

# The 5 Rules of Crypto



**INSIGHT**  
a fundstrat company



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Source: Fundstrat, Bloomberg

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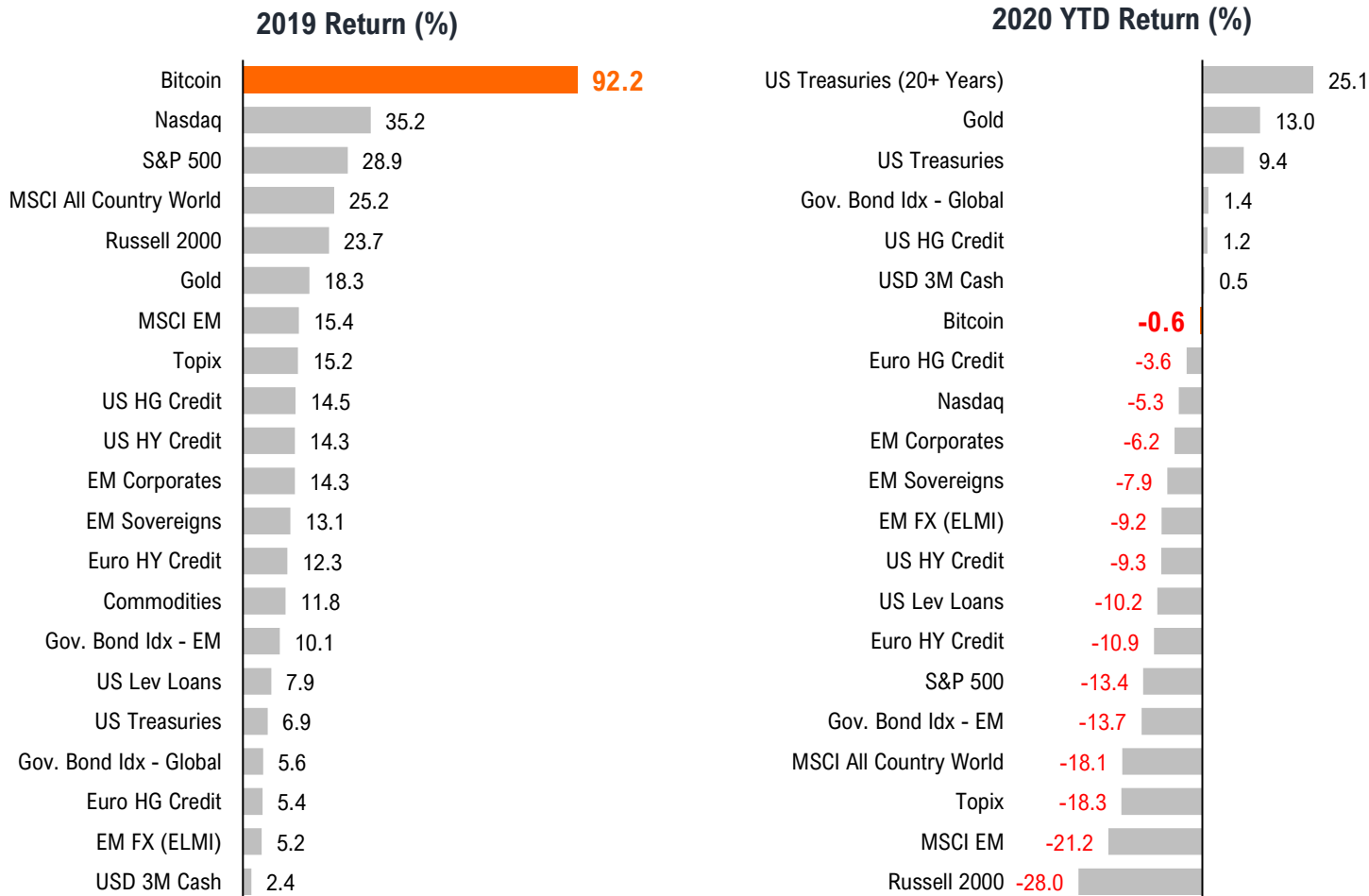
## 2020: Bitcoin shows great resilience amid the financial turmoil

We noted in our 2020 outlook that the escalation of geopolitical risk, halvening and election year are the 3 major positive developments for Bitcoin in 2020. These 3 developments supported Bitcoin's solid run at the start of the year.

- **Although it fell along with other asset classes since COVID-19 spread globally, Bitcoin remains one of the best performing assets and is outperforming almost all equity market indices on a relative basis.**

**Figure: Performances by Asset Classes**

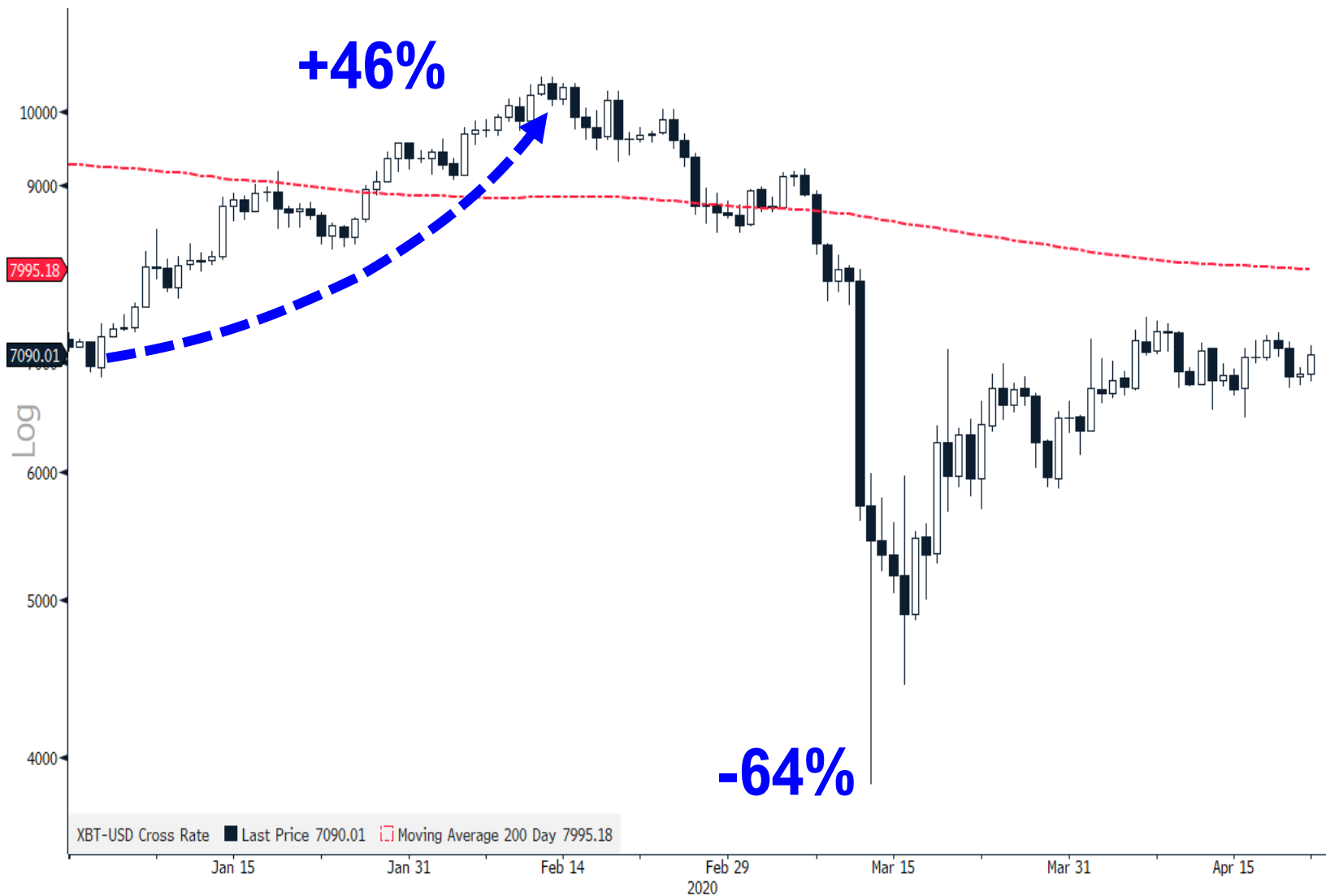
2019 and 2020 YTD; Sorted by best to worst;



Source: Fundstrat, Bloomberg

# 2020: After a solid start, Bitcoin fell along with global markets...

Figure: Bitcoin price performance YTD  
2020



XBTUSD Currency (XBT-USD Cross Rate) Bitcoin YTD Daily 31DEC2019-22APR2020

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22-Apr-2020 14:21:22

# Halvening: 2015-2017 → 2020-2022?

Figure: Bitcoin 2015-2022

Bloomberg data



# Research Team



**Rob Sluymer, CFA**  
Partner, Head of Technical Analysis Strategy  
*In research: 28 years*

Head of Technical Research with over 26 years experience writing technical research at RBC Capital Markets.



