

2020 **COVID-19**

10 reasons for YE rally

Key to 2019:
Don't fight the Fed
PE matters more than 'E'
+30%

Key to 2020:
Don't fight Central Banks
EPS upside on PMI rise
+10%

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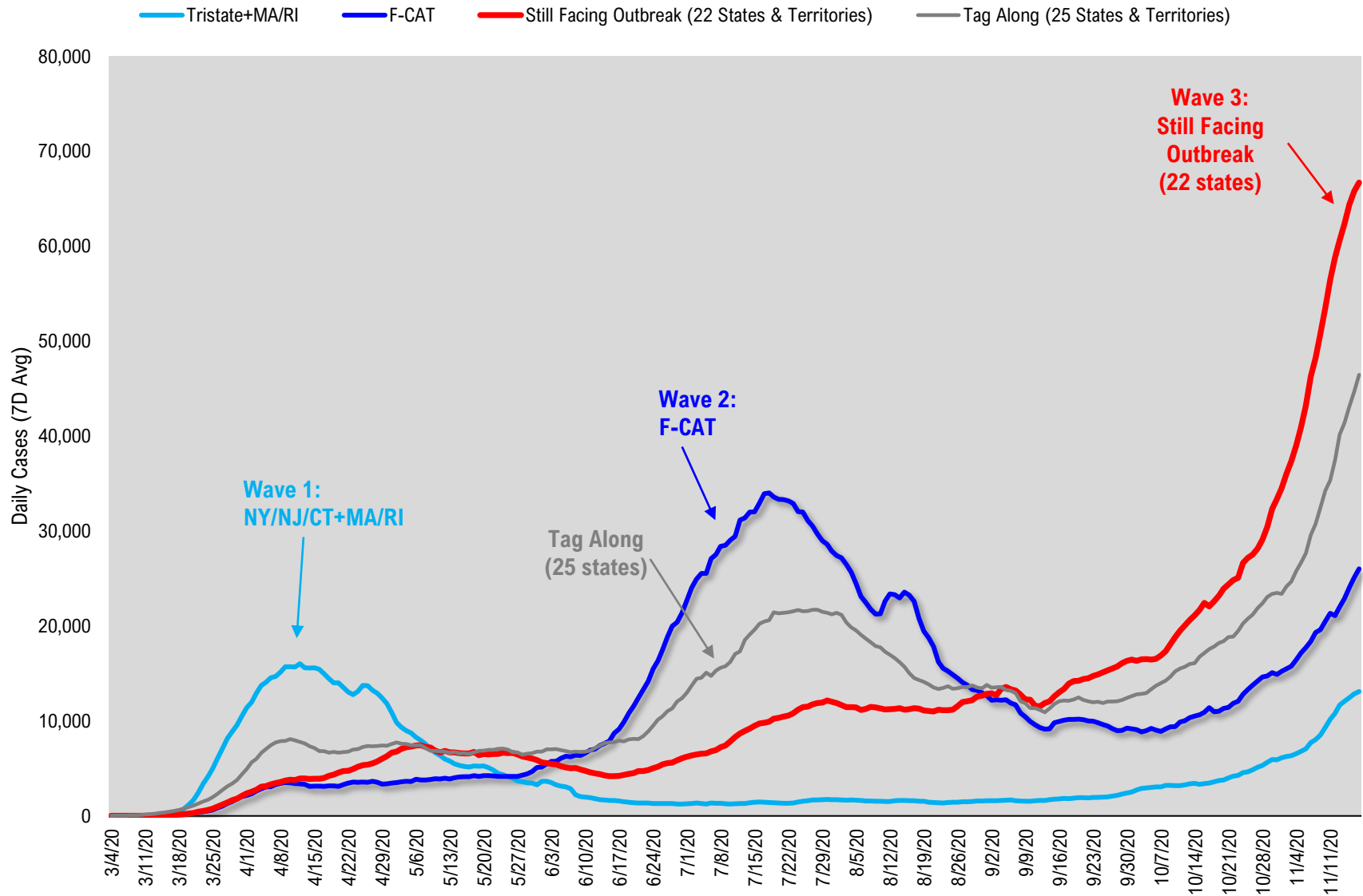
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COVID: Biggest macro factor, even more powerful than gov'ts and Fed...



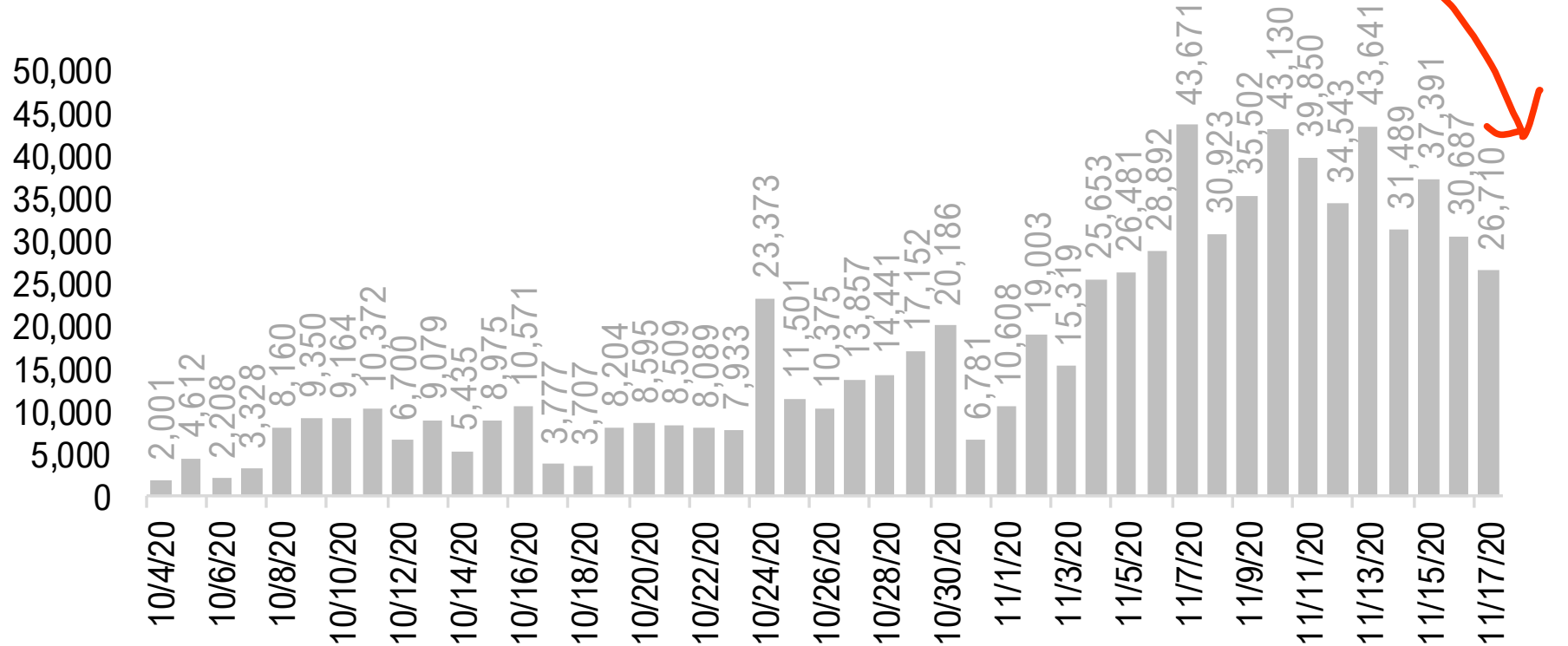
2020: Events this year will not happen again for 5 lifetimes...

- **Worse than a science fiction movie**
- **Global pandemic, so far 1 million deaths**
- **First ever global and coordinated economic shutdown**
- **US economic contraction exceeding Great Depression**
- **US Federal Reserve writes a new playbook within days**
- **US Government spends \$5T in stimulus, 25% of GDP**
- **Investors panic and sell whatever they can**

Source: Fundstrat, Bloomberg, Udata

COVID: Silver lining? Rate of increase is slowing

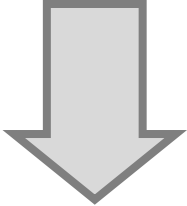
US daily new cases rolling 7D delta



10 reasons for a BIG Year-end Rally

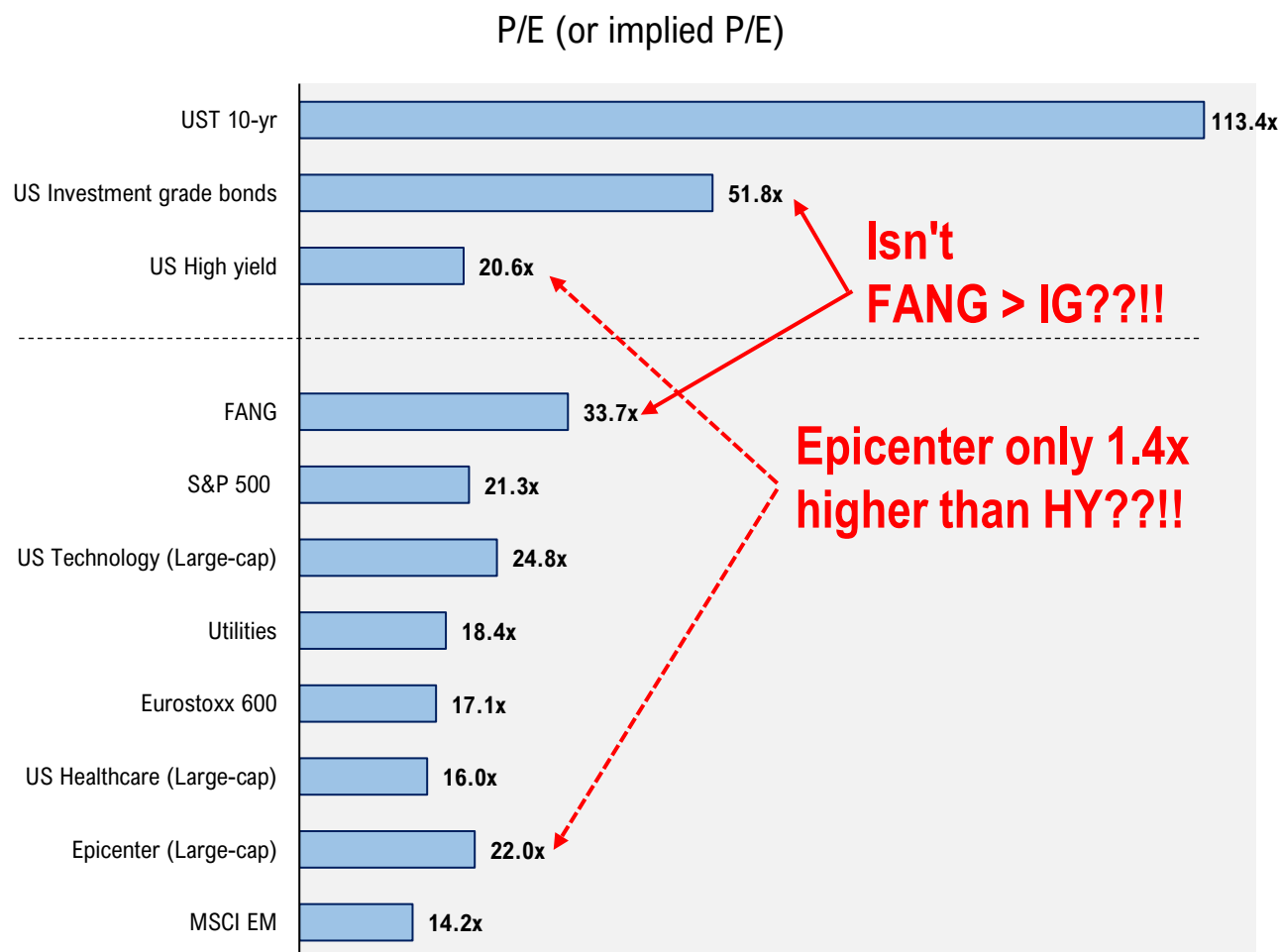
1. COVID-19 vaccine and therapeutics take “worst case” off table
2. Policymakers are pursuing soft-lockdowns, not killing recovery
3. Pent-up demand in US, look at output gap
4. China seeing massive explosive economic recovery
5. Fiscal stimulus coming
6. Investors are cautiously positioned, with little conviction
7. \$4.5T cash on sidelines
8. If VIX breaks below 20, double-risk on signal
9. Santa Claus rally
10. Fed dovish

YE 2020: Raising S&P 500 YE 2020 Target to 3,800, from 3,525

	<u>2021 EPS</u>	<u>P/E</u>	<u>YE 2020</u>
Prior (Aug 13)	\$193	18.3X	3,525
			
Revised (Nov 19)	\$193	19.7X	3,800

TINA: Bonds have >50 to 100+ P/E multiples

Figure: PE of Bonds (inverse of YTW) and PE of equities
Current



Source: Fundstrat and BofA

YE 2020: FSInsight Consensus

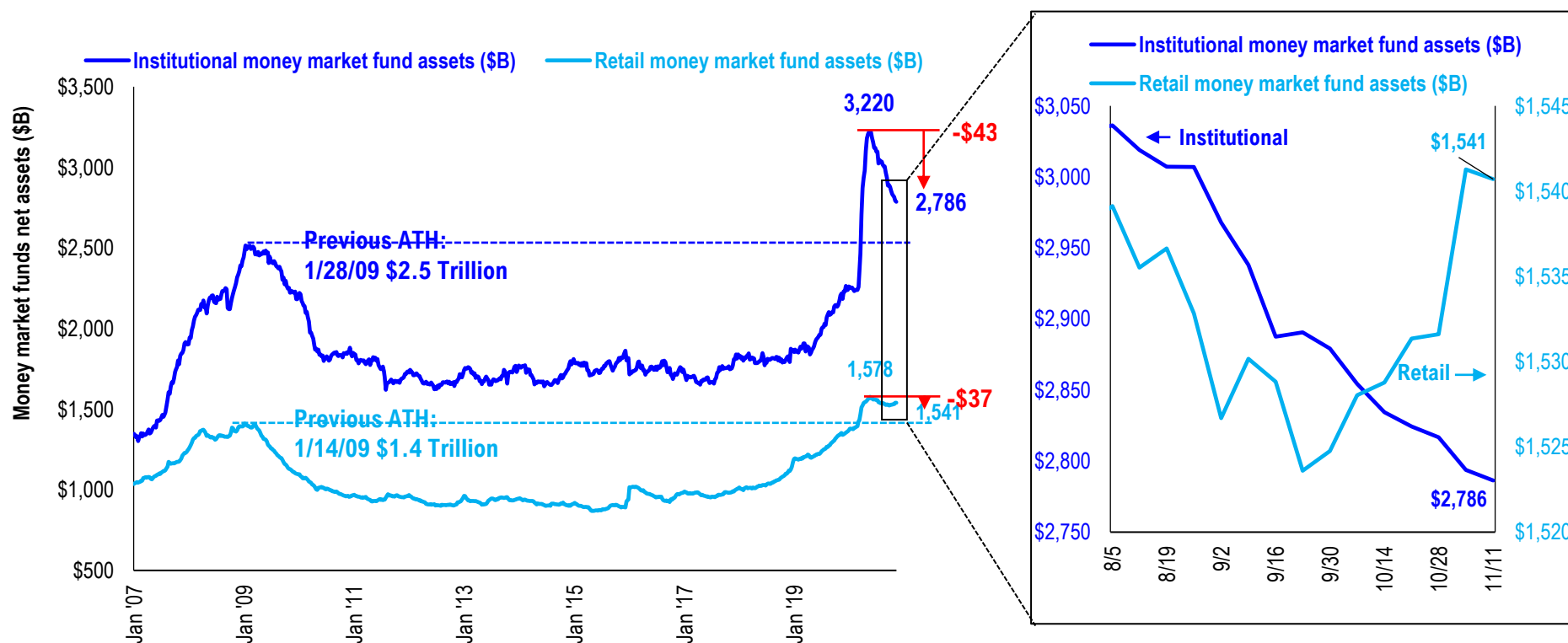


VIX: <25 = Risk-on... <20 = BOOM



DRY POWDER: Money on sidelines has “barely” budged... and now down to “only” \$4.3 trillion, from the peak of \$4.8 trillion

Figure: Institutional and retail money market fund assets
Since 2007

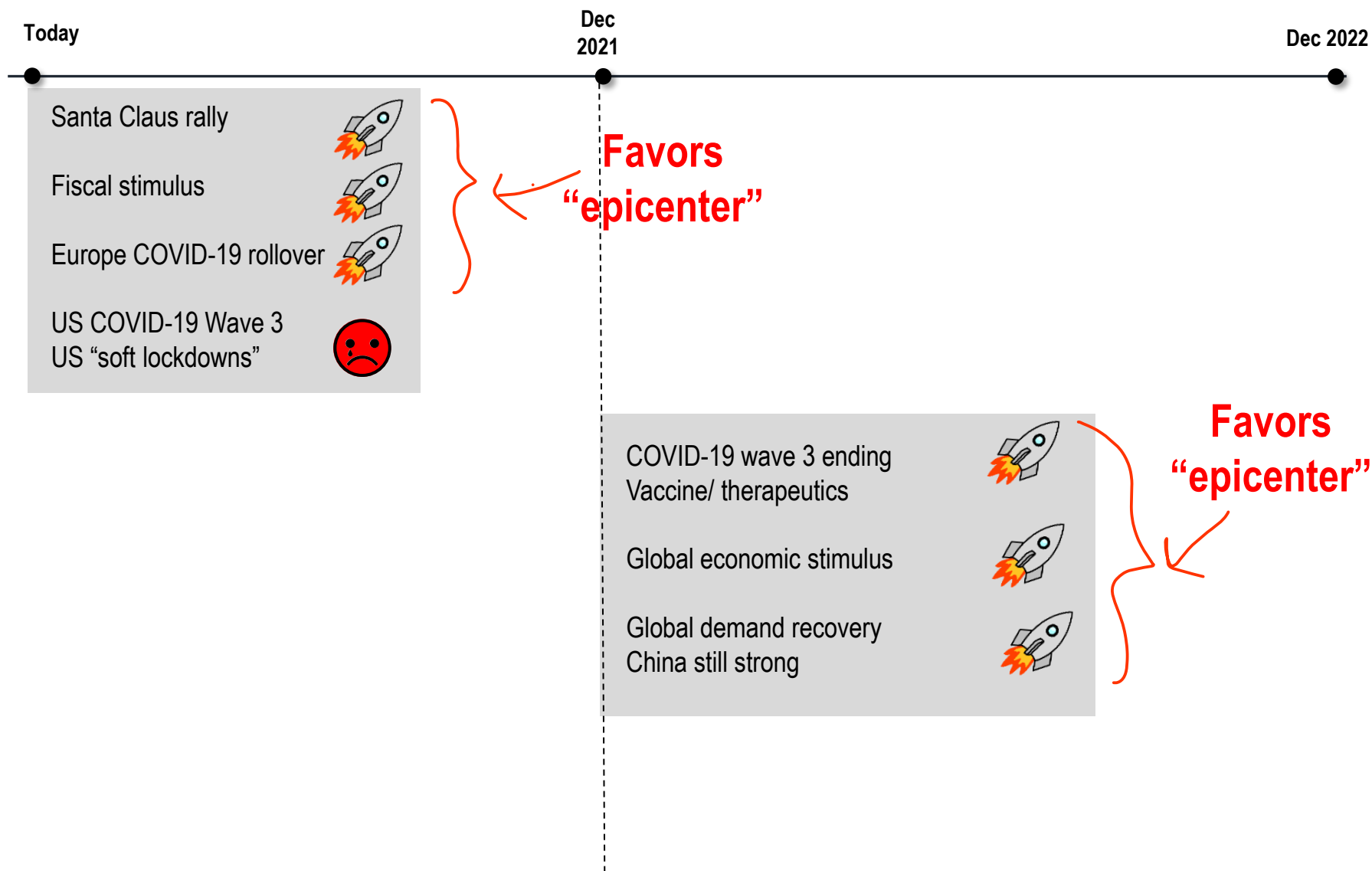


Source: Fundstrat, Bloomberg, ICI

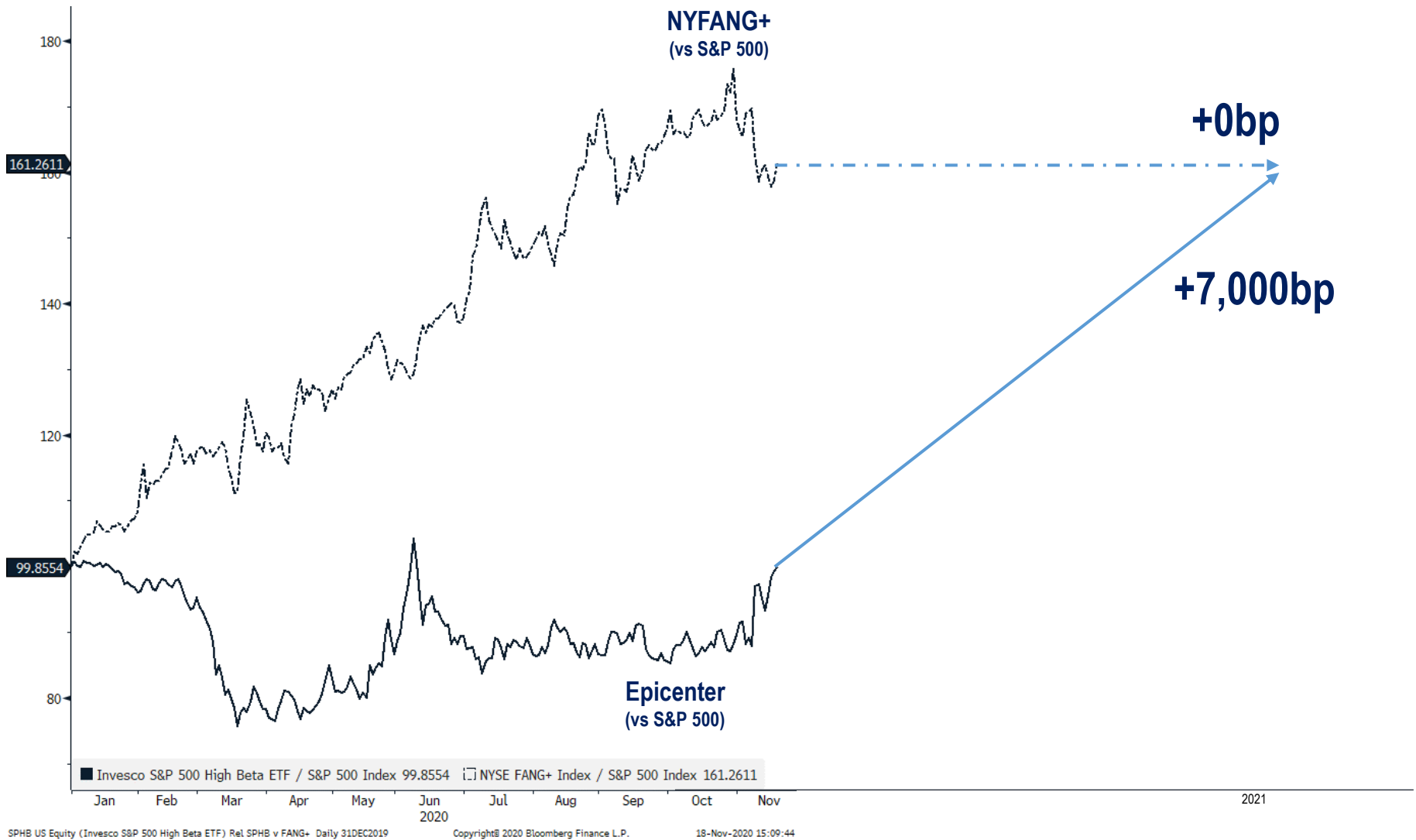
Epicenter: We warned it would be violent...



Epicenter:



Epicenter:

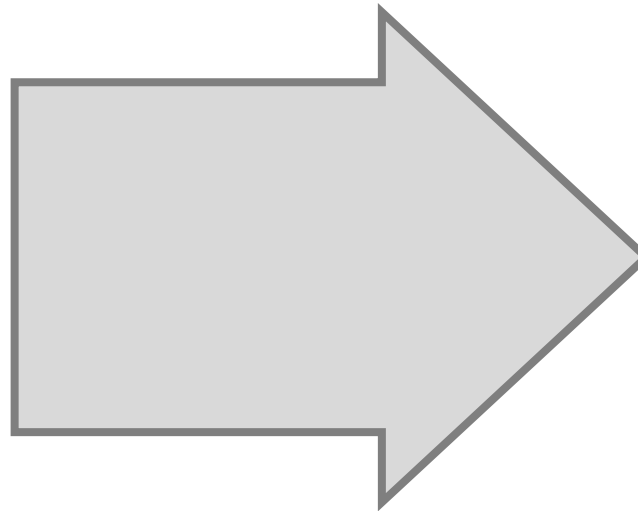


INDEX vs STOCKS: Some validity to why institutions “write-off” 90% down...

Since 1975...

stocks listed
on NYSE,
NASDAQ, AMEX

41,592



Down 90% from
ATH

**18,676
(45%)**

Average stock goes to zero

NEW NORMAL: Aftermath, who are winners?

We think there are some structural changes in the aftermath of COVID-19.

- Take a look below → this is our best guess and not a prediction.
































































































Figure: Way forward → What changes after COVID-19

Per Fundstrat best guess

Structural Change	Rationale	Stranded Capital	New Capital
1. Supply chain moves back to USA	From China → USA	Foreign factories Foreign supply chains	Domestic factories Domestic supply chains
2. De-urbanization	Cities → suburbs	Urban restaurants Urban shopping City-centric services	Housing + furnishing Infrastructure Home entertainment Home delivery Suburban entertainment Suburban amenities
3. Work from home	Office → home	Office space midtown/ urban office services	Home technology Home furnishings
4. Buy USA	Global → USA	Foreign-based asset	US based assets

Source: Fundstrat, Bloomberg, Factset

NEW NORMAL: Binary effects from a Vaccine/Cure

Industry	COVID-19 Impact	Vaccine/ Cure Impact	Long-term issues
Airlines	   	   	Vaccine/ Cure = Full recovery
Cruises	   	   	Vaccine/ Cure = Full recovery
Casinos	   	   	Vaccine/ Cure = Full recovery
Hotels	   	   	Vaccine/ Cure = Full recovery
Theme Parks	   	   	Vaccine/ Cure = Full recovery
Sports	   	   	Vaccine/ Cure = Full recovery
Concerts	   	   	Vaccine/ Cure = Full recovery
Bars	   	  	Vaccine/ Cure = Recovery
Restaurants	   	 	Failure rate high => less new capital
Retail	   	 	Already challenged
Fitness / Gyms	   	 	Surveys show cancellation risk
Urban office space	   	 	De-urbanization
Urban entertainment	   	   	Vaccine/ Cure = Full recovery

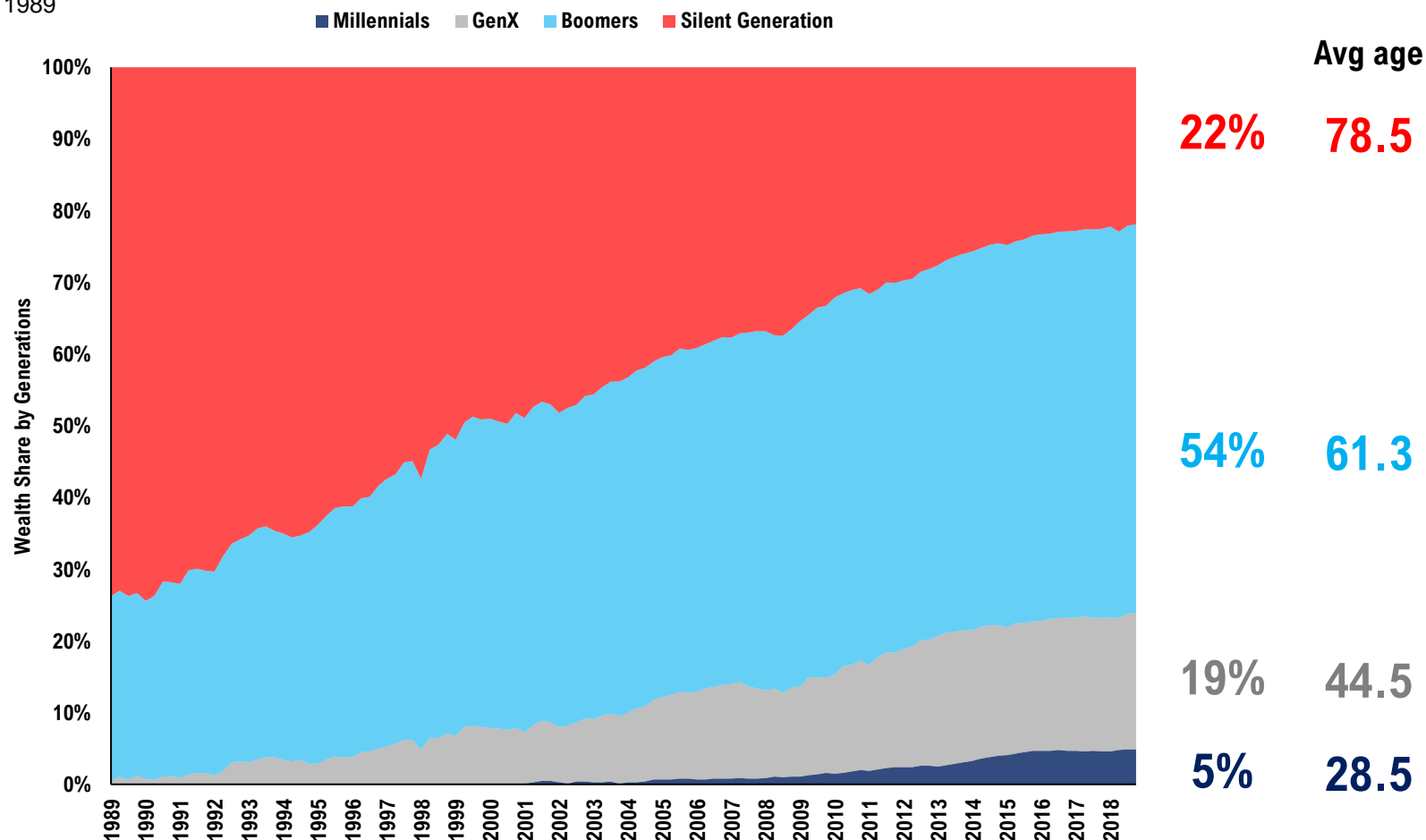
WEALTH TRANSFER: Millennials set to inherit \$68 trillion in next 20 years

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



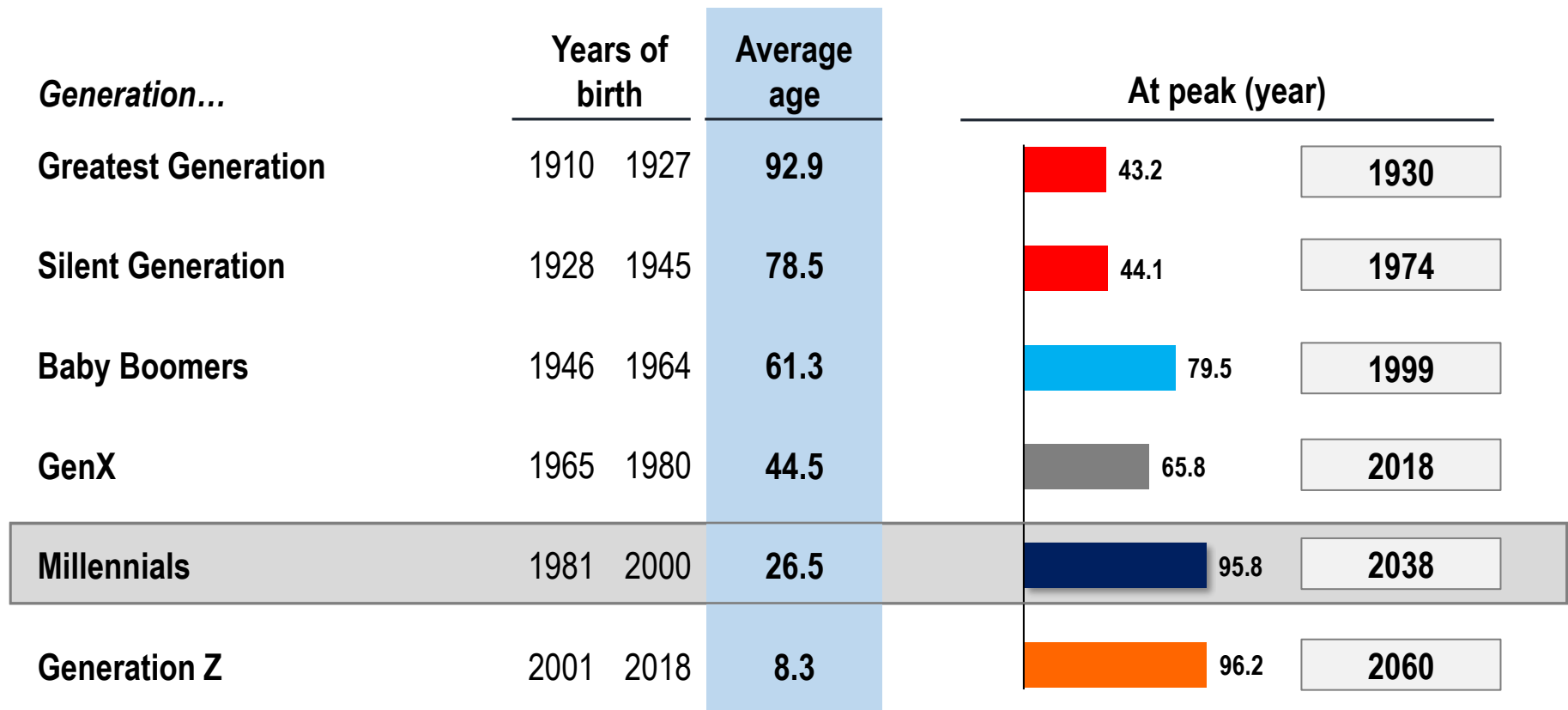
Source: Fundstrat, Federal Reserve DFA

DEMOGRAPHICS: Explains business cycles better than people realize...

Millennials are significant for two reasons: sheer size, both in the US and the rest of the world, and relatively young age.

- First, they are the largest single generation ever (larger than Boomers) at a population of 2.5 billion globally.
- Second, at an average age of 26.5, they are just entering their prime income years.

Figure: Total US Population divided by age groups
2017. Data provided by the DESA UN Data sets.



Source: Fundstrat. Peak population figures above include immigration. **Reduced immigration will lead to a smaller overall size of GenZ.

LABOR SUPPLY: Prime skilled US adults age 30-48 inflecting up and surging

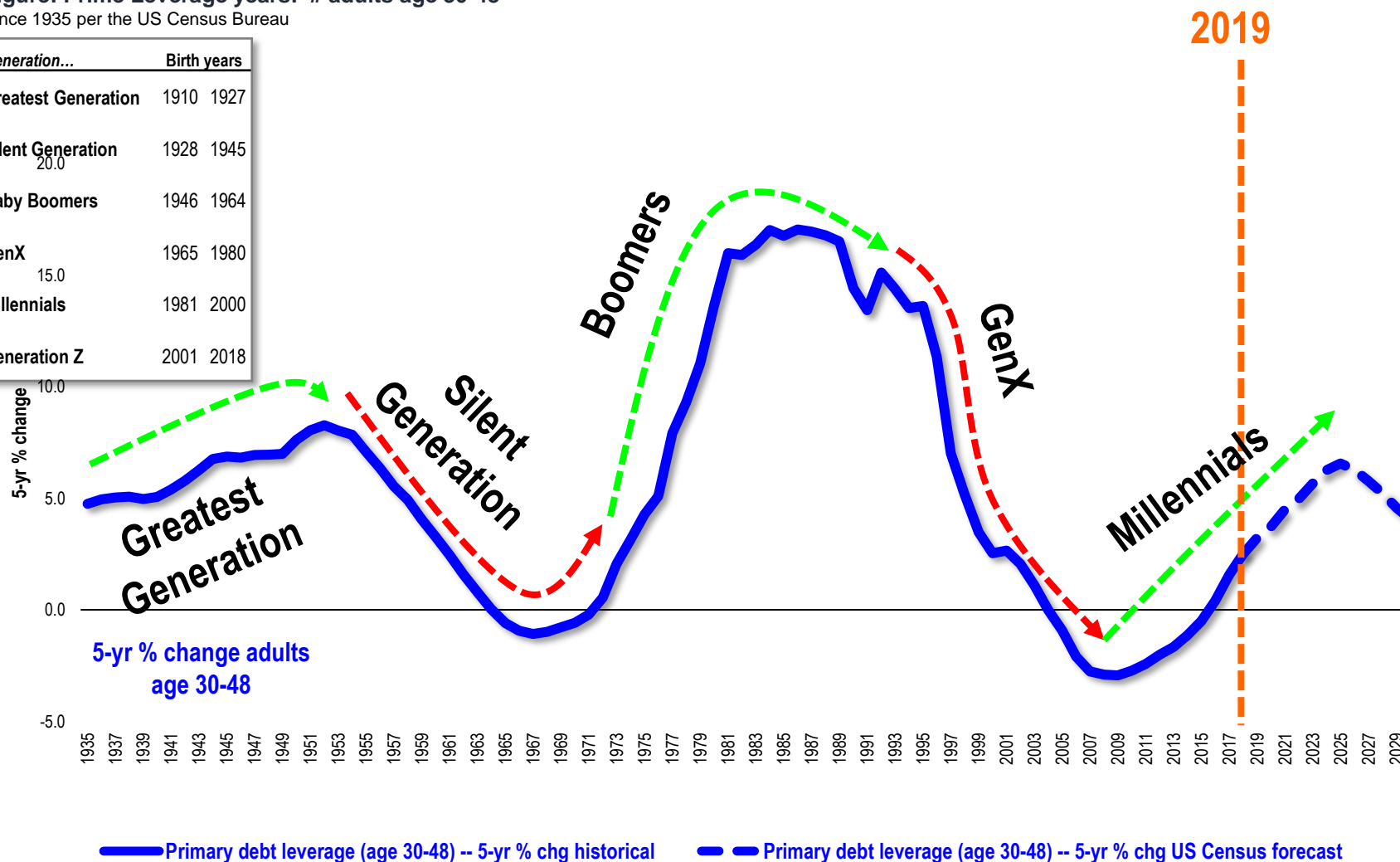
The number of adults in “prime leverage age” (age 30-48) is below, based on data from the US Census Bureau.

- This figure fell from 2001-2008 (is GFC not a surprise?) and as shown below, set to accelerate 2018 to 2026.

Figure: Prime Leverage years: # adults age 30-48

Since 1935 per the US Census Bureau

Generation...	Birth years
Greatest Generation	1910 1927
Silent Generation	1928 1945
Baby Boomers	1946 1964
GenX	1965 1980
Millennials	1981 2000
Generation Z	2001 2018



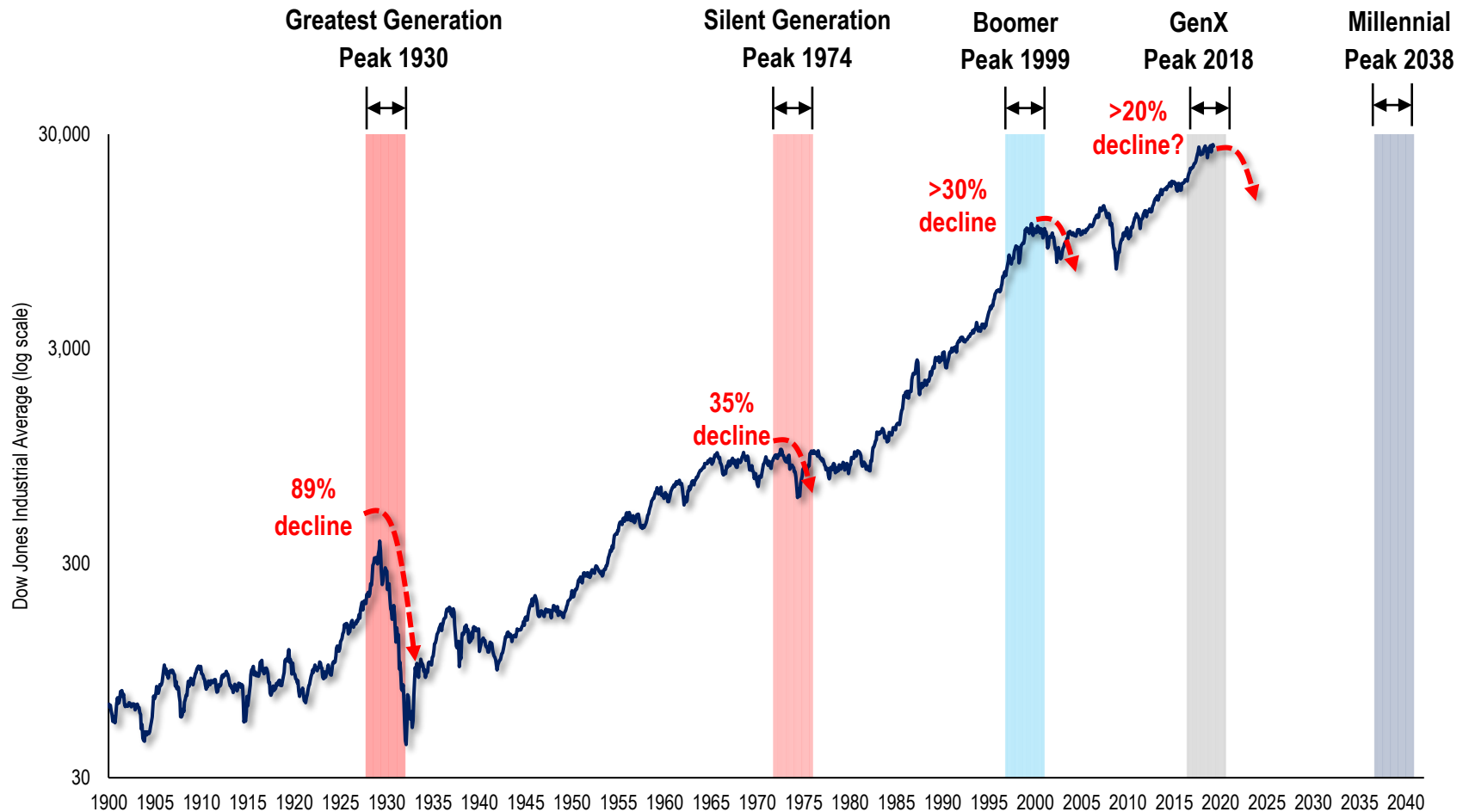
Source: Fundstrat, Bloomberg, BEA, National Association of Realtors, US Census Bureau

DEMOGRAPHICS: Major market turning points with each generation's peak

Notably, equity markets tend to peak with each generation's peak. Notice this below.

