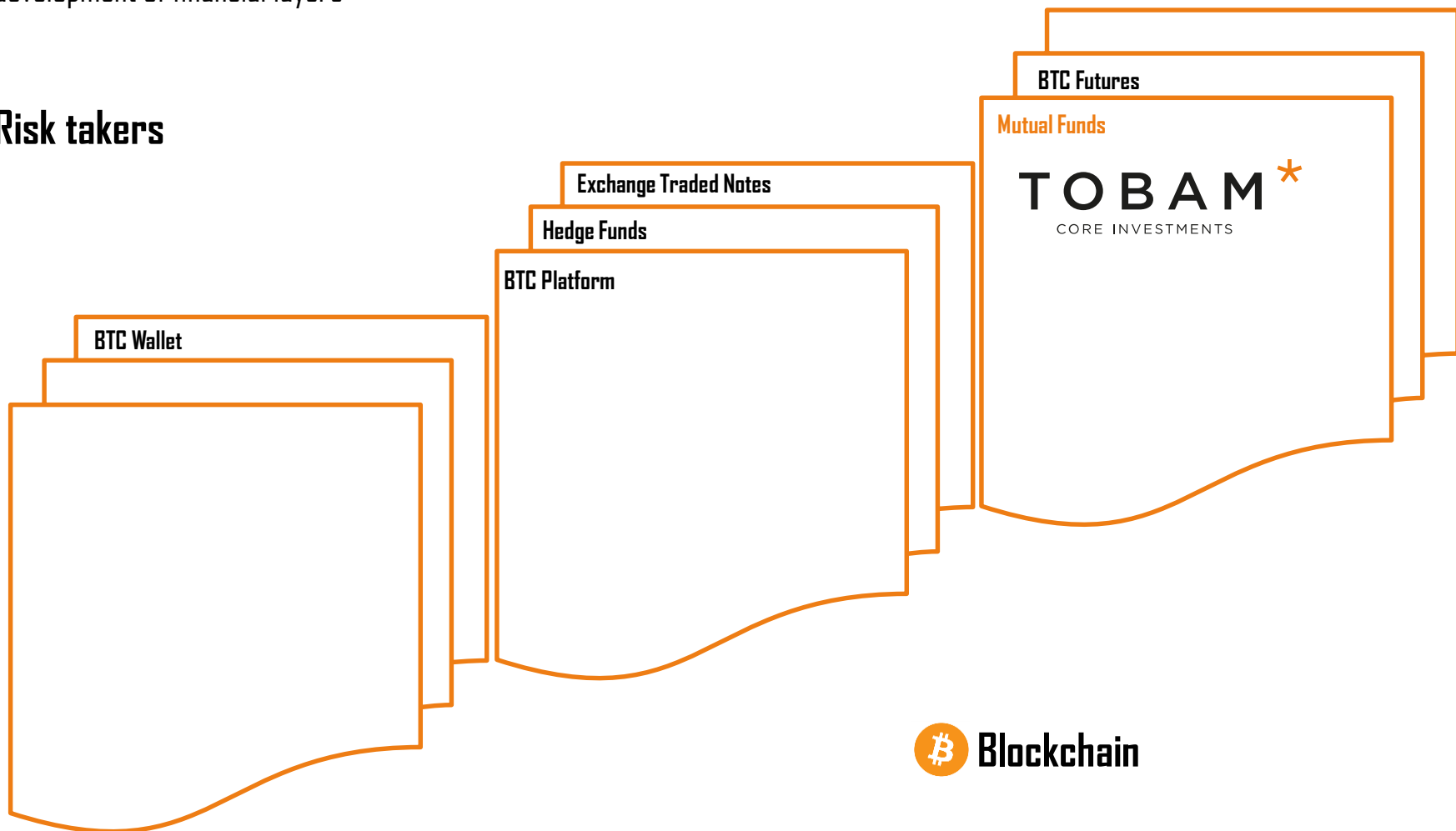
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Conclusion (2)