**Brian Rauscher, CFA**  
Head of Global Portfolio Strategy & Asset Allocation  
*In research: 25 years*

A 25-year industry veteran, Rauscher's work experience includes Morgan Stanley, Brown Brothers Harriman, Fortress Investment Group, and Wedge Partners. He most recently served as Chief Portfolio Strategist at Robert W. Baird & Co..



**Vito J. Racanelli**  
Senior Editor & Market Intelligence Analyst  
*Senior Editor: 20 years*

Previously a reporter with Dow Jones Professional Investor Report in 1990, moved to AP-Dow Jones in Italy and later Barron's in NY, where he was a senior editor for 20 years.



**L. Thomas Block**  
Washington and Policy Strategist

Tom had a 21-year career at J.P. Morgan, as Global Head of Government Relations. Prior to that, he served as Legislative Assistant and Chief of Staff in the House, and Legislative Staff Director in the Senate.



**Jonathan Lesser**  
Vice President  
*In research: 25 years*

More than 25 years experience in investment strategy and research, most recently with RW Baird & Co., where he was responsible for developing and maintaining the Global Portfolio Strategy data platform. Prior to Baird, Jonathan worked at Fortress Investment Group as well as at Brown Brothers Harriman.



**David Grider, CFA**  
Senior Digital Strategist  
*In research: 8 years*

Previously a general partner at Aenigma, a digital asset venture fund and investment banking advisory firm. Prior, David worked at PwC and Noble Financial. He holds a B.A. in Accounting from Florida Atlantic University and is a CFA charter holder.



**Ken Xuan, CFA, FRM**  
Partner, Head of Data Science Research  
*In research: 6 years*

Data scientist with expertise in applied mathematics and statistical analysis. Ken was an operations strategy consultant at West Monroe Partners. Ken received a B.S. in Economics from Purdue University and an M.S. in Operations Research from Columbia University.



**Andrew Cahill**  
Research Analyst  
*In research: 4 years*

Andrew Cahill is a Research Analyst at Fundstrat Global Advisors. He began his career in 2016 as an Analyst in CIT's Risk Management Group and most recently served as a Sr. Analyst in CIT's Leveraged Finance Group. Andrew holds a B.A. in Economics from McGill University

Source: Fundstrat



## PLAYBOOK: 5 Rules of Bitcoin (first 5 of 10)

**1. USA is future**

**2. Bitcoin Misery Index**

**3. Bitcoin > 200D DMA**

**4. Bitcoin RISK-ON asset**

**5. The 10-Best Days**

**Focus**

**Volatility**

**HODL**

\*\*Returns based upon last 20 years, excluding 2000, 2001, 2002 and 2008—all full-blown bear markets.

Source: Fundstrat, Bloomberg, Factset



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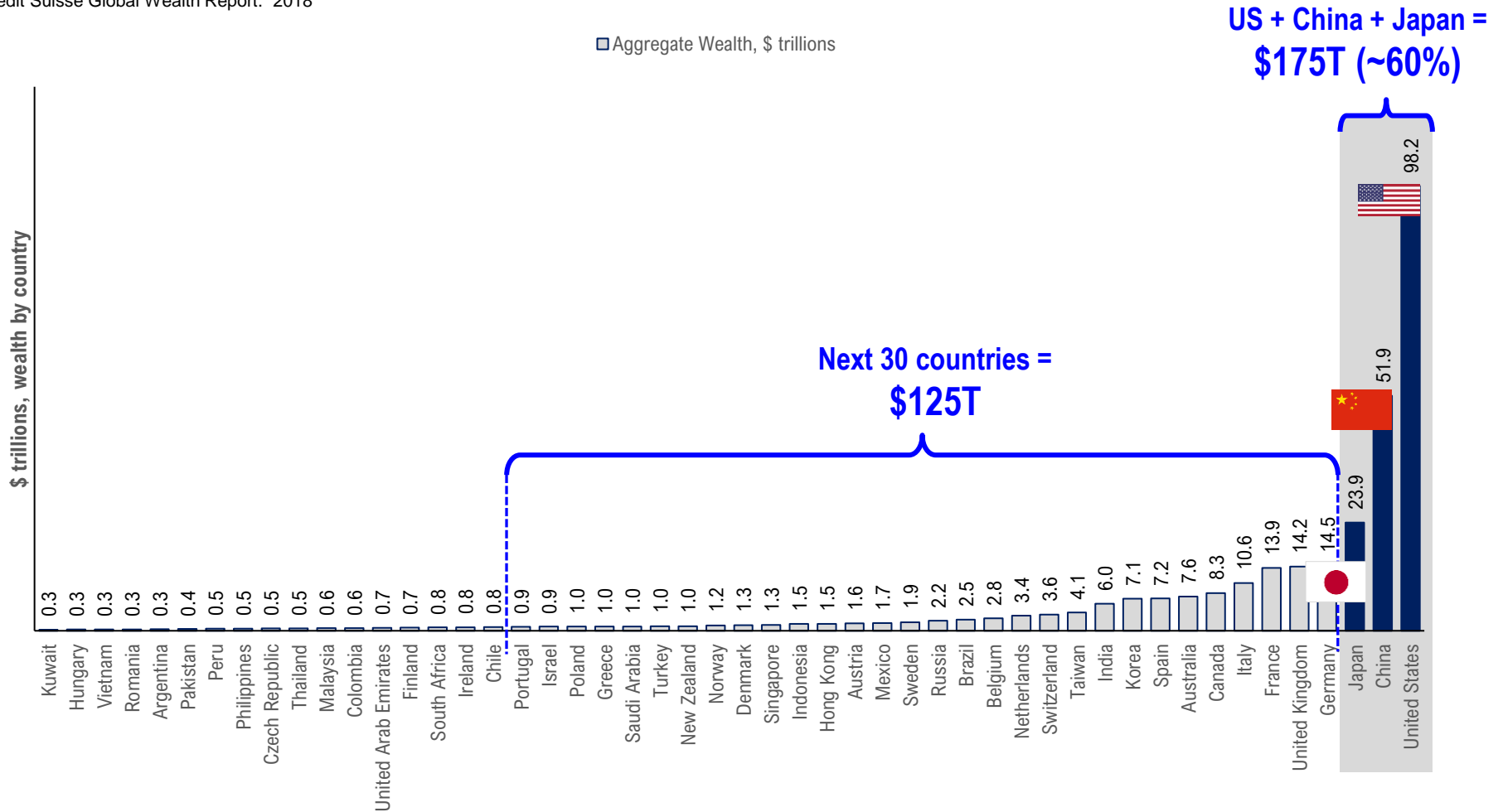
Source: Fundstrat, Bloomberg

# GLOBAL WEALTH: US + China + Japan > 60% of Global HH Wealth

To appreciate why the US de-coupling is a big deal, take a look at the aggregate wealth (per Credit Suisse Global Wealth Report) and see how the aggregate wealth of US, China and Japan dwarf all other countries.

- Roughly 60% of Global Wealth is controlled by the US, China and Japan today

Figure: Aggregate wealth by country  
 Credit Suisse Global Wealth Report. 2018



Source: Fundstrat, Bloomberg, Credit Suisse.

# US is the most important major economy for digital assets per BMPI

Garrick Hileman, professor at LSE, developed the BMPI in 2015 highlighting countries best potential for Bitcoin adoption.

- The US is #5 overall, but the only major country in the top 10.