- GenX is reaching the peak size of the cohort in 2018.

Figure: Dow Jones Industrials Average
Since 1900



Source: Fundstrat, Bloomberg

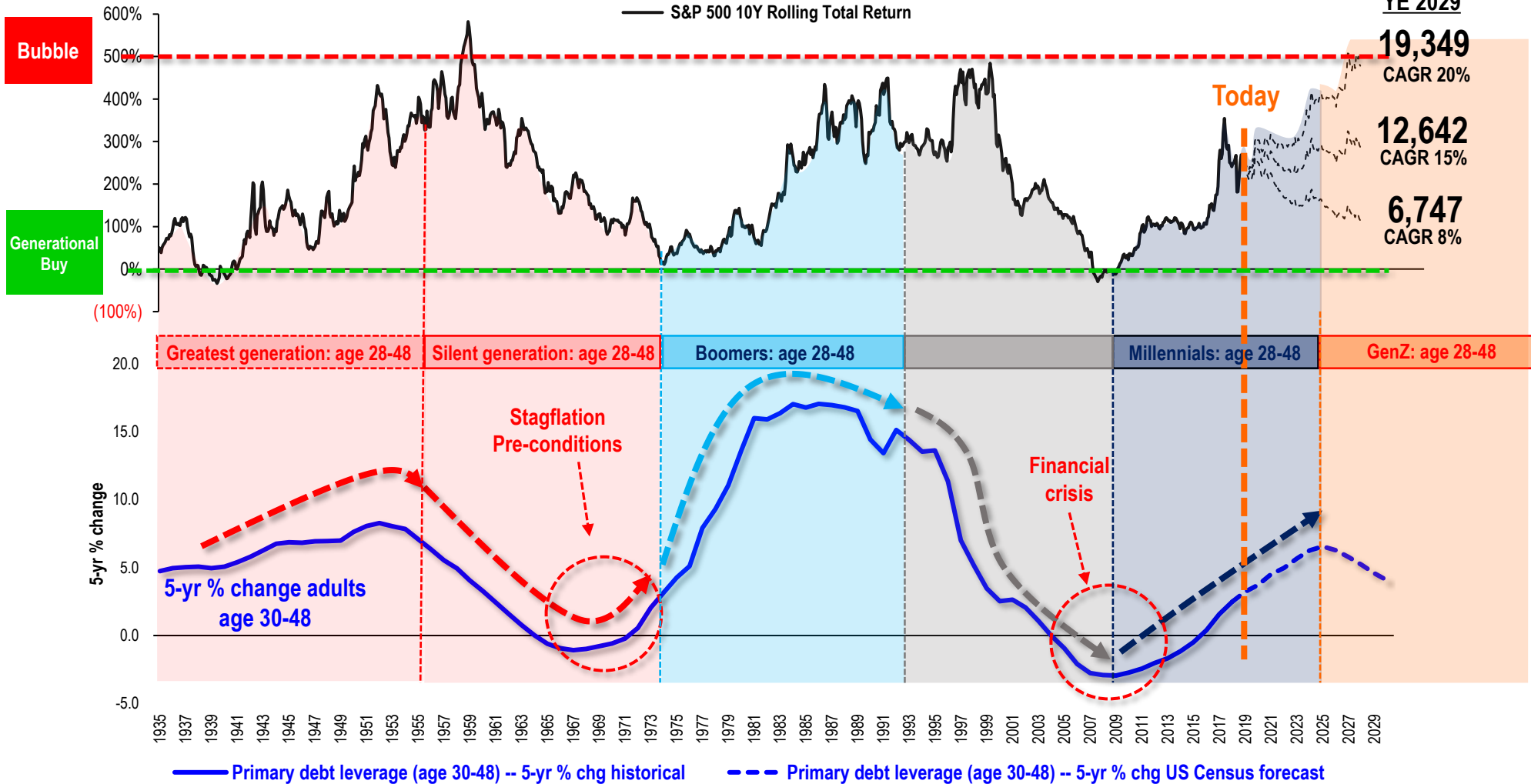
Disclaimer: Past performance does not guarantee future results

STOCK: Like housing, equity markets also follow moves in adults age 28-48

We overlay the # of adults in "prime leverage age" (age 30-48) against the 10-year rolling total return of S&P 500 below.

Figure: Prime Leverage years: # adults age 30-48

Since 1935 per the US Census Bureau



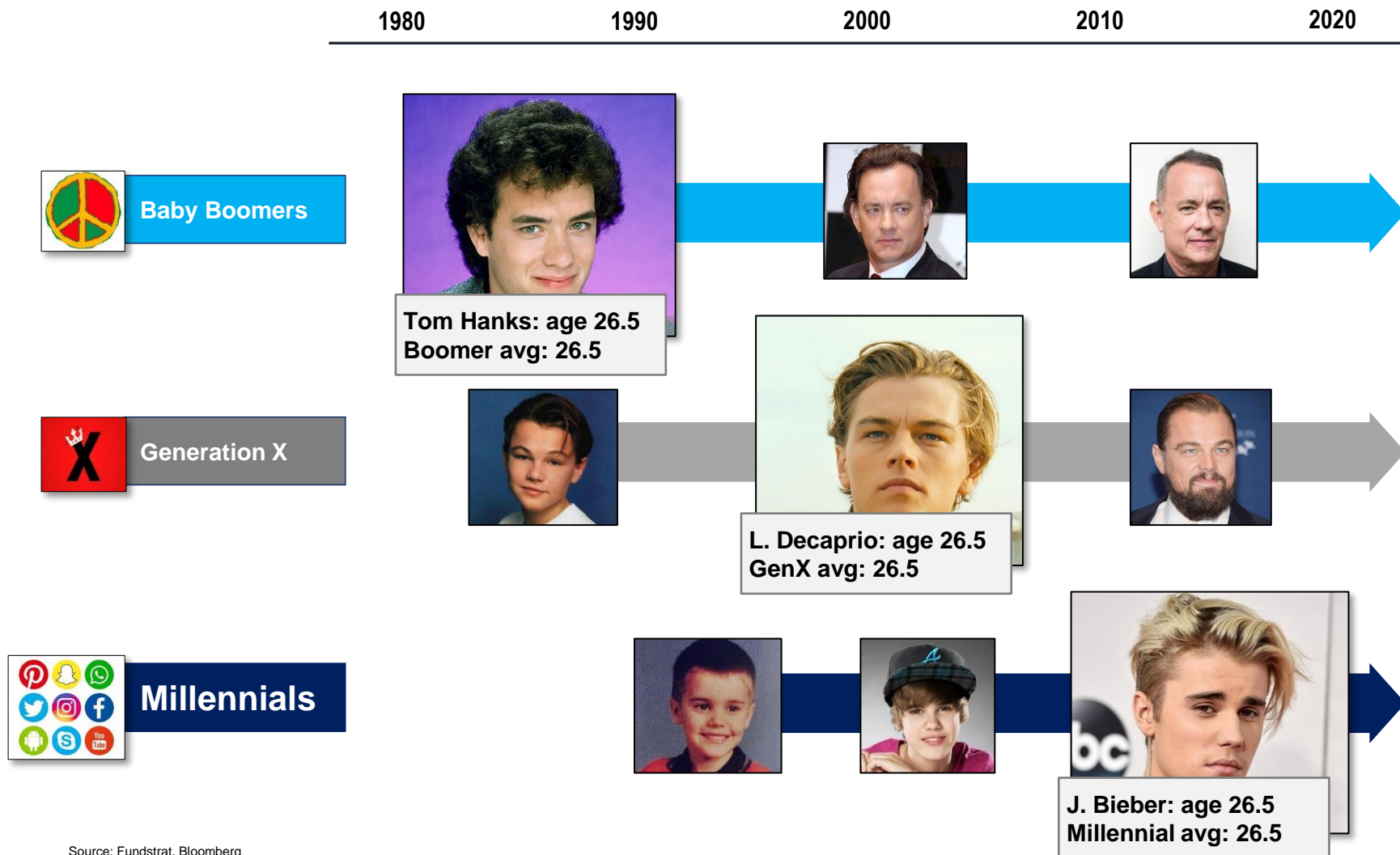
Source: Fundstrat, Bloomberg, BEA, National Association of Realtors, US Census Bureau

Disclaimer: Past performance does not guarantee future results

DEMOGRAPHICS: Looking at the world through the eyes of a millennial...

Figure: What did each generation look like in their 20s

Fundstrat and public information

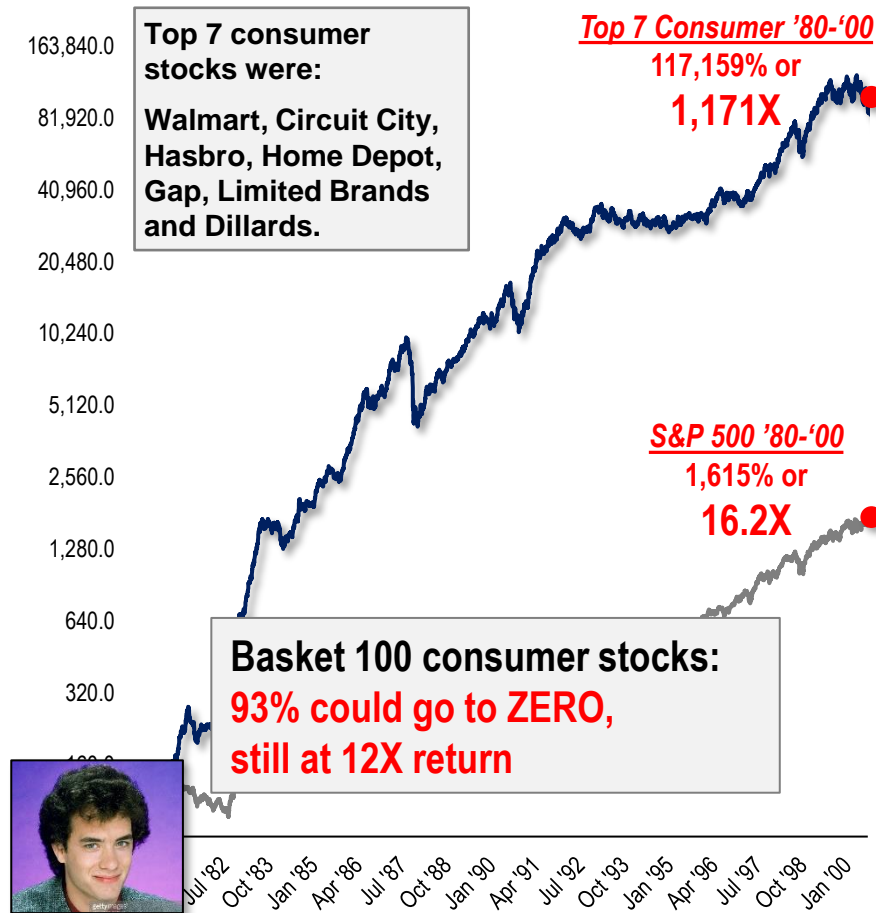


"Generational" Bets paid off for Boomers and for GenX



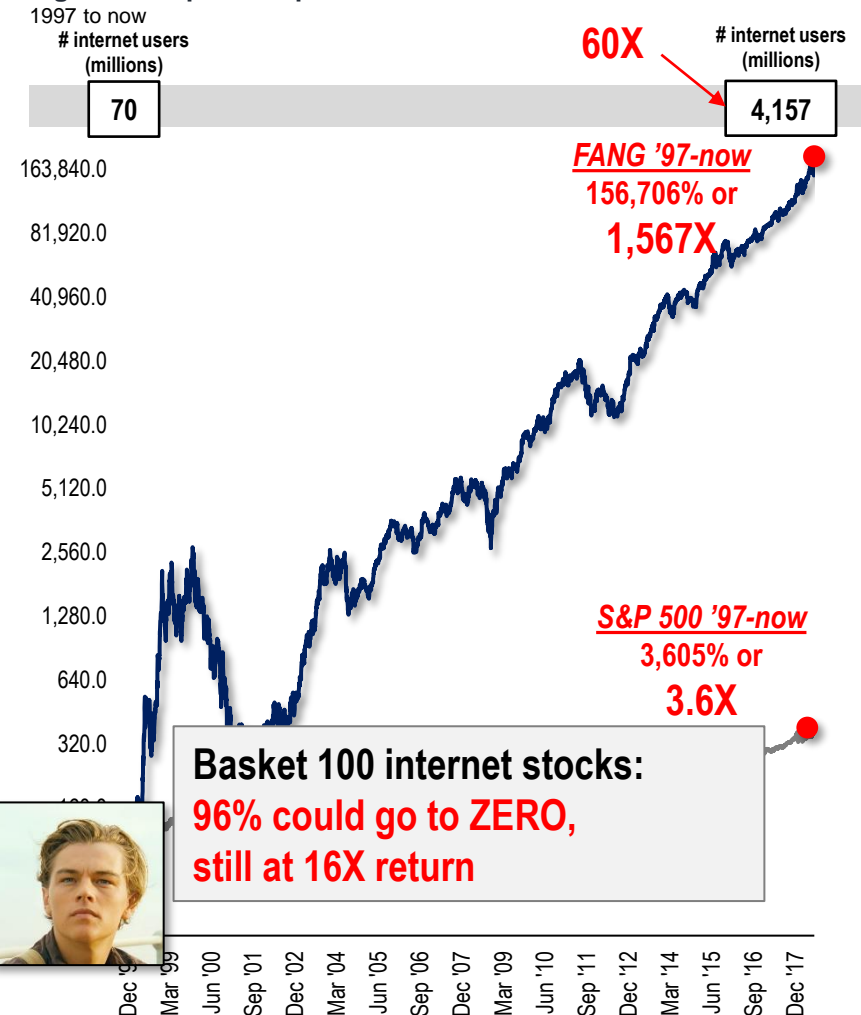
BOOMER SPEND VS PARENTS: Consumer Stocks was right vector

Figure: Comparative performance of Top 7 Consumer stocks
1980 to 2000



GenX FANG: Internet

Figure: Comparative performance of FANG
1997 to now



STRATEGY: Increase “win-rate” of stock picks...

Shaquille:

(career success)

52%



Rick Barry:

(career success)

90%



STRATEGY: Granny Shots represents the “best of the best” from Thematics

The granny shots represent the best of the best from the thematic portfolios.

- This is derived from looking at stocks which appear in multiple themes. As listed on the following pages, no stock appears in 6 of 6 thematics, but AAPL, CSCO, GOOG and XLNX appear in 4 out of 6.

Figure: Granny Shots are the “best of the best”

Stocks which appear in multiple themes.

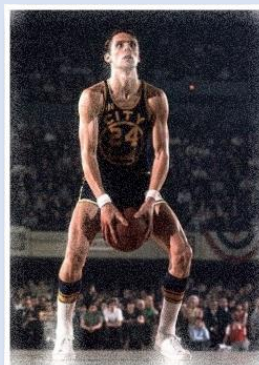
Tactical (6M-12M)

	# stocks
Style tilt	28
Seasonality	22
PMI Recovery	20

Thematic (3Y-5Y)

	# stocks
Millennials	28
Automation/ AI	49
Asset intensity	26

Granny Shots



Rick Barry career free throw percentage was eye-popping 90%, incredible considering Shaquille O’Neal’s only 52%.

His secret? The unorthodox style of underhanded throws, which is considered “not macho” enough for most players.

overlaps
“layups”

Tickers

4

GOOG, AAPL, CSCO
XLNX

3

GRMN, MSFT, MXIM

2

LEN, KLAC, MNST
OMC, GWW, INTC
LOW, AMZN, EBAY
TSLA, PYPL, AXP
BF/B, PM, NVDA
QCOM

GRANNY SHOTS: Beat S&P 500 17 out of the 23 months since inception...

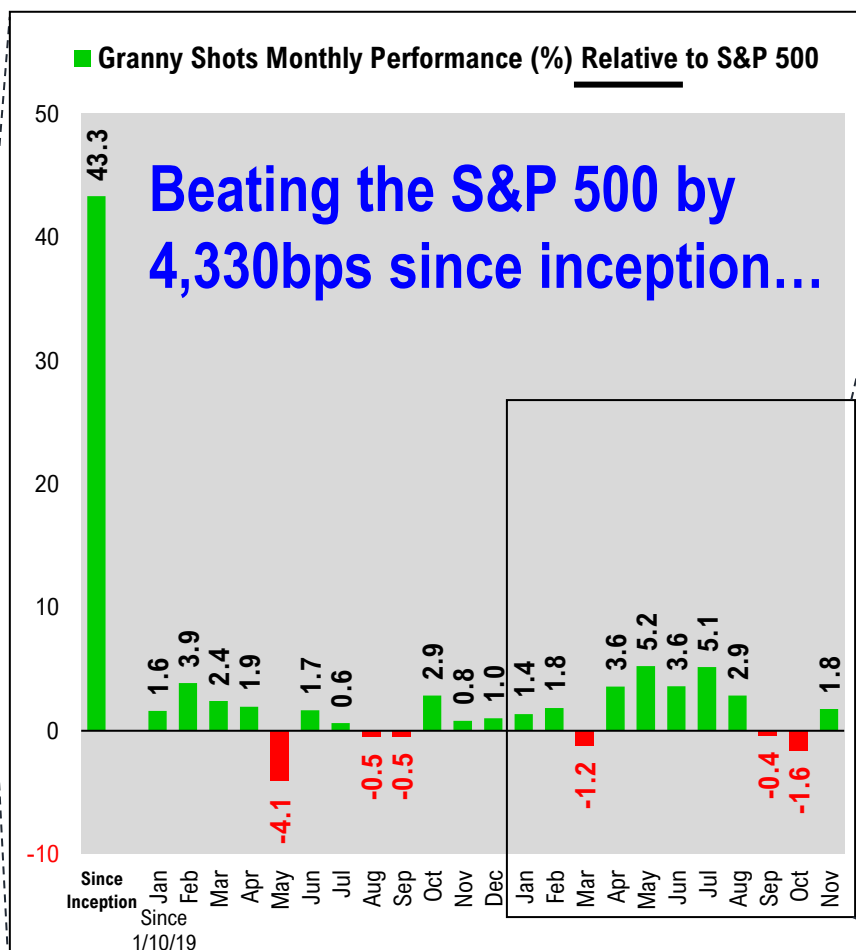
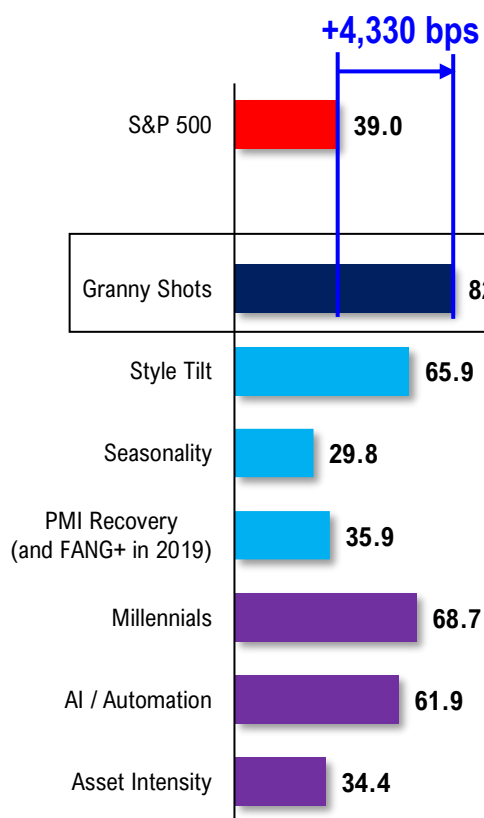
The relative performance of Granny Shots is below and as highlighted, has beaten the S&P 500 by 4,330bp since inception.

- Granny Shots, which are the “best of the best” for our thematic portfolios (and rebalanced every quarter) has consistently outperformed on a monthly basis. It has beaten the S&P 500 by 4,330bp since inception and 2,520bp YTD.

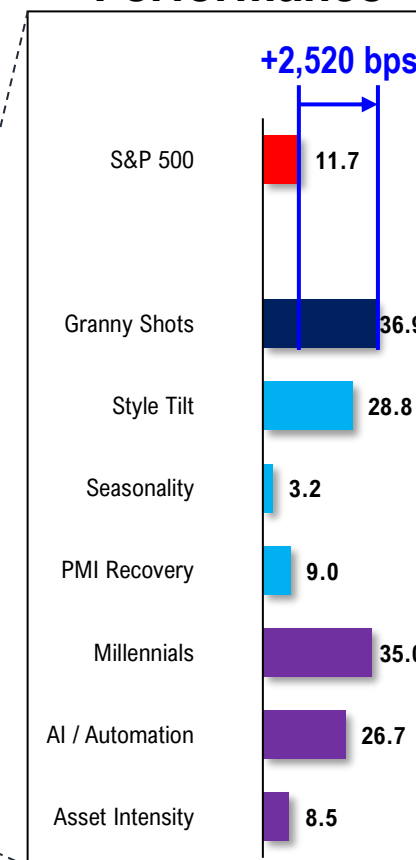
Figure: Granny Shots Portfolio Performance

Monthly; As of 11/17/20

Since Inception (return since 1/10/19)



YTD Performance



Source: Fundstrat, Bloomberg, Factset

Rebalanced

GRANNY SHOTS: Best bets in 2020

We recommend investors our granny shots, comprised of 23 stocks.

- These stocks are recommended across at least two of our investment strategies for 2020, which makes them likely to benefit from multiple themes and secular tailwinds.

Figure: Granny shots – recommended across at least two investment strategies for 2020
Per Fundstrat

Rick Barry career free throw percentage was eye-popping 90%, incredible considering Shaquille O'Neal's only 52%.

His secret? The unorthodox style of underhanded throws, which is considered "not cool" enough for most players.



Company information												Fundamentals & Valuation				Theme Membership						
							Analyst Ratings									Value / Growth Tilt	Seasonality	PMI Recovery	Millennials	AI / Automation	Inflation	Strategy Count
		Current	Mkt cap	3m avg	YTD perf	FC Mean	Mean			Short	2021E	2021E	P/E									
Ticker	Company name	Price	(\$ mm)	daily liquidity	(relative to S&P 500)	(5=Buy 1=Sell) ⁽¹⁾	implied upside ⁽²⁾	Dividend Yield	Issuer Rating	interest % of float	sales growth ⁽³⁾	EPS growth ⁽³⁾	('21E)	ROE								
1	GOOG	Alphabet Inc-CI C	\$1,752.70	\$1,183,655	\$2,964.0	19.6%	5.00	8%	0.0%	AA+	0.9%	21%	19%	28.5x	18%	•			•	•	•	4
2	AAPL	Apple Inc	\$119.22	\$2,026,955	\$18,281.0	50.9%	4.16	6%	0.7%	AA+	0.5%	15%	21%	30.0x	74%	•			•	•	•	4
3	CSCO	Cisco Systems Inc	\$41.95	\$177,260	\$987.2	-24.0%	3.83	16%	3.5%	AA-	1.1%	-1%	-2%	13.3x	29%	•		•	•	•	•	4
4	XLNX	Xilinx Inc	\$130.08	\$31,885	\$413.9	21.6%	3.09	-4%	1.2%	NR	1.5%	12%	32%	38.5x	24%	•	•			•	•	4
5	GRMN	Garmin Ltd	\$114.85	\$21,964	\$82.1	6.2%	3.67	-5%	2.3%	—	1.2%	7%	5%	22.6x	22%	•			•	•		3
6	MSFT	Microsoft Corp	\$212.22	\$1,604,488	\$6,775.0	23.1%	4.79	14%	1.0%	AAA	0.5%	11%	17%	31.4x	41%	•	•				•	3
7	MXIM	Maxim Integrated Products	\$80.06	\$21,400	\$214.3	18.7%	3.22	-6%	2.5%	BBB+ *+	3.3%	13%	22%	29.2x	39%	•	•			•		3
8	LEN	Lennar Corp-A	\$76.68	\$23,417	\$217.1	25.9%	4.14	15%	0.6%	BB+	3.3%	9%	12%	9.4x	14%	•	•					2
9	KLAC	Kla Corp	\$241.76	\$37,343	\$234.3	24.2%	3.90	-6%	1.6%	BBB+	1.9%	8%	18%	19.8x	48%	•					•	2
10	MNST	Monster Beverage Corp	\$84.89	\$44,815	\$179.4	22.1%	4.11	7%	--	—	2.0%	12%	14%	32.5x	27%	•			•			2
11	OMC	Omnicom Group	\$60.57	\$13,020	\$120.1	-36.7%	3.29	-1%	4.4%	BBB+	4.9%	5%	10%	11.0x	38%	•	•					2
12	GWW	Ww Grainger Inc	\$419.51	\$22,514	\$108.1	12.4%	3.48	-8%	1.5%	A+	2.1%	4%	13%	22.8x	31%	•		•				2
13	INTC	Intel Corp	\$45.38	\$185,980	\$1,648.5	-35.7%	3.09	15%	3.0%	A+	2.1%	-6%	-7%	10.0x	29%	•	•					2
14	LOW	Lowe'S Cos Inc	\$149.38	\$112,888	\$681.9	13.2%	4.39	23%	1.6%	BBB+	0.7%	-3%	-1%	17.4x	164%	•				•		2
15	AMZN	Amazon.Com Inc	\$3,117.75	\$1,564,332	\$16,555.9	57.2%	4.89	22%	--	AA-	0.7%	18%	30%	68.8x	25%	•				•		2
16	EBAY	Ebay Inc	\$49.27	\$33,964	\$467.8	25.0%	3.78	26%	1.3%	BBB+	3.1%	7%	9%	13.4x	174%	•					•	2
17	TSLA	Tesla Inc	\$483.41	\$458,226	\$24,921.9	466.3%	2.86	-26%	--	BB-	6.3%	47%	-	nm	5%				•	•		2
18	PYPL	Paypal Holdings Inc	\$191.23	\$224,062	\$1,725.8	65.3%	4.62	16%	0.0%	BBB+	1.2%	19%	20%	42.2x	18%				•		•	2
19	AXP	American Express Co	\$117.23	\$94,394	\$455.1	-17.3%	3.67	-4%	1.5%	BBB+	1.3%	11%	101%	17.5x	15%				•		•	2
20	BF/B	Brown-Forman Corp-Class B	\$80.23	\$37,135	\$58.8	7.2%	2.33	-10%	0.9%	A-	1.6%	6%	8%	42.2x	51%				•		•	2
21	PM	Philip Morris International	\$78.22	\$121,814	\$342.3	-19.6%	4.56	17%	6.2%	A	0.5%	8%	11%	13.7x	—				•		•	2
22	NVDA	Nvidia Corp	\$538.26	\$332,105	\$6,858.6	117.3%	4.44	5%	0.1%	A-	1.0%	19%	21%	48.6x	28%		•			•		2
23	QCOM	Qualcomm Inc	\$150.17	\$169,842	\$1,010.2	58.7%	4.30	4%	1.8%	A-	1.4%	37%	68%	21.4x	95%		•			•		2
Average				\$371,455	\$3,708.8	39.2%	3.90	5%	1.8%		1.9%	12%	20%	26.5x	46%							
Median				\$112,888	\$467.8	21.6%	3.90	6%	1.5%		1.4%	11%	16%	22.7x	29%							
% of stocks positive						78%		61%				87%	83%	100%								

Source: Fundstrat, Bloomberg, Factset

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Positive (+): The analyst expects the performance of his industry/sector coverage universe over the next 6-18 months to be attractive vs. the relevant broad market benchmark, being the S&P 500 for North America.

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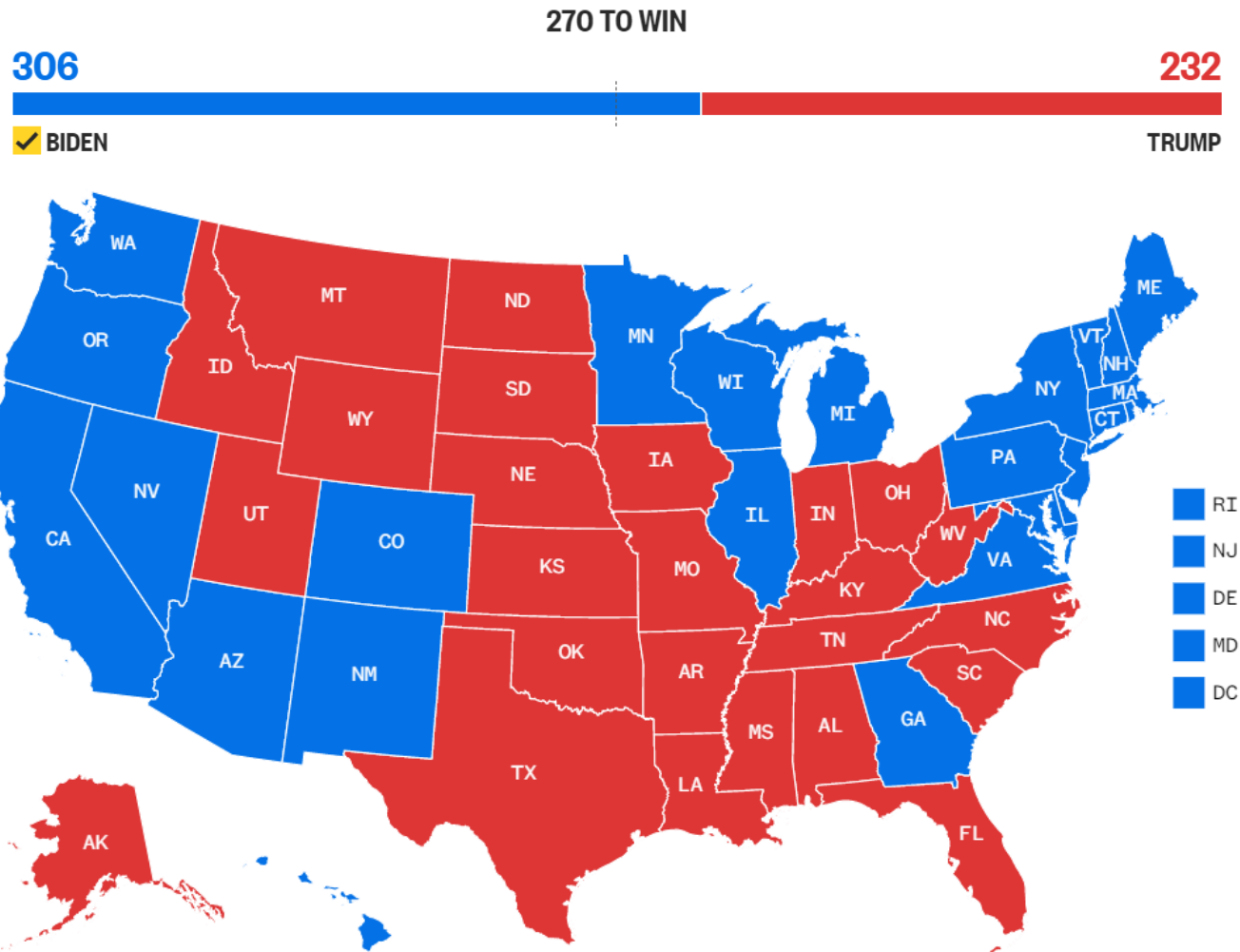
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- **Digital Asset Strategy – David Grider**



L. Thomas Block Washington and Policy Strategist

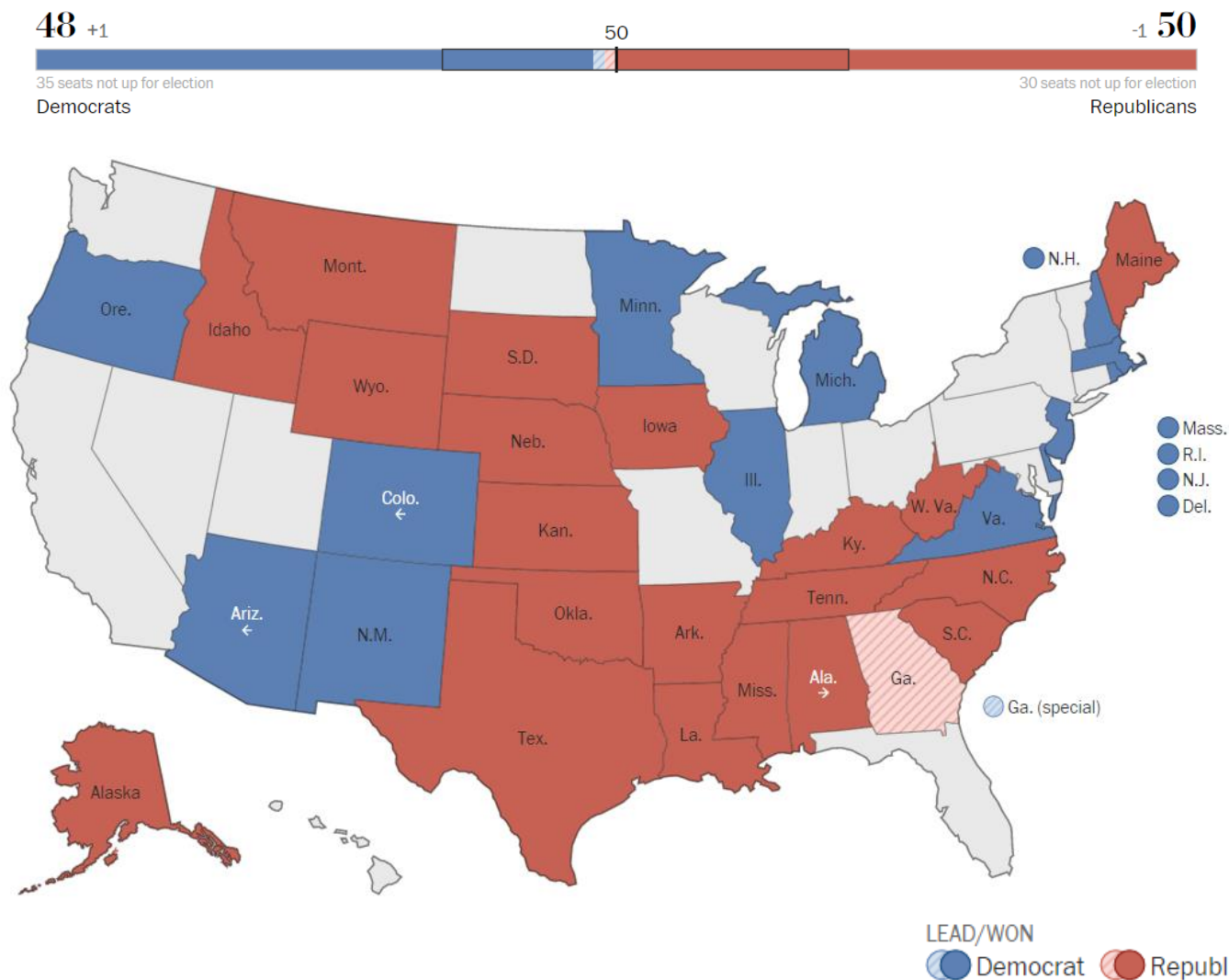
Tom had a 21-year career at J.P. Morgan, as Global Head of Government Relations. Prior to that, he served as Legislative Assistant and Chief of Staff in the House, and Legislative Staff Director in the Senate.

2020 U.S. Presidential Election Results...



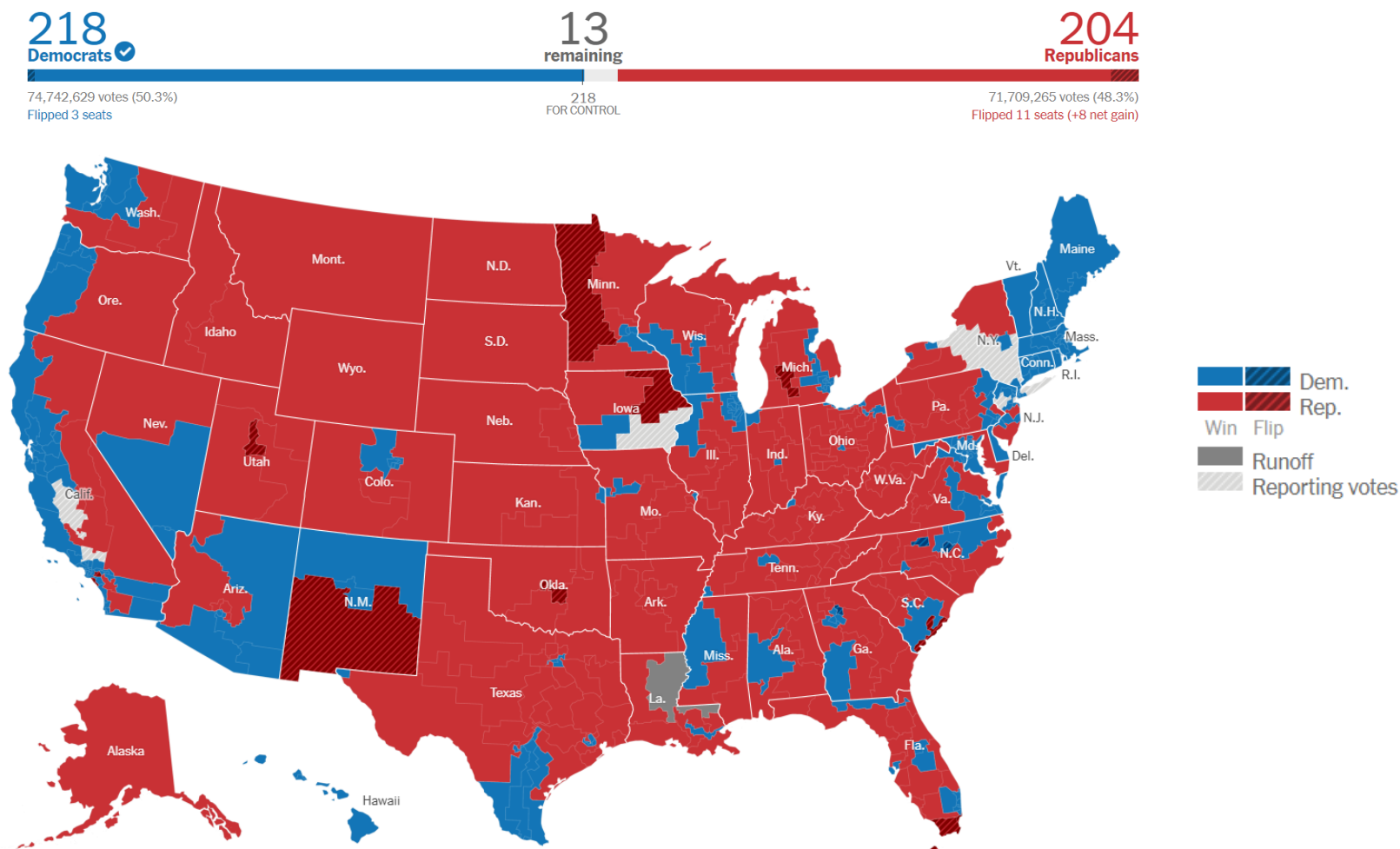
Source: NBC News

2020 U.S. Senate Election Results...



Source: The Washington Post

2020 U.S. House Election Results...



Source: New York Times

Current issues in Washington, D.C.

Stimulus - Can there be a stimulus bill in 2020? What may be in stimulus bill?

- PPP for small business loans
- \$1,200 individual stimulus check
- Extended unemployment and possible supplemental unemployment but less than \$600 a week.
- Funding for schools and vaccine inoculation program.
- Maybe some money for state and local governments, but focused for first responders.

Infrastructure, related to stimulus

- Broadband, program to get broadband into underserved urban and rural areas.

Tax policy

- Divided Congress assure little change in tax policy and protection for most of Trump tax changes.
- Capital gains rate safe even if there is Democratic control of House and Senate. More than one Democratic Senator would support existing capital gains rate.
- Corporate tax could go up but remain below pre-Trump levels.

Healthcare

- Action to follow any ruling from the Supreme Court decision on recently argued case.
- Prescription drug prices, bipartisan appeal.
- A government option under Obamacare, tough but may be doable, high Biden priority.