- Fast development of financial layers

Risk takers



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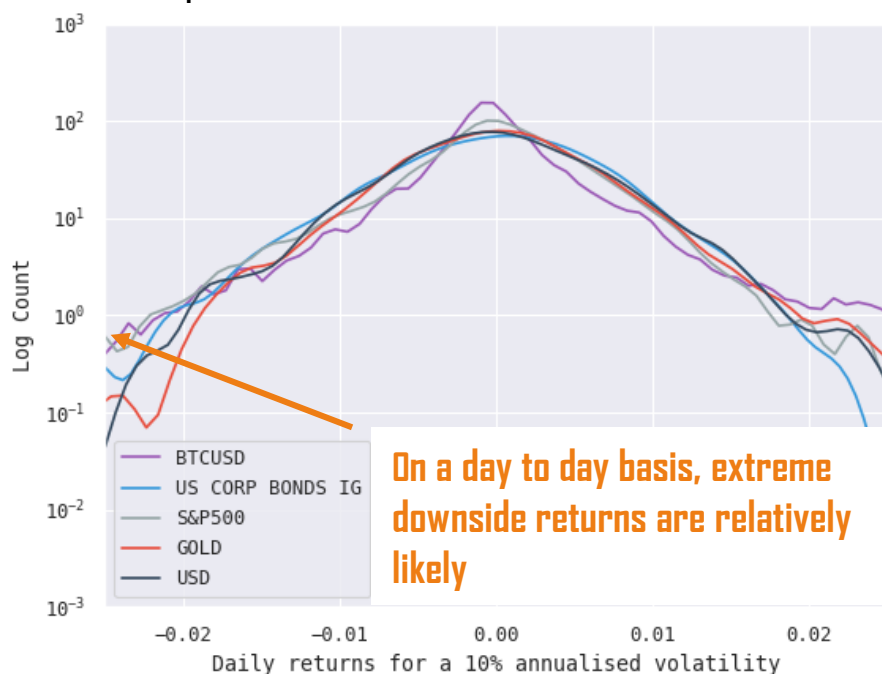
Bitcoin's empirical characteristics

is BTC risk same nature as other assets?

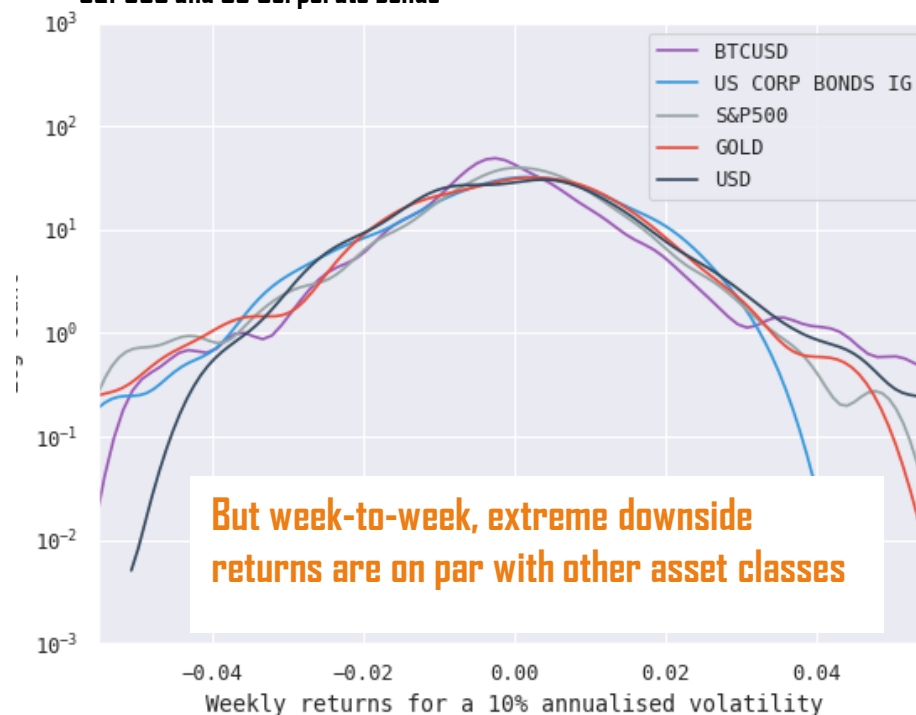
BTC, being much more volatile, has to be scaled accordingly

In this example, we compare the distribution of daily returns of the equivalent of a 10% volatility position: i.e. 10% exposure in BTC, versus 237% exposure in US IG corporate bonds

Distribution of **daily returns** of 10% volatility position in BTC, Gold, US\$, S&P500 and US Corporate bonds



Distribution of **weekly returns** of 10% volatility position in BTC, Gold, US\$, S&P500 and US Corporate bonds