**Figure: Garrick Hileman's Bitcoin Market Potential Index (BMPI)**

Sorted by High (greatest potential to Low (least potential))

Rank	Country	Rank	Country	Rank	Country	Rank	Country
1	Argentina	51	Morocco	101	Guatemala	151	Spain
2	Venezuela	52	Thailand	102	Germany	152	Indonesia
3	Zimbabwe	53	Tajikistan	103	Honduras	153	Maldives
4	Malawi	54	Philippines	104	Pakistan	154	Chile
5	United States	55	Namibia	105	Fiji	155	Qatar
6	Belarus	56	Burundi	106	Samoa	156	Mongolia
7	Nigeria	57	Dominica	107	Armenia	157	Czech Republic
8	Congo, Dem. Rep.	58	Mali	108	Dominican Republic	158	Kenya
9	Iceland	59	Sao Tome and Princip	109	United Kingdom	159	New Zealand
10	Iran	60	Comoros	110	Norway	160	Austria
11	Russia	61	Madagascar	111	Slovenia	161	United Arab Emirates
12	Guinea-Bissau	62	Croatia	112	Trinidad and Tobago	162	Papua New Guinea
13	Sudan	63	Aruba	113	Iraq	163	Djibouti
14	Angola	64	St. Kitts and Nevis	114	Albania	164	Japan
15	Syria	65	Panama	115	Cyprus	165	Liberia
16	Uruguay	66	Mexico	116	Tonga	166	Brunei Darussalam
17	Brazil	67	Haiti	117	Ecuador	167	Afghanistan
18	Serbia	68	Macedonia	118	Kyrgyz Republic	168	Rwanda
19	Mozambique	69	Azerbaijan	119	St. Lucia	169	Ireland
20	Ukraine	70	Costa Rica	120	Malaysia	170	Bahrain
21	Benin	71	Seychelles	121	Finland	171	Timor-Leste
22	India	72	Bangladesh	122	Curacao	172	Kuwait
23	Moldova	73	Estonia	123	Portugal	173	Saudi Arabia
24	Tanzania	74	Belize	124	Antigua and Barbuda	174	Slovakia
25	Congo, Rep.	75	Uzbekistan	125	Bahamas	175	Yemen, Rep.
26	Tunisia	76	Lebanon	126	Cambodia	176	Oman
27	China	77	Romania	127	Montenegro	177	Vanuatu
28	Equatorial Guinea	78	Zambia	128	Malta	178	Jordan
29	Nicaragua	79	Mauritania	129	Guyana		
30	Gabon	80	Netherlands	130	Italy		
31	Bolivia	81	Lithuania	131	El Salvador		
32	Bulgaria	82	Sweden	132	Laos		
33	Ghana	83	Israel	133	Denmark		
34	Barbados	84	Colombia	134	Canada		
35	Turkey	85	Libya	135	Paraguay		
36	Cote d'Ivoire	86	Korea	136	Maldives		
37	Sri Lanka	87	St. Vincent and the	137	Hungary		
38	Chad	88	Hong Kong	138	Bosnia and Herzegovina		
39	Swaziland	89	Solomon Islands	139	San Marino		
40	Suriname	90	Togo	140	Gambia, The		
41	Burkina Faso	91	Grenada	141	Australia		
42	Senegal	92	Botswana	142	Latvia		
43	Jamaica	93	Kazakhstan	143	Belgium		
44	Poland	94	Sierra Leone	144	Vietnam		
45	South Africa	95	Egypt	145	Singapore		
46	Lesotho	96	Myanmar	146	Luxembourg		
47	Algeria	97	Bhutan	147	Greece		
48	Nepal	98	Cameroon	148	Switzerland		
49	Niger	99	Ethiopia	149	France		
50	Peru	100	Georgia	150	Uganda		

Rank	Country
1	Argentina
2	Venezuela
3	Zimbabwe
4	Malawi
5	United States
6	Belarus
7	Nigeria
8	Congo, Dem. Rep.
9	Iceland
10	Iran
11	Russia
12	Guinea-Bissau
13	Sudan
14	Angola
15	Syria
16	Uruguay
17	Brazil
18	Serbia
19	Mozambique
20	Ukraine
21	Benin
22	India
23	Moldova
24	Tanzania
25	Congo, Rep.
26	Tunisia
27	China

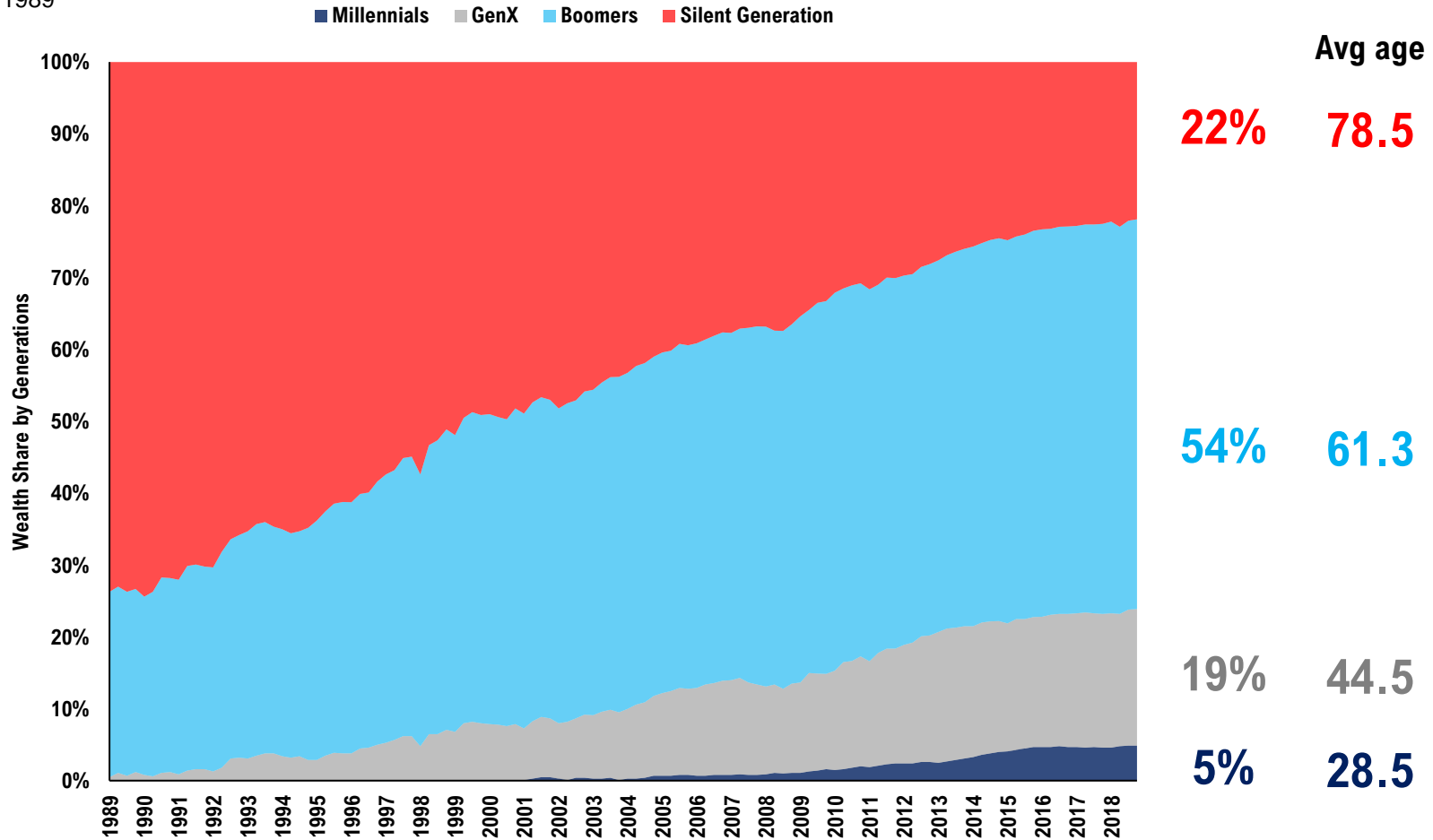
Source: Fundstrat, Garrick Hileman (link: [https://fc15.ifca.ai/preproceedings/bitcoin/paper\\_14.pdf](https://fc15.ifca.ai/preproceedings/bitcoin/paper_14.pdf))

# WEALTH TRANSFER: Millennials set to inherit \$68 trillion in next 20 years

A study by Coldwell Banker ([Coldwell Banker report here](#)) shows Millennials are expected to inherit \$68T over the next 20 years.