Environment/Climate Change

- No New Green Deal, but incremental steps to advantage renewables.
- Executive Orders: reversal of Trump Orders ranging from energy to auto emission standards.

Immigration

- DACA likely to be restored by Executive Order, but legislation may put legally sound program into place.
- Possible bipartisan bill to deal with undocumented in the US currently, and new rules for immigration.

Source: Fundstrat

- **Macro Strategy – Thomas Lee**
- **Policy Strategy – L. Thomas Block**
- **Tax Strategy – David Zion, Zion Research Group**
- **Global Portfolio Strategy – Brian Rauscher**
- **Technical Strategy – Robert Sluymer**
- **Digital Asset Strategy – David Grider**



David Zion, CFA, CPA
Research Analyst at Zion Research Group

Prior to founding Zion Research Group, Dave had 20 years of experience as a sell side Accounting & Tax research analyst at Bear Stearns, ISI and most recently Credit Suisse. He started his career as an auditor at Deloitte & Touche.

Dave has been named to Institutional Investor's All-America Research Team multiple times, and was ranked the #1 or #2 Accounting & Tax analyst for 13 out of 14 years.



ZION RESEARCH GROUP

Tax Rates

Movin' On Up

November 2020

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Today's Agenda

- **Higher Taxes Built Into Tax Code Today**
- **Overview of Biden Tax Plan, Focus on Big Three Corporate Tax Changes**
 1. **Increase statutory tax rate from 21% to 28%**
 2. **Increase GILTI (Global Intangible Low Taxed Income) tax rate from 10.5% to 21%**
 3. **Impose a 15% minimum tax on book income**

How Can We Help You?

With a combined 100+ years of buy/sell-side experience, Zion Research Group was founded in 2017 to help our clients overcome roadblocks. We make the complex understandable and useful so that you can uncover the underlying economics and avoid accounting time bombs. We work alongside you in a *confidential*, iterative manner on the companies you own/follow (across sectors/geographies). Set up differently than other shops, here are a few examples of what we do:

Assist with Due Diligence / Identify Risk

You know the companies, we know the accounting

*From big projects to one-off questions, you choose how you want to engage with us.
A company has changed its accounting, is it more aggressive?*

Our forensic analysis can be part of your investment process

Customized to fit your needs.

Earnings/Cash Flow/Balance Sheet quality

What's driving the growing disconnect between earnings and cash flow?

Help!

*A **short report** has been issued; are the points raised legit?*

A company is restating earnings and being investigated by the SEC.

I'm struggling to analyze name the metric on an apples-to-apples basis across peers.

Prep for Meetings / Calls

Digging deeper

I'm meeting with a company and looking for questions to ask.

*I'm pitching a stock, any **red flags**?*

More Research, Less Noiz

Research product that cuts thru accounting noise

*Focus on **underlying economics**, impact on results and changes in behavior (drill down to sectors, companies).*

Complex topics & accounting mumbo jumbo in **plain English**.

Bonus – we don't write that often.

Company Deep Dives – Forensic Analysis

- Find accounting risk before it finds your portfolio.
- Not a cookie cutter approach, its bespoke forensic work.
- We have a different perspective, unbiased/neutral.
- One **blowup** can ruin your year.

Help with Your Models

We're on call and user friendly

Don't be afraid to ask us questions as you're working on your model, you won't feel stupid and we'll try not to put you to sleep.

What's a sustainable tax rate?

Are the Non-GAAP numbers kosher? Etc. etc. etc.

Consistent approach to modeling/valuation

Use our models/tools to help supplement yours in tricky areas where we have an edge, tax rates, pensions, stock comp, etc.

Keeping you Informed

Your time is valuable

Taking stuff off your plate so you can focus on what you do best.

Insert accounting/tax rule here

How does it work? E.g., walk me thru FX & hedge accounting.

There's a new accounting/tax rule in town

*What's the impact on results, how might it change behavior?
E.g., what does Topic 606 mean for the top line and margins?*

Cool Tools

Red Flag Finder
Pension Model, etc.

Data

Buybacks, Non-GAAP,
Pensions, etc.

Education & Training

Practical, customized

Now you know.

Nine Other Reasons Why Taxes Could Head Higher from Here

Even if Joe Biden is not elected, there are a number of factors that could cause corporate tax rates to increase in the future (especially for multinationals), including:

1. Someone eventually has to pay for all this stimulus spending (including you and me).
2. BEAT (Base Erosion and Anti-Abuse Tax) tax rate increased from 5% to 10% last year (then 12.5% in 2026).
3. Continued crackdown on base erosion and profit shifting outside the U.S. (despite Apple's recent tax win over the European Commission) including more countries looking to tax the "digital economy" (e.g., France, Italy and the U.K have all implemented a digital tax).
4. New NOL's can only shield up to 80% of taxable income (though the CARES Act temporarily lifted the 80% cap on NOL usage for 2018 thru 2020, see our March 31, 2020 piece, *Washington Attacks COVID-19 with CARES Stimulus – Top Ten List*).
5. Companies continue to pay the deemed repatriation tax through 2026 (remember it's back-end loaded).
6. In 2022, the limit on tax deductibility of interest expense switches from 30% of EBITDA to 30% of EBIT (the CARES Act temporarily raised the limit to 50% for 2019 and 2020).
7. Also, in 2022, R&D will no longer be expensed immediately for tax but amortized over five years (domestic R&D) or 15 years (foreign R&D).
8. Full expensing of capex will begin to phase out in 2023.
9. A bit further down the road in 2026 both the GILTI (Global Intangible Low-Taxed Income) and FDII (Foreign Derived Intangible Income) tax rates increase from 10.5% to 13.125% and 13.125% to 16.4% respectively.

Further Limit Tax Deductibility of *Net* Interest Expense

What? When? Why? How?

- Limit on tax deductibility of net U.S. interest expense
- 30% of U.S. Adjusted Taxable Income
 - EBITDA from 2018-2021 (CARES Act raised to 50% in 2019 and 2020)
 - EBIT starting in 2022
 - Less tax deductible interest = higher taxable income = higher cash taxes
- Disallowed interest carried forward indefinitely
 - Prevents negative impact on book tax rates, but cash tax rates go up

Real estate, certain
Utilities, car dealers
and small businesses
are exempt

Energy & Materials
Net interest expense > 30% of EBIT

Phasing Out Full Expensing

What? When? Why? How?

- Full expensing of capex for tax purposes (most assets are eligible including used)
- Applies to property acquired after 9/27/17 and placed in service between 9/28/17 and 12/31/22
- Phased out 20% per year starting in 2023
 - 80% bonus depreciation in 2023, 60% in 2024, etc.

Impact of Full Expensing / Bonus Depreciation

	Early Years	Later Years
Depreciation Expense (on tax return)	↑	↓
Taxable Income (on tax return)	↓	↑
Cash Taxes	↓	↑
Cash Flow	↑	↓
GAAP Taxes	No Impact	No Impact
GAAP Net Income	No Impact	No Impact

Communication Services, Energy, Utilities
 CapEx > 40% of CFFO & Deferred Tax Liabilities
 > 20% of Market Cap

After-Tax R&D Budget Takes a Hit

What? When? Why? How?

- Starting in 2022 R&D capitalized and amortized for tax purposes instead of expensed upfront
 - Five years for U.S. R&D
 - 15 years for foreign R&D
- Increases cash taxes but has no impact on GAAP tax rate or earnings
- Companies will be able to keep using R&D tax credit

Biden Top Ten List

From the home office in
Zion National Park, Utah.

		10-Year Revenue Estimate (% of \$2.1T total)
Business	Individual	
10. Restore limit on itemized deduction > \$400k income		\$51.2B (2.4%)
9. Establish a financial risk fee, applies to financials > \$50B in assets		\$84.4B (4.0%)
8. 15% minimum tax on book income		\$108.5B (5.2%)
7. Restore pre-TCJA tax rates on income > \$400k		\$111.8B (5.3%)
6. Phase out qualified business income deduction > \$400k		\$143.4B (6.9%)
5. Limit tax benefit of itemized deductions to 28% of value		\$223.5B (10.7%)
4. Tax capital gains & dividends at ordinary rate when income > \$1M		\$372.7B (17.8%)
3. Double GILTI tax rate to 21%		\$442.1B (21.1%)
2. Increase corporate tax rate to 28%		\$727.3B (34.8%)
1. Apply payroll tax to income > \$400k		\$739.8B (35.4%)

Source: Tax Policy Center

**WARNING – Based on limited information available about
the Biden Tax Plan**

Lots of Potential Tax Rate Losers

Exhibit 2: Estimated Impact of Biden Tax Plan on Tax Rates and Earnings, S&P 500¹

Sector	Number of Companies	Estimated 2019 Effective Tax Rate Biden ²	2019 ¹ Effective Tax Rate	Estimated Increase in Effective Tax Rate Bps	Estimated Decrease in Earnings %
Communication Services	18	27.2%	18.2%	894	-10.9%
Consumer Discretionary	51	29.6%	20.5%	910	-11.5%
Consumer Staples	29	27.8%	21.2%	658	-8.3%
Energy	13	31.7%	24.6%	709	-9.4%
Financials	60	26.2%	19.5%	673	-8.4%
Health Care	49	26.6%	16.3%	1,029	-12.3%
Industrials	63	28.7%	21.2%	749	-9.5%
Information Technology	58	25.1%	15.0%	1,010	-11.9%
Materials	19	26.6%	21.6%	496	-6.3%
Utilities	23	26.6%	18.0%	860	-10.5%
S&P 500³	383	27.0%	18.7%	828	-10.2%

Use most recent fiscal year tax rate (2019) as starting point

Increase statutory rate from 21% to 28%

Increase GILTI rate from 10.5% to 21%

Source: Compustat, Company Filing, Zion Research Group

Note: Analysis excludes the Real Estate Sector and companies domiciled outside the U.S.

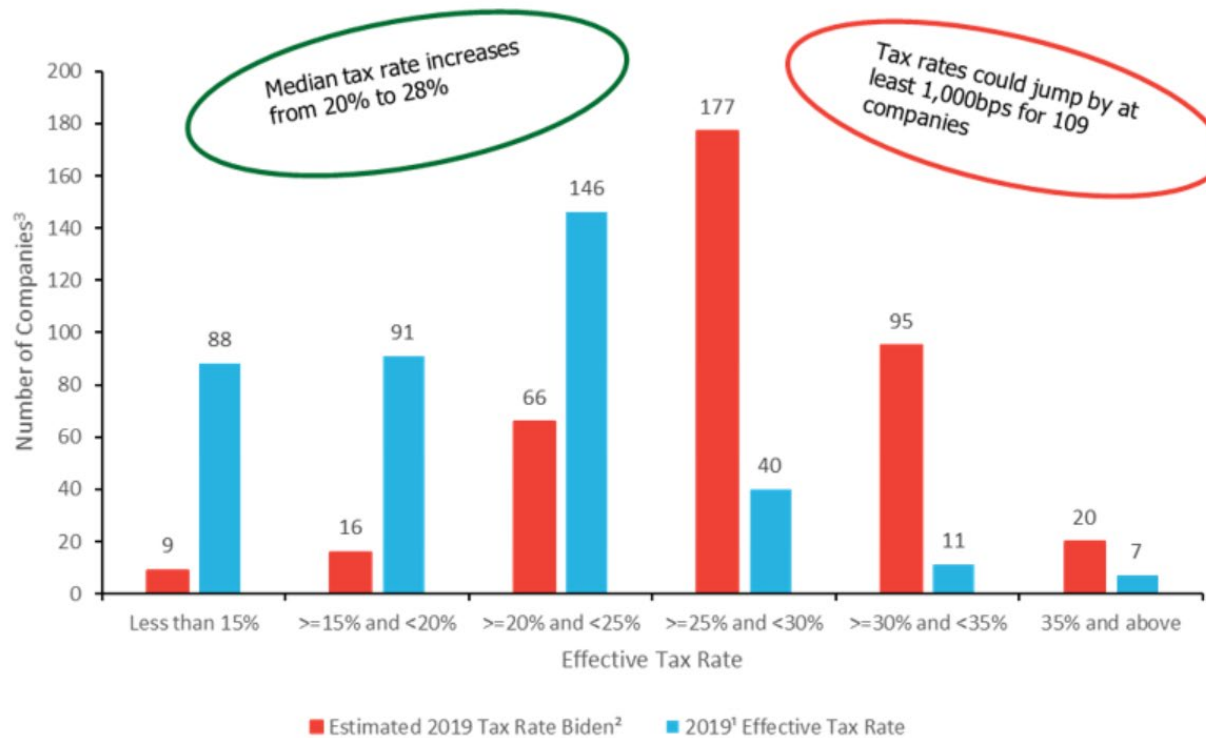
1. We have used 2020 tax rates for companies with fiscal years ending 1/31/2020, 2/29/2020 and 3/31/2020

2. Under the Biden plan, we only factored in three changes, increasing the statutory tax rate to 28%, doubling the GILTI rate to 21% and removing 10% tangible income return.

3. Includes only companies having pretax profits and effective tax rates between 0 and 45% in FY2019.

Some Companies Hit Harder than Others

Exhibit 2: Effective Tax Rates Would Shift Up, S&P 500



Relative Winners & Losers

35 companies' earnings hit by less than 5%

87 companies' earnings fall by more than 10%

They've done studies, you know. 96% of the time tax rates would increase under the Biden plan.



Source: Compustat, Company Filing, Zion Research Group

Note: Analysis excludes the Real Estate Sector and companies domiciled outside the U.S.

1: We have used 2020 tax rates for the companies whose year ending 1/31/2020, 2/29/2020 and 3/31/2020

2: Under the Biden plan we only factored in two changes, increasing the statutory tax rate to 28% and doubling the GILTI rate to 21%.

3: Includes only companies having pretax profits and effective tax rates between 0 and 45% in FY2019.

Tax Rate Estimator (MSFT)

Ticker: MSFT
Company: MICROSOFT CORP
Sector: Information Technology
Industry: Software

Estimated GAAP-Effective Tax Rate (Post Tax Reform)

	Impact of	GAAP Tax Rate
Start	Tax on U.S. Profits (C) = (A) * (B)	12.7%
Subtract	Impact of Deduction on FDII ¹	-1.1%
Add	Foreign Taxes on Foreign Profits ²	7.8%
Add	State & Local Tax ³	1.2%
Add	Limiting Interest Expense Deductibility ⁴	0.0%
Add	Global Intangible Low-Taxed Income (GILTI) ⁵	5.3%
Add	Base Erosion and Anti-Abuse Tax (BEAT) ⁶	0.0%
Subtract	Tax Credits and Deductions	-1.1%
End	New (Estimated) GAAP Tax Rate	24.7%
	GAAP Tax Rate (Last Reported)	16.5%
	Estimated Change in the Tax Rate	8.2%
	Estimated Impact on Earnings	-9.8%

Source: MSFT 10-K, Compustat, Zion Research Group

Note: Amounts may not add due to rounding. We calculate net interest expense as interest expense less interest income. However, the Compustat data item we use for interest income includes dividends.

1: Click here to see the Computation - Impact of U.S. Tax on Foreign Derived Intangible Income (FDII)

Editable Drivers

Non-Editable Drivers

Current driver value is different from the default value

Policy Level Drivers

U.S. Statutory Tax Rate (A)	28.0%
Interest Deduction Limit (as a % of U.S. EBITDA) ⁷	30.0%
Applicable BEAT Tax Rate (Click the box for Banks or Security Dealers) <input type="checkbox"/>	10.0%
GILTI - Tangible Income Rate of Return	0.0%
GILTI - % Deduction Allowed	25.0%
FDII - % Deduction Allowed	37.5%

☐ Disallowed interest expense will impact the GAAP tax rate

Company Level Drivers

US\$ in millions

Pretax Income		
Domestic (B)	\$ 24,116	45%
Foreign	\$ 28,920	55%
% of Domestic Pretax Income that is Derived from Foreign Sources		31.0%
Foreign Effective Tax Rate		14.2%
State & Local Effective Tax Rate		1.6%
Tax Credits and Deductions		-1.1%

There are additional drivers in other sheets

Where could we go wrong?

- Lots of places
- Profit split
- Foreign tax rate
- GILTI
- Tax credits, etc.
- Don't factor in stock comp **excess** tax benefits – low quality



Minimum Tax Rate on Foreign Profits (aka GILTI)

Biden Plan now proposing to end the “**Trump Loophole**”

What? When? Why? How?

- **10.5% (21%-Biden) Tax on Global Intangible Low-Taxed Income – GILTI TAX**
- Taxes foreign net income over and above a “tangible income return” (10%) and interest expense
- Foreign tax credit for 80% of foreign taxes paid
- Avoid the tax by paying a tax rate of 13.125% (10.5%/80%) or higher overseas, (jumps to 26.25% under Biden)
- Meant to penalize companies for shifting profits to low tax countries

“Fiddy” Patent Box

- Foreign derived intangible income (FDII) earned in U.S. (think exports of goods or services) taxed at 13.125% rate
- Meant to incentivize companies to keep IP in the U.S.



More companies GILTI under Biden Plan

72% with foreign tax rate < 26.25%, only 29%
with foreign tax rate < 13.125%

GILTI Tax

US\$ in millions

1: Computation - Impact of U.S. Tax on "Global Intangible Low-Taxed Income (GILTI)"

	Value		Value
A. Foreign Tangible Assets	\$ 42,504	H. GILTI $\text{MAX}(G - D, 0)$	24,809
B. Tangible Income Rate of Return	0%	J. Gross GILTI $(H / (1 - F))$	\$ 28,920
C. Foreign Interest Expense		K. Amount on which GILTI Deduction is Disallowed (See table 3 below for calculation)	-
D. Net Deemed Tangible Income Return $\text{MAX}((A * B) - C), 0)$	\$ -	L. GILTI Deduction $(J - K) * 25\%$	7,230
E. Foreign Pretax Income	28,920	M. Credit for Foreign Taxes $\text{MAX}(J * F * 80\%, 0)$	3,289
F. Foreign Tax Rate	14.2%	N. Tax on GILTI $\text{MAX}(0, 28\% * (J - L) - M)$	2,785
G. Foreign Net Income $(E * (1 - F))$	\$ 24,809	P. Pretax Income	53,036
		Q. Impact on Tax Rate from GILTI (N / P)	5.3%

Note: All company level data is based on the most recent five-year weighted average

Biden plan now proposing to
eliminate 10% return threshold

Currently 50% of income taxed at 21% rate (i.e., 10.5%), under Biden 75% of income taxed at 28% rate (i.e., 21%)

Foreign income and foreign tax rate are key estimates

Biden proposing **country by country** basis – Tax paid in high tax rate country could **not** be used as tax credit to reduce GILTI tax due on profits from low tax country

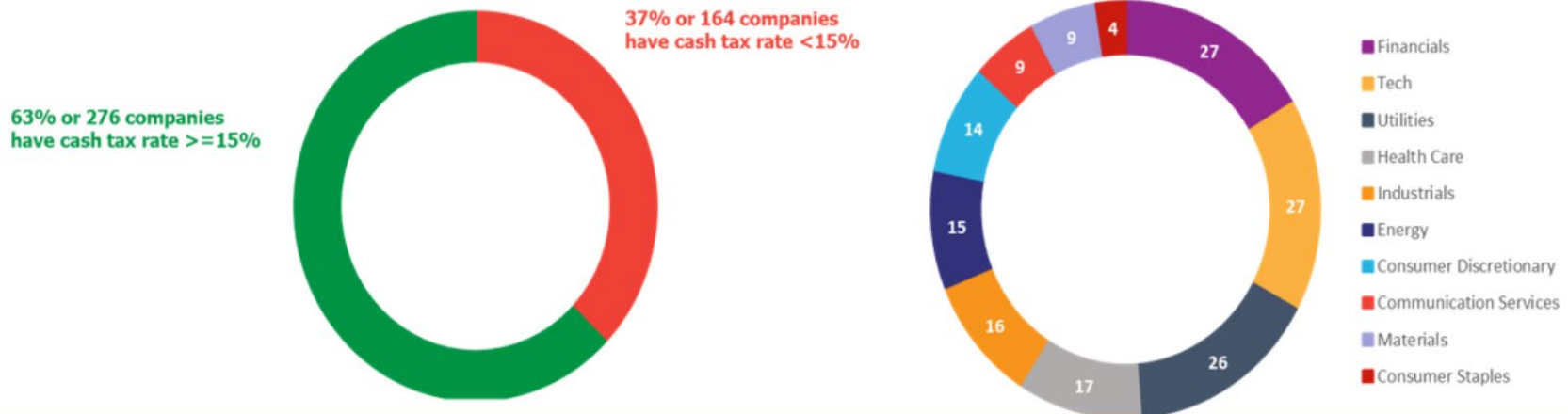


Ask Questions about Key Drivers to Fine Tune Tax Rate Estimates

- **What's the Foreign/Domestic profit split?** 45% Domestic for MSFT in fiscal 2020 is highest in past five years. Not that long ago very little U.S. profit (e.g., 2% of total in 2017).
- **What's the expectation for foreign effective tax rate going forward and why?** It has bounced around a bit but on average less than 15% (that's pretty darn low when you look at tax rates around the globe).
- **What's their guidance for tax credits?** R&D credits reduced the tax rate by 110bps in 2020 and 2019.
- **What amount of U.S. profits come from foreign sources?** We backed into 31%, its important as it drives the FDII benefit.
- **What's the expectation on stock comp excess tax benefit?** We left it out as its low quality since its entirely dependent upon the stock price (though its been pretty consistent: between 2% and 2.7% over past five years).

In Search of Exposure to 15% Minimum Tax on **Book** Income

Exhibit 3: Looking for Exposure to a 15% Minimum Tax, Focusing on 2019¹ Cash Tax Rates, S&P 500



Source: Compustat, Company Filing, Zion Research Group

Note: Analysis excludes the Real Estate Sector and companies domiciled outside the U.S.

1: We have used 2020 tax rates for the companies whose year ending 1/31/2020, 2/29/2020 and 3/31/2020

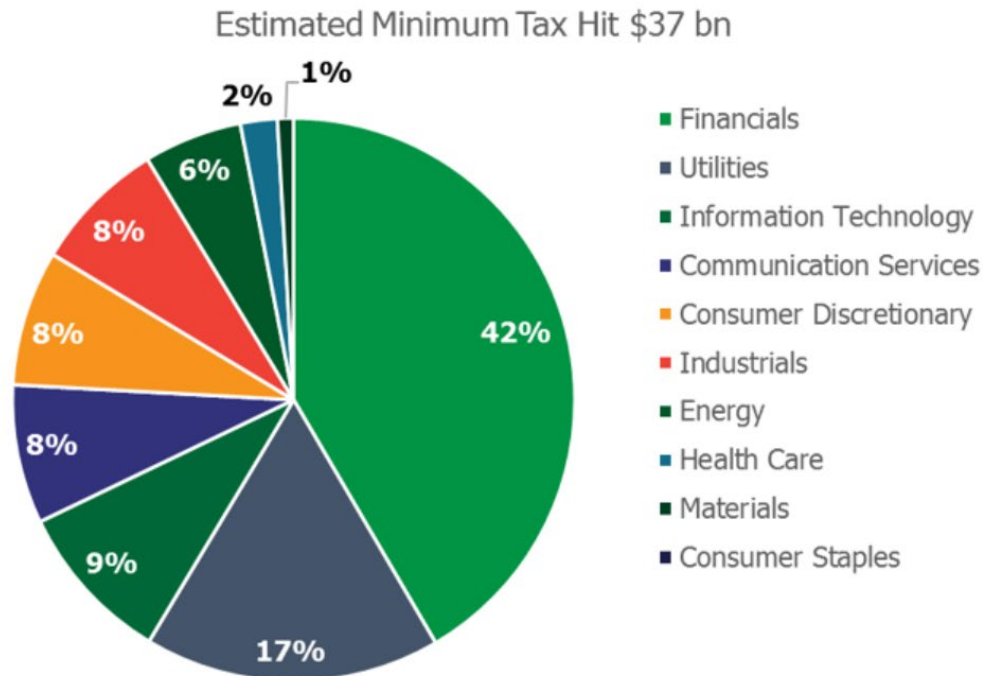
Applies to companies with $> \$100$ million in profits

Assume its an alternative minimum tax

Allows use of foreign tax credits and NOLs to reduce tax due

15% Minimum Tax Highly Concentrated

Exhibit 4: Estimated Minimum Tax Hit by Sector, S&P 500



117 S&P 500 companies
>\$100 million net income,
<15% cash tax rate

Apply 15% tax rate, min
tax of \$60B, \$37B tax hit

16 companies nearly 70%
of tax hit

Expect actual impact to be
less than our estimate

Source: Capital IQ, Zion Research Group

Note: Includes only the 117 companies with net income over \$100 million and cash tax rate ≤15%

15% Minimum Tax - Back of the Envelope (AT&T)

Minimum Tax = 15% of Book Income

- \$2,770 million = 15% x \$18,468 million

Cash Taxes Paid

- \$1,421 million

Assume 15% min tax was
in effect for 2019

Estimated Min Tax Hit = Difference between Min Tax and Taxes Paid

- \$1,349 million = \$2,770 million - \$1,421 million

Increases cash tax rate from 7.7% to 15%

	2019	2018
Depreciation and amortization	\$ 44,896	\$ 43,105
Licenses and nonamortizable intangibles	17,355	17,561
Employee benefits	(5,143)	(5,366)
Deferred fulfillment costs	3,050	2,679
Net operating loss and other carryforwards	(7,301)	(6,470)
Other – net	1,536	1,651
Subtotal	54,393	53,160
Deferred tax assets valuation allowance	4,941	4,588
Net deferred tax liabilities	\$ 59,334	\$ 57,748

What can cause those deferred
tax liabilities to come due?



Problems with a Tax on Book Income

1. *Non-GAAP on steroids!* With a real economic incentive to keep book income down (paying less in taxes), we'd expect companies will go all in on non-GAAP, trying to paint an even prettier picture of their results (especially if they try to make their GAAP results look worse to pay less in taxes).
2. *The FASB would effectively be setting tax policy, who elected them to do that job?* We'd expect projects like amortizing goodwill would suddenly get very popular. In fact, on July 15th (Tax Day), six of the seven board members were supportive of doing research on the possibility of amortizing goodwill (we can't make this stuff up). The cost/benefit analysis of future accounting rule changes would be very different than today.
3. *Companies would set their own tax policy too, aren't their lobbyists doing that now anyway?* That's a result of the wide variety of management judgment calls that go into GAAP earnings (e.g., shrink depreciable lives to increase depreciation expense to reduce earnings and pay less in taxes; or more write-offs?).
4. *Time to get packing.* Increasing the tax rate would once again provide incentive for companies to leave the U.S. for the smiling shores of Ireland, etc. How about we actually try to fix the tax code instead?

Yikes! Non-GAAP could get even more popular.

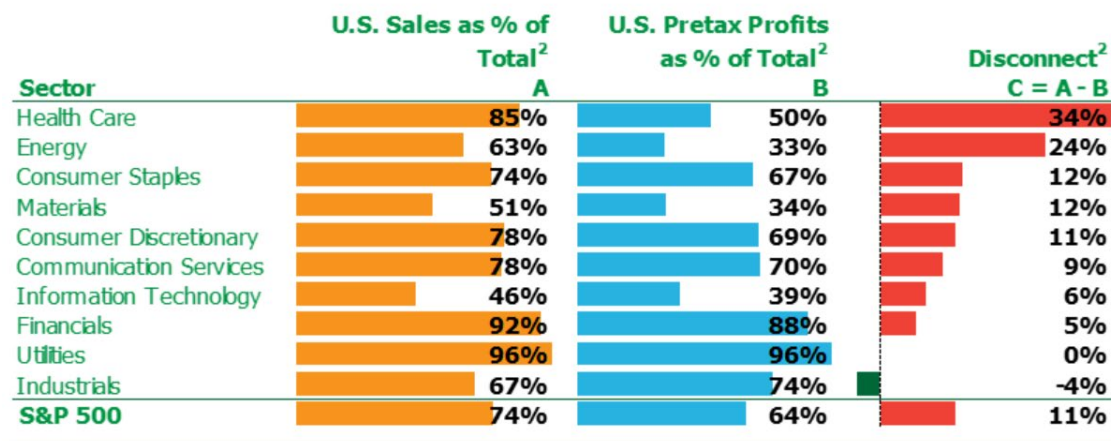
Moving abroad may prove costly as Biden proposed implementing "strong anti-inversion regulations and penalties"

How about just fixing the tax code instead!

What to Watch Out For

- High % of profits from the U.S. – hit by increased statutory tax rate
- Low foreign tax rates – hit by GILTI
- Low cash tax rates – hit by minimum book tax
- Large deferred tax liabilities – hit by increased statutory tax rate
- U.S. Sales (% of total) > U.S. Profits (% of total) – could be exposed to 10% Biden Offshoring Tax Penalty surtax (pay a 30.8% tax rate on profits from overseas production/services sold in U.S.)

Exhibit 1: Disconnect may Signal Offshoring, S&P 500¹



Source: Compustat, Zion Research Group

Includes only 294 companies having total pretax income and pretax foreign income.

1. Excludes Real Estate sector and companies domiciled outside the U.S.

2. The analysis covers the last 2 fiscal years.

What People are Missing

- **Devil is in the details – there will be relative winners & losers**
- **Impact on the balance sheet, DTA & DTL will increase**
- **15% minimum book tax could effectively cancel some of the benefits of bonus depreciation**
- **Lots of confusion on all the different rates**
- **Its not all bad news**
 - **Biden Made in America 10% tax credit for investments to create American jobs**
- **Variety of other reasons why tax rates were already headed higher...**

Disclosures

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Moving Away from Pandemic Positioning for a Profit Recovery

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What We Have Been Saying?

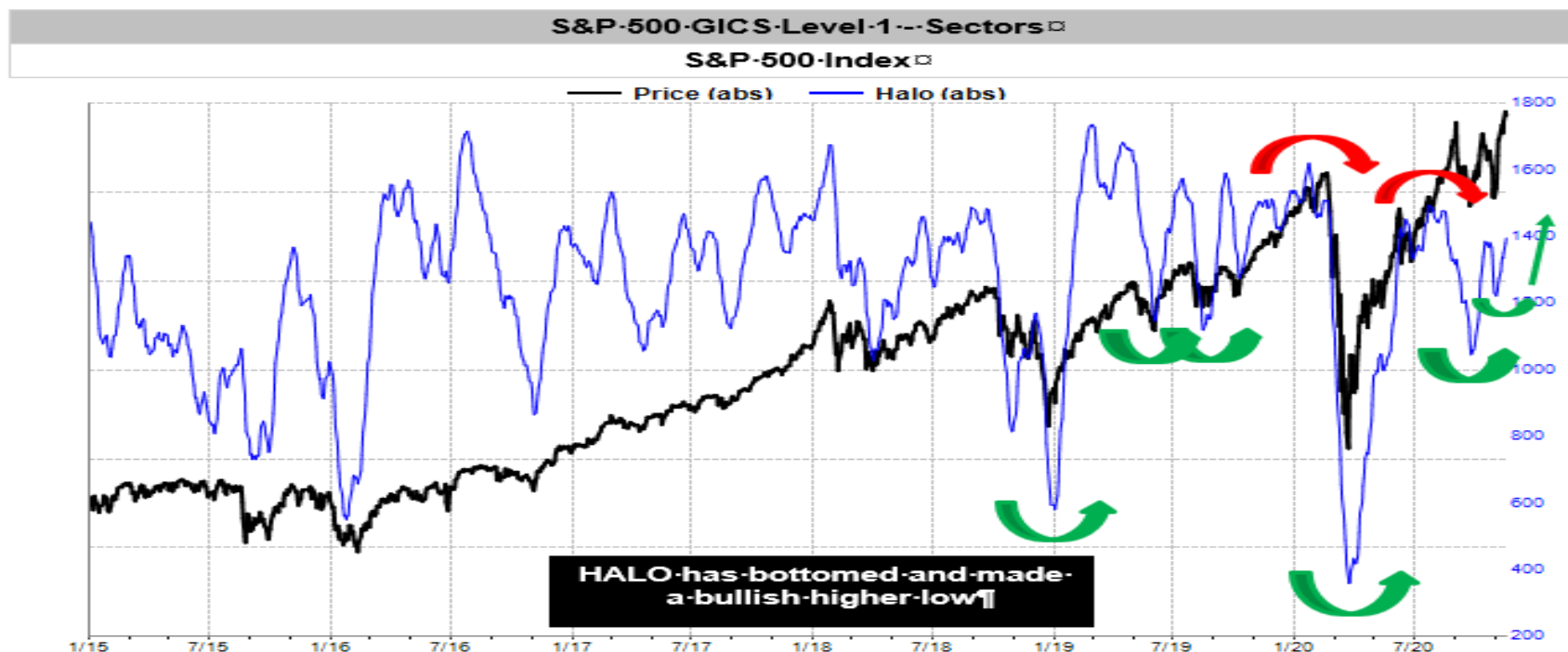
- 3/20 – Tactical bottom is likely as indicators turning up from extreme negative readings.
- 3/26 – Bottom for equities was in and expect new highs before year end – Barbell positioning mix of Growth/FAANG and Value Cyclicals avoid Cash and traditional defensive areas (Staples, Utilities, Real Estate, and Legacy Telecoms).
- 4/2 – Reiterate equity bottom is in and urge investors to look ahead, buy any dips that may occur, retain the barbell (Growth/FAANG & Value/Cyclical).
- 5/1 – 10/1 – Reiterate bullish views, buy dips, and keep the barbell.
- 10/12 – Still bullish, barbell appropriate BUT begin to shift more towards Value/Cyclical.

Ok, So Where are We Now?

- **Tactically bullish** as our preferred shorter-term indicators have all turned favorable.
- **Medium-term bullish** as our proprietary earnings revision work remains quite favorable combined with accommodative liquidity/stimulus backdrop, as well as our expectations that we will be moving towards economic recovery following vaccine announcements.
- Still holding the barbell but continuing our ongoing move towards Value/Cyclicals. The pace will likely accelerate as time passes.
- Despite ongoing bearish forecasters and the unknown election outcome, keep your eyes on the bigger picture – **PROFITS RECOVERY**.
- **STAY BULLISH** and view tactical dips, as the result of macro headlines, as opportunities to raise exposures in strong earnings revisions areas and single stock names.

Tactical Indicators Are Favorable

Preferred Tactical Indicator is Bullish Again



Source: FSInsight

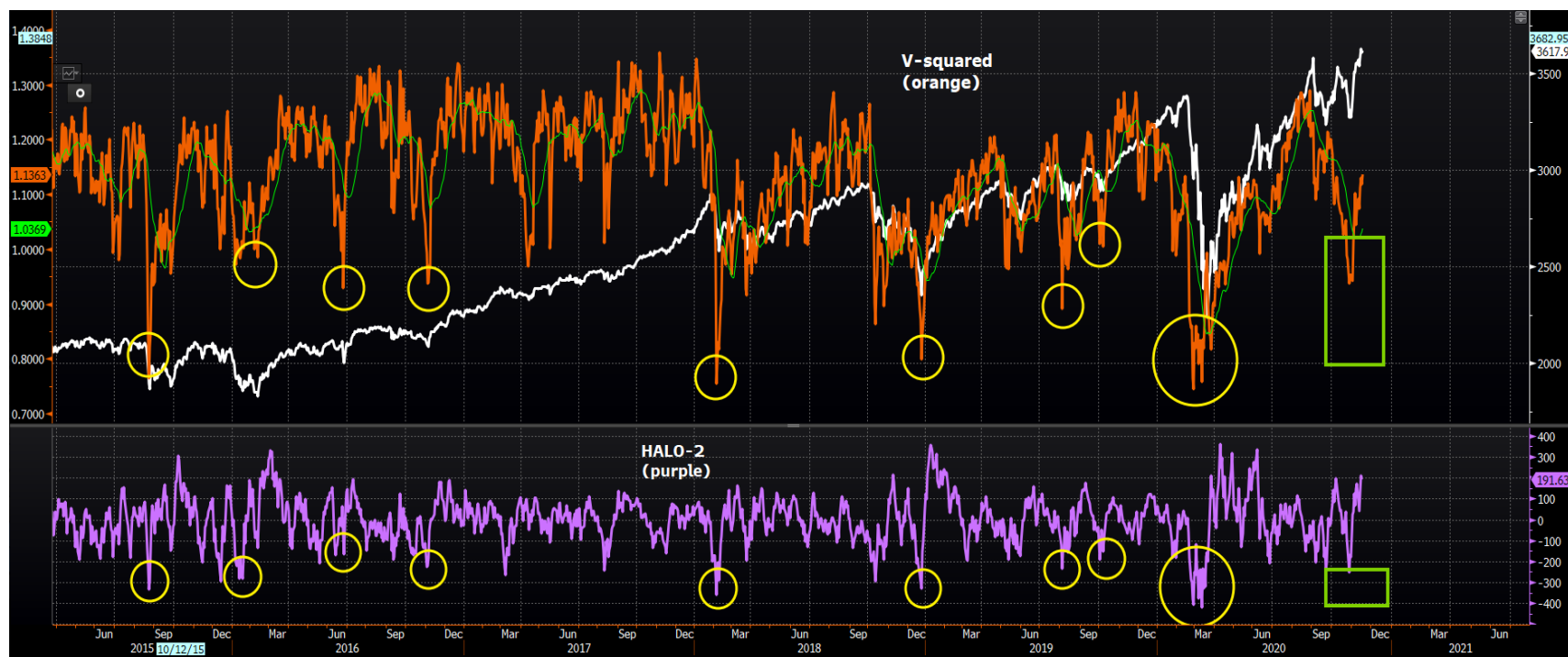
* NOTE – The proprietary Fundstrat Portfolio Strategy Halo Model is a multi-factor model that attempts to predict the forward 1 – 6 month relative performance of a group. The goal is to help both strategic accounts better time their implementation strategies that would be consistent with our more strategic conclusions derived by our sector/sub-industry 8-panels as well as our stock specific Estimate Revisions Model (ERM), and to generate tactical ideas for aggressive trading accounts.

The model has both momentum and contrarian characteristics. When the blue line, which is the model, is trending, our proprietary tool is in a momentum phase, and our research shows a high probability that relative performance will mirror the slope of the line. Importantly, because the model is built to oscillate, an extreme reading that inflects strongly suggests that a reversal in the most recent performance trend is likely to occur.

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Aggressive Tactical Indicators Have Once Again Been Helpful



Source: FSInsight and Bloomberg

** NOTES – The proprietary Fundstrat Portfolio Strategy V-squared indicator shown in the [top chart](#) (orange line) shows the ratio of VXV (the 3-month CBOE S&P 500 Volatility Index) and the VIX (the 1-month CBOE S&P 500 Volatility Index). This tool is also useful for identifying aggressive tactical trading bottoms for the S&P 500.

The proprietary Fundstrat Portfolio Strategy HALO-2 Model, which is the purple line in the [lower chart](#) shown above, is the raw tactical data behind our standard HALO multi-factor model described on the previous page. It is useful for identifying aggressive tactical trading bottoms for the S&P 500.

Frequent Client Questions

Top Questions Clients Have Been Asking?

- Is the U.S. Equity markets disconnected with reality ?
- Is the S&P 500 extremely overvalued ?
- Should investors finally be moving away from our recommended barbell (Growth/FAANG & Value/Cyclicals) positioning ?
- Will the equity markets start evolving from macro/technicals (BETA) to fundamentals/earnings revisions (ALPHA)?
- How should one be positioned at the sector (GICS L-1) level, as well as what individual stocks look interesting ?

Frequent Client Questions

Our Answers

Is the U.S. Equity market disconnected with reality?

- **Our answer is NO.** The ongoing market rise has and continues to make TOTAL sense to us.
- Robust earnings revision backdrop is key underpinning for equity gains and far from peak optimism based on our work.
- Investors should be valuing the S&P 500 and its constituents on some type of forward normalized earnings and NOT trough profits.
- Valuation expansion that is based on historical factor analysis of what drives multiples.
- Unprecedented monetary and fiscal policy and more is likely to come.
- Continued skepticism by investors, which is a contrarian positive, and still helping equities climb the proverbial Wall of Worry.

Is the S&P 500 extremely overvalued ?

- **Our answer is NO.**
- Use normalized OEPS not depressed 2020 levels. Hence, we think investors should be using at least year-end 2021 OEPS, and better yet would be year-end 2022, which we preliminarily estimate to be in a range of \$180-200.
- Fair value forward P/E calculation should take into account interest rates, inflation, and the monetary policy backdrop. With all these factors near maximum bullish, our research shows that the forward P/E multiple for the S&P 500 should reach 20-22x, at minimum.
- Thus, based on these two components of getting to a target for the S&P 500, **we see a range of 3600 (20 x \$180) to 4400 (22 x \$200) as achievable over time.** Importantly, this would suggest that not only is the index not extremely overvalued, but also that there is plenty of upside remaining for investors.

Should investors finally be moving away from our recommended barbell (Growth/FAANG & Value/Cyclicals) positioning ?

- **Our answer is YES,** investors should be moving away from Growth/FAANG (not abandoning) and raising exposure to Value/Cyclicals. This is a process that will likely have more to go over time.
- Cash levels should be at the lower end of normal.
- Weightings in traditional defensive areas of the equity market — Staples, Utilities, Real Estate, and legacy Telecom within Comm Services sector — should be below benchmark and any tactical outperform periods can be used to sell into.
- Importantly, our work still recommends a barbell approach of having some of both Secular Growth/FAANG and Value/Cyclicals while COVID is still on the front page.
- Once we get closer to moving past pandemic fears, we will shift even further towards Value/Cyclicals and take some profits in Secular Growth/FAANG.