Bitcoin Investment Case

Bitcoin's empirical characteristics

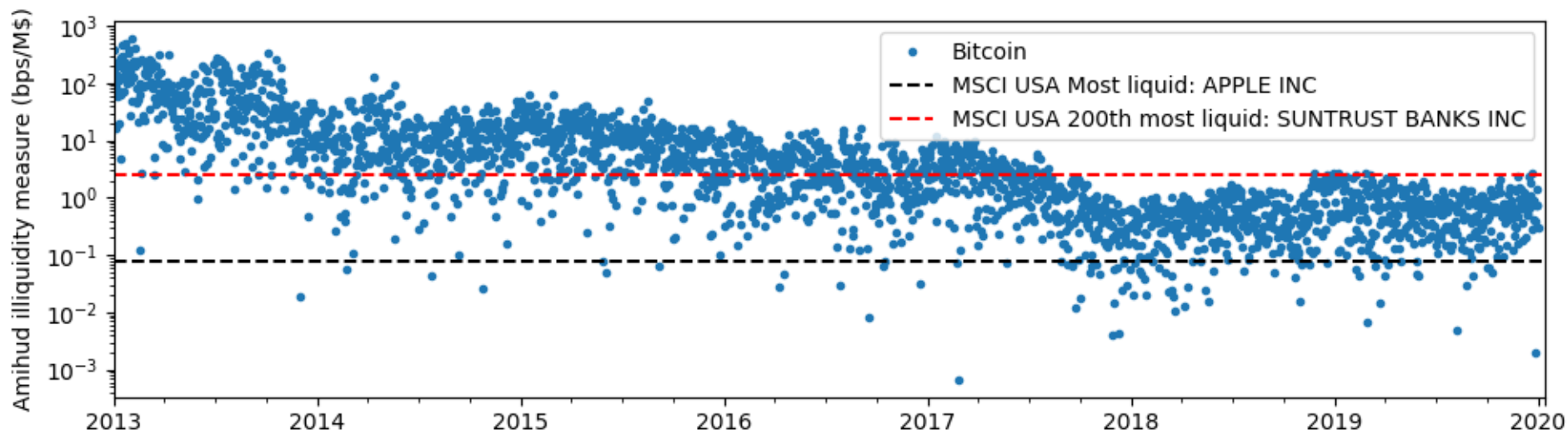
Volume and volatility on exchanges (2)

Despite the OTC trades, exchange volumes represent the overall activity fairly.

We highlight a **significant increase in liquidity since 2012**: trading \$1mn in 2013 moved the price by 100 bps vs 1 bp only in 2019.

➔ **Amihud's illiquidity measure:** $\frac{abs(return)}{dvolume}$ (*dvolume = dollar volume*)

Amihud's Illiquidity measure since 2012



Bitcoin Investment Case

Bitcoin's empirical characteristics

is BTC a diversifying asset? (3)

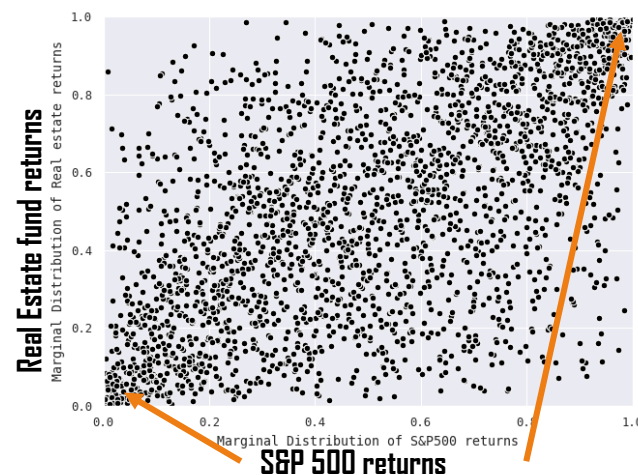
Marginal Distribution of BTC returns versus S&P500, Gold, US\$ and US corporate bonds returns



Source: TOBAM, Bloomberg. Calculations made from 30/09/2010 to 30/09//2020.
Past performance, risk and behavior are not indicative of future performance, risk and behavior.

- Looking at the joint distribution of the BTC and the four assets, **no pattern emerges**

As a reference, a dependence pattern would look like this (stocks vs real estate):



Extreme returns notably are very much correlated: Stocks and Real Estate funds are moving together especially in extremes