- The latest Federal Reserve Survey of Consumer Finances shows that Boomers and Silent Generation control about 77% of the wealth. The Silent Generation controls \$22 trillion today and is an average age of 78.5 (oldest is 88.5)

Figure: Wealth share by generations  
 Since 1989



Source: Fundstrat, Federal Reserve DFA

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**Rule #1: USA is future - All about USA next 3-5 yrs**

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**Rule #5: Rule of The 10-Best Days**

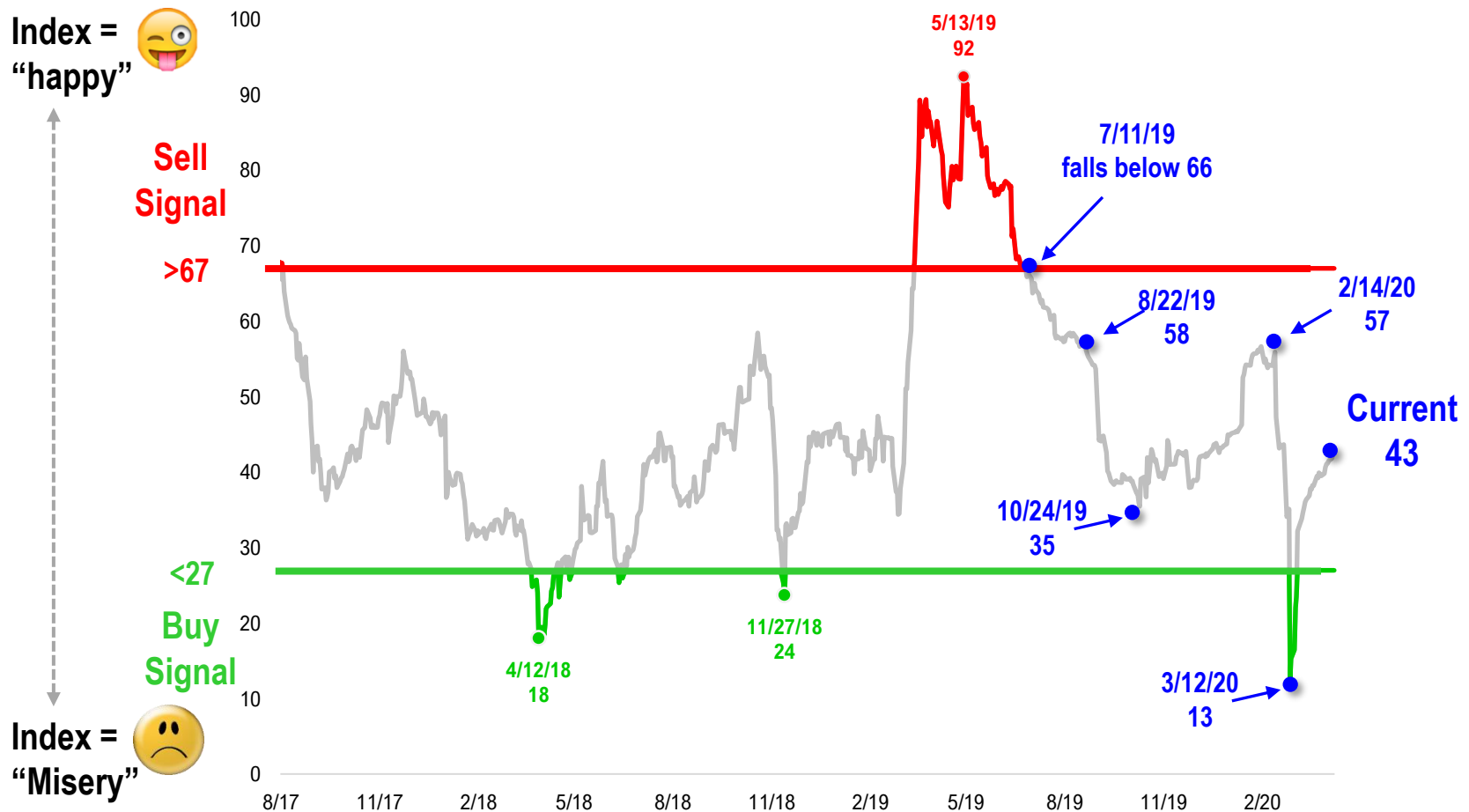
Source: Fundstrat, Bloomberg

# SENTIMENT: BMI currently @ 43, slightly recovered from recent low at 13

The Bitcoin Misery Index, which measures the expected sentiment of a holder of bitcoin (50=Neutral).

- The BMI slipped below 66 on 7/11/19. Although temporarily bottomed at 35 on 10/24/19 and recovered to 57 at mid February, the BMI tanked to 13 amid the COVID-19 outbreak. Since then, investor sentiment has improved as the BMI gradually climbs back to current level at 43.

Figure: The Bitcoin Misery Index (historical range is 0 to 100). 100=happy. 0=miserable  
Since 2011. The formula = (z-score of win-ratio + z-score of upside/downside volatility)\*7 + 50 (intercept)



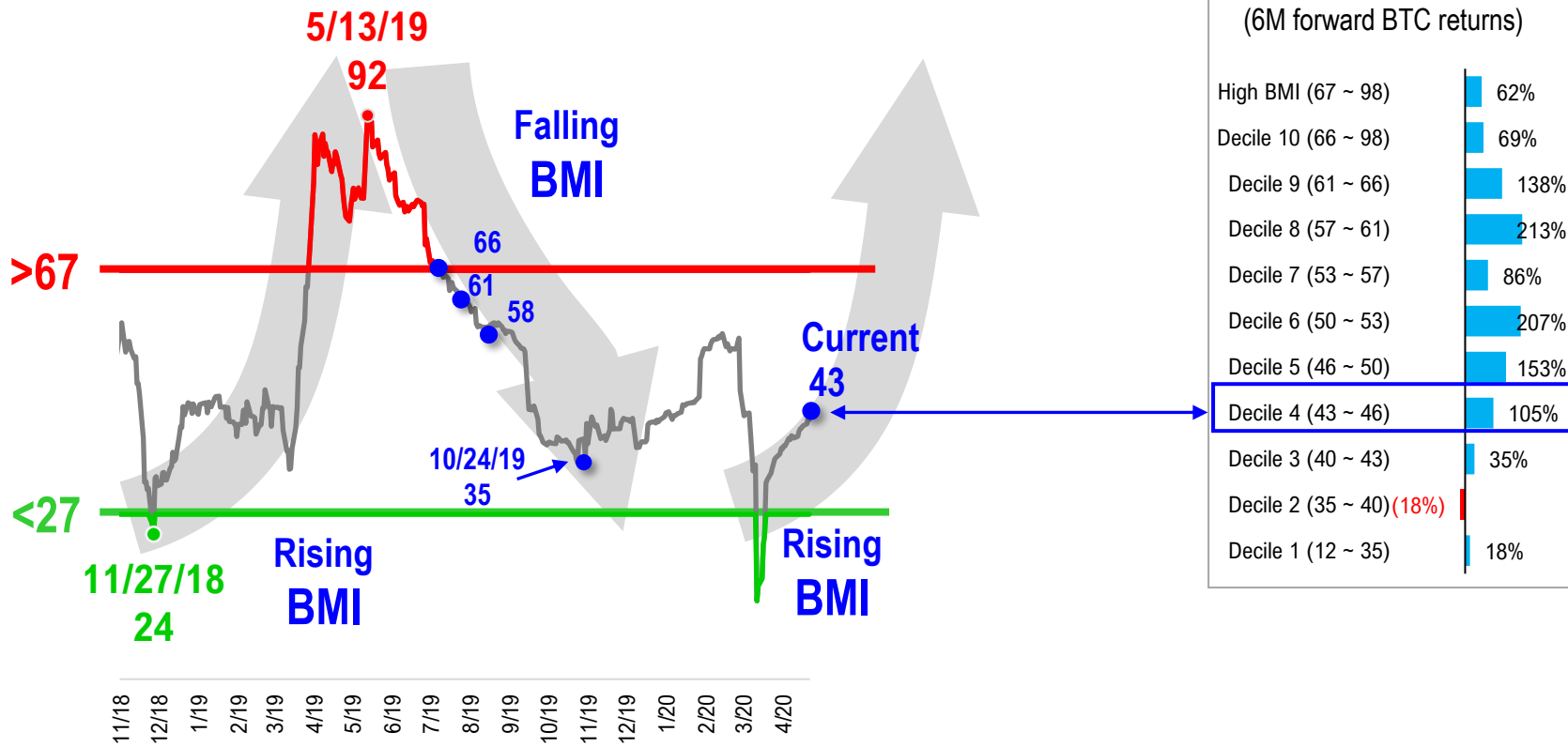
Source: Fundstrat

# BMI RISING: history suggests 105% 6M forward return when BMI is at current level at 43

Once BMI begins an uptrend (ala now) a reading of 43 is not associated with the best scenario based on 6M returns for Bitcoin.

- Since 2011, when BMI is 43 (decile 4), the average 6M return for Bitcoin is 105%—while this is good, it is not as strong as waiting for the BMI to rise towards 50-53 (decile 6) or even more ideally, 57-61 (decile 8).