Will the equity markets start evolving from macro/technicals to fundamentals/earnings revisions?

- **Our answer is YES.**
- Initial bounces tend to do little with operating fundamentals or with single stock idiosyncratic factors, but more to do with behavioral/psychological, fear, greed, technicals, and news releases.
- However, as the healing process continues there is a transition as the environment reverts to more fundamental or operating indicators and correlations fall.
- **Thus, it will become even more critical going forward to be aware of the earnings revisions at the single stock level and our ERM model will be a valuable process tool to help investors generate excess returns (Alpha).**

Macro Conclusions

- Is the U.S. Equity market disconnected with reality?

Our answer is NO.

- Is the S&P 500 extremely overvalued ?

Our answer is NO.

- Should investors finally be moving away from our recommended barbell (Growth/FAANG & Value/Cyclicals) positioning ?

Our answer is YES, but slowly and with more to come.

- Will the equity markets start evolving from macro/technicals to fundamentals/earnings revisions?

Our answer is YES.

Macro Conclusions

Staying Bullish

Looking for New Highs

Buying Tactical Weakness

Shifting Towards Value/Cyclicals

Global Portfolio Strategy

SECTOR & STOCK IDEAS

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Global Portfolio Strategy

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MULTI-FACTOR APPROACH

MOST IMPORTANT INPUT

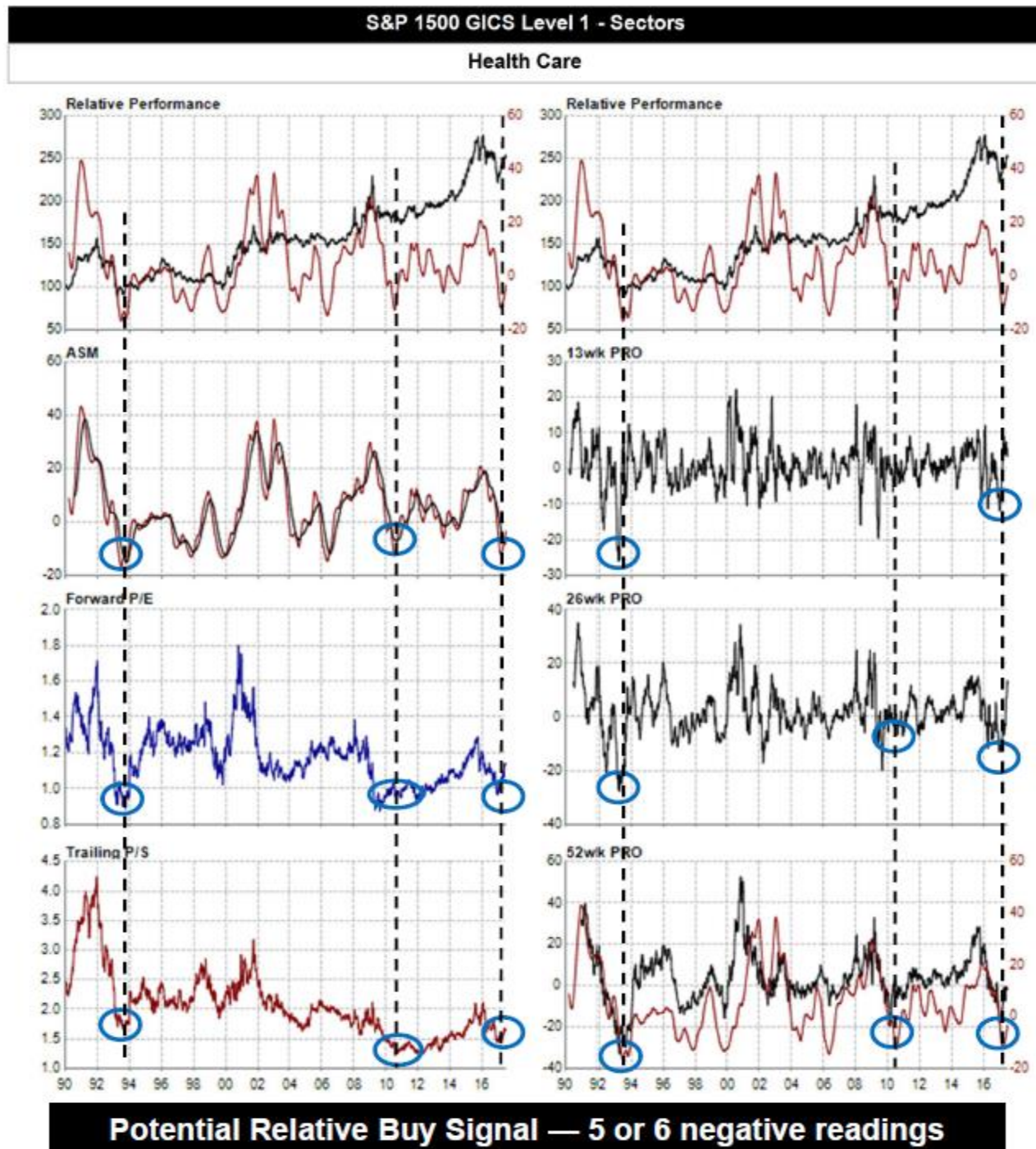
ANALYZING PROFIT CYCLES

HOW DO YOU DO SECTOR/INDUSTRY SELECTION?

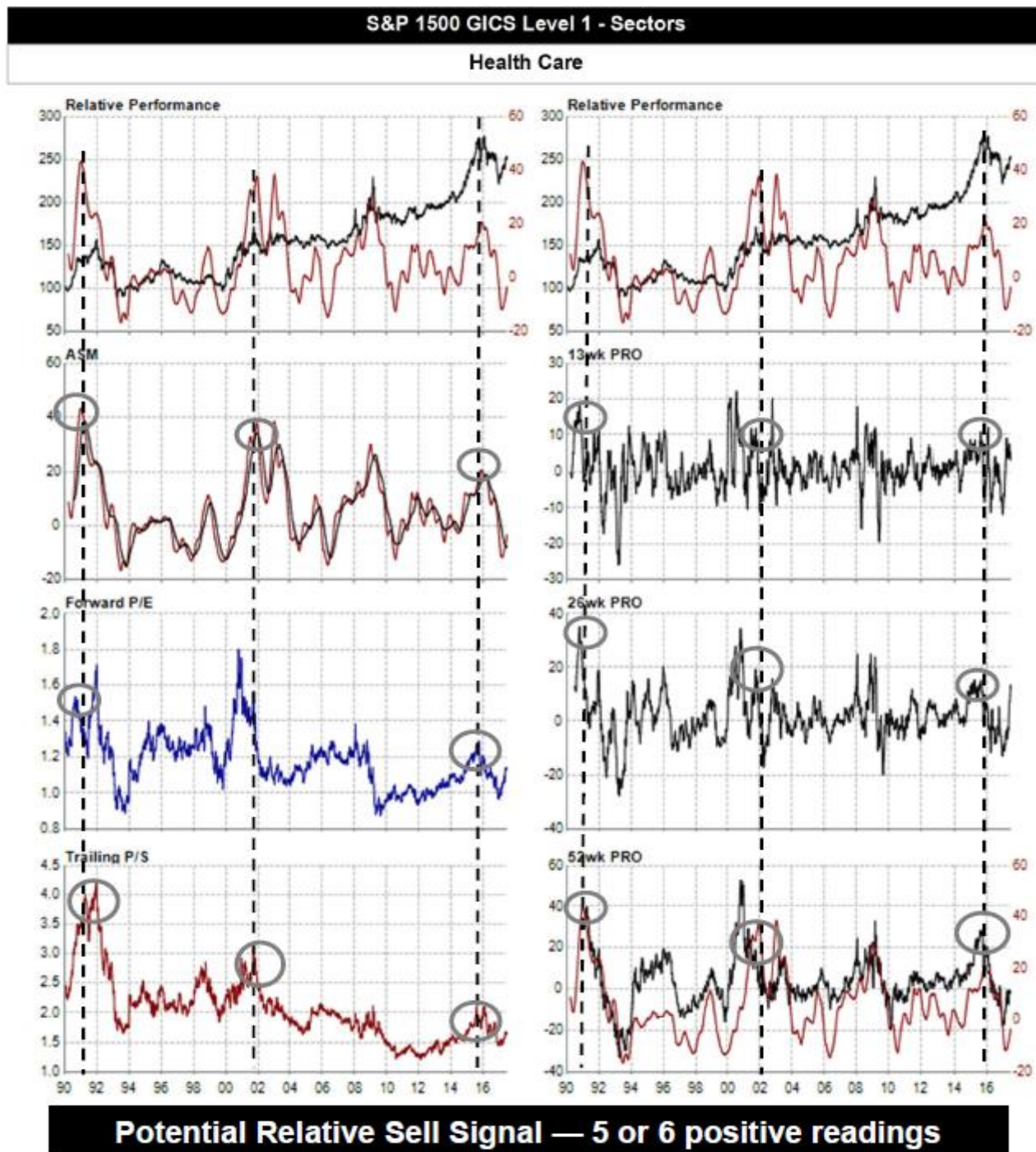
PROPRIETARY METHODOLOGY

8-PANEL ANALYSIS

8-PANEL ANALYSIS – BUY SIGNAL CLUSTERING



8-PANEL ANALYSIS – SELL SIGNAL CLUSTERING



Sector

Recommendations

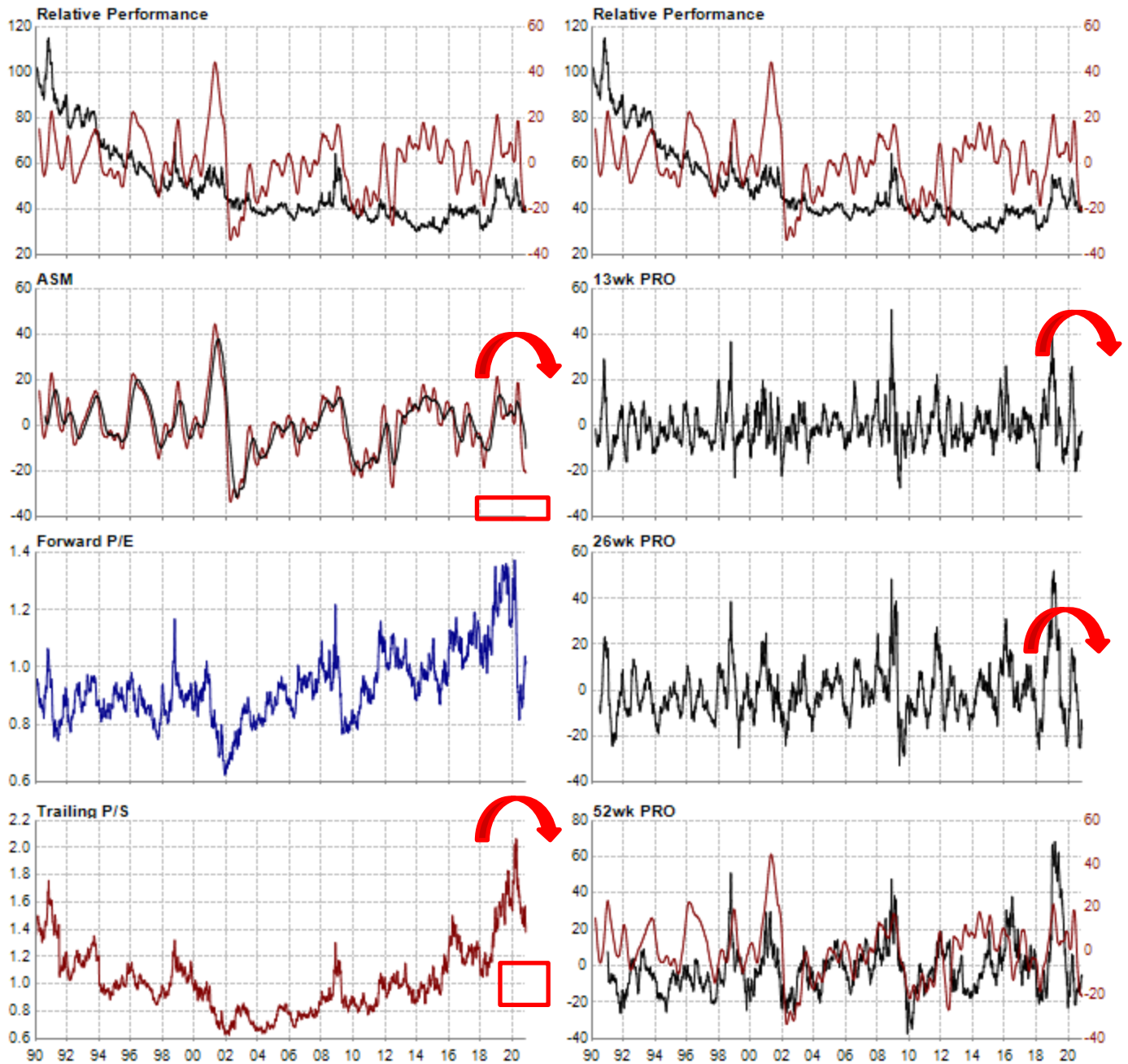
Consumer Disc Industrials Materials	ABOVE
Comm Services Technology	TILT - ABOVE
Health Care	NEUTRAL
Financials Utilities	TILT - BELOW
Energy Staples Real Estate	BELOW

LEAST FAVORITE SECTORS

Sectors (GICS L-1)	ETF
<u>Name</u>	<u>Ticker</u>
Utilities	XLY
Energy	XLI
Staples	XLB
Real Estate	XLRE

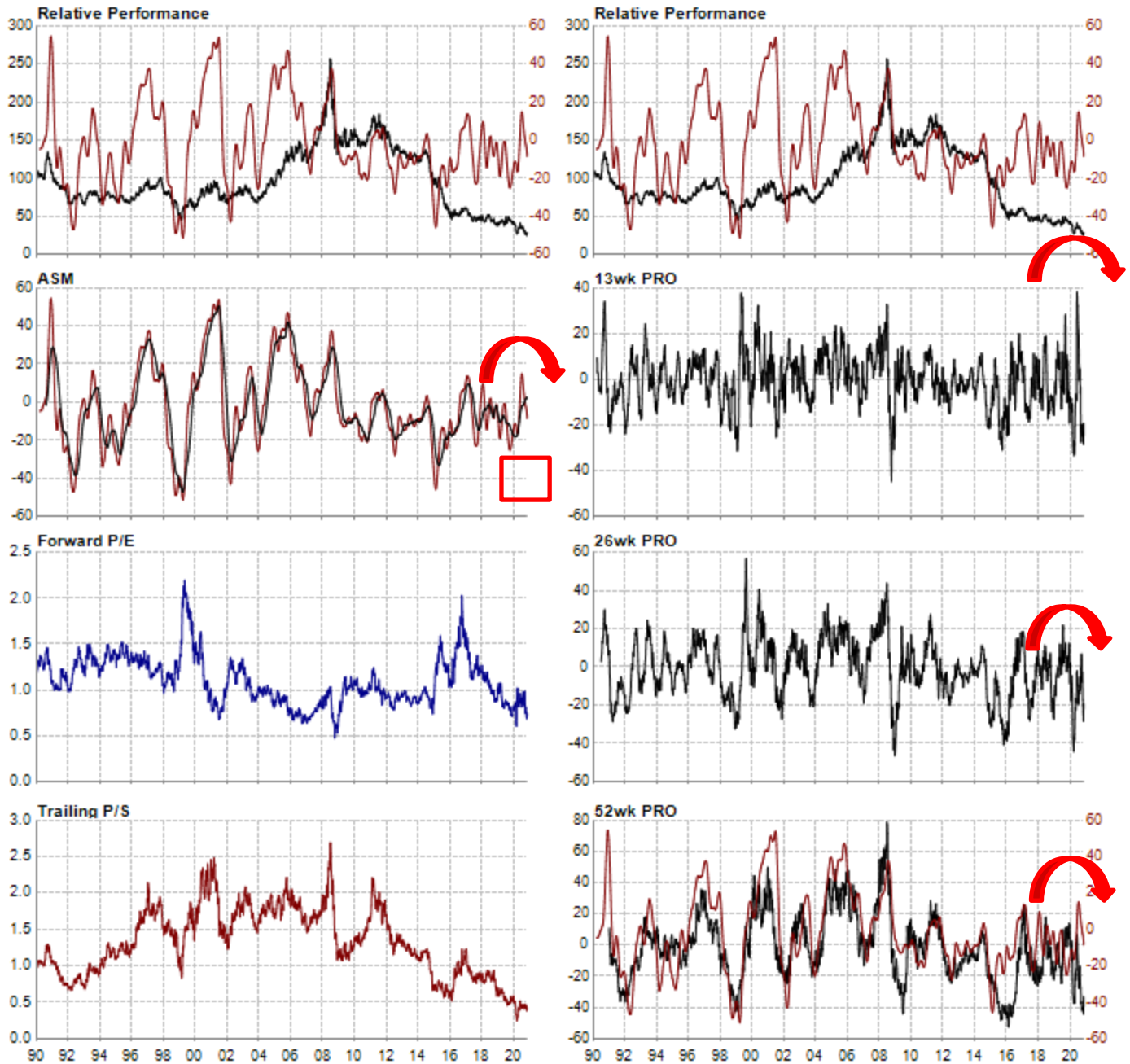
S&P 1500 GICS Level 1 - Sectors

Utilities



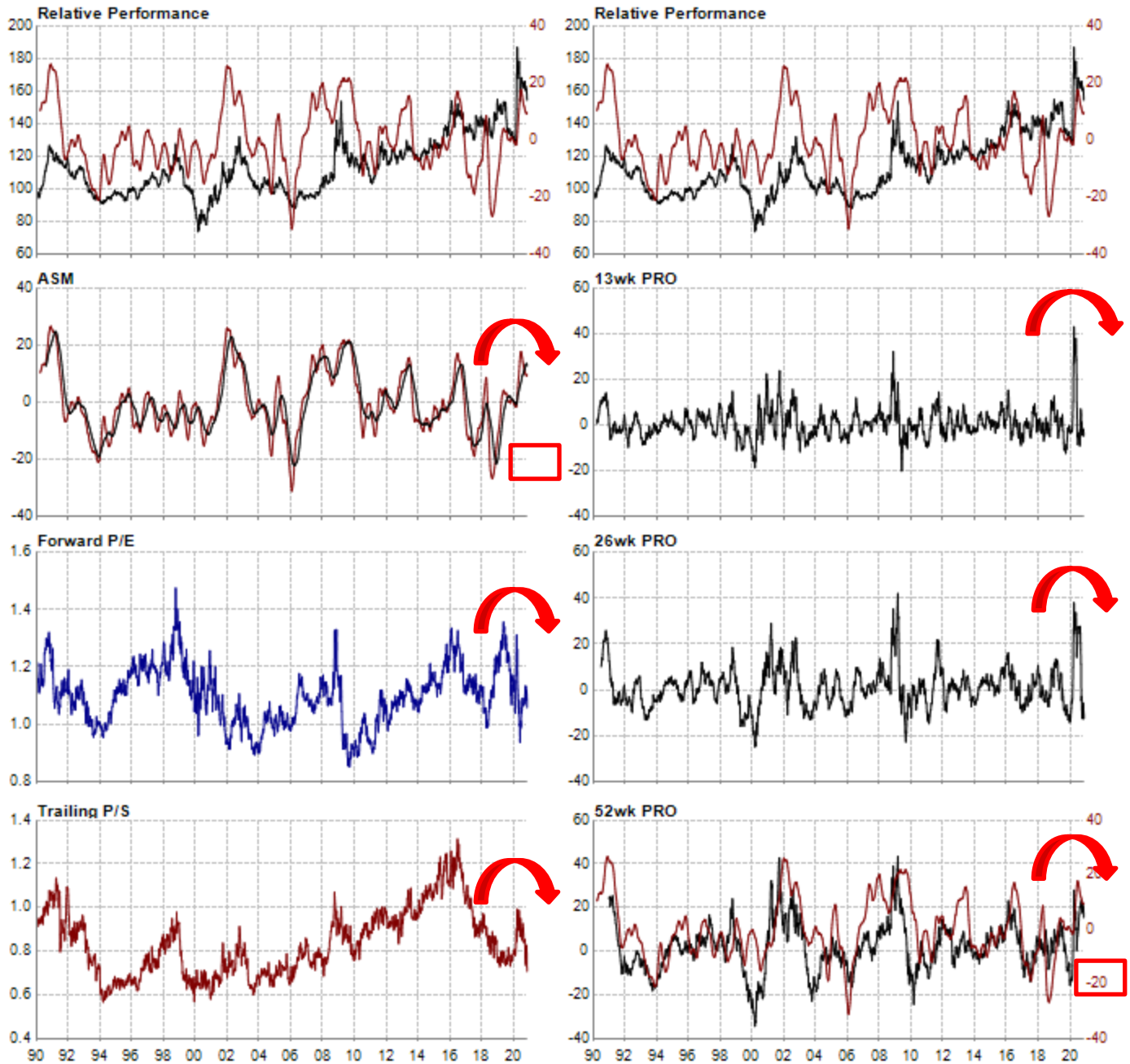
S&P 1500 GICS Level 1 - Sectors

Energy



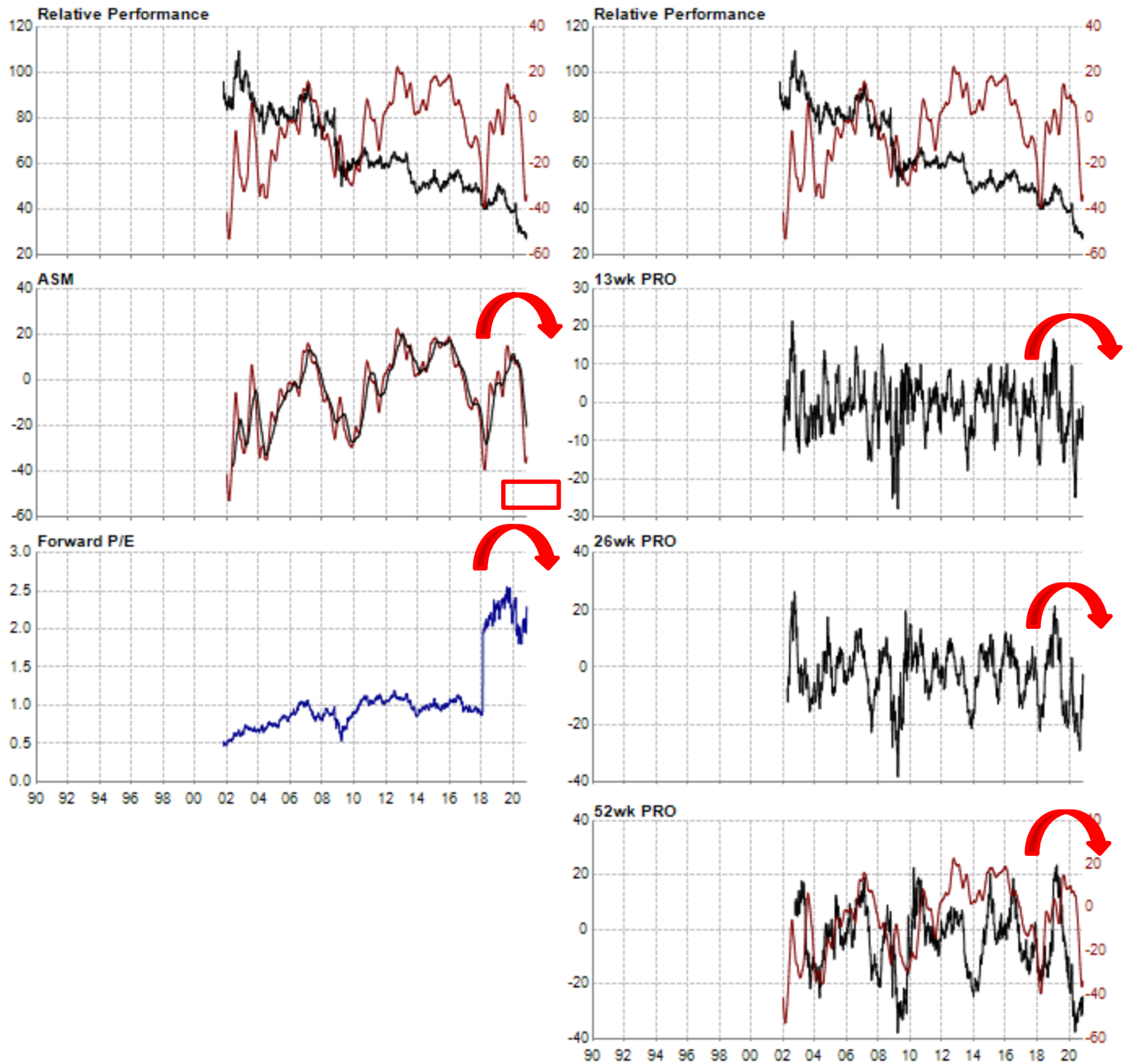
S&P 1500 GICS Level 1 - Sectors

Consumer Staples



S&P 1500 GICS Level 1 - Sectors

Real Estate

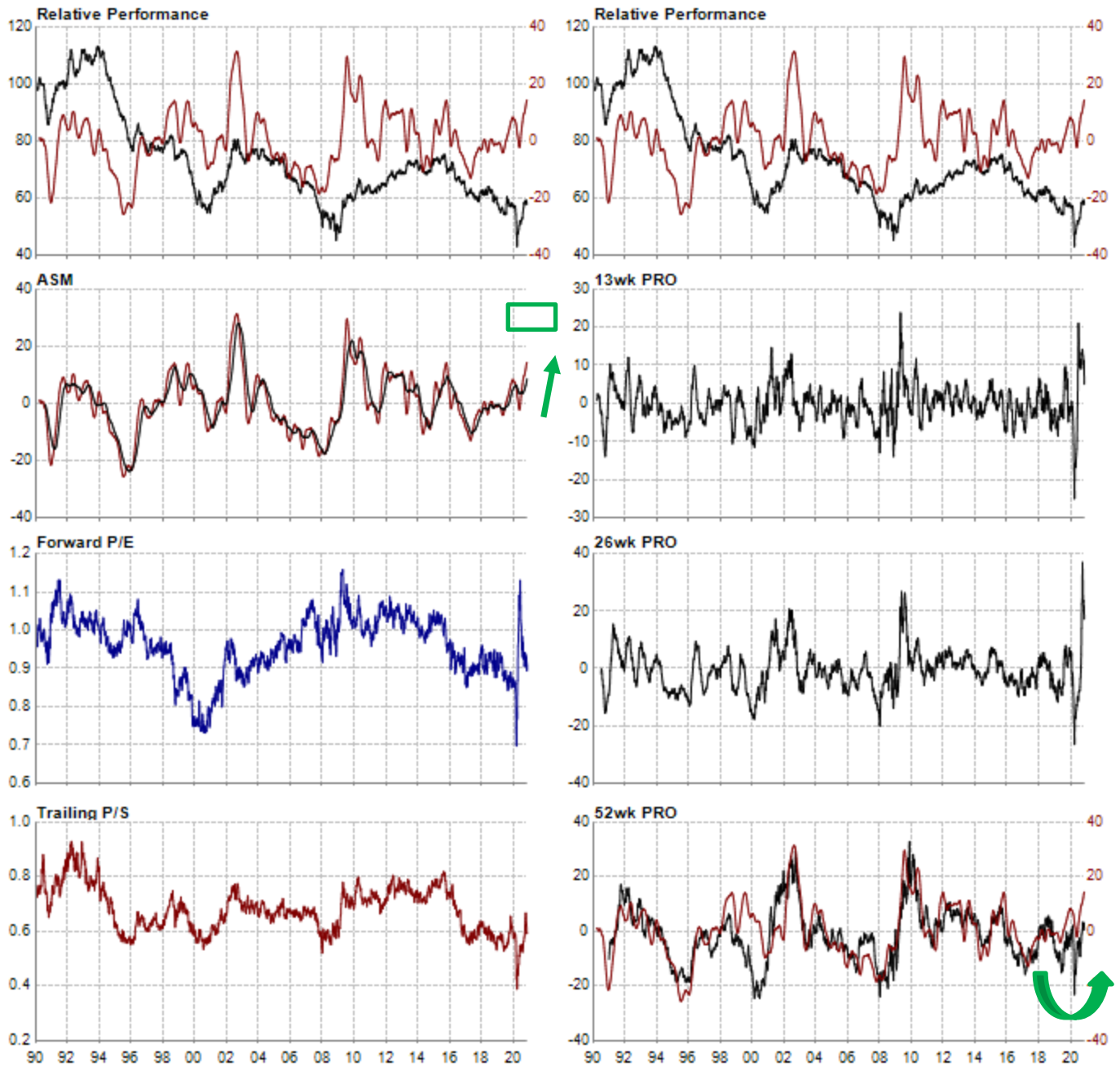


PREFERRED SECTORS

Sectors (GICS L-1)	ETF
<u>Name</u>	<u>Ticker</u>
Consumer Discretionary	XLY
Industrials	XLI
Materials	XLB

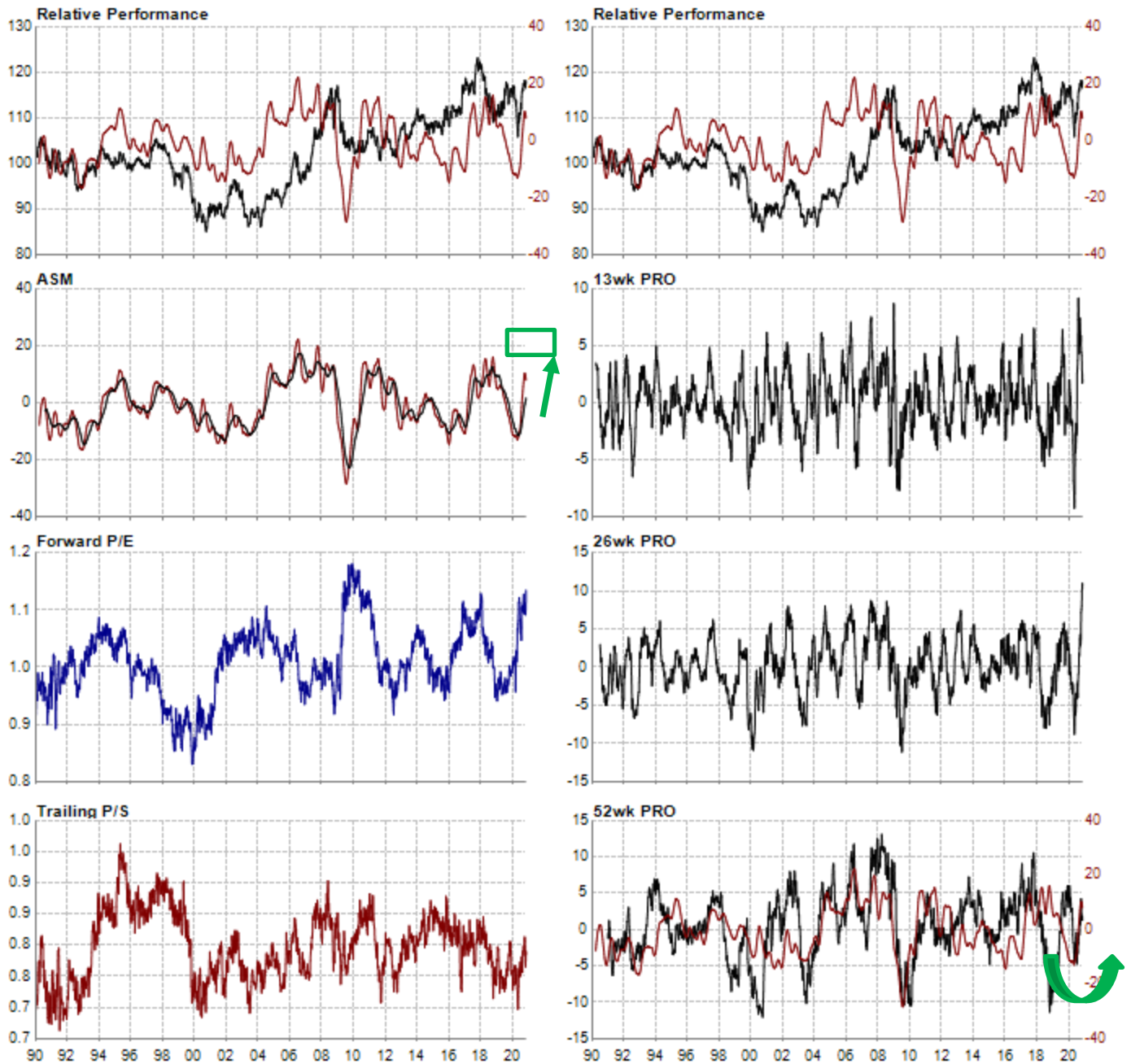
S&P 1500 GICS Level 1 - Sectors

Consumer Discretionary



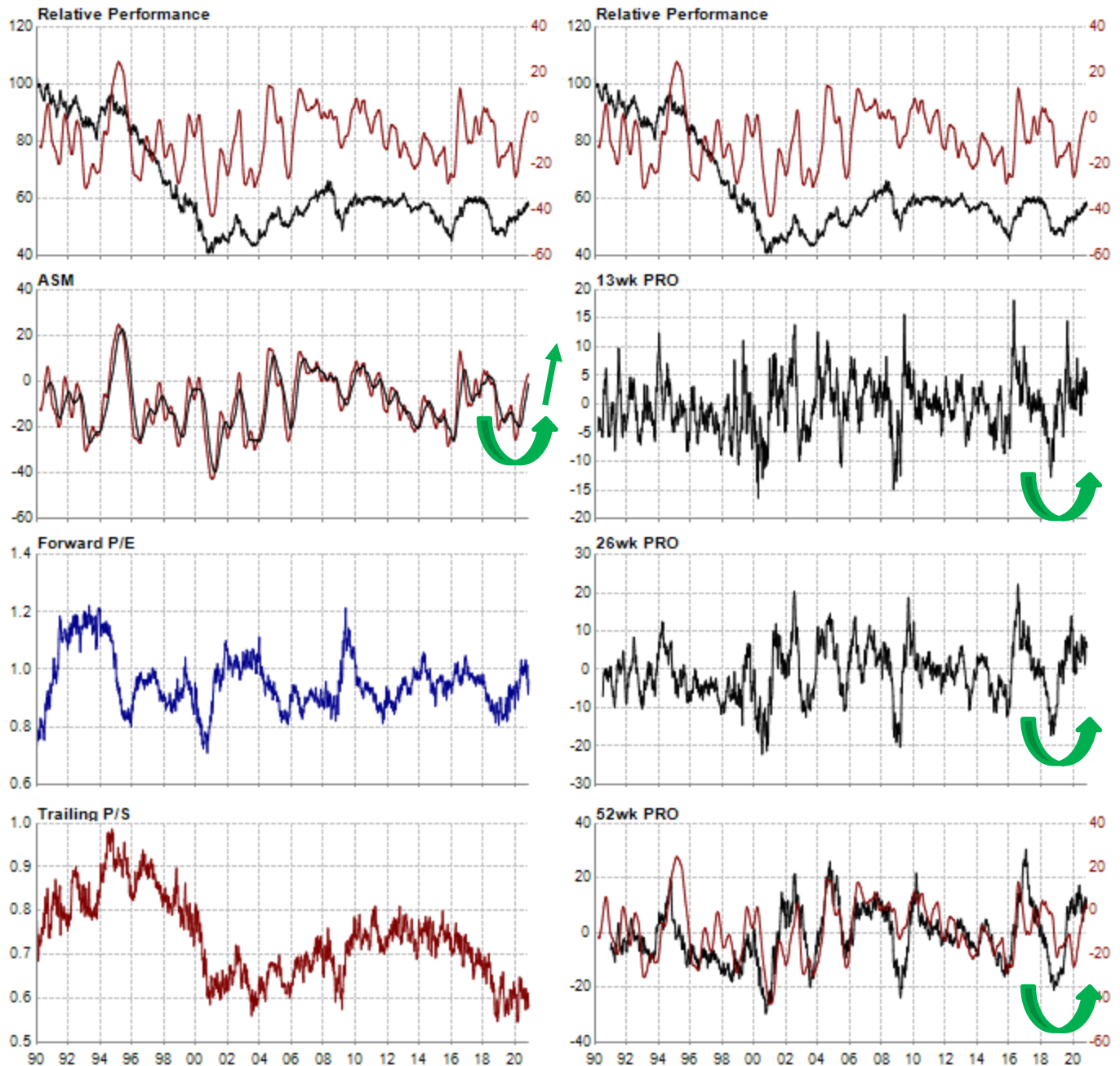
S&P 1500 GICS Level 1 - Sectors

Industrials



S&P 1500 GICS Level 1 - Sectors

Materials



HOW DO YOU DO STOCK SELECTION?

PROPRIETARY METHODOLOGY

ERM MODEL & ANALYST SENTIMENT INDICATOR (ASM)

Earnings Revision Cycle



Earnings Revision Model Key

--

Double minus - Earnings revisions deteriorating on an absolute basis signaling that the bottom-up consensus is now actively lowering forward expectations.

Stock price is generally acting poorly and still too early to get aggressively long.

P+

Early positive signal - Earnings revisions have experienced a positive inflection (second derivative turn) though absolute activity remains negative.

Probability is rising that the stock price may be nearing a bottom which leads to a high-quality entry point.

++

Double plus - Earnings revisions improving on an absolute basis signaling that the bottom-up consensus is now actively raising forward expectations.

Stock price is generally acting well and is becoming a momentum play.

N-

Early negative signal - Earnings revisions have experienced a negative inflection (second derivative turn) though absolute activity remains positive.

Probability is rising that the stock price may be topping which leads to a high-quality trim/exit point.

ESTIMATE REVISION MODEL — INTRO

A) PRICE PERFORMANCE

The red line is the absolute price performance for this stock.

The blue line is the relative performance for this stock. The default benchmark is the index that the company is in (S&P 500, 400, or 600) or the S&P 500 if not in any of the S&P indexes. This can be customized to a client's preference.²

B) EARNINGS ESTIMATE REVISIONS — BREADTH

RED ASM line — is based on the second derivative of analyst estimate changes.

Positive aspects — inflections tend to **LEAD** turns in stock price performance and at worst are coincident.

Negative aspects — more volatile and more false positives.

GRAY A/D line — is based on the first derivative of the breadth of analyst estimate changes for a stock.

Positive aspects — few false positive readings once an inflection occurs, stable, and tends to trend.

Negative aspects — tends to be late, both on the entry/exit.

C) EARNINGS ESTIMATE REVISIONS — MAGNITUDE

Bars represent the percentage change in the dollar amount of the forward 12 month estimate over the prior 90 days.

Ideally, a directional change in the bars should confirm an inflection point in our ASM line (i.e., shrinking red bars when the ASM has positive inflection and smaller green bars when the ASM rolls over).

D) PRICE MOMENTUM

Measure overbought/oversold conditions and help identify good risk/reward (exit/entry) points (Overbought = elevated reading).

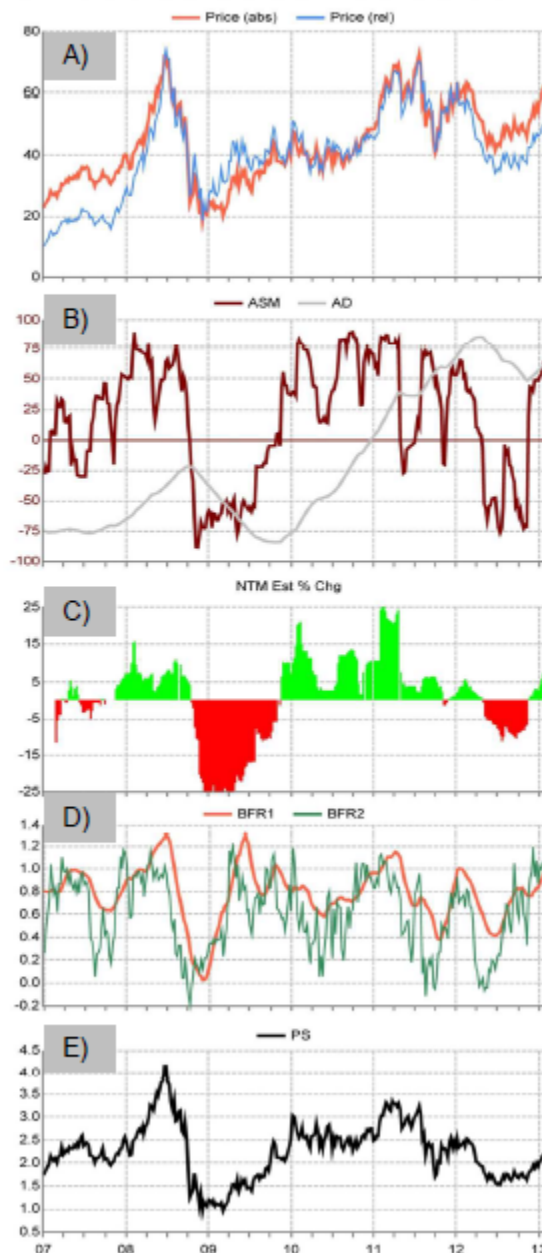
The red line (BFR1) is more strategic and based on a Coppock curve methodology.

The tactical green line (BFR2) is based on a Bollinger band concept.