Good news: Investors are Risk takers

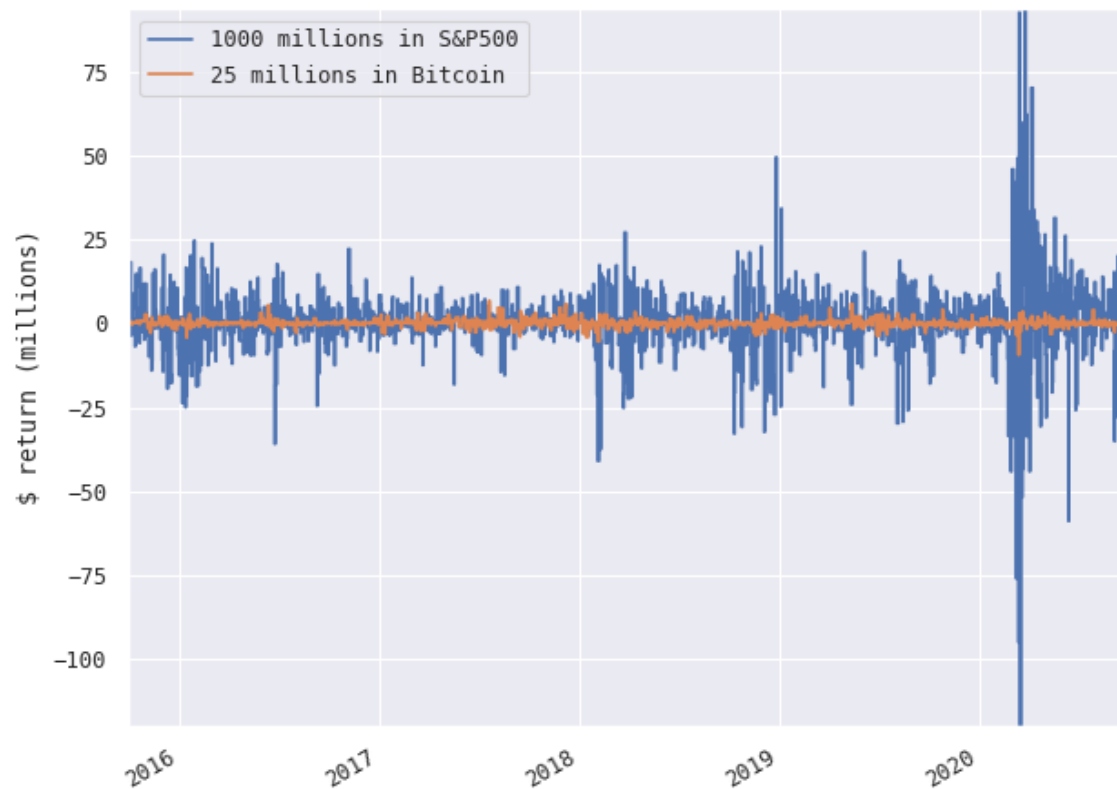
Theorem:

Risk is not relevant on the Investment thesis. Risk should only determine the Investment size.

US\$ 1000 million at 10% volatility is far riskier than US\$ 25 million at 80% volatility