Figure: BMI and comparative Bitcoin returns when in an uptrend  
 Since November 2018



Source: Fundstrat, Bloomberg, Factset



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Source: Fundstrat, Bloomberg

# BITCOIN >200D: Bitcoin could be back in a bull market soon...

Bitcoin's 200 day moving average (based on 200 calendar days, not 200 "equity trading days") is \$8,000. The 200D moving average is important, because it reflects the long-term trend in prices and is also essentially where most holders acquired their security/bitcoin. When **Bitcoin regains its 200D**, the momentum will be viewed by investors as **bullish**.

- Historically, Bitcoin acts much better when it is above its 200D moving average.

Figure: Bitcoin 200D moving average and Bitcoin spot price  
 Data since 2010. Chart is past 12 months



## above 200D = Bullish

# instances (% time)	6M forward return	Win-ratio
1,765 (66%)	<b>+193%</b>	80%
Above 200D		
Below 200D		
923 (34%)	<b>+10%</b>	36%

Price: \$9,075

XBT Currency (Bitcoin) BTC Spot and 200D MAVG Daily 01FEB2018-28JAN2020 Copyright© 2020 Bloomberg Finance L.P. 28-Jan-2020 20:47:15  
 Source: Fundstrat, Bloomberg

# POSITIVE MILESTONE: positive trend when Bitcoin regains 200D...

When Bitcoin crosses above its 200-day moving average, it will be a big positive.

- Bitcoin is viewed as a commodity, and hence, investors are more constructive when Bitcoin is in a positive trend—this is measured by its price relative to the 200-day moving average. Bitcoin is currently 3% below its 200D.

Figure: Bitcoin price and 200-day moving average  
Since 2019



XBTUSD Currency (XBT-USD Cross Rate) Bitcoin 2019 Daily 31DEC2018-28JAN2020 Copyright© 2020 Bloomberg Finance L.P. 28-Jan-2020 20:44:34

Source: Fundstrat, Bloomberg

## HALVENING: Equilibrium of supply-demand

Recently, there has been a lot of skepticism regarding the boost to bitcoin from the halvening.

- The negative arguments center around miners and their need to sell more Bitcoin if the value of the block reward is cut in half. But we think this is conflating the larger supply-demand dynamic.
- A simple illustration below shows that if demand is constant (we assume higher due to Iran) and supply is cut in half, this creates a net demand imbalance – which should be resolved with a higher price to create equilibrium.

Figure: Bitcoin price and 200-day moving average  
2019

	2018	2019	2020
<b>Demand</b> (assume equilibrium in 2019)	\$12mm	\$14mm	\$16mm
<b>Supply</b> (block reward)	36mm	14mm	7mm
<b>Net demand-supply</b> (assume equilibrium in 2019)	-\$24mm	\$0mm	+\$9mm

**Dramatic rise in “net demand”**

Source: Fundstrat, Bloomberg

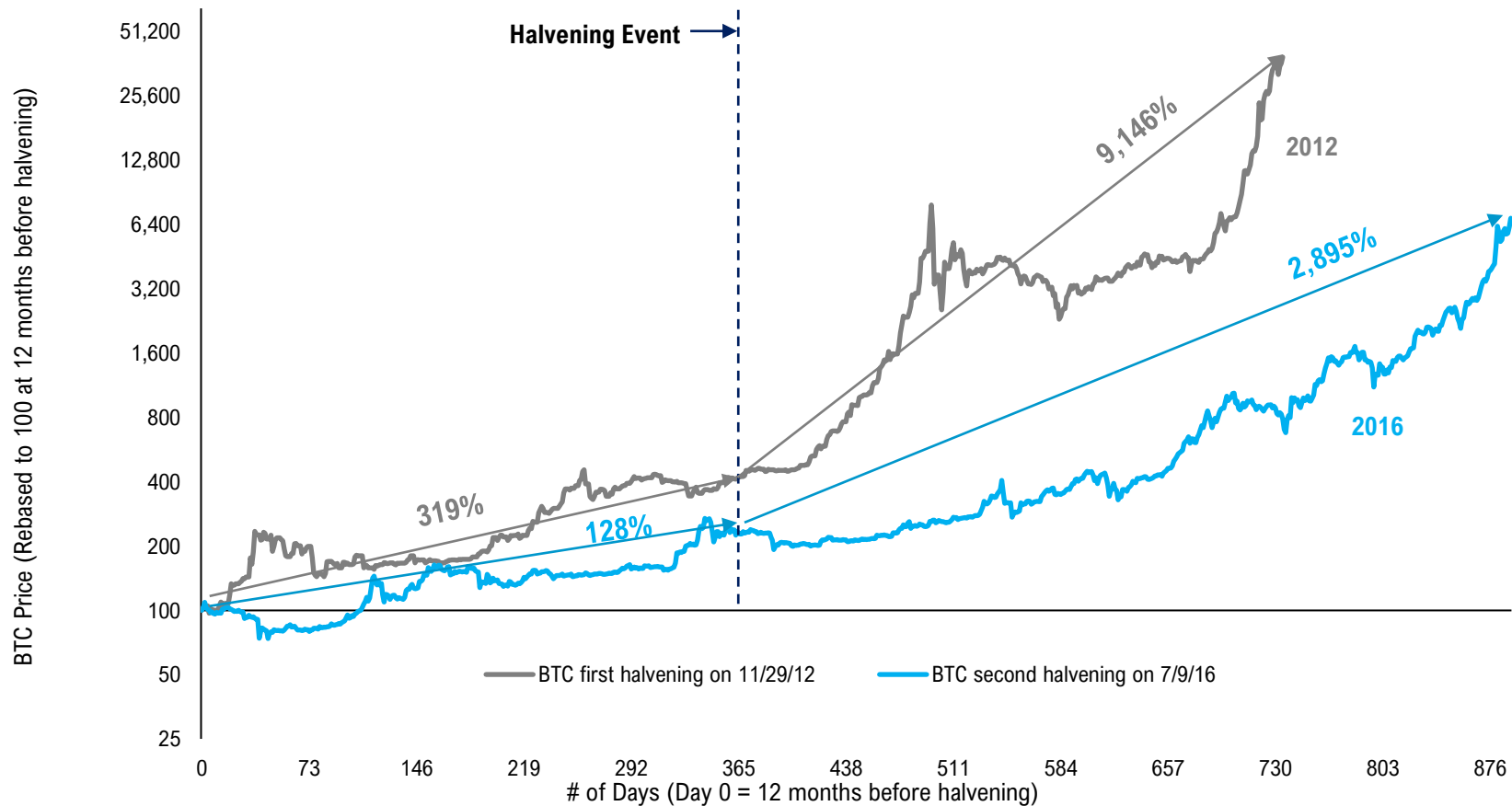
# HALVENING: History shows “net demand” → 128%-320% post-halvening

History shows the price gains are quite dramatic post the two preceding halvening events.

- Notice the significant change in the gains of Bitcoin price into the halvening and after the halvening.