E) VALUATION

Our standard metric is trailing Price-to-Sales for all sectors except for Financials, where we use Price-to-Book.²

S&P 500 - Energy - Oil & Gas Drilling					
Heimerich & Payne (HP)					
Price: 62.20 EPS FY1: 4.97 EPS FY2: 5.31 PE FY1: 12.5 PE FY2: 11.7					
Scoring:		Grey Line: +		Red Line: UP	
Quantitative Indicator: ++					



ESTIMATE REVISION MODEL — How To Use

How to Use — 101: New Long Ideas

Step 1: The Analyst Sentiment Measure (ASM)

Similar to our 8-Panel Analysis, the single-stock ERM starts with the Analyst Sentiment Measure (ASM), which is our proprietary metric for tracking the second derivative of analysts' earnings estimate revisions (second chart down).

Our most actionable ideas occur when the ASM inflects from an extreme level, with buy signals when the revision line rolls up (blue annotations to right) and sell signals when it rolls down (see next page). As a reminder, when the ASM rolls up, this is when there are fewer analysts cutting, and NOT when analysts are raising forward profit expectations.

When the ASM is then trending higher and more analysts begin to raise, the stock is likely to mirror the trend and investors should avoid fading it.

Step 2: NTM Estimate Magnitude Change

Moving to the next chart down, red bars represent the magnitude of the cut to the consensus forward twelve month consensus OEPS estimate over the previous 90-day period. Our most actionable, highest conviction signals occur when the revision magnitude trends match the ASMs breath pattern.

As the ASM rolls up, concurrent shrinking red bars help to confirm the initial buy signal and raise the probability that bad news is fully priced in. This is the most favorable entry point where risk/reward is greatest.

As the red bars shrink and turn to accelerating/rising green bars, concurrent with a rising ASM, the stock is firmly in a momentum/growth phase and likely to continue to outperform.

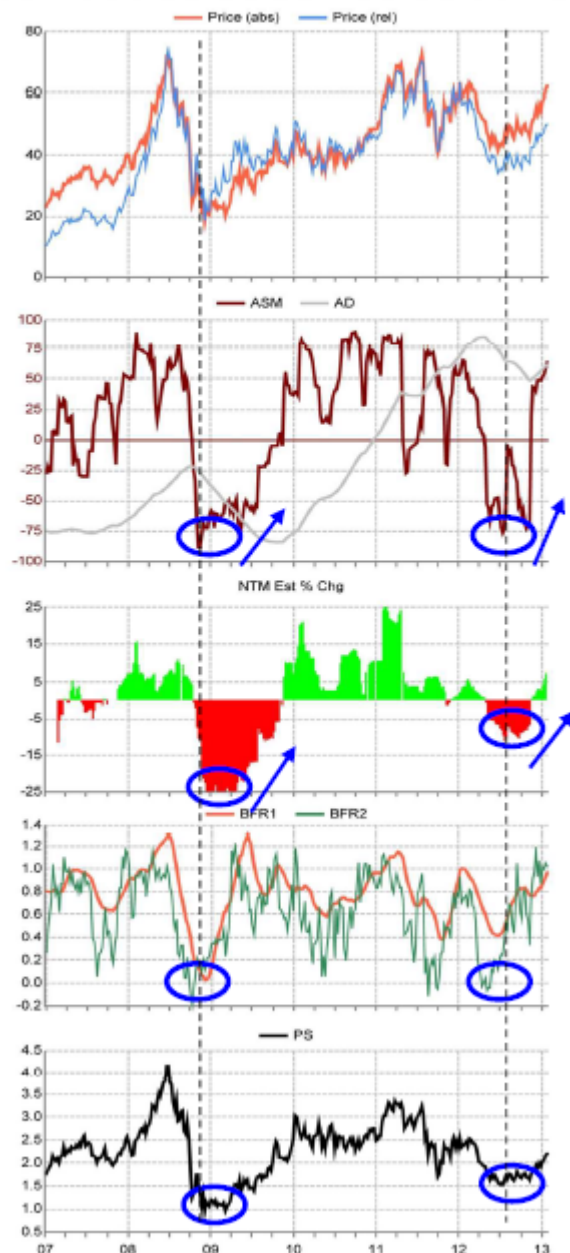
Step 3: BFR Indicators

A high quality buy signals occur when stocks are oversold according to our two price reversion indicators. While price reversion alone is not necessarily a reason to buy a stock, when our metrics are at depressed levels while the ASM indicator is inflecting from a negative extreme, the probability of a new rising trend considerably rises.

Step 4: Valuation

Similar to our BFR indicators, valuation signals are secondary to estimate revisions in our work, but can help to confirm the above indicators and should be considered for long-term investors.

S&P 500 - Energy - Oil & Gas Drilling					
Helmerich & Payne (HP)					
Price: 62.20 EPS FY1: 4.97 EPS FY2: 5.31 PE FY1: 12.5 PE FY2: 11.7					
Scoring:		Grey Line: +		Red Line: UP	
Quantitative Indicator: ++					



Favorable Stocks

IN-MOTION CYCLICAL NAMES

Summary

DOW, EMN, CTVA, LIN, ALB, CE, PPG, SHW, MLM, BLL, AMCR, PKG, SEE, FCX, CARR, TDG, FBHS, JCI, PWR, AME, EMR, ETN, ROK, HON, CAT, CMI, PCAR, DE, DOV, IEX, IR, ITW, OTIS, PH, SNA, XYL, GWW, URI, RSG, WM, CPRT, VRSK, FDX, UPS, CSX, NSC, APTV, GM, GRMN, NVR, NKE, CMG, MCD, SBUX, LKQ, AMZN, BBY, ORLY

HONEYWELL INTERNATIONAL (HON)

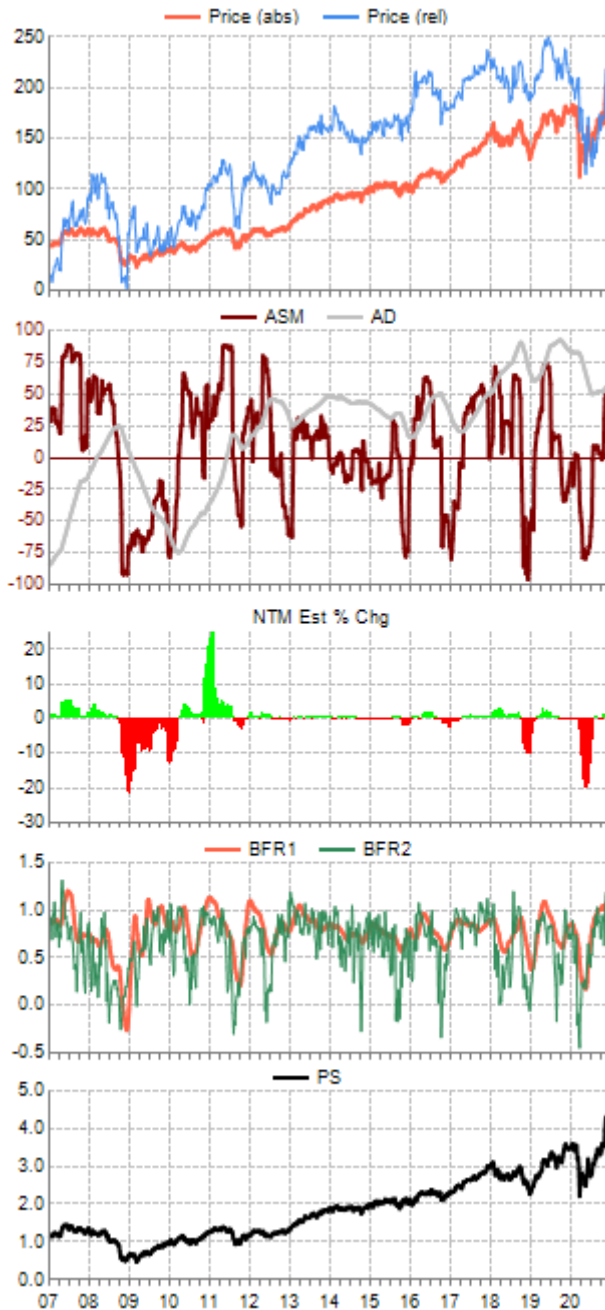
S&P 500 - Industrials - Industrial Conglomerates

Honeywell International Inc. (HON)

Price: 201.54 EPS FY1: 7.03 FY2: 7.88 PE FY1: 28.7 FY2: 25.6

Scoring: Grey Line: + Red Line: UP

Quantitative Indicator: ++



ASM Indicator:

Rolling Up

CONCLUSION:

FAVORABLE

CYCLICAL RECOVERY

“EPICENTER” NAMES

Summary

MPC, DD, ECL, IP, WRK, NUE, BA, TXT, ALLE, AOS, GE, MMM, FLS, FAST, RHI, AAL, ALK, DAL, LUV, UAL, F, MHK, NWL, HAS, PVH, RL, TPR, UAA, VFC, LVS, MGM, WYNN, CCL, HLT, MAR, NCLH, RCL, DRI, YUM, EXPE, GPS, ROST, TJX, ULTA, DIS, LYV

TJX (TJX)

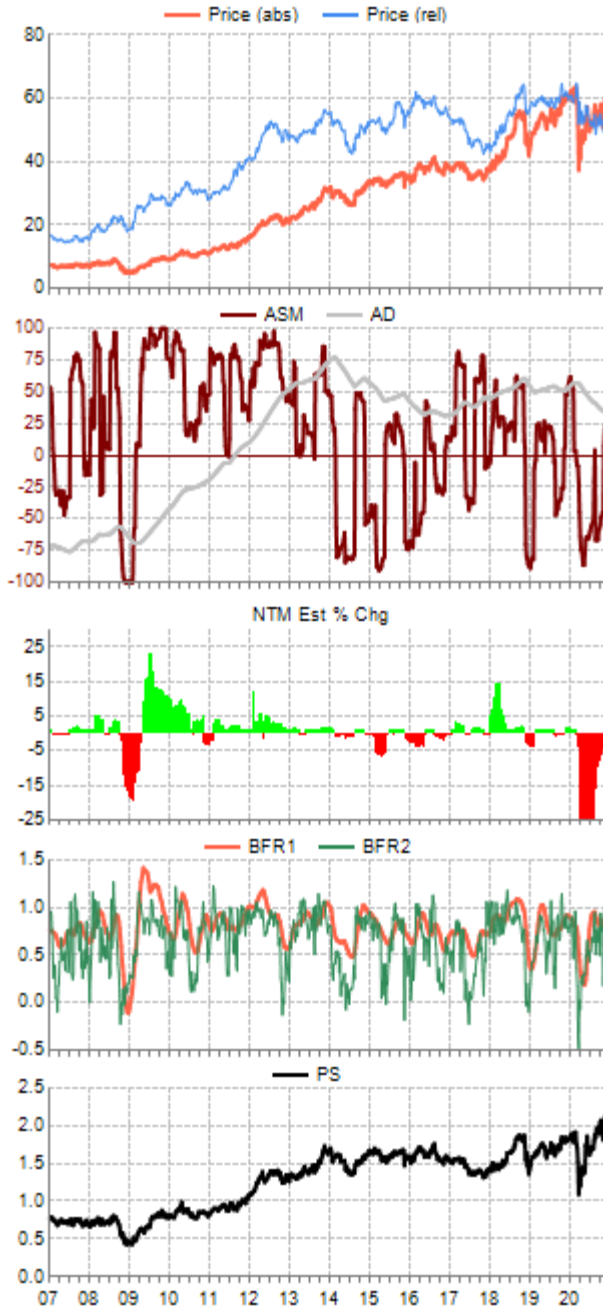
S&P 500 - Consumer Discretionary - Apparel Retail

TJX Cos. (TJX)

Price: 59.63 EPS FY1: .15 FY2: 2.56 PE FY1:nm FY2: 23.3

Scoring: Grey Line: + Red Line: UP

Quantitative Indicator: ++



ASM Indicator:

Rolling Up

CONCLUSION:

FAVORABLE

STOCK SUMMARY CONCLUSIONS

In Motion

DOW, EMN, CTVA, LIN, ALB, CE, PPG, SHW, MLM, BLL, AMCR, PKG, SEE, FCX, CARR, TDG, FBHS, JCI, PWR, AME, EMR, ETN, ROK, HON, CAT, CMI, PCAR, DE, DOV, IEX, IR, ITW, OTIS, PH, SNA, XYL, GWW, URI, RSG, WM, CPRT, VRSK, FDX, UPS, CSX, NSC, APTV, GM, GRMN, NVR, NKE, CMG, MCD, SBUX, LKQ, AMZN, BBY, ORLY

“Epicenter” Names

MPC, DD, ECL, IP, WRK, NUE, BA, TXT, ALLE, AOS, GE, MMM, FLS, FAST, RHI, AAL, ALK, DAL, LUV, UAL, F, MHK, NWL, HAS, PVH, RL, TPR, UAA, VFC, LVS, MGM, WYNN, CCL, HLT, MAR, NCLH, RCL, DRI, YUM, EXPE, GPS, ROST, TJX, ULTA, DIS, LYV

THANK YOU FOR PARTICIPATING

Global Portfolio Strategy

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Positive (+): The analyst expects the performance of his industry/sector coverage universe over the next 6-18 months to be attractive vs. the relevant broad market benchmark, being the S&P 500 for North America.

Neutral (N): The analyst expects the performance of his or her industry/sector coverage universe over the next 6-18 months to be in line with the relevant broad market benchmark, being the S&P 500 for North America.

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- **Policy Strategy – L. Thomas Block**
- **Tax Strategy – David Zion, Zion Research Group**
- **Global Portfolio Strategy – Brian Rauscher**
- **Technical Strategy – Robert Sluymer**
- **Digital Asset Strategy – David Grider**



Technical Strategy

Robert Sluymmer, CFA

Technical Strategy

November 19, 2020

6 technical events to impact portfolio performance in 2020-2021

1. Secular trend and cycle bullish through into mid 2030s
2. The current 4-year market cycle – S&P 4400-4600
3. Navigating markets into and through Q1 – S&P 4000
4. Long bond prices – Cycle peak developing
5. US Dollar – Long-term trend remains negative → (+) Cyclical
6. Sector and group leadership trends
 - **Increase exposure to Cyclical** - Participation continues to broaden and are more timely than high momentum growth stocks
 - **Hold core overweights in Growth leadership** – Momentum leaders are pausing not broken with weekly indicators already unwinding overbought levels in August
 - **UW – Safety/defensive sectors**

For Reg AC certification and other important disclosures see [Slide 149](#)



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The BIG picture - Secular trends and cycle bullish into early 2030s

- 17 and 34-year market cycles remain bullish into early-mid 2030's – S&P 14,000 possible
- Demographic trends is a fundamental catalyst supporting our technical outlook

The 4-year cycle likely to continue into 2022-2023 before peaking

- March 2020 lows consistent with a new 4-year cycle from the 2016 lows
- Current cycle unlikely to peak until late 2022-2023
- Minimum cycle has been +65% = S&P 3615
- Average cycle is 100-110% = S&P 4400-4600

Tactical considerations into YE and Q1 2021

- Weekly momentum (1-2 quarter cycles), bottomed in late Q3 and likely peak mid Q1
- Expect pullbacks to be shallow followed by further upside into Q1 → S&P 4000
- VIX futures – Investors remain hedged – Expect further unwind similar to 2012 & 2016

Portfolio Strategy – Managing barbell exposure

Increasing exposure Cyclicals

- Increase exposure to **Industrials, Materials, Discretionary**, select **Financials** and **Energy**
- Participation/breadth continues to expand
- Expecting participation to continue expanding through the current 4-year cycle

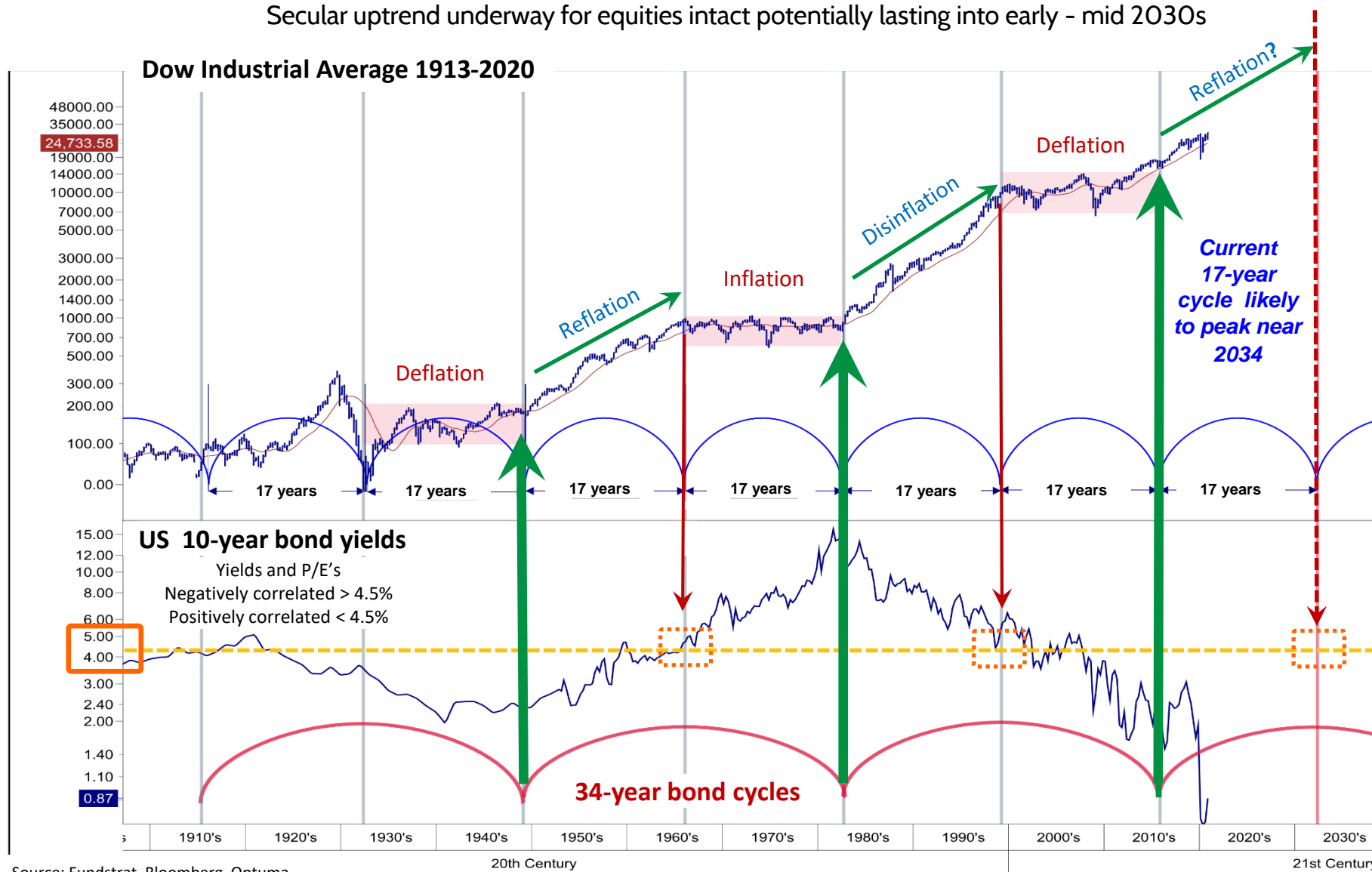
Holding core overweight in **Technology** and **growth Discretionary** leadership long-term

- Growth/momentum has been pausing/consolidating but not broken
- Weekly momentum data already unwinding from overbought levels seen in August

Underweight Defensive/safety sectors – **Utilities, Staples, Healthcare**

Dow and 10-year Bond Yield – Generational 34 & 17-year cycles

Secular uptrend underway for equities intact potentially lasting into early - mid 2030s



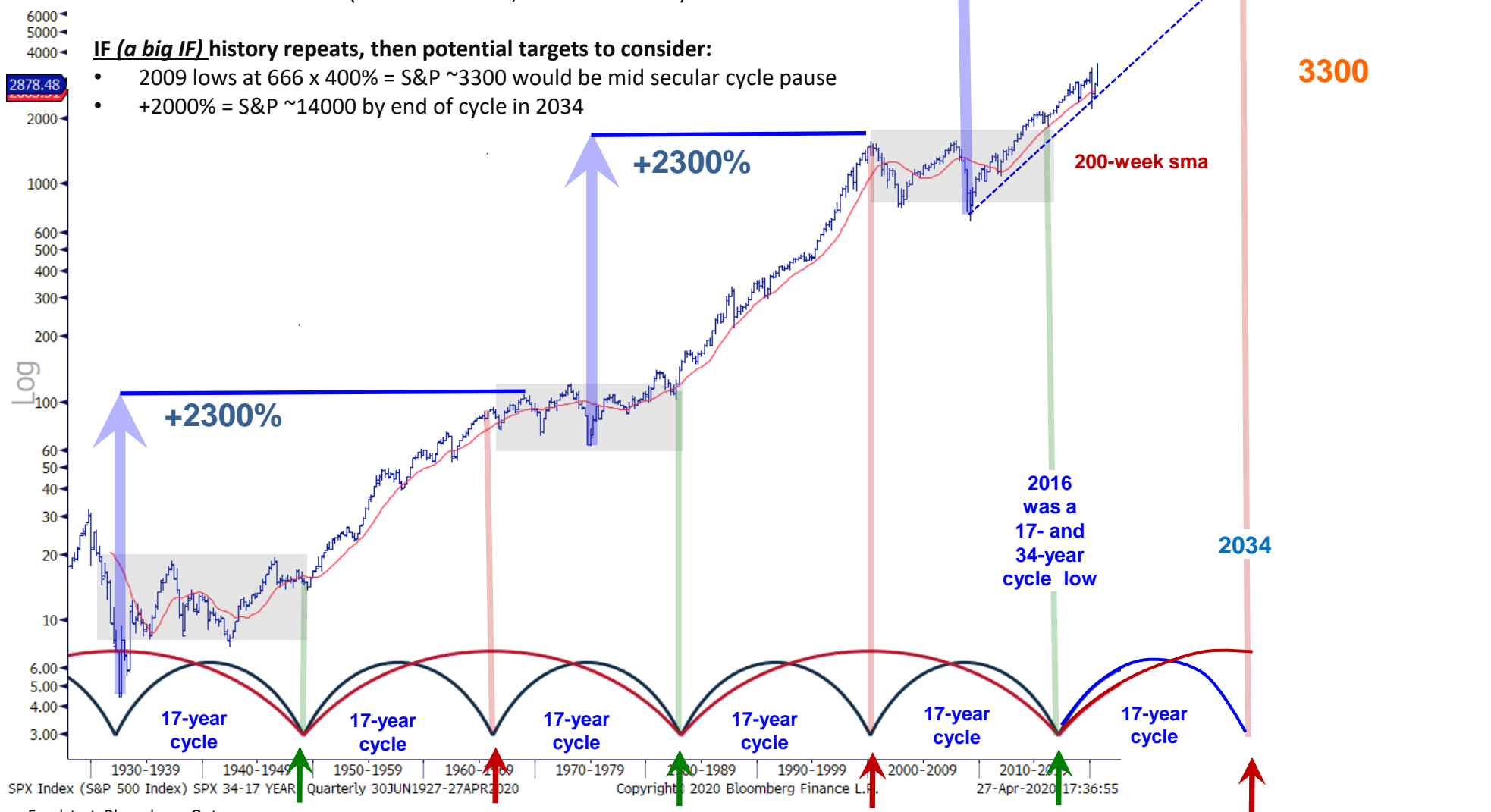
S&P 500 – A secular perspective

Prior secular bull market returns:

- 1932-1966 = +2300% ('32-'46 = +335%, '46-'66 = +460%)
- 1974-2000 = +2300% ('74-'87 = +440%, '87-'00 = +360%)

IF (a big IF) history repeats, then potential targets to consider:

- 2009 lows at 666 x 400% = S&P ~3300 would be mid secular cycle pause
- +2000% = S&P ~14000 by end of cycle in 2034

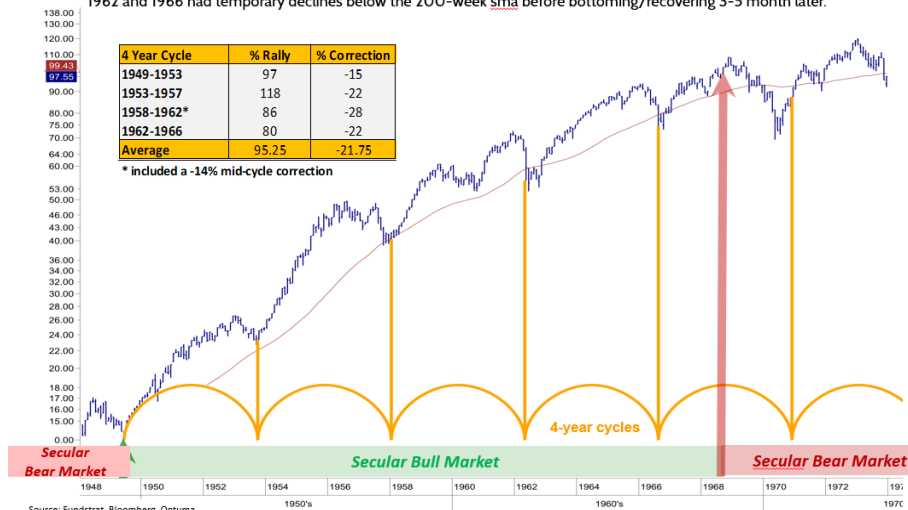


Source: Fundstrat, Bloomberg, Optuma

S&P 500 and 4-year cycles

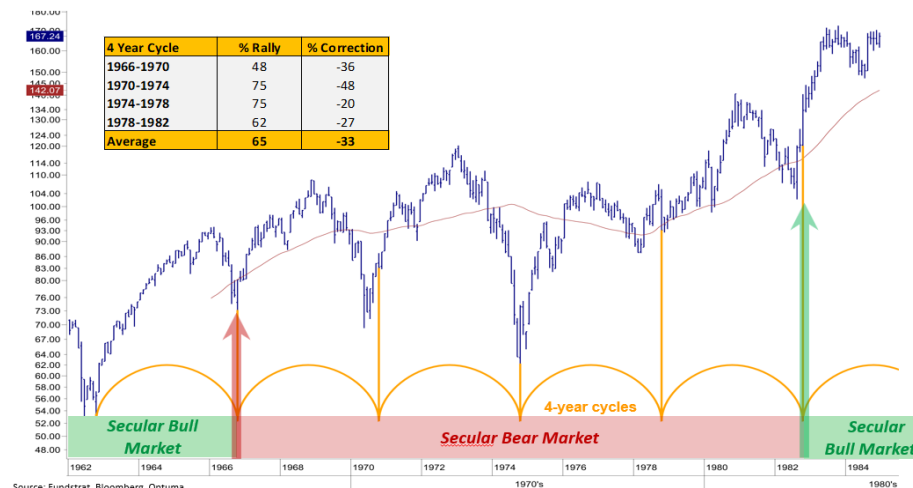
S&P 500: 4-year cycle - 1950s-1960s

4-year cycle lows regularly developed near the rising 200-week sma during the secular bull market of the 1950s-1960s. 1962 and 1966 had temporary declines below the 200-week sma before bottoming/recovering 3-5 month later.



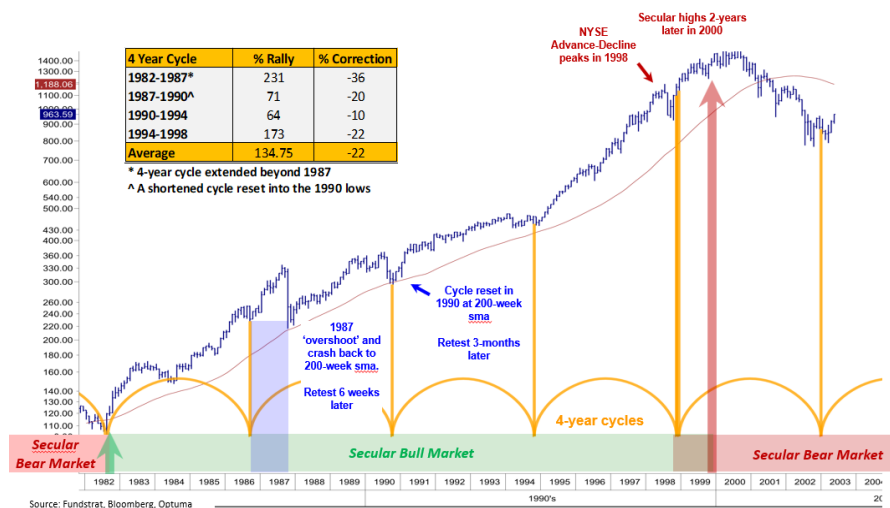
S&P 500: 4-year cycle - 1970s

The bear markets of the 1970s bottomed near 4-year cycle inflections but did so much farther below the 200-week sma



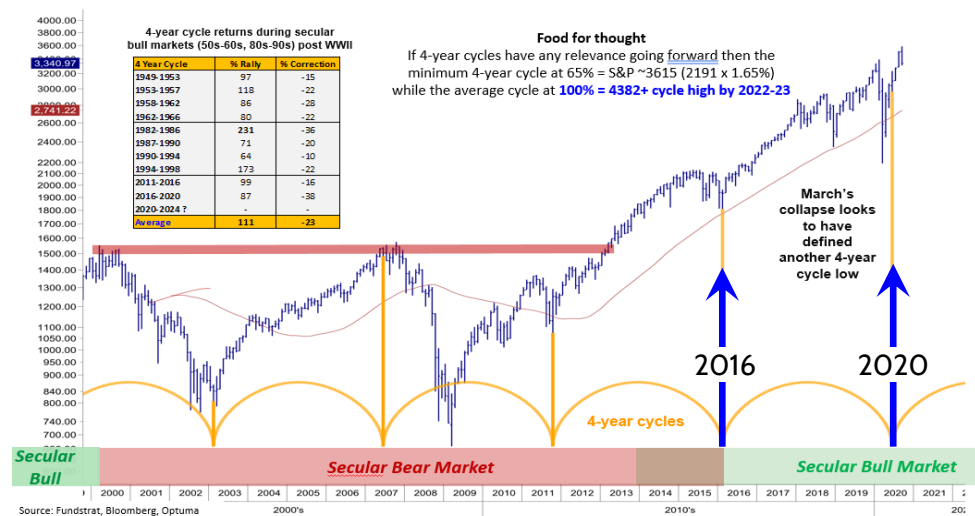
S&P 500: 4-year cycle - 1980s-1990s

Similar to the secular uptrend of the 1950s-1960s, 4-year cycle lows developed near the rising 200-week sma during the 1980s-1990s



S&P 500: 4-year cycles in 2000-2020

The timing of the Q1 2020 -35% correction is consistent with another 4-year cycle low.



S&P 500 – Monthly

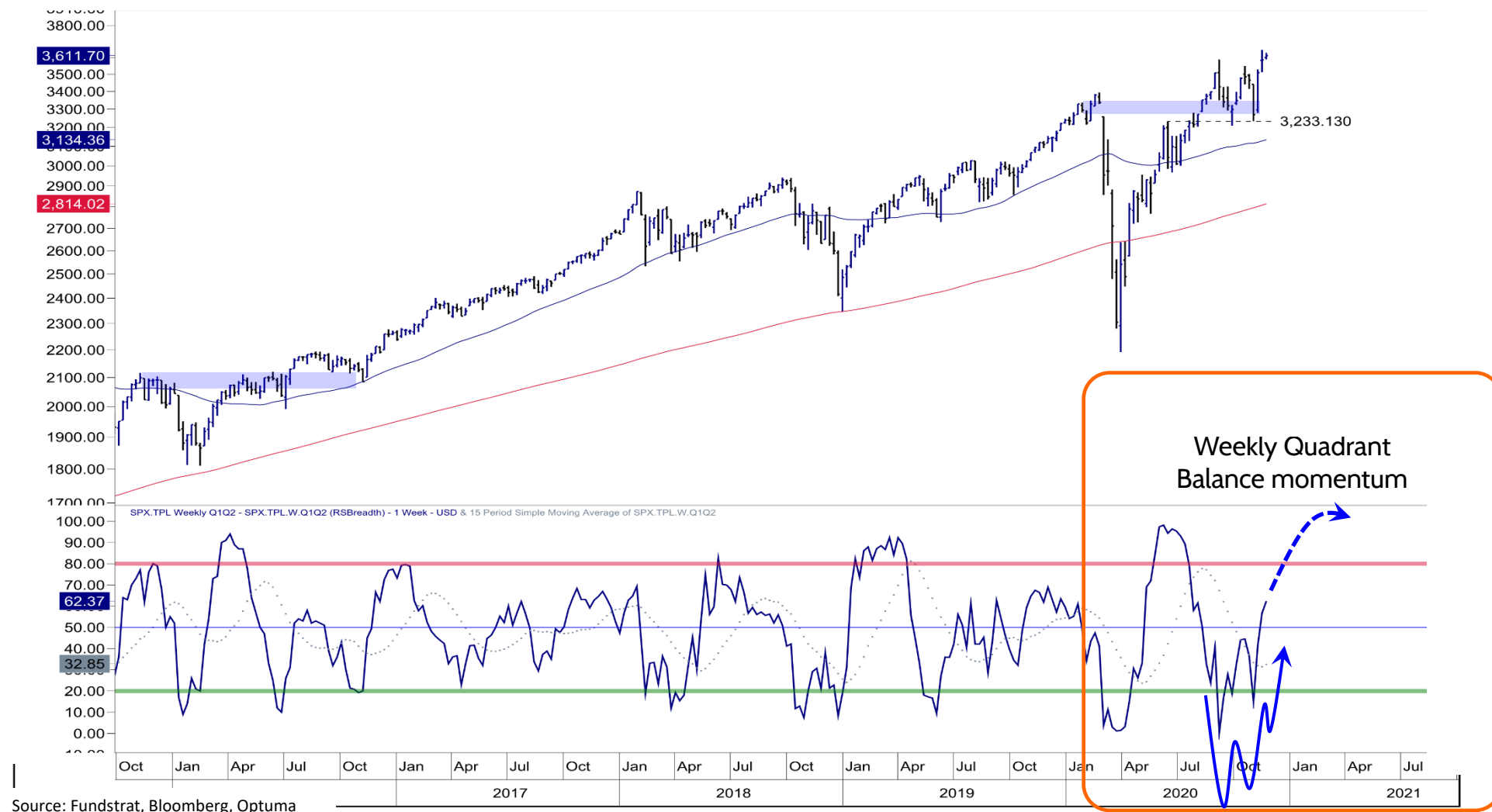
Long-term uptrend intact above 15- and 48-month moving averages
WITH relative performance making new cycle highs vs the Barclay's All Aggregate Bond Index
similar to the cycle accelerations in 2012 and 2016



Source: Fundstrat, Bloomberg, Optuma

S&P 500 – 2015-2020 - Weekly

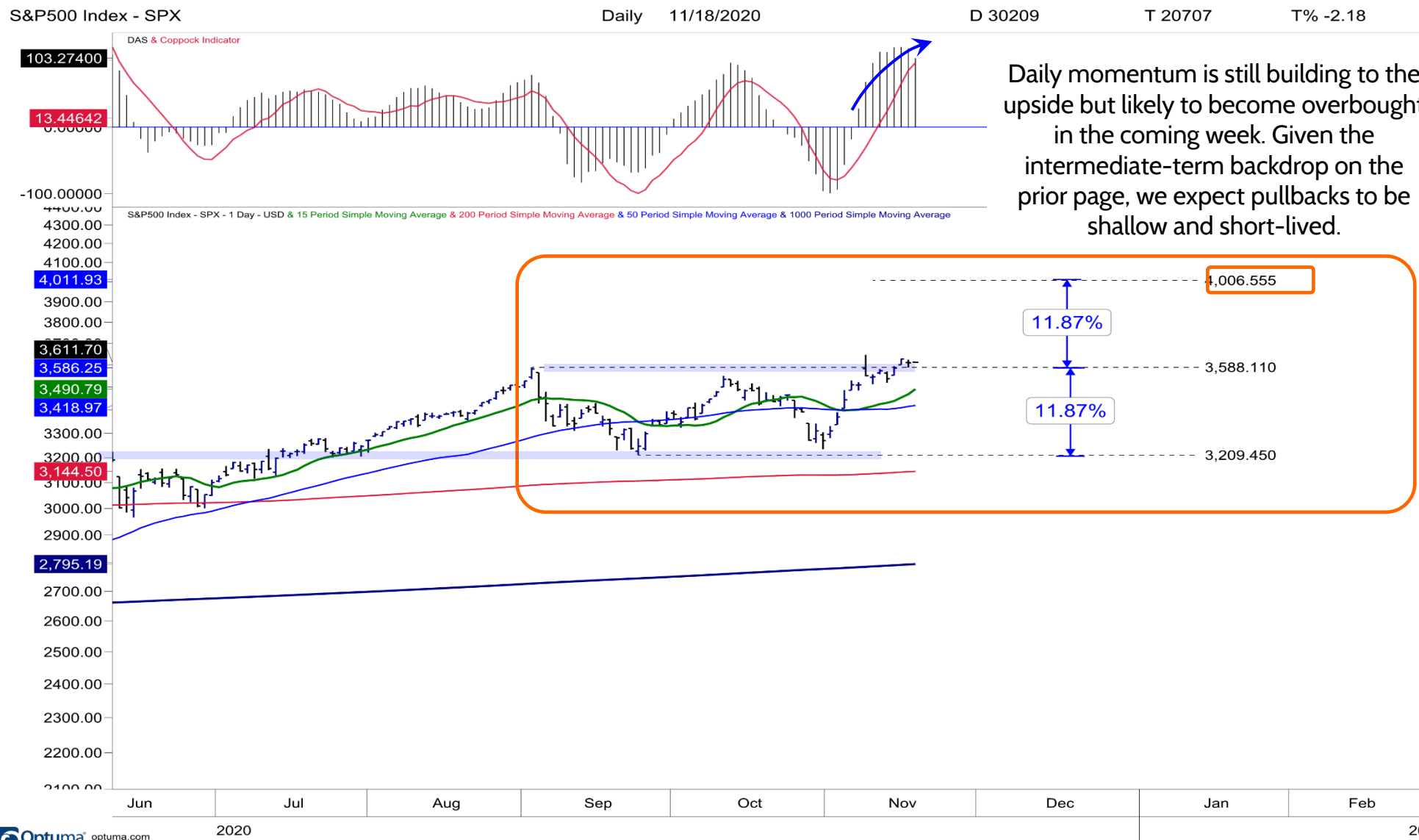
Intermediate-term momentum, tracking the percentage of stocks with rising weekly momentum, continues to build positively. We expect this data to build to the upside well into Q1 before an intermediate-term peak develops.