% volatility is not relevant, what is relevant is the \$ volatility

Risk is a matter of scale

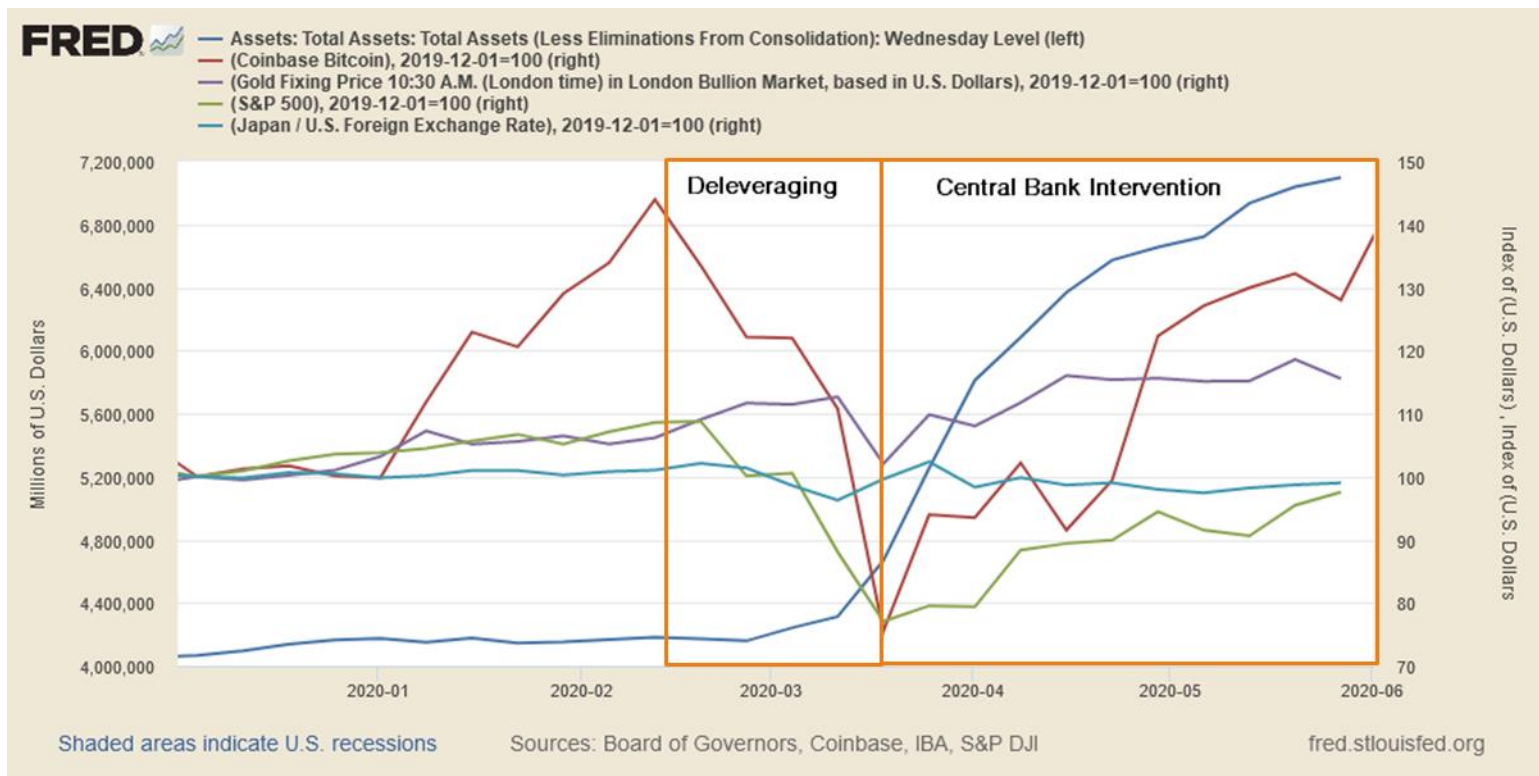


The risk of an asset should determine the size of the investment, not the investment case itself

Source: TOBAM and FRED. Hypothetical returns from September 30 2015 to September 30, 2020 provided for illustrative purposes. Hypothetical results do not represent the results of actual trading using client assets. Performance returns are shown gross of fees and do not reflect the deduction advisory fees and any other expenses that an investor may incur in the management of its investment advisory account. Warning: Past performance is not an indicator or a guarantee of future performance. The value of your investment and income received from it can go down as well as up and you may not get back the full amount invested. Performance details do not include reinvested dividends.

Empirical Evidence: Bitcoin during the Covid Crisis

Federal Reserve balance sheet and financial asset returns during the Covid19 market crisis



- Size of the Federal Reserve's balance sheet (blue line - left axis)
- Price of bitcoin - normalised at period start (red)
- Price of gold - normalised at period start (purple)
- S&P500 price index - normalised at period start (green)
- JPYUSD exchange rate - normalised at period start (cyan)

→ Bitcoin price action matched the phases of the 2020 liquidity crisis and other risky assets behaviour.

→ This behaviour, typically caused by margin calls and, more generally, liquidity tightness is a tell-tale of financialization and growing institutional integration.

Bitcoin: 2017 vs 2020, from retail to institutions

Price and search interest 18-10-2016 to 18-11-2020

Bitcoin (BTC)

CoinMarketCap

From Oct 18, 2016 To Nov 18, 2020



Google Trends

bitcoin

États-Unis 18/10/2016 – 18/11/2020

Évolution de l'intérêt pour cette recherche



2017 was all about retail

Is 2020 about institutions?

Echoes in the Press

Forbes (06/08/2020):

"Institutional adoption of bitcoin is here, you just have to know where to look.[...]"

The highly private New York private equity giant Fortress Investment Group has \$41 billion in assets under management for 1,700 institutional investors [...] \$30 billion pension and endowment advisor Cambridge Associates, has been advocating for its clients to invest in bitcoin since at least 2019"

Business Insider (23/10/2020):

"Bitcoin has "considerable" upside in the long-term as it better competes with gold as an alternative currency, JPMorgan said [...]"

"Even a modest crowding out of gold as an 'alternative' currency over the longer term would imply doubling or tripling of the bitcoin price from here," JPMorgan said"

Coin insider (04/11/2020):

*"Cryptocurrency investment firm Grayscale is set to reach **500,000 Bitcoin** [approx. \$7.5bln] in its Bitcoin Trust by the end of the month. [...] With nearly **84% of Grayscale's Bitcoin additions attributed to institutional investors**, there seems to be a massive move towards Bitcoin as a new interest for large-scale institutions"*