**Figure: Comparison of Bitcoin price performance around halvening event**

12 months prior to and 30 months following each halvening



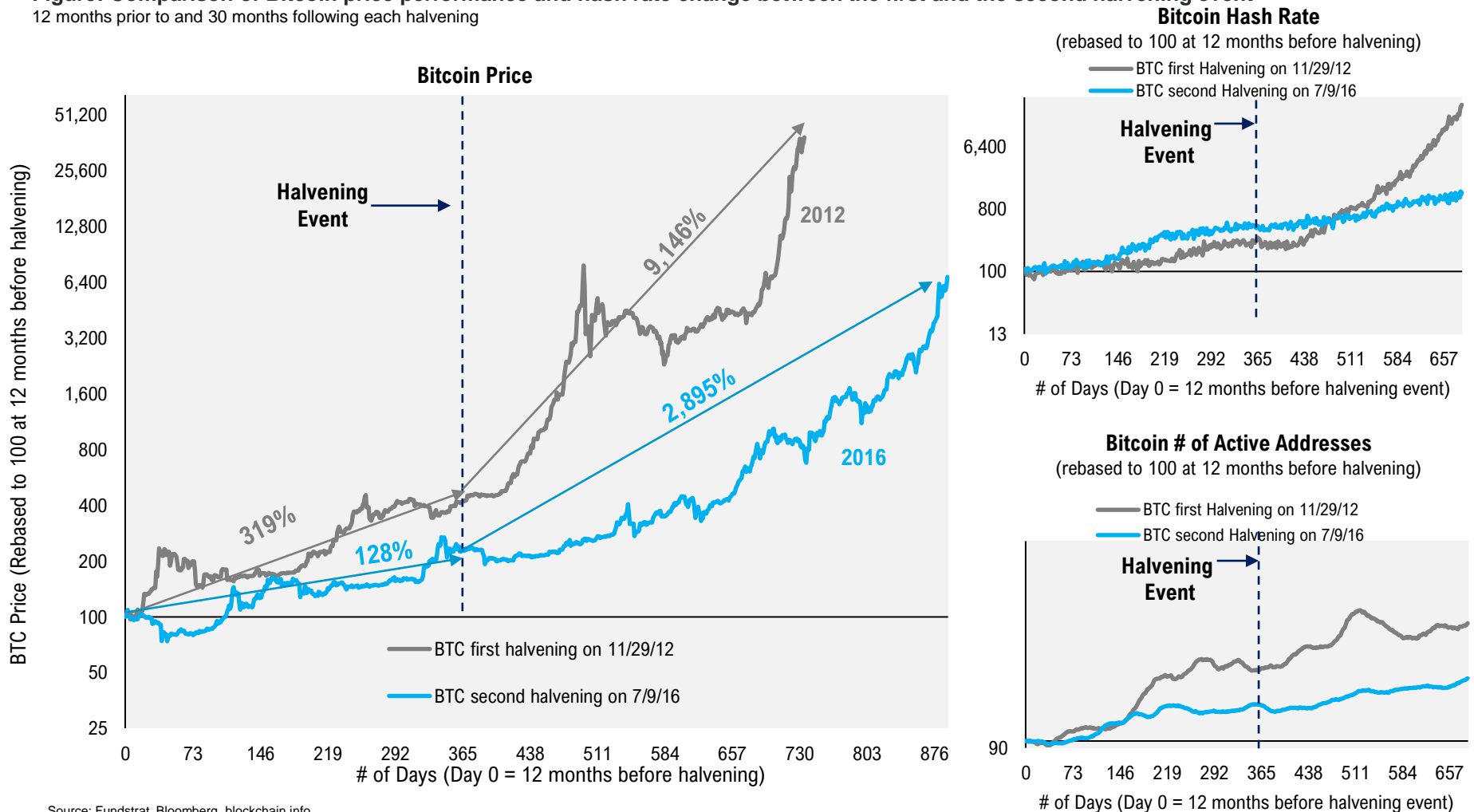
Source: Fundstrat, Bloomberg, blockchain.info

# HALVENING: “co-efficient” increases vs Hash-rate and active addresses

Below we show the Bitcoin’s price performance, hash power change and number of active addresses 12 months prior to and 30 months following the previous two halvening events.

- The hash rate and active addresses adjust but the key change, in our view, is the co-efficient assigned to activity—in other words, the increase in “net demand” is causing price to rise faster than underlying metrics.

**Figure: Comparison of Bitcoin price performance and hash rate change between the first and the second halvening event**  
 12 months prior to and 30 months following each halvening



Source: Fundstrat, Bloomberg, blockchain.info

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Source: Fundstrat, Bloomberg



## Bitcoin performs best when S&P 500 is performing strongly...

Bitcoin performs in synch with the S&P 500. This is only 10 years of history, but it is notable.

- In years where the S&P 500 has the strongest gains, we see the best returns for Bitcoin.
- Does this mean Bitcoin is a risk-on asset? Maybe. But we think the better explanation is Bitcoin works best when there is a clear macro trend.

**Figure: Comparative performance of Bitcoin and S&P 500**  
 Since 2010

	Annual Performance (%)										Stock market trend is ...		
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Down	Up / No Trend	Strong
S&P 500	17	-0	13	30	11	-1	10	19	-6	29	-3	9	24
Stock Market Trend	Strong	No	Up	Strong	Up	Down	Up	Strong	Down	Strong			
Bitcoin	200	1,467	187	5,485	-58	34	124	1,369	-74	92	-20	430	1,787

**Bitcoin shows the best returns when S&P 500 has strong gains (>15%)**

Source: Fundstrat, Bloomberg, Factset

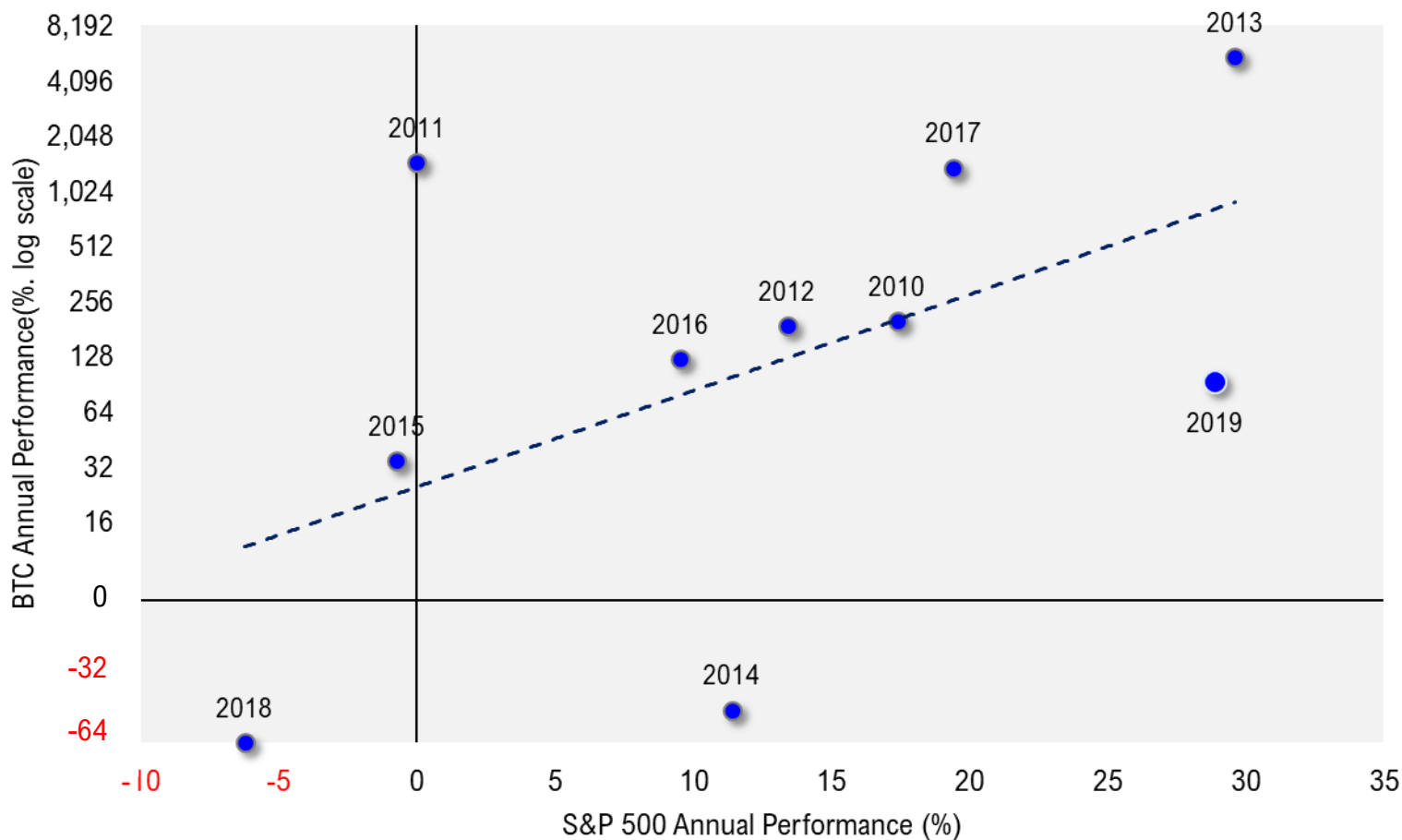
## This relationship is even more apparent when looking at a chart...

This positive correlation is best seen in a chart.

- The S&P 500 and Bitcoin seem positively correlated.