S&P 500 – Daily

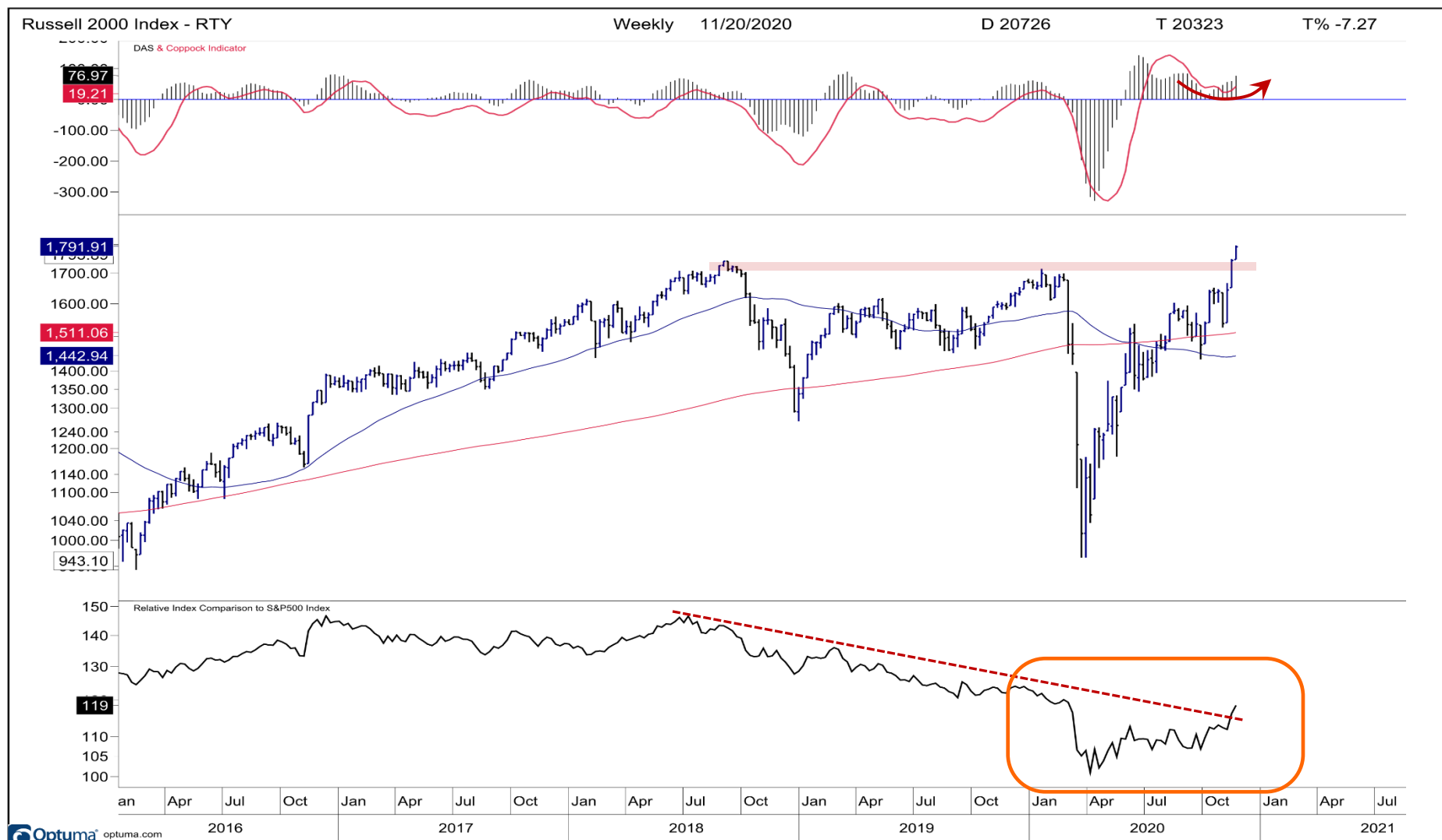
A doubling of the September – November trading range supports a move toward 4000

Use near-term weakness/backing and filling to accumulate



Russell 2000 - Weekly

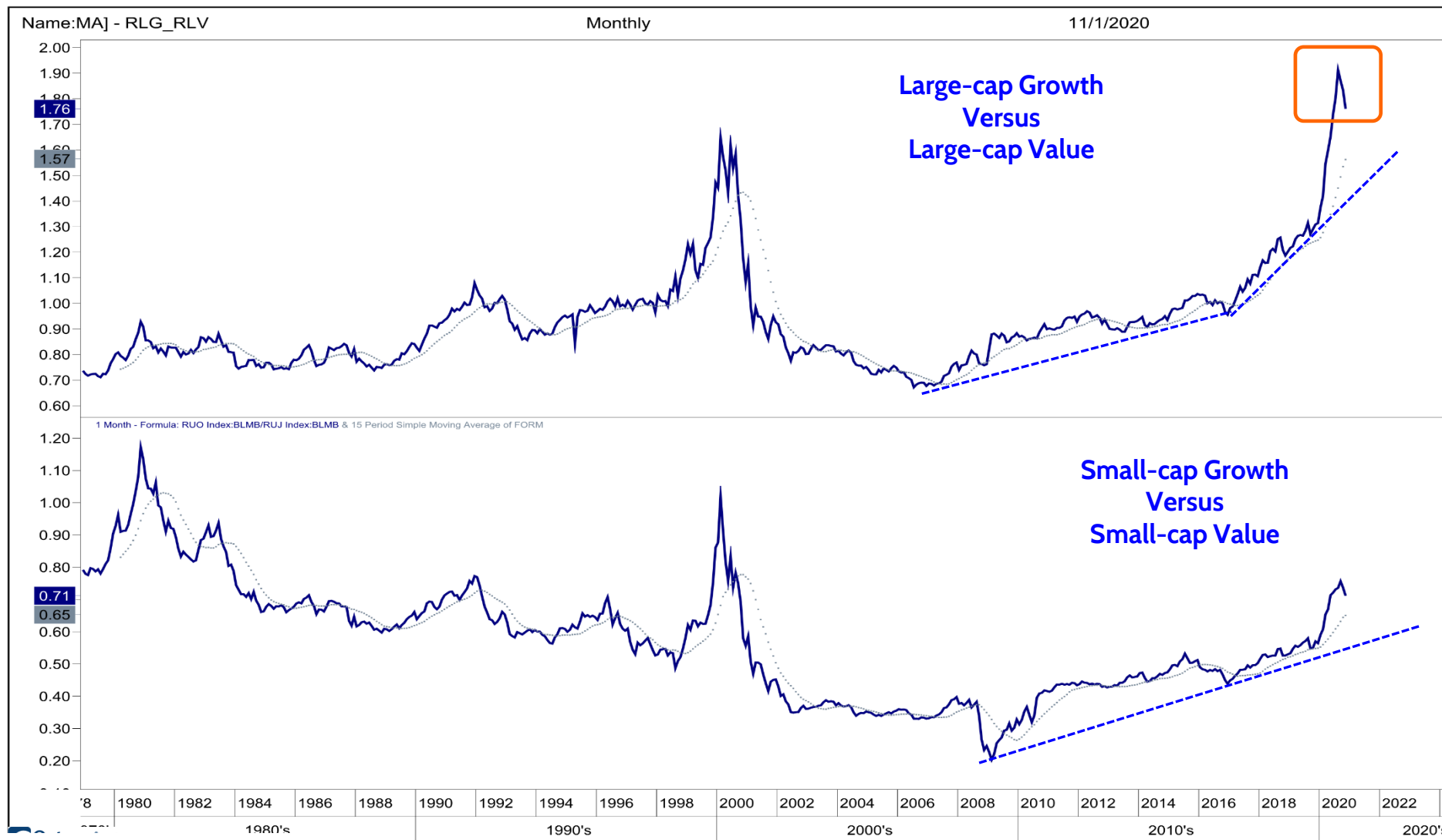
Breaking out of a 2-year trading range
...with relative performance reversing a 2-year downtrend



Source: Fundstrat, Bloomberg, Optuma

Growth versus Value – Monthly

After an extended surge well above trend, growth is beginning to pullback as cyclicals broadly improve
Growth do not appear poised to collapse as they did in 2000 but cyclicals are likely to outperform well into the current 4- year cycle



Growth vs Value trading range continues.

Large-cap Growth versus Large-cap Value

Y-axis labels: 1.90, 1.84, 1.76, 1.69, 1.60, 1.50, 1.40, 1.35

Legend: 50-day sma (blue line), 200-day sma (red line)

Mid-cap Growth versus Mid-cap Value

Y-axis labels: 0.78, 0.76, 0.73, 0.72, 0.71, 0.70, 0.68, 0.66, 0.64, 0.62, 0.60, 0.57

Legend: Period Simple Moving Average of FORM (blue line), 200 Period Simple Moving Average of FORM (red line)

Small-cap Growth versus Small-cap Value

Y-axis labels: 0.78, 0.76, 0.74, 0.73, 0.72, 0.71, 0.70, 0.68, 0.66, 0.64, 0.62, 0.60, 0.58

Legend: 50-day sma (blue line), 200-day sma (red line)

X-axis labels: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec

Source: Fundstrat, Bloomberg, Optuma

S&P High Beta (SPHB) vs S&P Low Vol (SPLV) ETFs

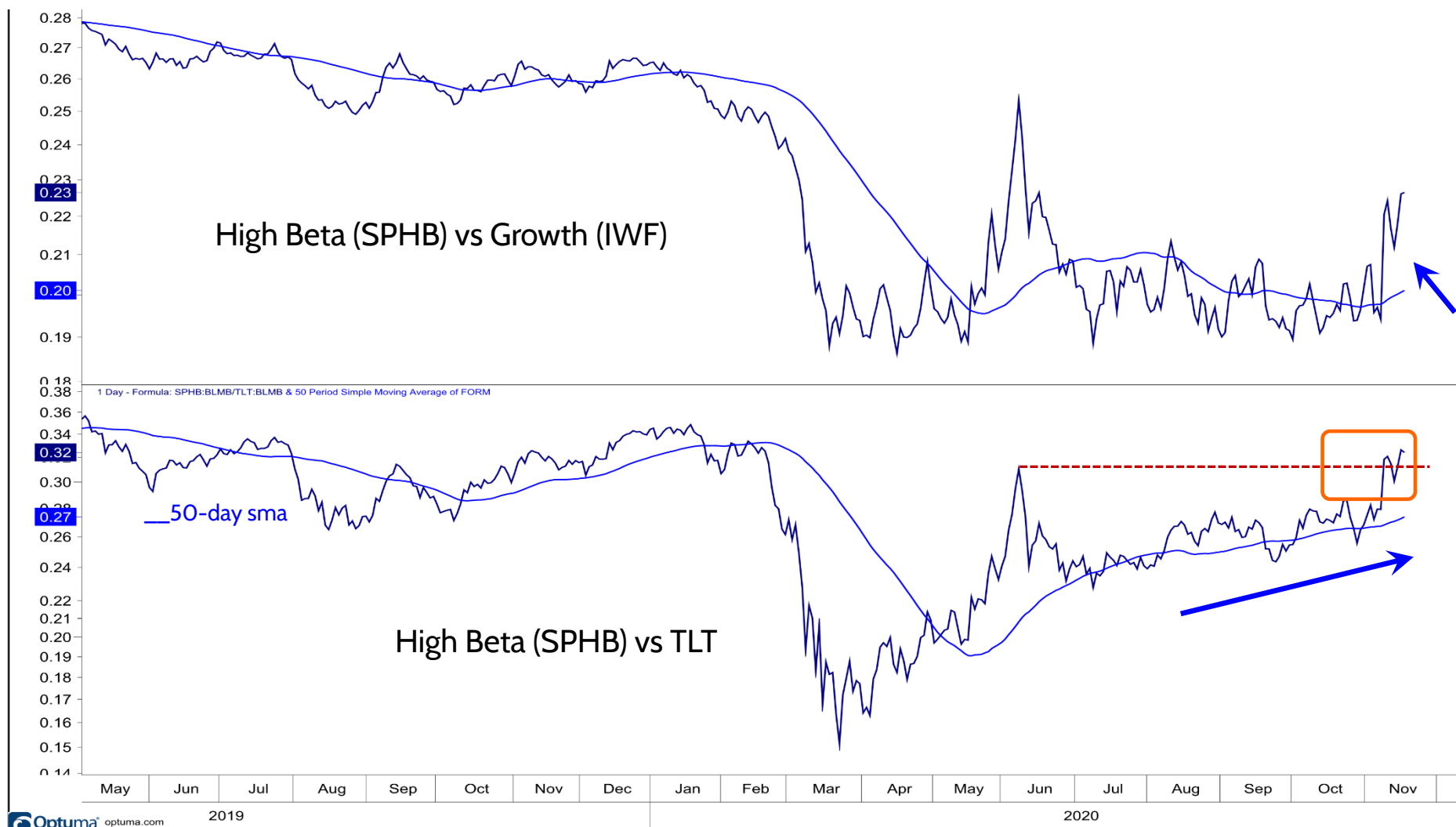
High Beta vs Low Volatility making new cycle highs – Uptrend continues



Source: Fundstrat, Bloomberg, Optuma

S&P High Beta (SPHB) vs Large-cap Growth (IWF) and TLT Bond ETF

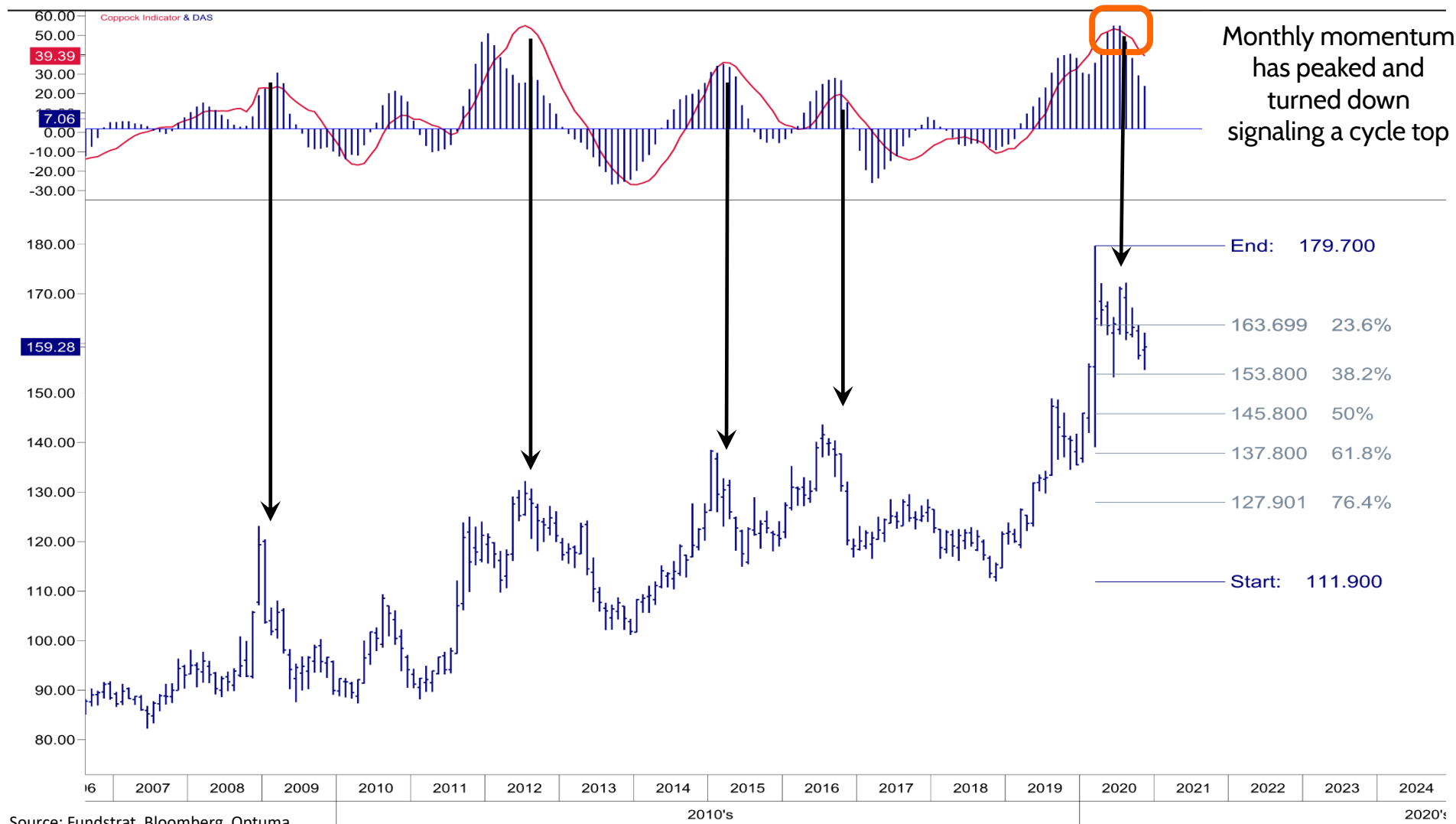
High Beta is in the very early stages of turning back up to Growth (IWF) while continuing to trend to the upside vs the TLT bond ETF



Source: Fundstrat, Bloomberg, Optuma

TLT long-bond ETF

Monthly momentum is still early in a downturn of a cycle peak.
Continue to underweight Treasury bonds



Source: Fundstrat, Bloomberg, Optuma

US 10-year note yields - Daily

10-year yields are now above their declining 200-dma with 1.0% followed by ~1.30-1.40% next key hurdles

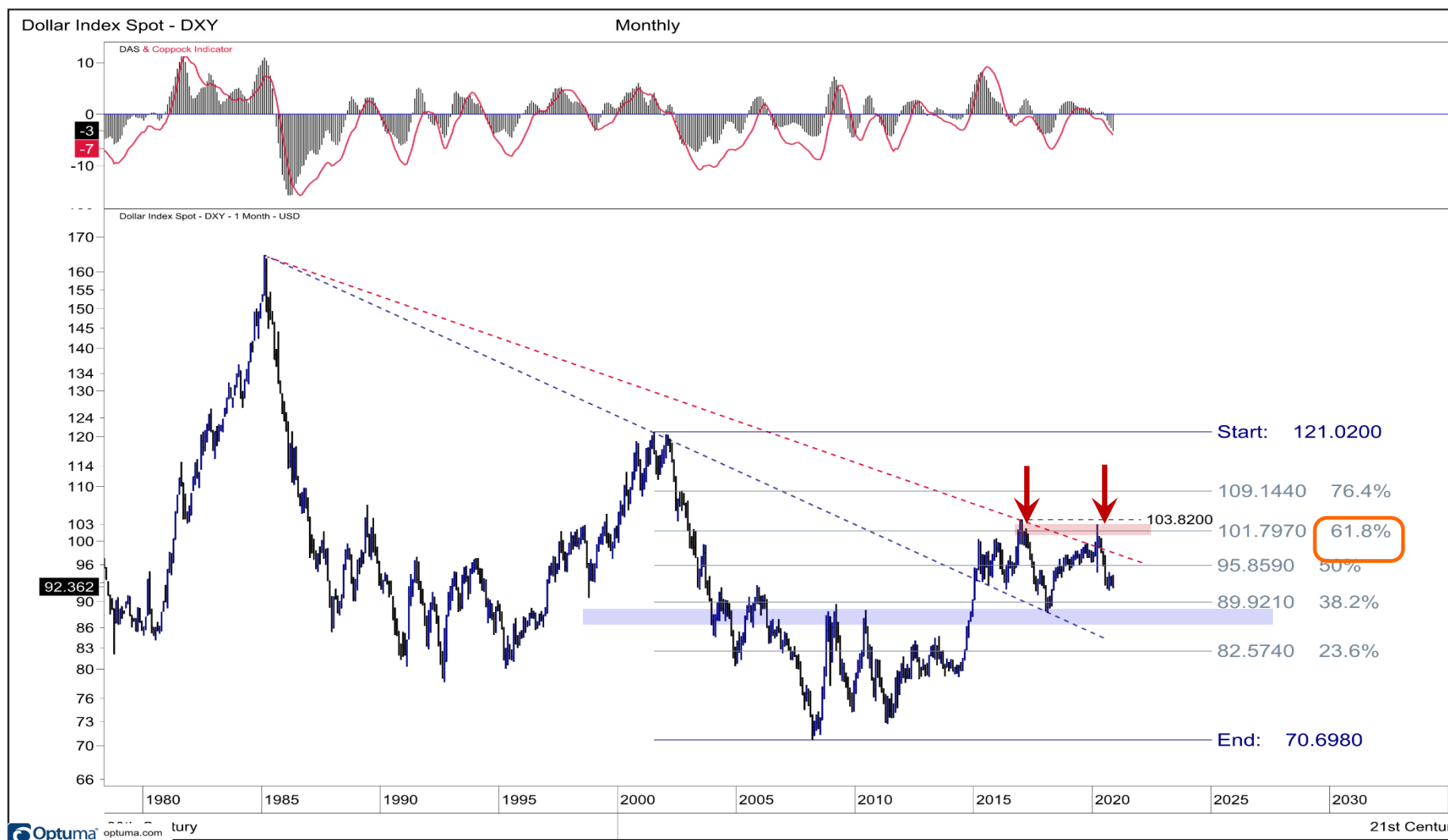
Short-term yields are at a pause point near the 62% retracement



Source: Fundstrat, Bloomberg, Optuma

US Dollar Index – DXY – Monthly

DXY is failing at 101.80- 103.82 resistance at its longer-term downtrend.
A move toward next support near 89-90 appears likely

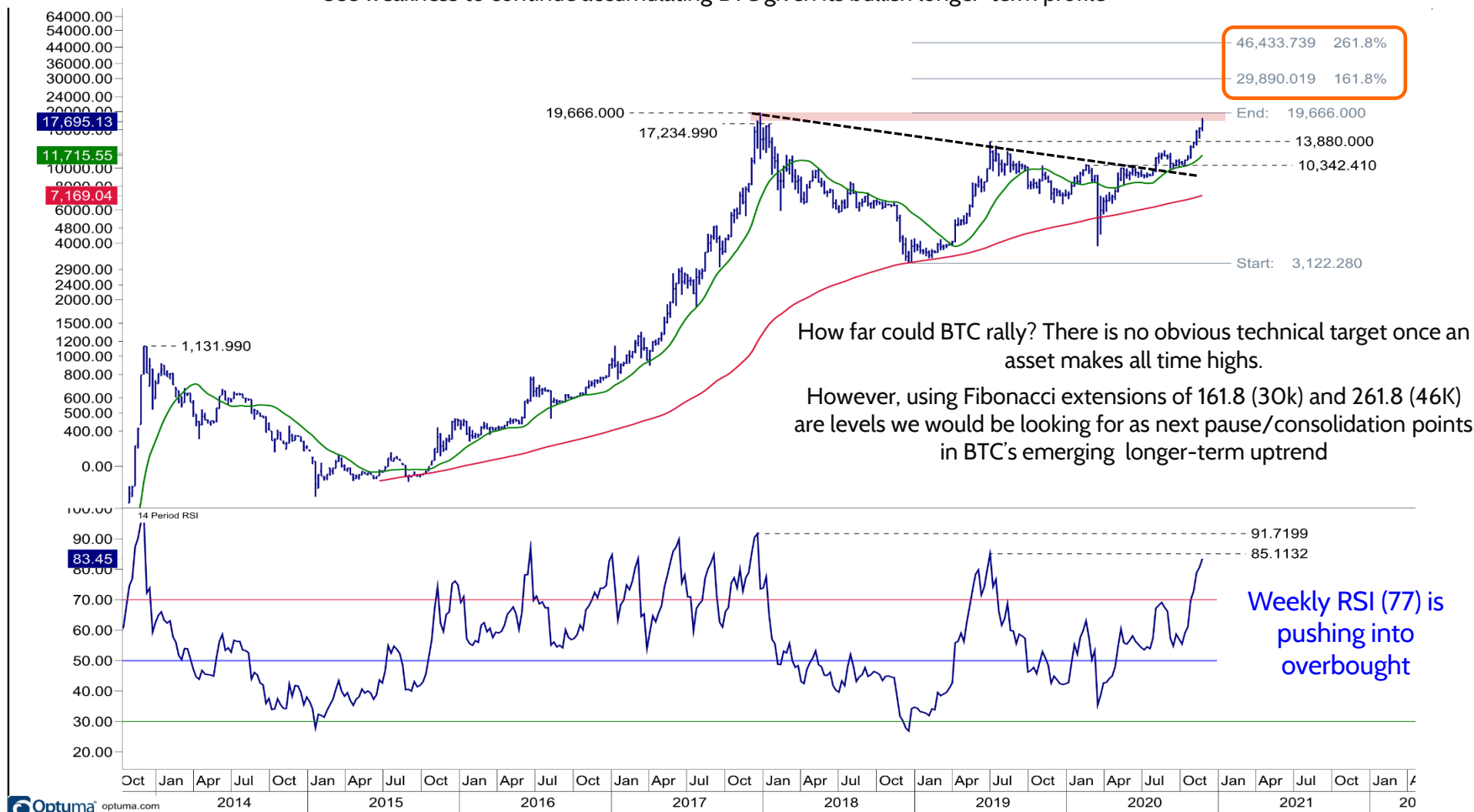


Source: Fundstrat, Bloomberg, Optuma

BTC – 2017-2020

The most important technical point regarding BTC is that crossing above 10.5K followed by 13.8K confirmed that BTC was in the early stages of resolving a very large technical pattern consolidation. As BTC tests its next resistance band between 17.2-19.6K a pause would not be surprising particularly given weekly momentum has moved into overbought territory. However, the larger price pattern suggests to us pullbacks are likely to be accumulated and short lived.

Use weakness to continue accumulating BTC given its bullish longer-term profile



Source: Fundstrat, Bloomberg, Optuma

S&P 500 Sector Relative Performance Trends

Leaders lag, laggards lead

Relative sector trends continue to favor cyclicals as emerging tactical leadership as growth pulls back within long-term uptrends

- 1) GROWTH: Intermediate-term corrections continue to XLK, XLY and XLC but within longer-term uptrends
- 2) Leading CYCLICALS: Industrials and Materials are in early long-term uptrends extending medium-term uptrends
- 3) Lagging CYCLICALS: Financials, Energy and select REITS continue to complete intermediate-term bottoming patterns

Relative performance trend vs the S&P 500

INVESTING Long-term 6+ monthly trend	TACTICAL Medium term 8-16+ weekly trend	TRADING Short-term 10-20+ daily trend	10 day relative high low vs S&P	Code	Name
A	B	C	D		
1) Established Up	↓ 3) Neutral (-)	4) Early Down		XLC	COMM SERV SELECT SECTOR SPDR
1) Established Up	4) Early Down	5) Established Down (+)		XLY 1	CONSUMER DISCRETIONARY SELT
1) Established Up (-)	4) Early Down	4) Early Down		XLK	TECHNOLOGY SELECT SECT SPDR
↑ 2) Early Up	1) Established Up	1) Established Up	HIGH	XLI 2	INDUSTRIAL SELECT SECT SPDR
2) Early Up	1) Established Up	↑ 3) Neutral (+)		XLB	MATERIALS SELECT SECTOR SPDR
↓ 4) Early Down	↓ 4) Early Down	↓ 4) Early Down	LOW	XLV	HEALTH CARE SELECT SECTOR
5) Established Down	5) Established Down (+)	↓ 3) Neutral (-)		XLP	CONSUMER STAPLES SPDR
5) Established Down (+)	↑ 2) Early Up	1) Established Up	HIGH	XLE 3	ENERGY SELECT SECTOR SPDR
5) Established Down (+)	2) Early Up	1) Established Up		XLF	FINANCIAL SELECT SECTOR SPDR
5) Established Down (+)	↓ 3) Neutral (-)	1) Established Up		IYR	ISHARES US REAL ESTATE ETF
5) Established Down (+)	3) Neutral (+)	↓ 5) Established Down		XLU	UTILITIES SELECT SECTOR SPDR

Leaders lag, laggards lead

1. Leaders lag - Semi leadership intact but most growth/momentum leadership continue to correct within long-term uptrends – Hold
2. Emerging – Cyclical: Auto related, Durables, Materials, Transports, Consumer Durables – Increase exposure
3. Bottoming – Cyclical: Bottoming within longer-term downtrends: Capital Goods (GE), Financials, Energy – Selectively add exposure

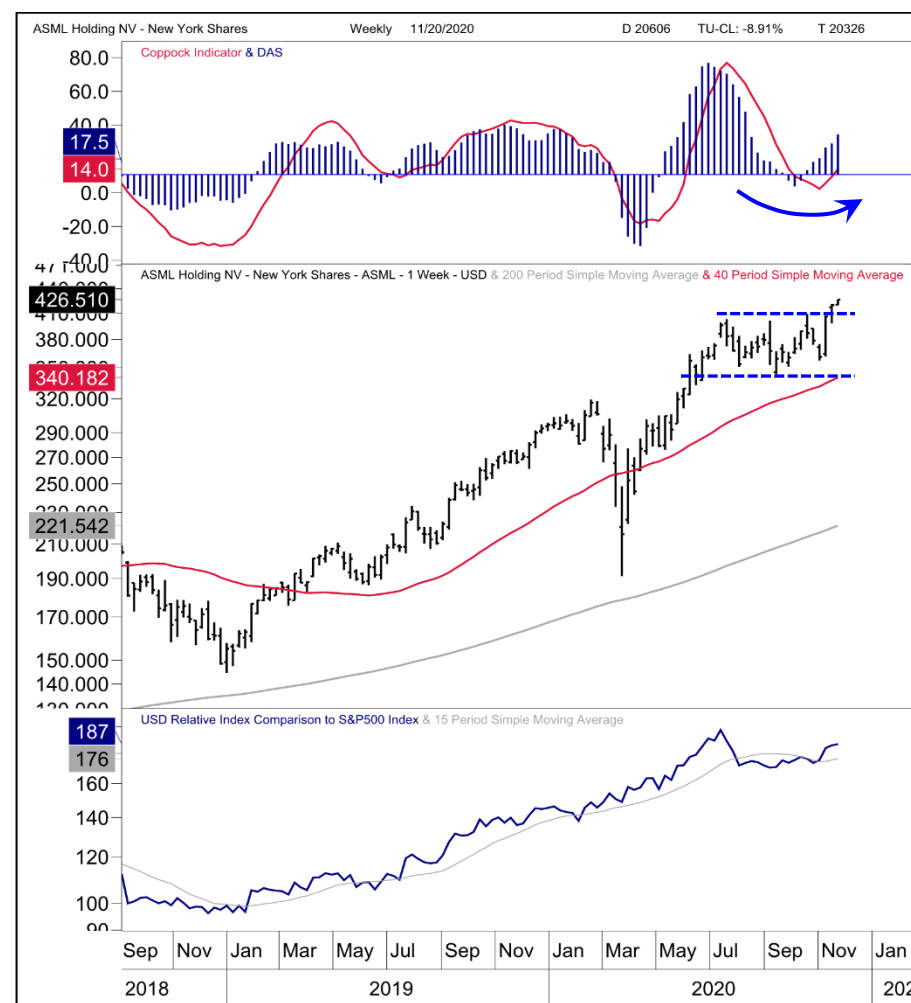
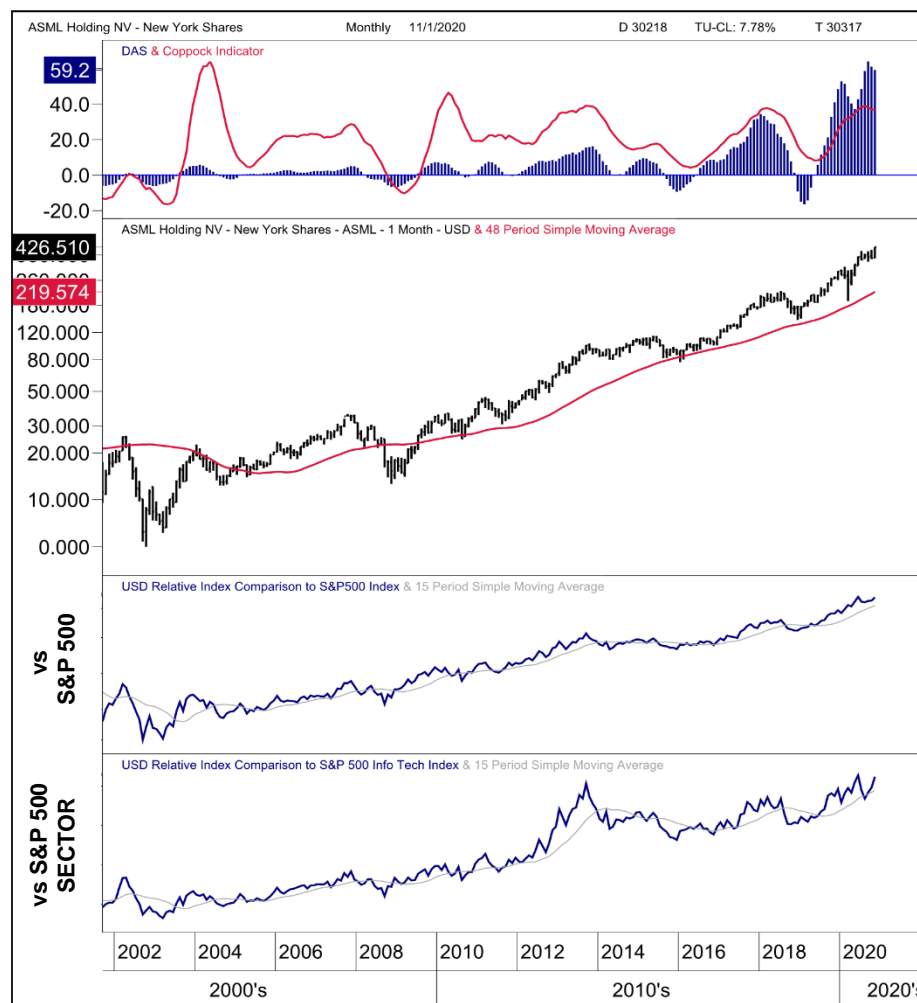
Relative performance trend versus the S&P 500

INVESTING Long-term 6+ monthly trend	TACTICAL Medium term 8-16+ weekly trend	TRADING Short-term 10-20+ daily trend	10 day relative high low vs S&P	Code	Name	Sector GIC Level 1
A	B	C	D			
1) Established Up	↑ 1) Established Up	4) Early Down		S5MEDA	MEDIA & ENTERTAINMENT	COMMUNICATION SERVICES
1) Established Up	1) Established Up (-)	3) Neutral (+)		S5SSEQX	SEMICONDUCTORS & SEMICONDUCTOR EQU	TECHNOLOGY
1) Established Up (-)	4) Early Down	3) Neutral		S5TECH	TECHNOLOGY HARDWARE & EQUIPMENT	TECHNOLOGY
1) Established Up (-)	↓ 5) Established Down	5) Established Down		S5RETL	RETAILING	DISCRETIONARY
1) Established Up (-)	↓ 5) Established Down	5) Established Down	LOW	S5SETW	SOFTWARE & SERVICES	TECHNOLOGY
2) Early Up	1) Established Up	1) Established Up	HIGH	S5AUCO	AUTOMOBILES & COMPONENTS	DISCRETIONARY
2) Early Up	↑ 1) Established Up	1) Established Up (-)	HIGH	S5COMS	COMMERCIAL PROFESSIONAL SERVICES	INDUSTRIALS
2) Early Up	1) Established Up	2) Early Up		S5TRAN	TRANSPORTATION	INDUSTRIALS
2) Early Up	1) Established Up	2) Early Up		S5FDSR	FOOD & STAPLES RETAILING	STAPLES
2) Early Up	1) Established Up	↑ 3) Neutral (+)		S5MATRX	MATERIALS	MATERIALS
2) Early Up	1) Established Up (-)	5) Established Down (+)		S5CODU	CONSUMER DURABLES & APPAREL	DISCRETIONARY
2) Early Up	2) Early Up	↓ 4) Early Down		S5HCES	HEALTH CARE EQUIPMENT & SERVICES	HEALTHCARE
3) Neutral (-)	4) Early Down	5) Established Down	LOW	S5HOUS	HOUSEHOLD & PERSONAL PRODUCTS	STAPLES
4) Early Down	5) Established Down	↓ 5) Established Down		S5PHRM	PHARM BIOTECH & LIFE SCIENCES	HEALTHCARE
5) Established Down	5) Established Down (+)	2) Early Up		S5FDBT	FOOD BEVERAGE & TOBACCO	STAPLES
5) Established Down	5) Established Down (+)	2) Early Up		S5REAL INDEX	REAL ESTATE	REITS
5) Established Down	5) Established Down (+)	↓ 4) Early Down		S5TELSX	TELECOMMUNICATION SERVICES	COMMUNICATION SERVICES
5) Established Down (+)	1) Established Up	1) Established Up	HIGH	S5CPGS	CAPITAL GOODS	INDUSTRIALS
5) Established Down (+)	↑ 2) Early Up	1) Established Up		S5BANKX	BANKS	FINANCIALS
5) Established Down (+)	↑ 2) Early Up	1) Established Up		S5DIVF	DIVERSIFIED FINANCIALS	FINANCIALS
5) Established Down (+)	2) Early Up	1) Established Up		S5INSU	INSURANCE	FINANCIALS
5) Established Down (+)	↑ 2) Early Up	1) Established Up	HIGH	S5ENRSX	ENERGY	ENERGY
5) Established Down (+)	↑ 2) Early Up	3) Neutral (+)		S5HOTR	CONSUMER SERVICES	DISCRETIONARY
5) Established Down (+)	3) Neutral (+)	↓ 5) Established Down		S5UTILX	UTILITIES	UTILITIES

ASML Holding NV - New York Shares - ASML

Information Technology Semiconductors & Semiconductor Mkt Cap: 178,602.63

A leader accelerating above its June-October trading range

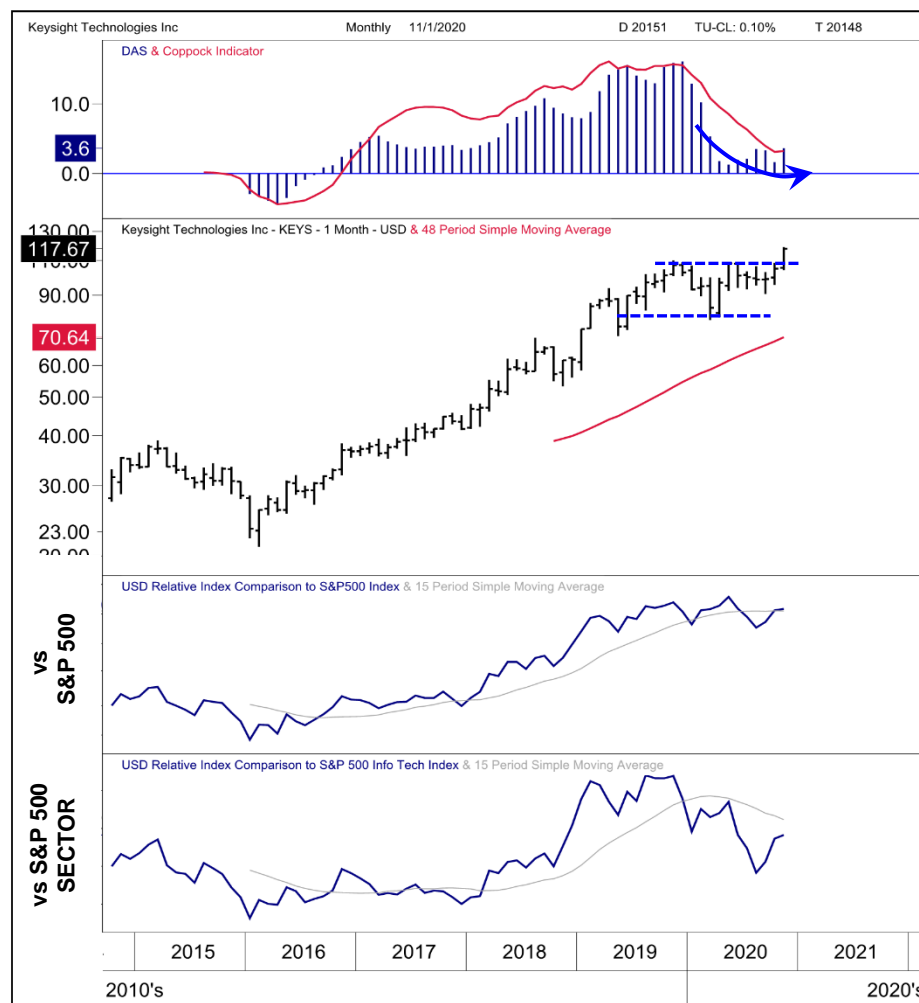


Source: Fundstrat, Bloomberg, Optuma

Keysight Technologies Inc - KEYS

Information Technology Electronic Equipment, Instrume Mkt Cap: 21,726.88

KEY is also breaking out

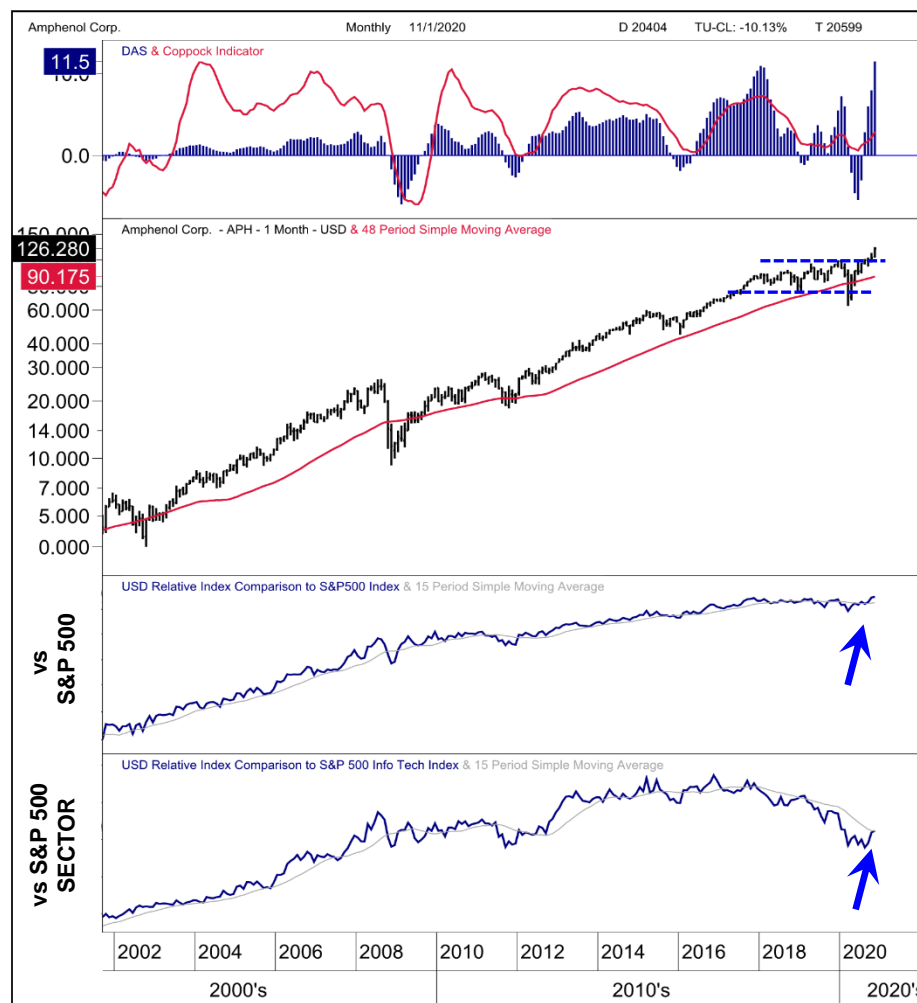


Source: Fundstrat, Bloomberg, Optuma

Amphenol Corp. - APH

Information Technology Electronic Equipment, Instrume Mkt Cap: 36,915.696

APH continues to lead in Electronic Equipment breaking out of a 2-year trading range