Figure: Comparative return of Bitcoin and S&P 500

Since 2010



Source: Fundstrat, Bloomberg, Factset

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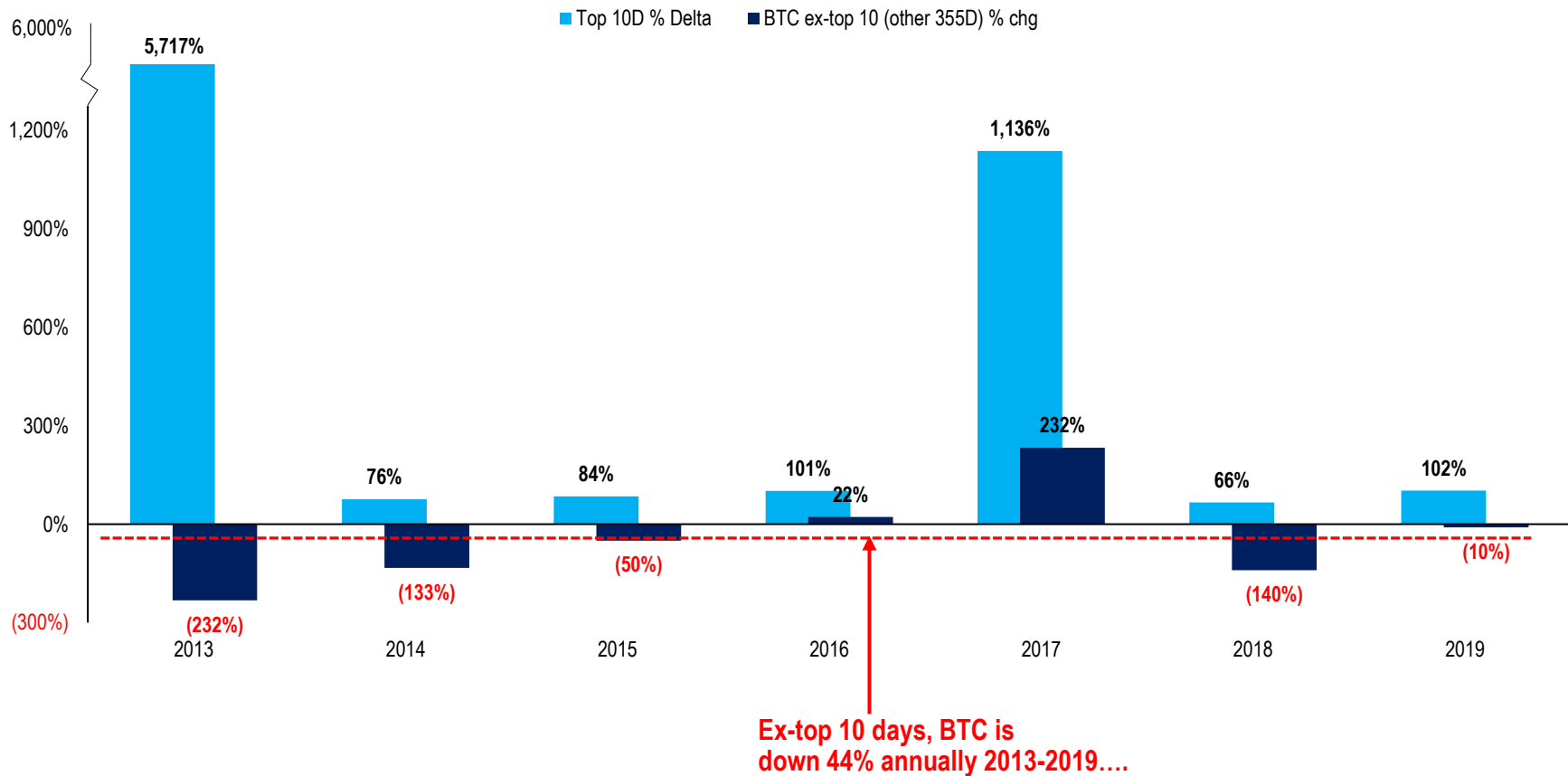
Source: Fundstrat, Bloomberg

## FUNDSTRAT CRYPTO RULE #5: Rule of 10-best days

The reason “buy and hold” (or HODL) makes sense for BTC is that a handful of days each year account for the bulk of gains for BTC.

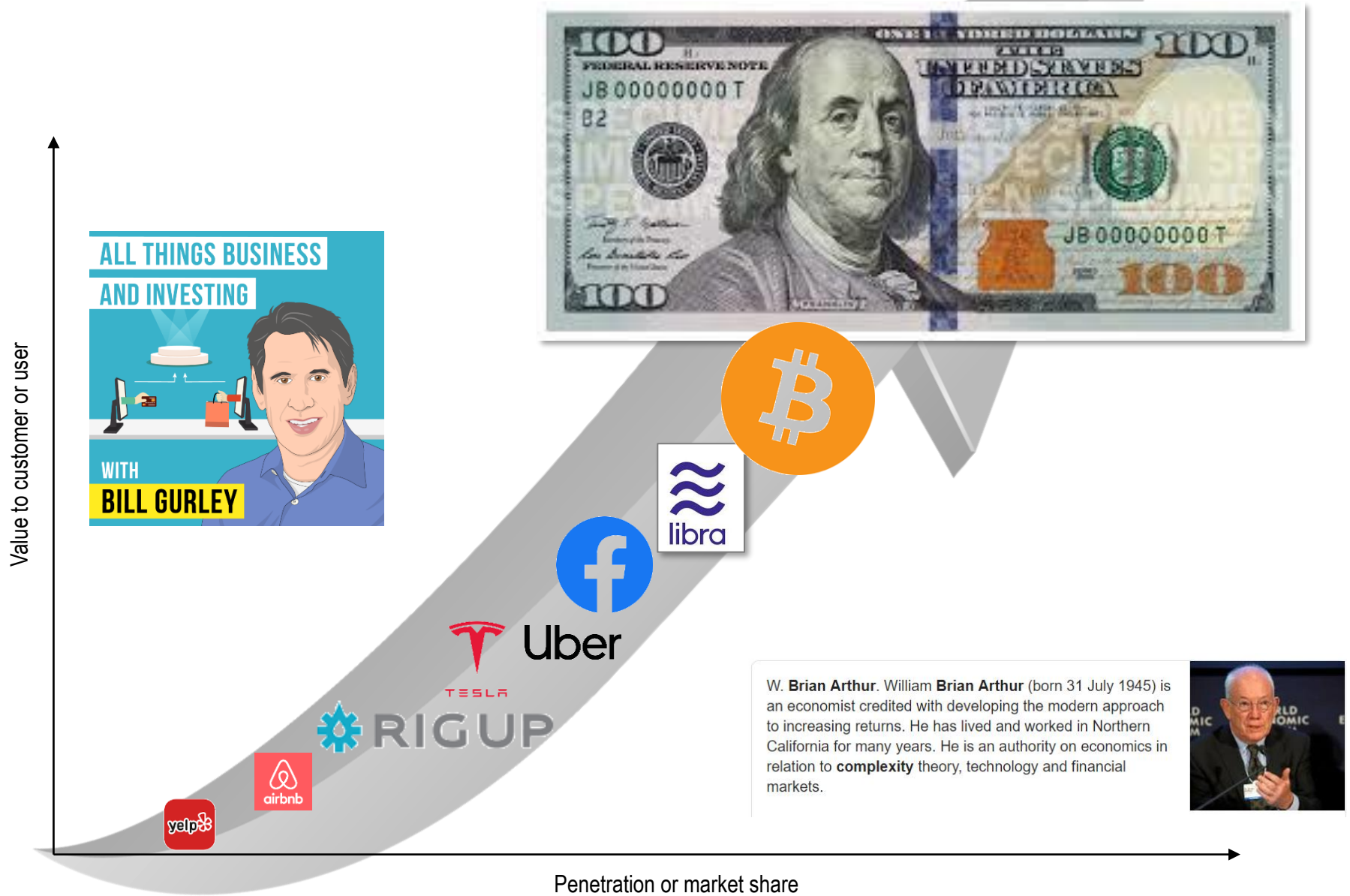
- As shown below, BTC was down, on average, every year if we exclude the gains for the top 10 days (based on % change).
- If we looked at the top 10 “point gain” days, BTC would be down even more every year.

Figure: Return of BTC based on top 10 days (% chg. daily) vs rest of year  
Since 2013



Source: Fundstrat, Bloomberg, CoinMarketCap

# Network effects drive most successful platforms



W. Brian Arthur. William Brian Arthur (born 31 July 1945) is an economist credited with developing the modern approach to increasing returns. He has lived and worked in Northern California for many years. He is an authority on economics in relation to **complexity** theory, technology and financial markets.