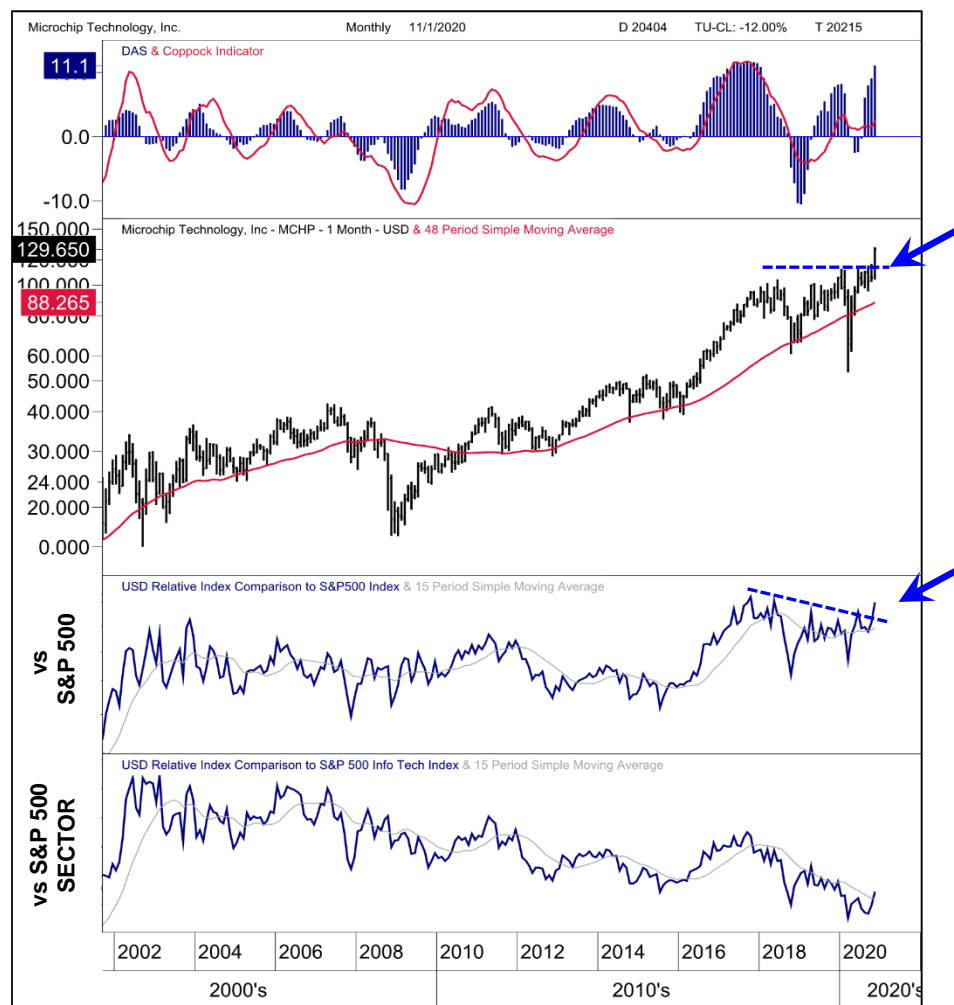


Source: Fundstrat, Bloomberg, Optuma

Microchip Technology, Inc. - MCHP

Information Technology Semiconductors & Semiconductor Mkt Cap: 32,846.452

MCHP breaks out with improving relative performance

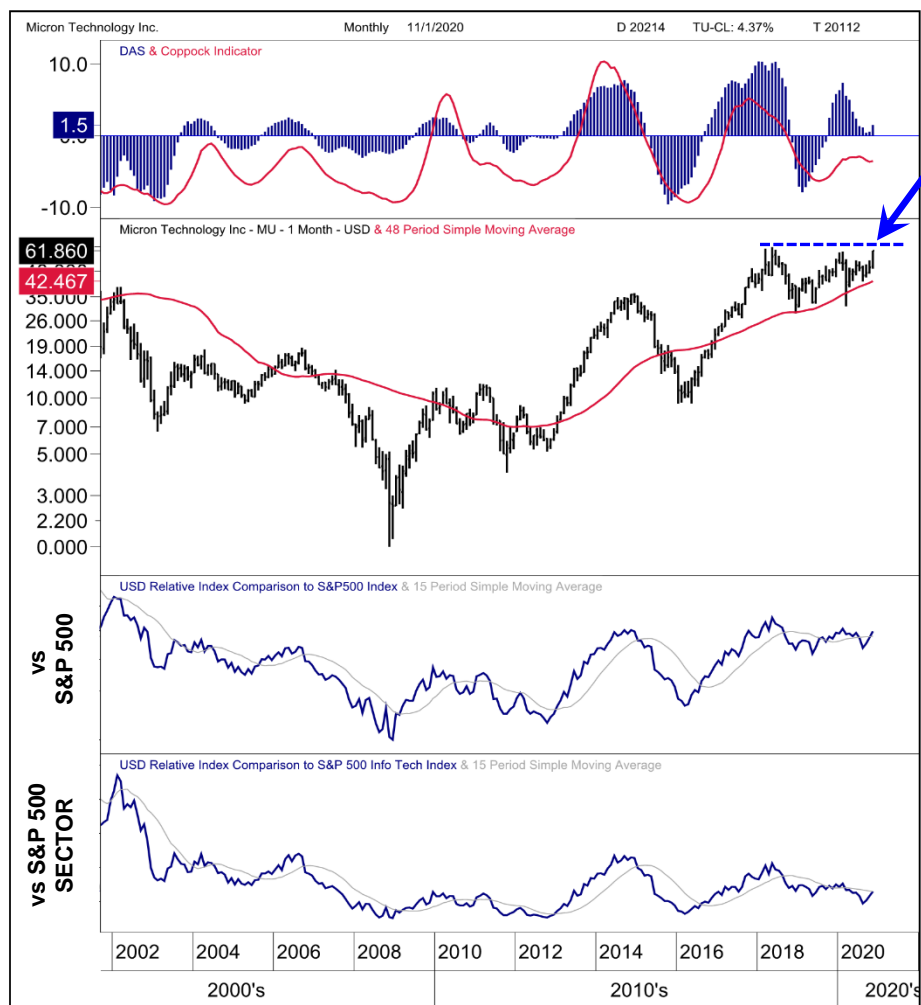


Source: Fundstrat, Bloomberg, Optuma

Micron Technology Inc. - MU

Information Technology Semiconductors & Semiconductor Mkt Cap: 64,488.939

MU is reaccelerating and on the verge of breaking out

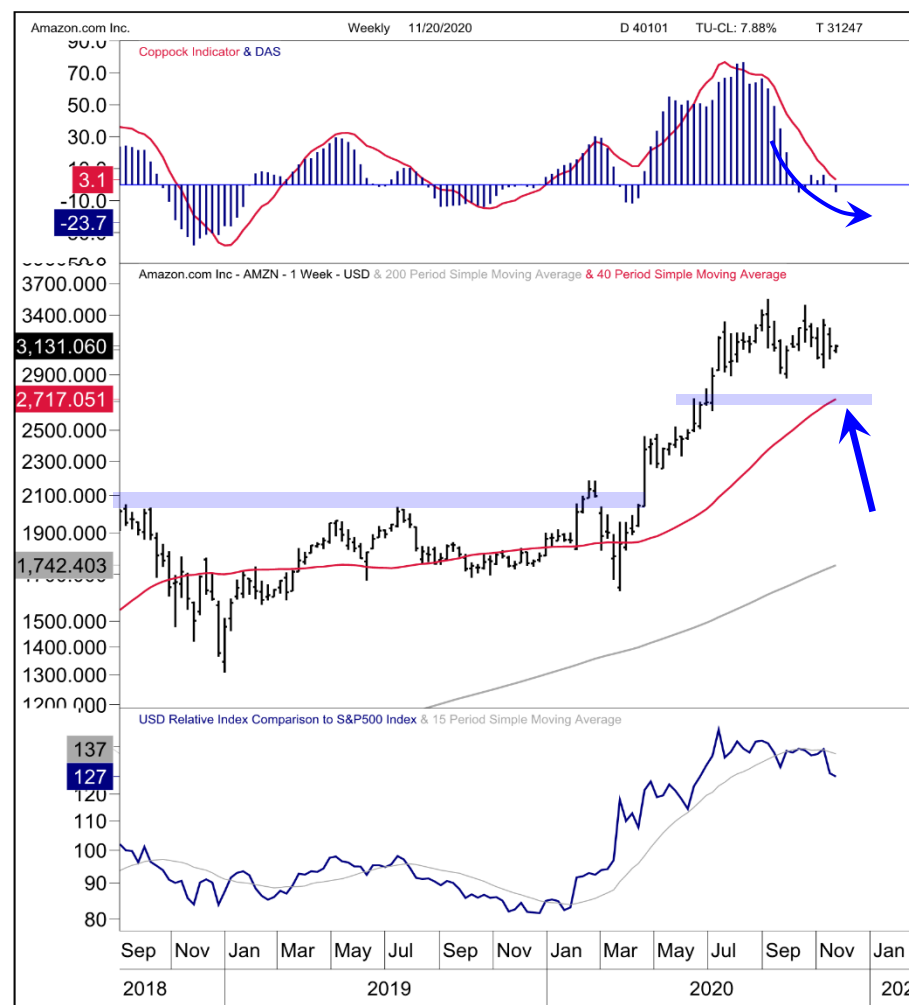
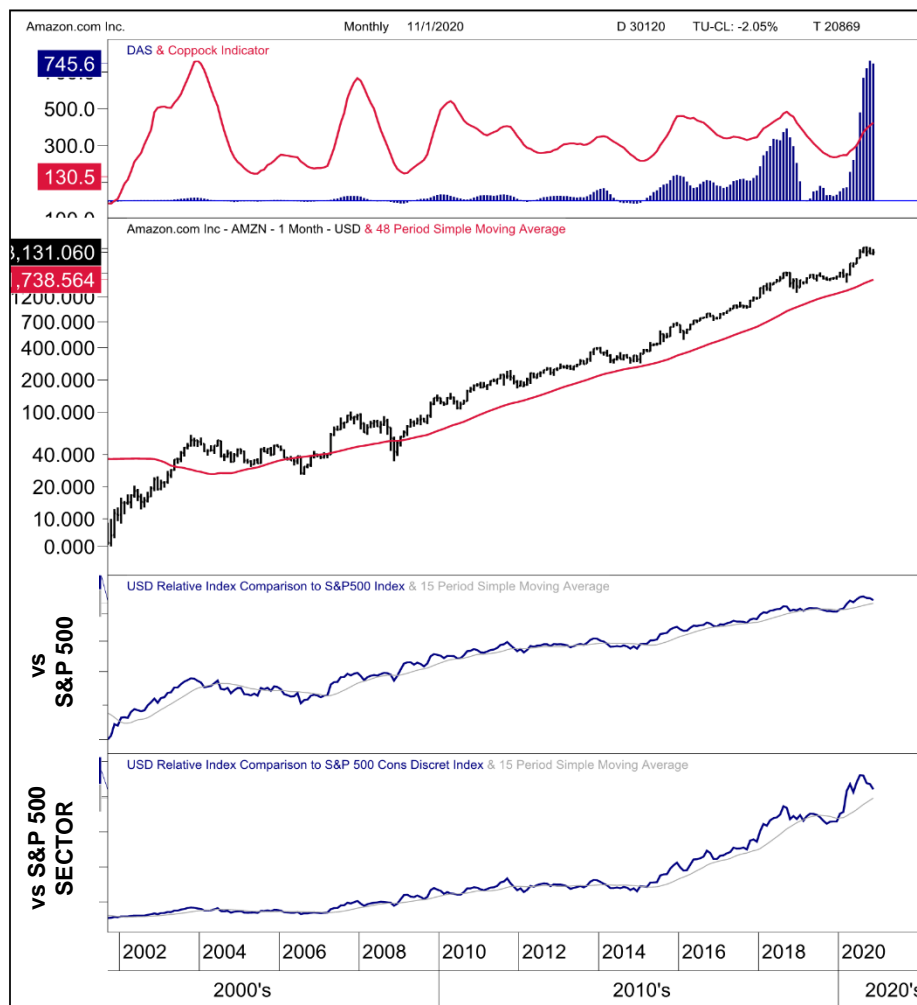


Source: Fundstrat, Bloomberg, Optuma

Amazon.com Inc. - AMZN

Consumer Discretionary Internet & Direct Marketing Re Mkt Cap: 1,569,884.119

AMZN is pausing/catching up with its rising 40-week moving average and is not breaking down in our opinion. In fact, weekly momentum (top right) is working toward oversold levels. Hold



Source: Fundstrat, Bloomberg, Optuma

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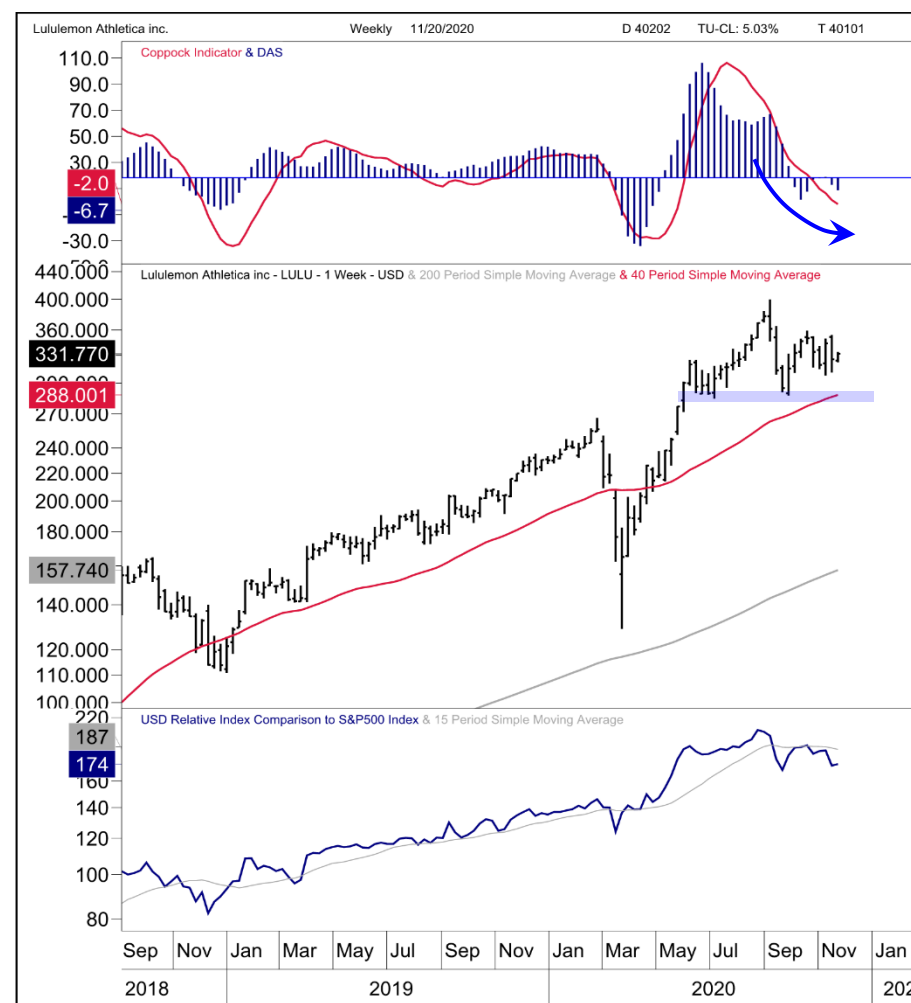
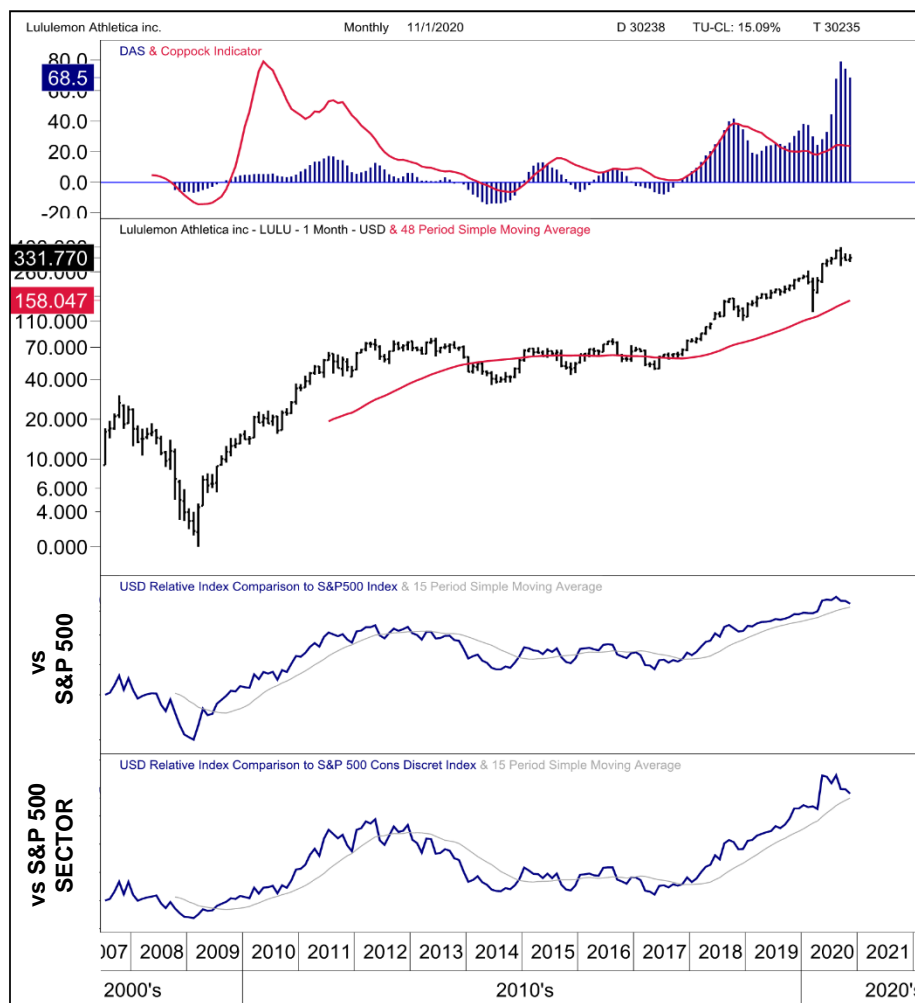
November 19, 2020

Slide 135

Lululemon Athletica inc. - LULU

Consumer Discretionary Textiles, Apparel & Luxury Goods Mkt Cap: 42,410.47

Similar to AMZN and many other growth stocks, LULU is pausing and working toward oversold levels heading into year-end/Q1. Hold



Source: Fundstrat, Bloomberg, Optuma

Norfolk Southern Corp. - NSC

Industrials Road & Rail Mkt Cap: 60,768.532

Cyclical leader breaking out of its 2019-2020 trading range with improving relative performance



Source: Fundstrat, Bloomberg, Optuma

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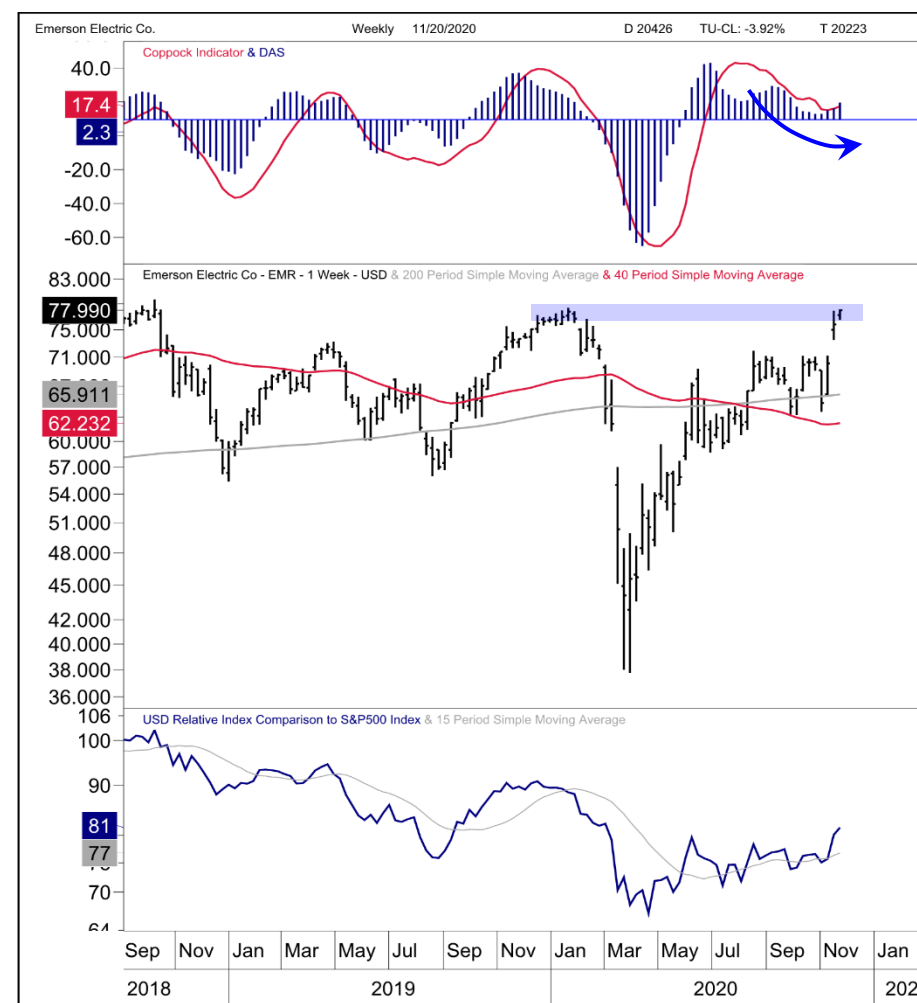
November 19, 2020

Slide 137

Emerson Electric Co. - EMR

Industrials Electrical Equipment Mkt Cap: 45,303.444

EMR has lagged but is also on the cusp of breaking out of its 2 year trading range

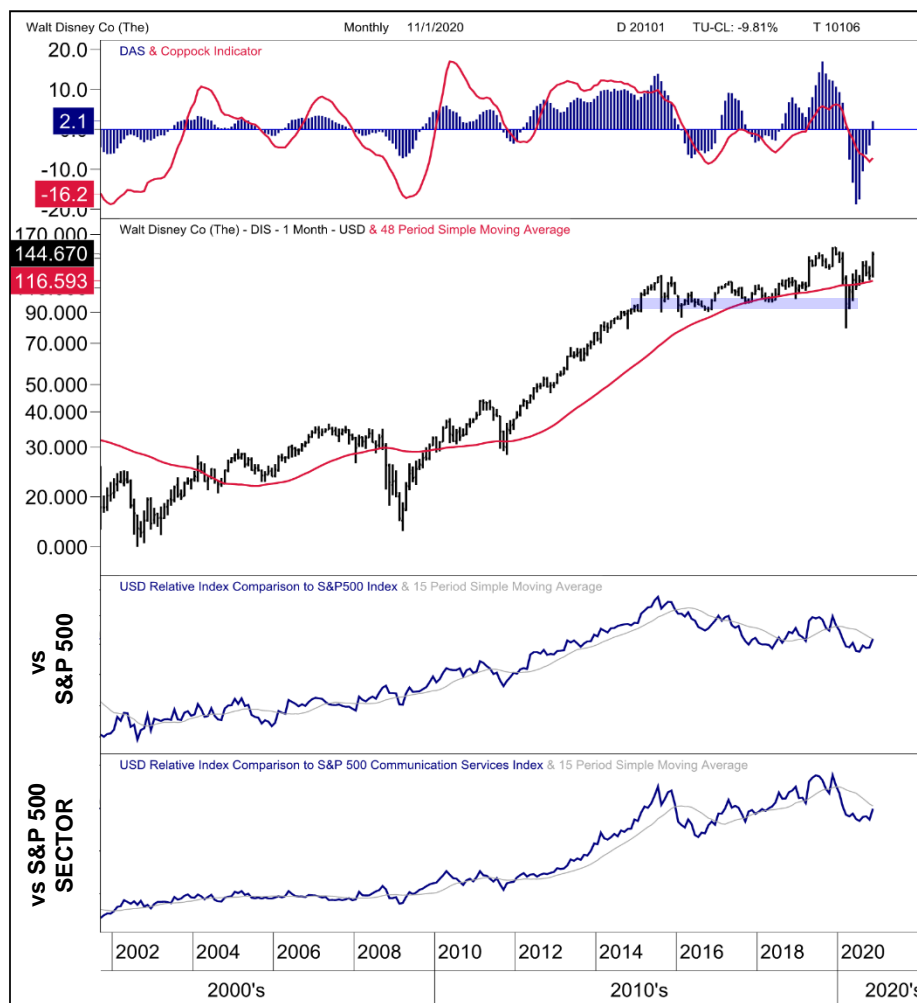


Source: Fundstrat, Bloomberg, Optuma

Walt Disney Co (The) - DIS

Communication Services Entertainment Mkt Cap: 250,025.287

DIS in the early stages of new up cycle rallying from its 40-week sma



Source: Fundstrat, Bloomberg, Optuma

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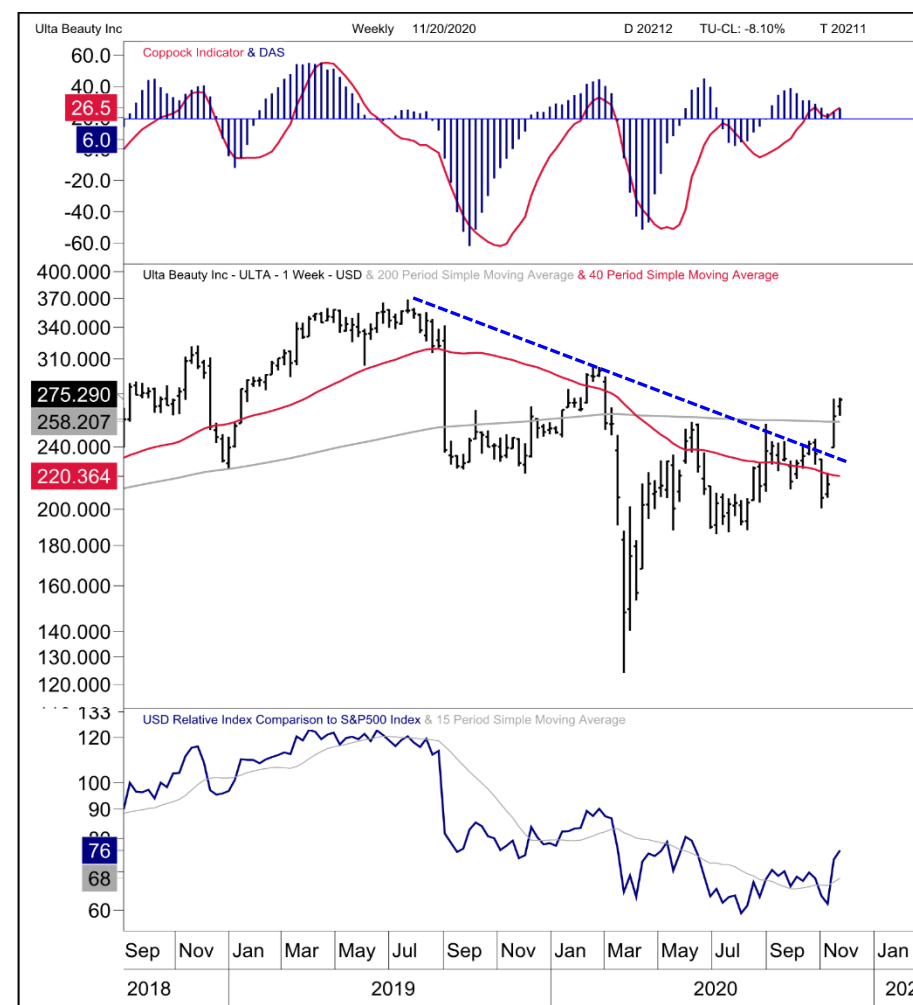
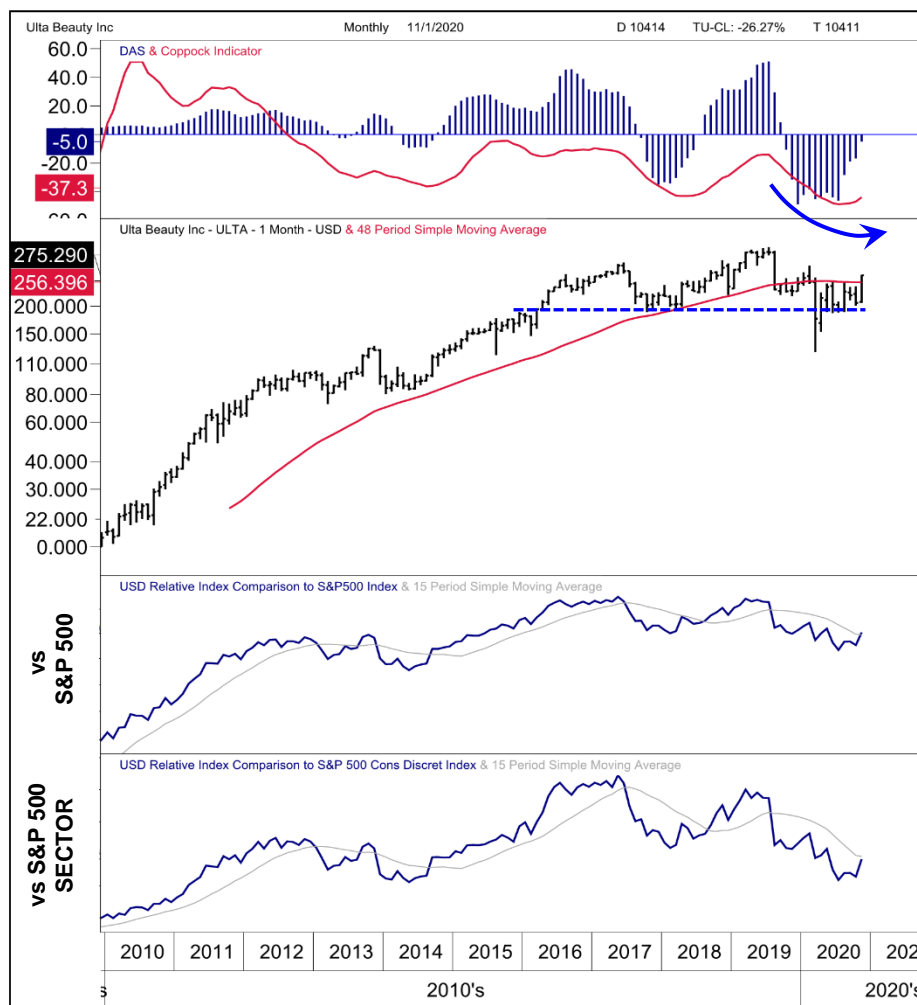
November 19, 2020

Slide 139

Ulta Beauty Inc - ULTA

Consumer Discretionary Specialty Retail Mkt Cap: 14,776.37

Even ULTA is showing evidence of completing a cycle low

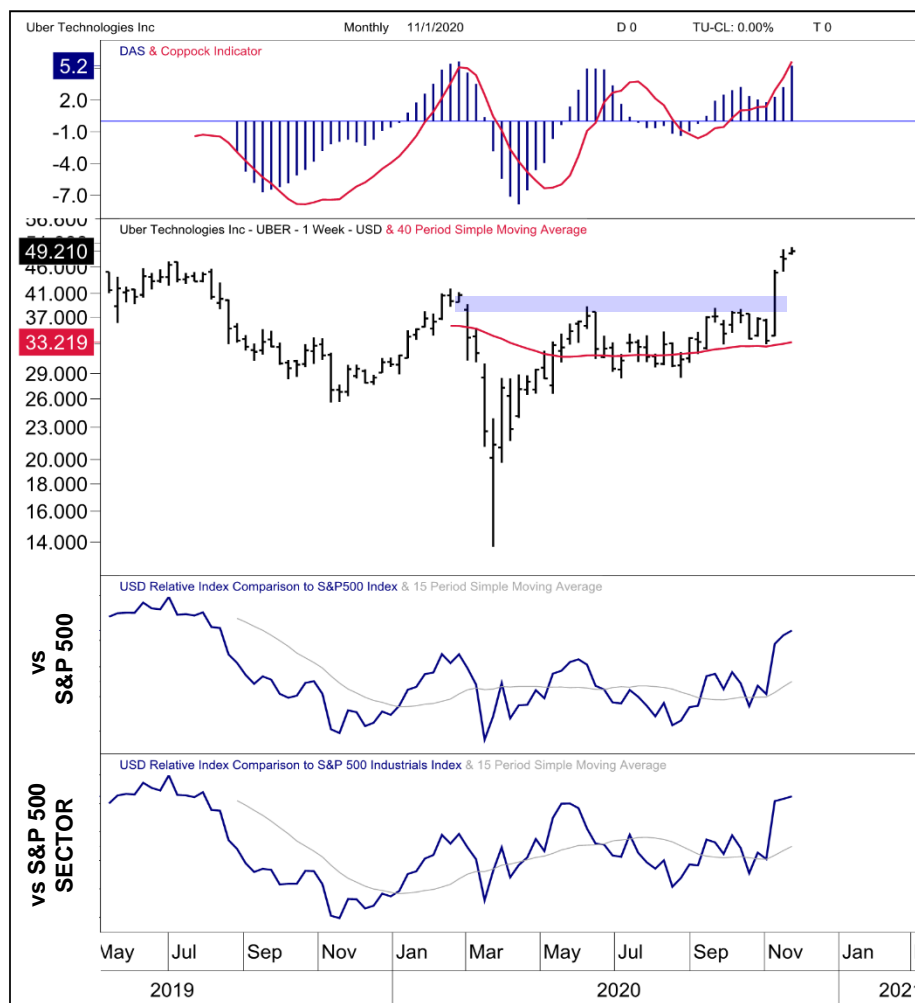


Source: Fundstrat, Bloomberg, Optuma

Uber Technologies Inc - UBER

Industrials Road & Rail Mkt Cap: 83,972.999

UBER is overbought short-term but we would be buyers on near-term weakness



Source: Fundstrat, Bloomberg, Optuma

Morgan Stanley - MS

Financials Capital Markets Mkt Cap: 102,418.713

MS has lagged BLK but is more timely and is just beginning to emerge from its 2-year trading range



Source: Fundstrat, Bloomberg, Optuma

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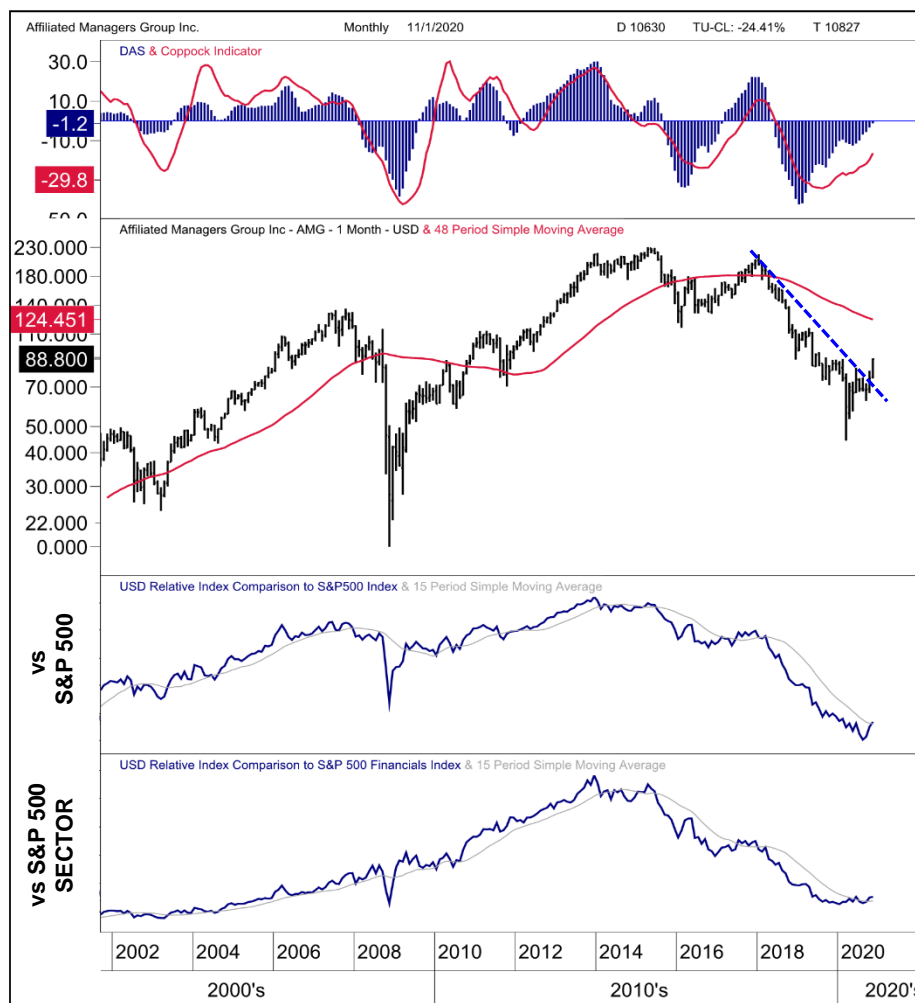
November 19, 2020

Slide 142

Affiliated Managers Group Inc. - AMG

Financials Capital Markets Mkt Cap: 3,835.28

...and laggards, such as AMG, are in the early stages of reversing 2-year downtrends.



Source: Fundstrat, Bloomberg, Optuma

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Halliburton Co. - HAL

Energy Energy Equipment & Services Mkt Cap: 12,667.823

..even Energy is likely establishing a cycle low as June-November corrections begin to bottom for secondary lows



Source: Fundstrat, Bloomberg, Optuma

Tactical considerations into YE and Q1 2021

- Weekly momentum (1-2 quarter cycles), bottomed in late Q3 and likely peak mid Q1
- Expect pullbacks to be shallow followed by further upside into Q1 → S&P 4000
- VIX futures – Investors remain hedged – Expect further unwind similar to 2012 & 2016

Portfolio Strategy – Managing barbell exposure

Increasing exposure Cyclicals

- Increase exposure to **Industrials, Materials, Discretionary**, select **Financials** and **Energy**
- Participation/breadth continues to expand
- Expecting participation to continue expanding through the current 4-year cycle

Holding core overweight in **Technology** and **growth Discretionary** leadership long-term

- Growth/momentum has been pausing/consolidating but not broken
- Weekly momentum data already unwinding from overbought levels seen in August

Underweight Defensive/safety sectors – **Utilities, Staples, Healthcare**

Appendix

Tracking relative performance trends over three time horizons

Visualizing different investment horizons

Relative performance life cycle

Disclosure

Tracking shifting relative performance trends

- Markets are moving incredibly fast turning most preconceived market views upside down.
- To help in tracking the rapidly shifting market dynamics, we categorize trends into 3 main trend categories: **UP (GREEN)**, **DOWN (RED)** and **NEUTRAL (WHITE)** across 3 times frames (monthly, weekly and daily)
- Relative performance**, the ratio of a securities price versus a market (A/B), is the **single best technical tool to navigate markets and to isolate leadership trends within and between markets**
- The **15-period moving average is an effective proxy for trend** for most securities over most time frames (monthly, weekly or daily)

Relative performance trend	Over/underweight	Technical metric defining
1) Established Up	Core OVERWEIGHT	Relative performance ratio is TRENDING ABOVE a RISING 15-period ma
2) Early Up	New OVERWEIGHT candidates	Relative performance ratio is REVERSING ABOVE a DECLINING 15-period ma
3) Neutral	Market weight	A flat or choppy relative performance trading range
4) Early Down	New UNDERWEIGHT candidates	Relative performance ratio is REVERSING BELOW a RISING 15-period ma
5) Established Down	Core UNDERWEIGHT	Relative performance ratio is TRENDING BELOW a DECLINING 15-period ma
<ul style="list-style-type: none"> Within each trend, counter trend moves develop regularly and are indicated with (+) for a positive and (-) for a negative change 		

- An illustration of these relative performance trends is illustrated at the end of this note

EARLY UPTREND

Relative performance is breaking **ABOVE** a **DECLINING** relative moving average

ESTABLISHED UPTREND

Relative performance is trending **ABOVE** a **RISING** relative moving average

MARKET PERFORMANCE

Relative performance is **RANGE BOUND** around a **FLAT/NEUTRAL** relative moving average

EARLY DOWNTREND

Relative performance is breaking **BELOW** a **RISING** relative moving average

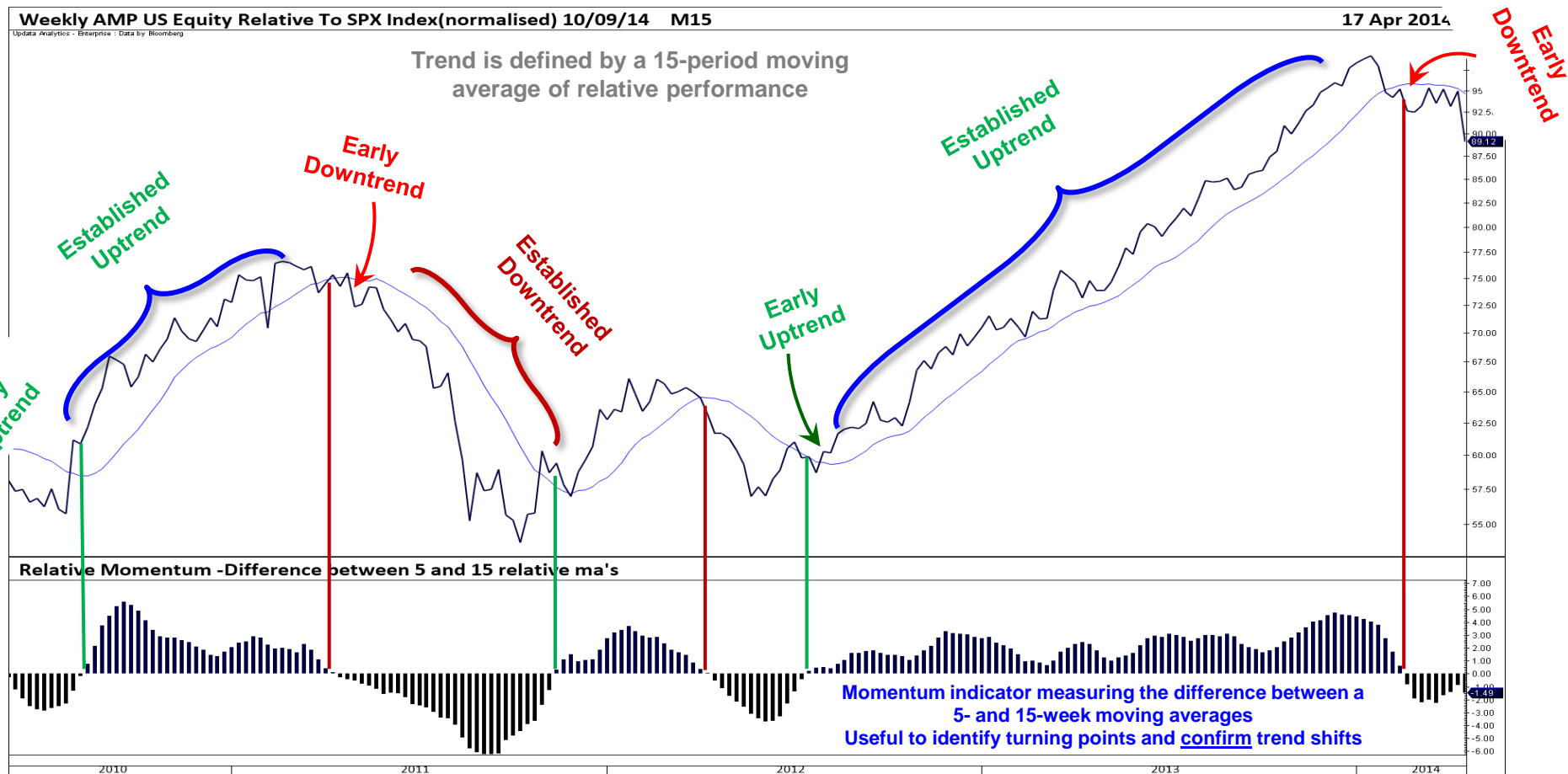
ESTABLISHED DOWNTREND

Relative performance is trending **BELOW** a **DECLINING** relative moving average

> = improving categories

* = Slowing uptrend

/ = deteriorating categories



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Analyst Industry/Sector Views

Positive (+): The analyst expects the performance of his industry/sector coverage universe over the next 6-18 months to be attractive vs. the relevant broad market benchmark, being the S&P 500 for North America.