Source: Fundstrat

# Crypto is not:

# 10%

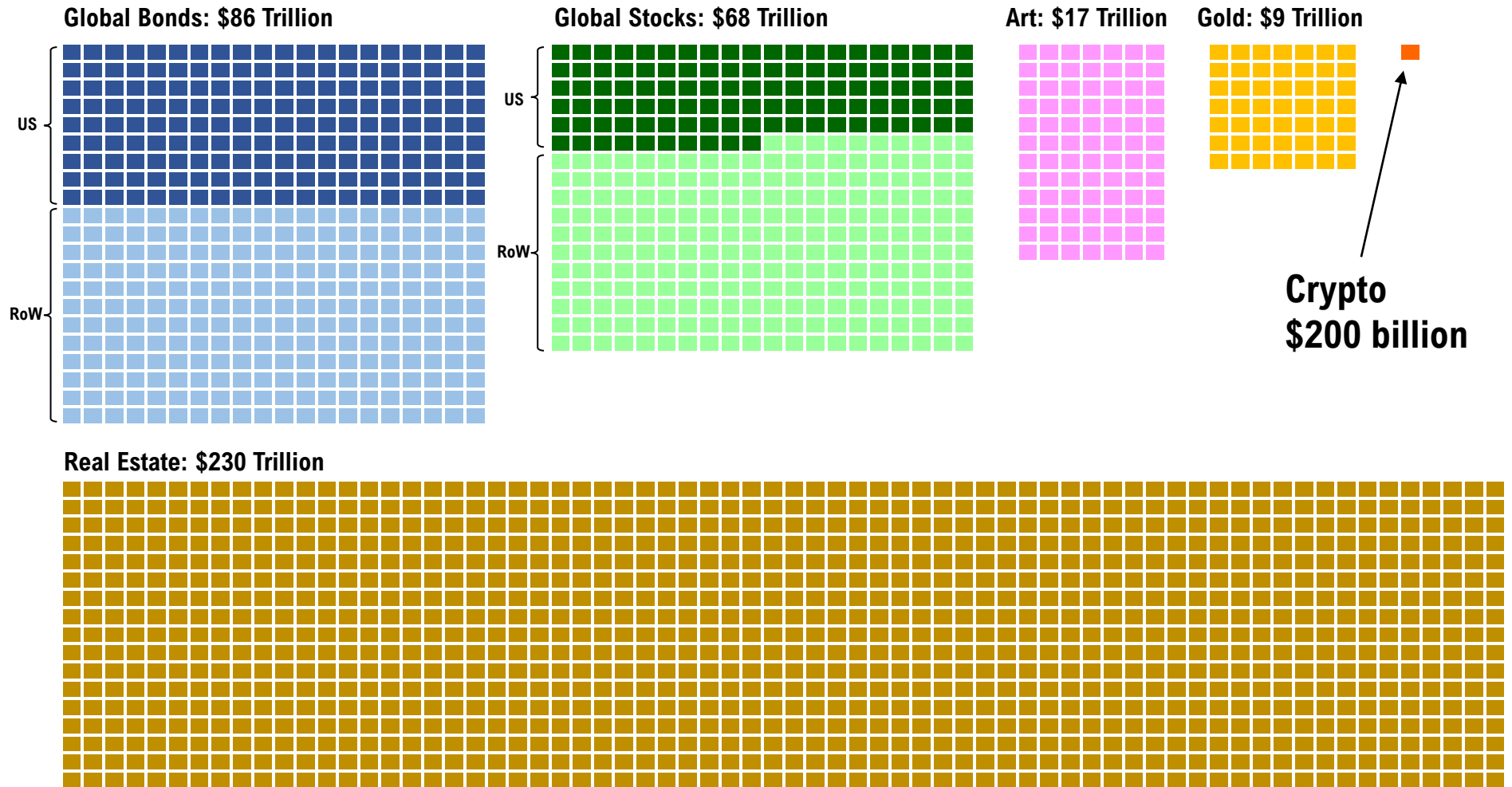
# 1%

# It is: 0.1% of assets

# RETAIL ONLY: Bitcoin TOO SMALL 0.1% of overall addressable investments

- Bitcoin's network valuation is \$200 billion which ranks it as tiny versus other liquid market.

Figure: Size of various markets  
Each square = \$200 billion



Source: Fundstrat, Twitter



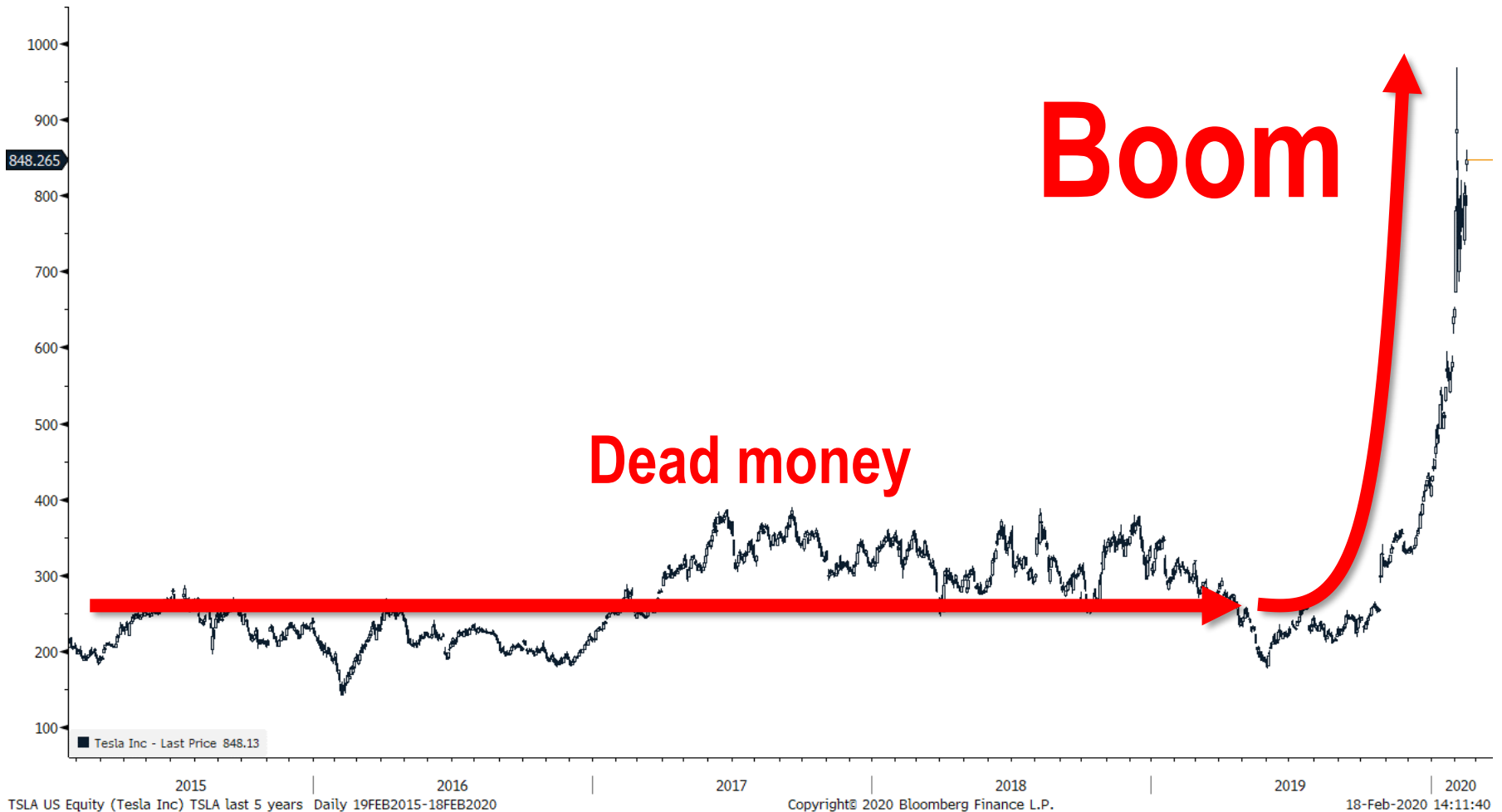
# INSTITUTIONAL FOMO: Case Study Tesla

Rally in Tesla in 2020 due to the Russell 1000 Growth Manager FOMO.

- Tesla is less than 0.7% of the weight in the Russell 1000 but is the 3<sup>rd</sup> biggest contributor to YTD gains—sound familiar?

Figure: Tesla Price Chart

Past 5 years



# INSTITUTIONAL FOMO: \$135 billion increase in value in 90 days

Figure: Tesla Price Chart  
Past 5 years



Price...  
**\$250 → \$1000**

**\$ gain**  
**+\$100 → \$18b**

**Not short-covering**  
**FOMO buying**

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