Neutral (N): The analyst expects the performance of his or her industry/sector coverage universe over the next 6-18 months to be in line with the relevant broad market benchmark, being the S&P 500 for North America.

Negative (-): The analyst expects his or her industry coverage universe over the next 6-18 months to underperform vs. the relevant broad market benchmark, being the S&P 500 for North America.

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- **Macro Strategy – Thomas Lee**
- **Policy Strategy – L. Thomas Block**
- **Tax Strategy – David Zion, Zion Research Group**
- **Global Portfolio Strategy – Brian Rauscher**
- **Technical Strategy – Robert Sluymer**
- **Digital Asset Strategy – David Grider**

Crypto, Internet & Fintech

Industry Outlook & Portfolio Strategy



David Grider, CFA

Director & Senior Analyst at FSInsight, overseeing emerging tech research within the crypto, internet and fintech space

Source: Fundstrat, Bloomberg, Udata

Crypto Internet & Fintech

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 - Current Bitcoin Price Target
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 - Valuations & Return Outlook
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 - Financial Model Estimates
3. Portfolio Strategy: Liquid Crypto Asset Investments
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Crypto Thesis

Bitcoin Outlook

Portfolio Strategy

Crypto Investment Thesis

Secular Macro Growth Drivers Converging

Macro Thematic Driver

Explanation & Rationale

Digital EM Economies (Crypto = BRICS 2.0)

The next economic frontier is in cyberspace. Crypto Emerging Market (“Crypto EM”) economies are a natural consequence of the fourth industrial revolution. Crypto EM growth will be tied to the growth of the digital internet economy.

Technology Disruption (Crypto = FANGs 2.0)

Distributed ledger technology disruption is driving long-term secular crypto industry growth. As more services become digital, technology is absorbing more GDP. The shortage of labor is creating more demand for technology products.

Digital Store of Value (Crypto = Black Gold 2.0)

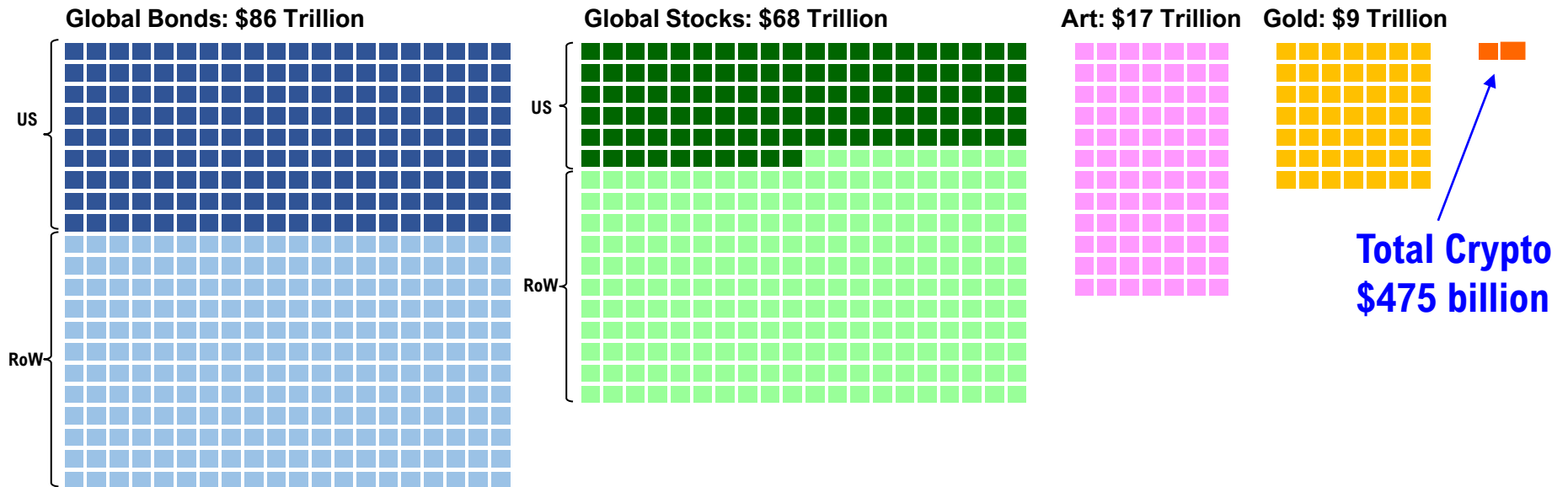
Crypto as a new form of digital gold is the cyber economies equivalent of oil as black gold for the industrial age. Crypto commodities are powering new virtual products & services.

Bitcoin Outperformed Global Assets 9 of 11 Years & Upside Remains

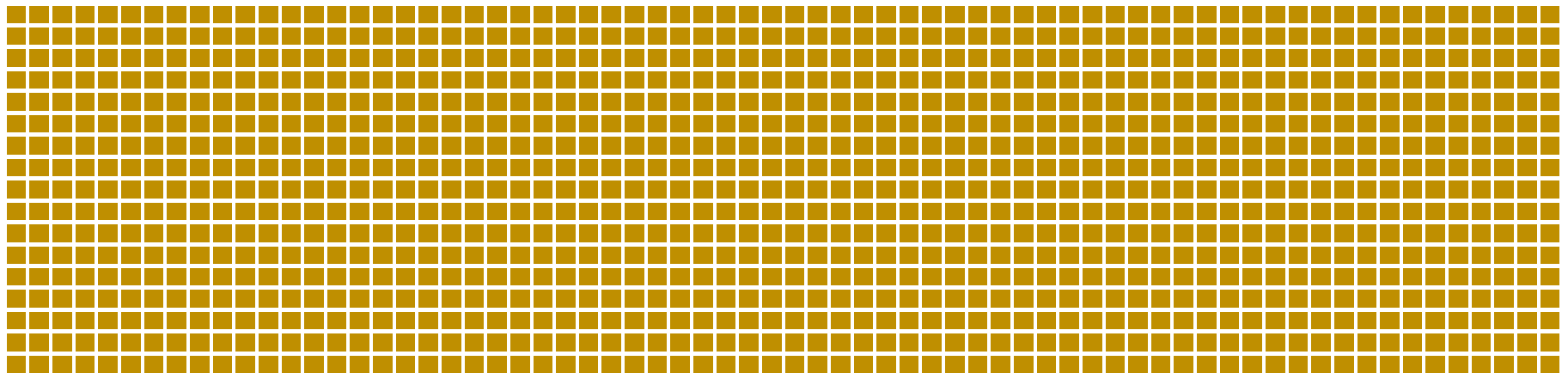
Source: Fundstrat, Bloomberg

Digital Emerging Market

Crypto EM Economies Only 0.1% Global Assets; 1-2% = 10-20x OW




Real Estate: \$230 Trillion



Source: Fundstrat, Bloomberg

Digital Emerging Market

Leading Hedge Fund Managers Revaluating Crypto Opportunity

 CNBC

Paul Tudor Jones calls bitcoin a 'great speculation,' says he has almost 2% of his assets in it

Paul Tudor Jones said Wall Street could be witnessing the historic "birthing of a store of value" through bitcoin.



7,355 views | Nov 12, 2020, 02:17am EST

A Legendary Hedge Fund Billionaire Just Flipped To Bitcoin —Calling It 'Better' Than Gold

Cryptocurrencies

Ray Dalio Says He 'Might Be Missing Something' About Bitcoin

By [Nathan Crooks](#)

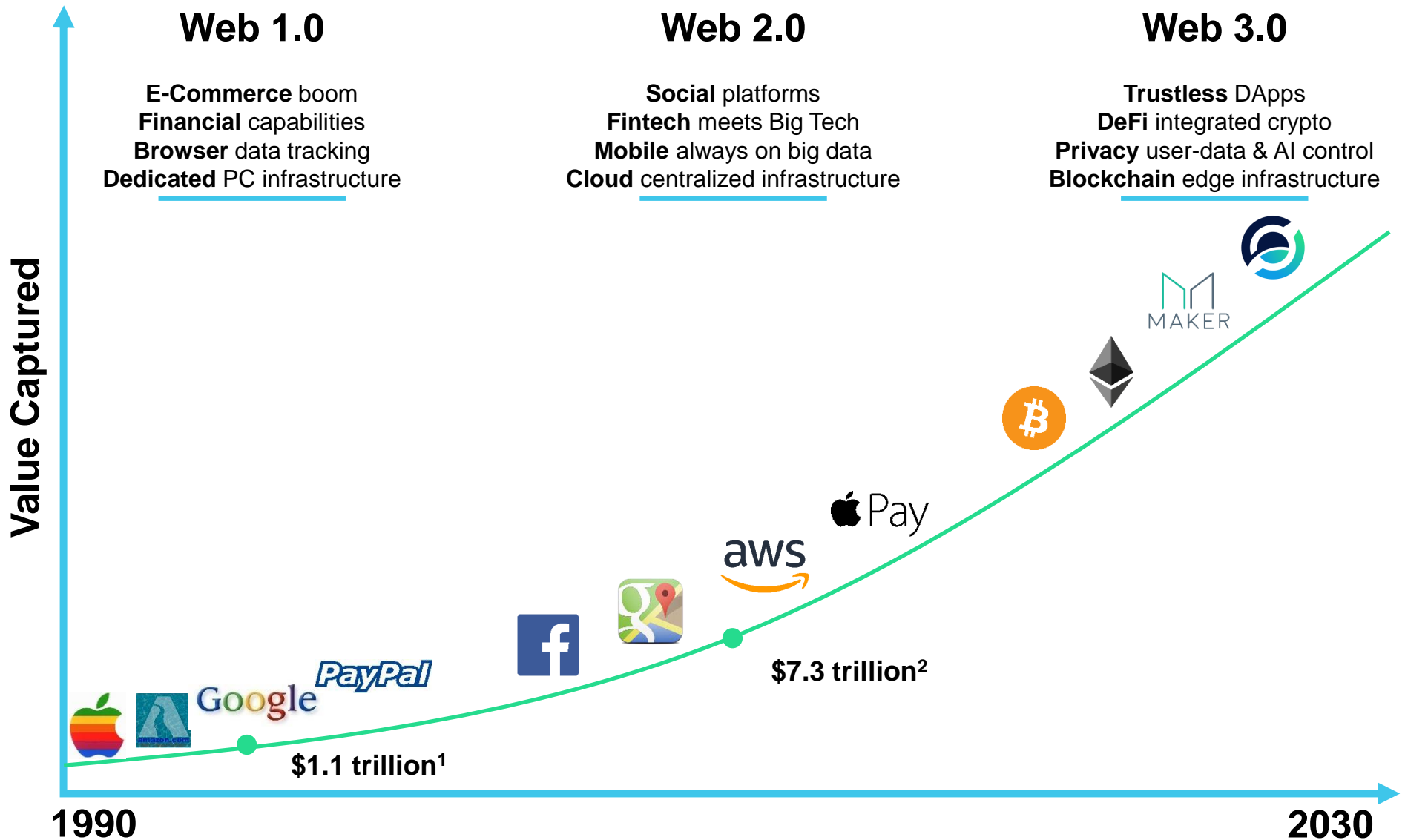
November 17, 2020, 11:30 AM EST



Source: Fundstrat, Bloomberg, CNBC, Forbes

Technology Disruption

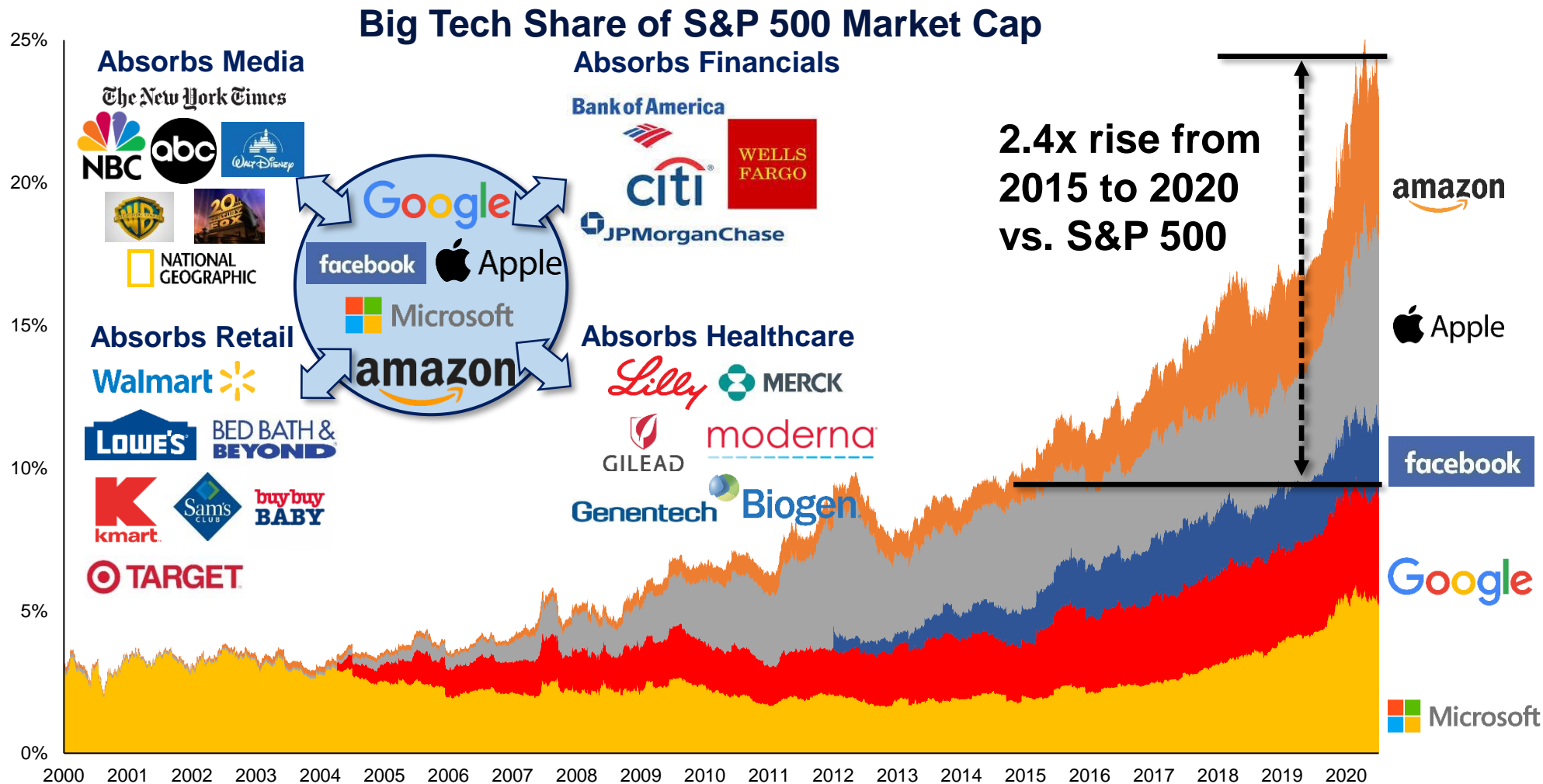
Platforms For The Next Era Of The Web



Source: Fundstrat, Bloomberg, Reuters, (1) Internet companies market cap as of 2000, (2) Big Tech market cap as of 8/25/2020

Technology Disruption

Big Tech Has Been Growing By Absorbing Legacy Industries

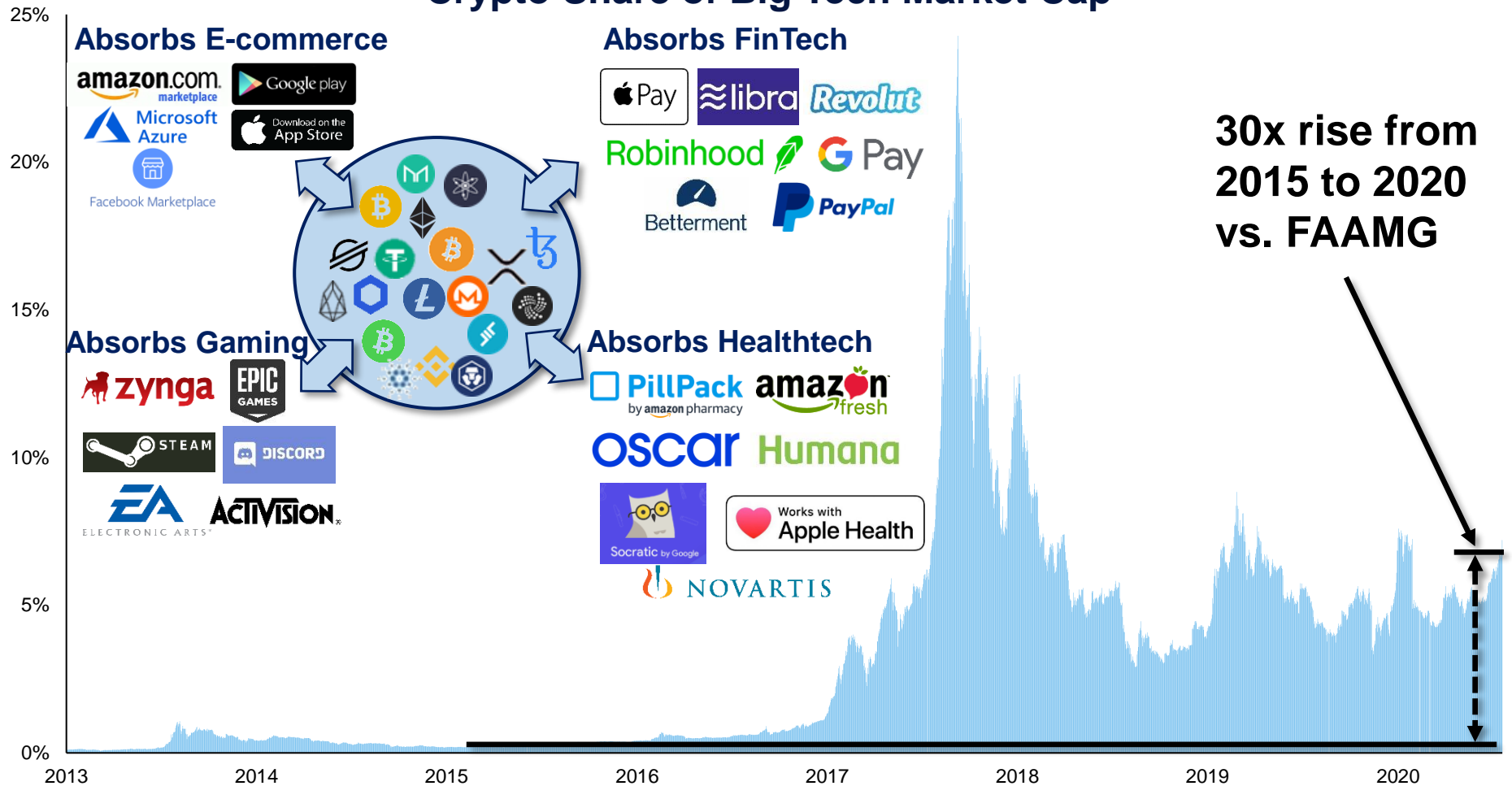


Source: Fundstrat, Bloomberg

Technology Disruption

Early Innings Of Crypto Tech Absorbing Big Tech

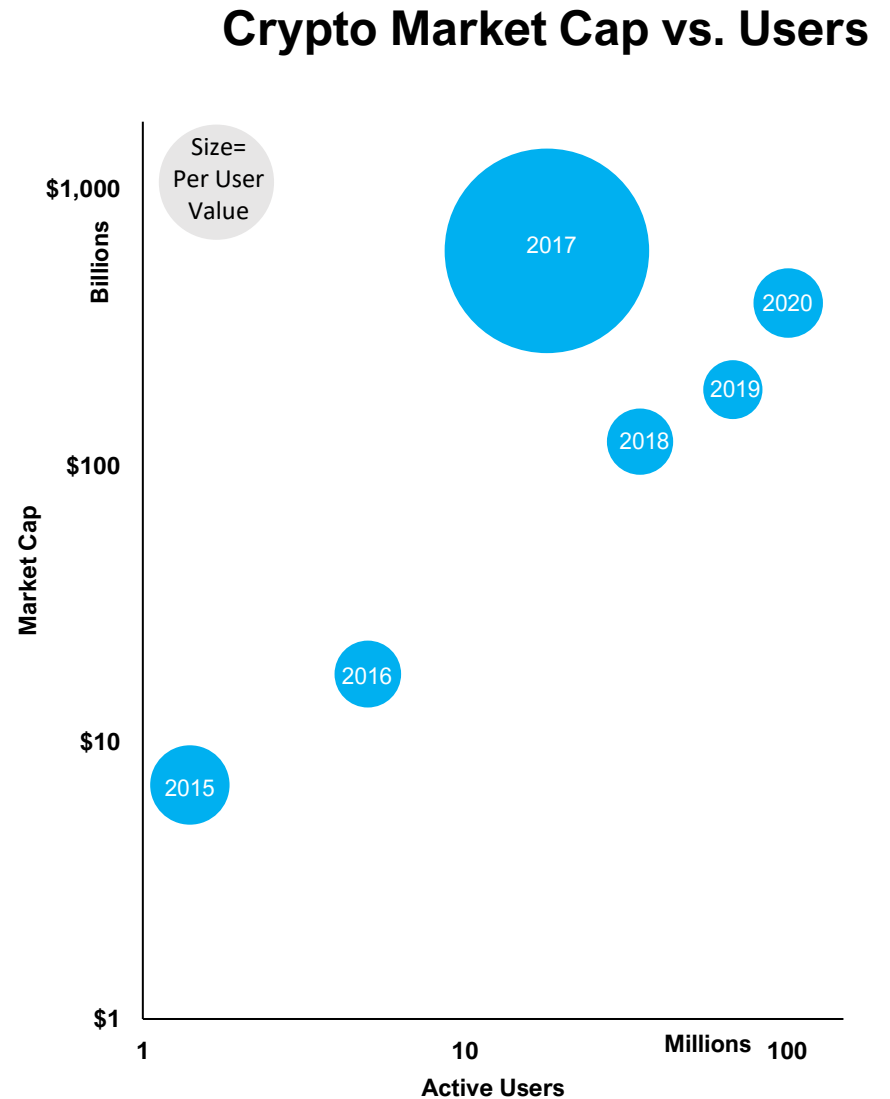
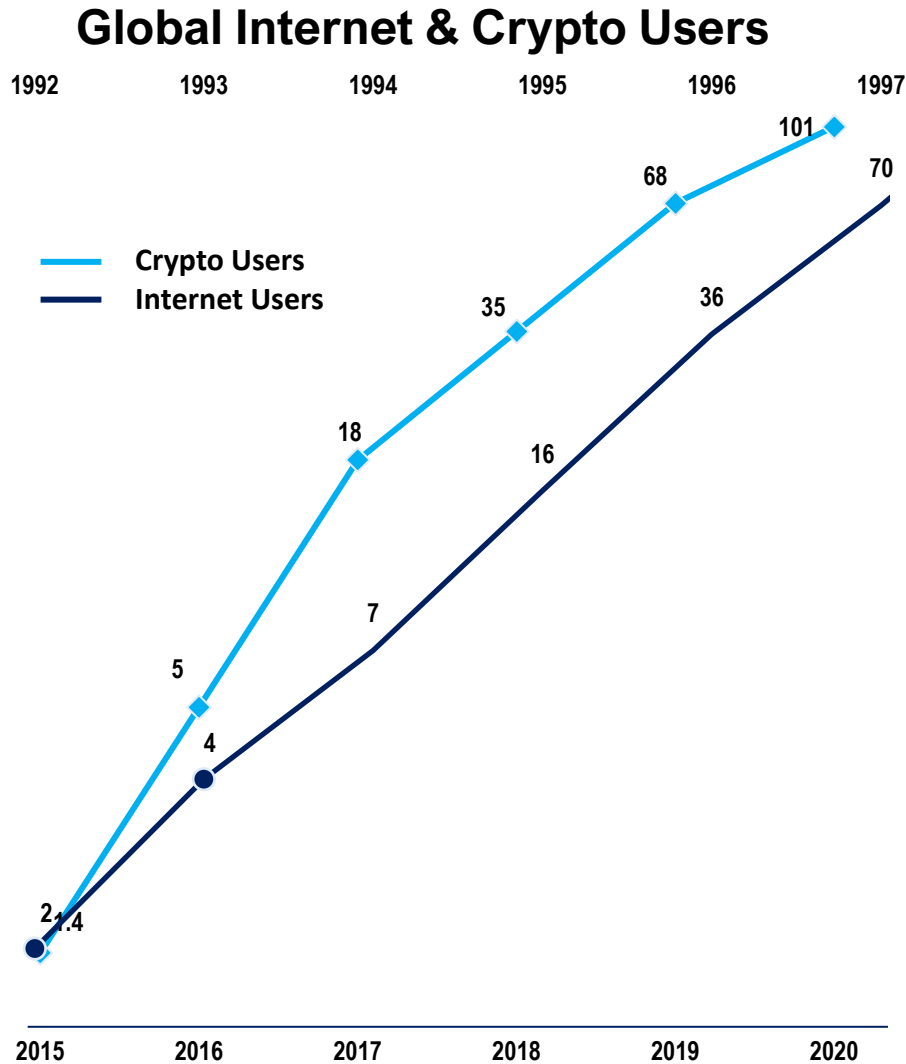
Crypto Share of Big Tech Market Cap



Source: Fundstrat, Bloomberg, Coinmarketcap, Coinmetrics

Technology Disruption

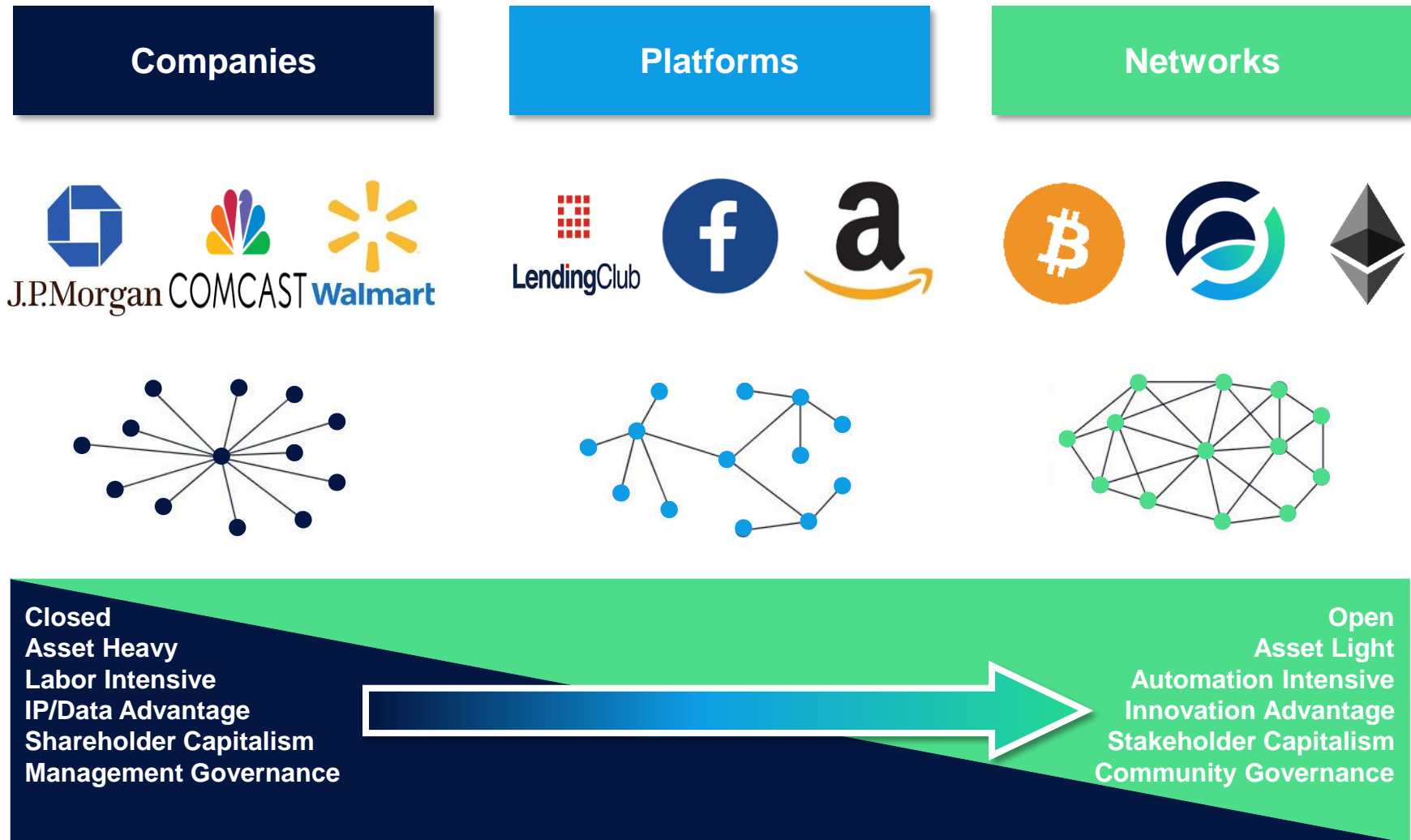
Crypto Users Tracking Internet Growth & Value Following



Source: Fundstrat, Internet World Stats, Cambridge University, Coinmetrics, Coinmarketcap

Technology Disruption

Next Generation Organizational Tech Business Models

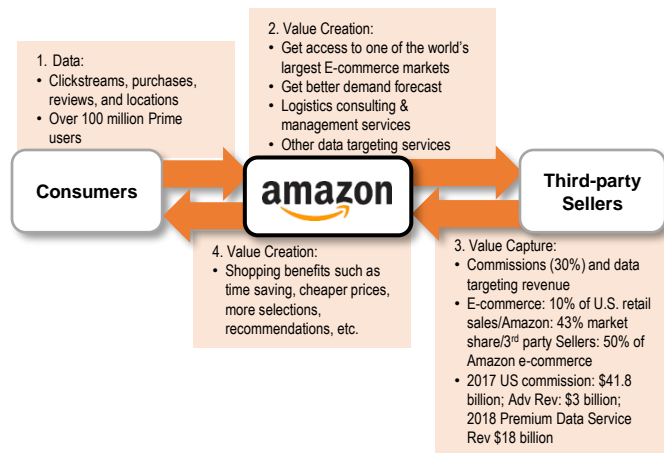


Source: Fundstrat

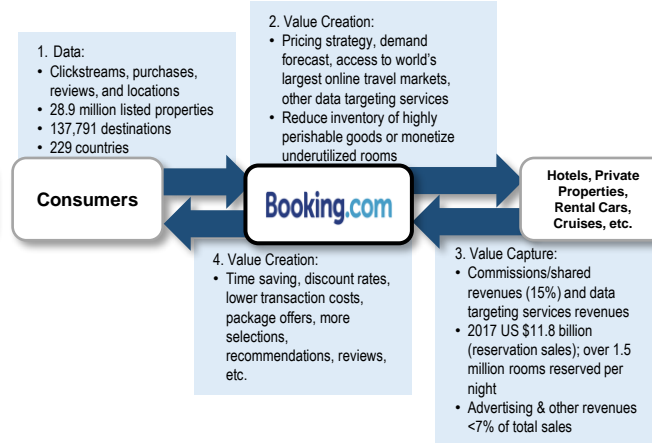
Technology Disruption

Data-Based Platform Company Business Model Being Disrupted

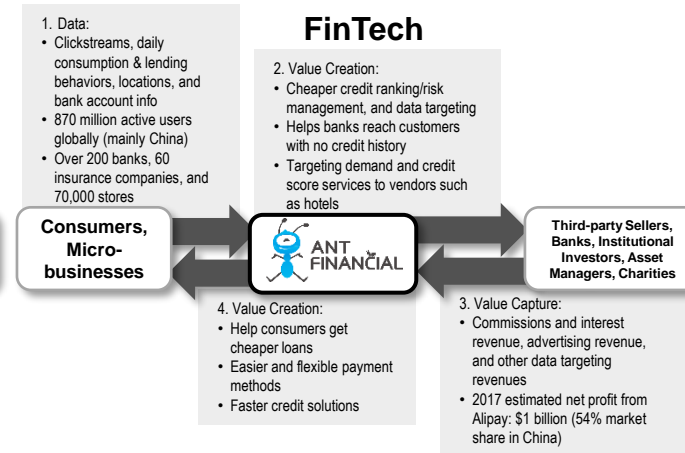
E-commerce



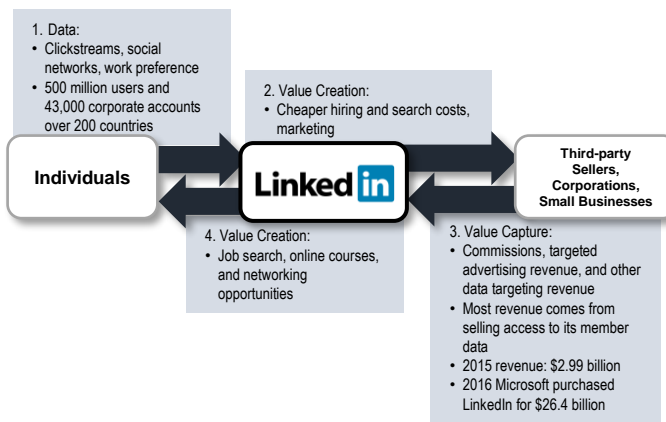
Online Sharing



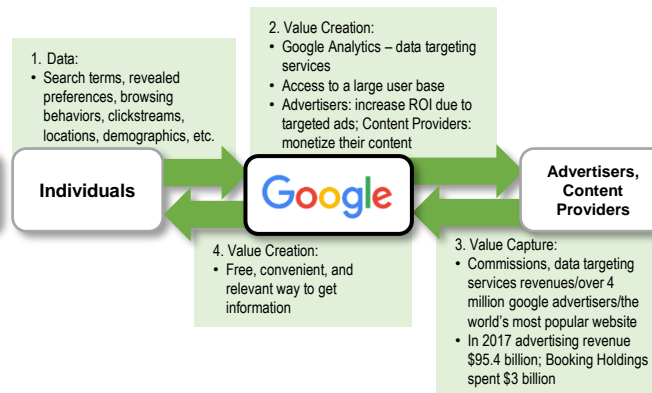
FinTech



Social Network



Online Search



Online Marketplace



Source: Fundstrat, Bureau of Economic Analysis (BEA)

Technology Disruption

Leading Fintech & Big Tech Platforms Moving Into Crypto

2019 Internet



jack
@jack

Twitter is funding a small independent team of up to five open source architects, engineers, and designers to develop an open and decentralized standard for social media. The goal is for Twitter to ultimately be a client of this standard. 🧵

51.4K 10:13 AM - Dec 11, 2019

16.5K people are talking about this



2020 Fintech



PayPal says all users in US can now buy, hold and sell cryptocurrencies



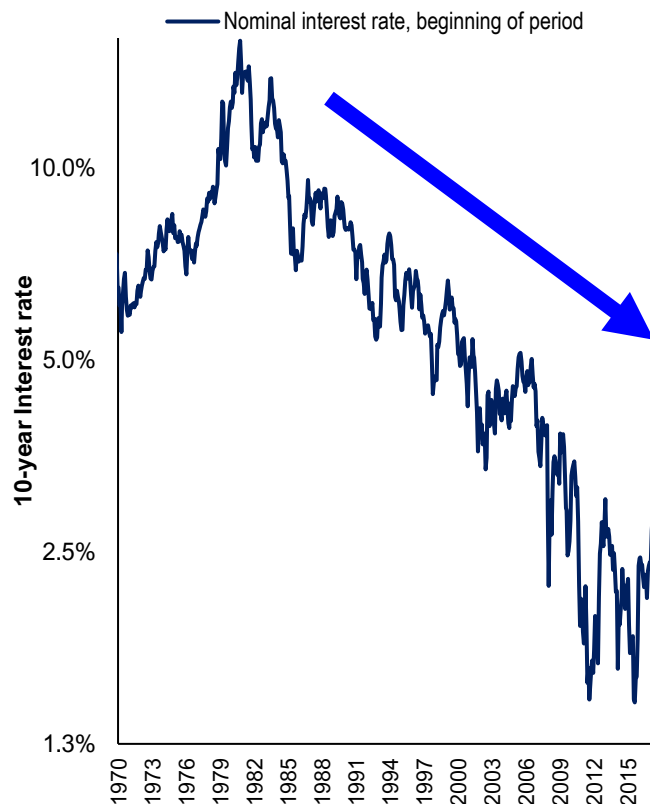
Square buys \$50 million in bitcoin, says cryptocurrency 'aligns with company's purpose'

Source: Fundstrat, Twitter, Facebook, CNBC, PayPal

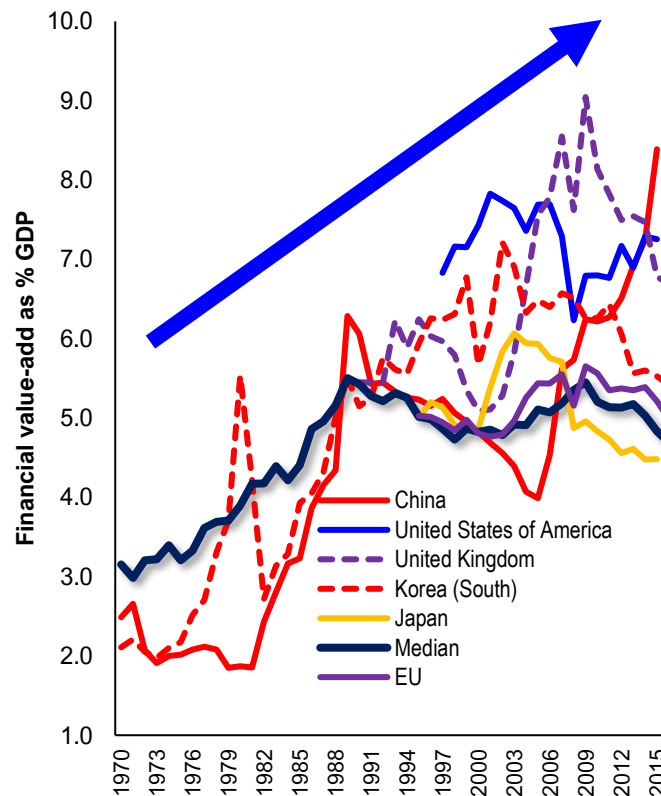
Technology Disruption

DLT's Lowering Banking Costs & Reshaping Financial Sector

Since 1970, interest rates have generally been falling...



But the Financial sector has grown despite this...



Banking value capture is **6%** of all GDP.

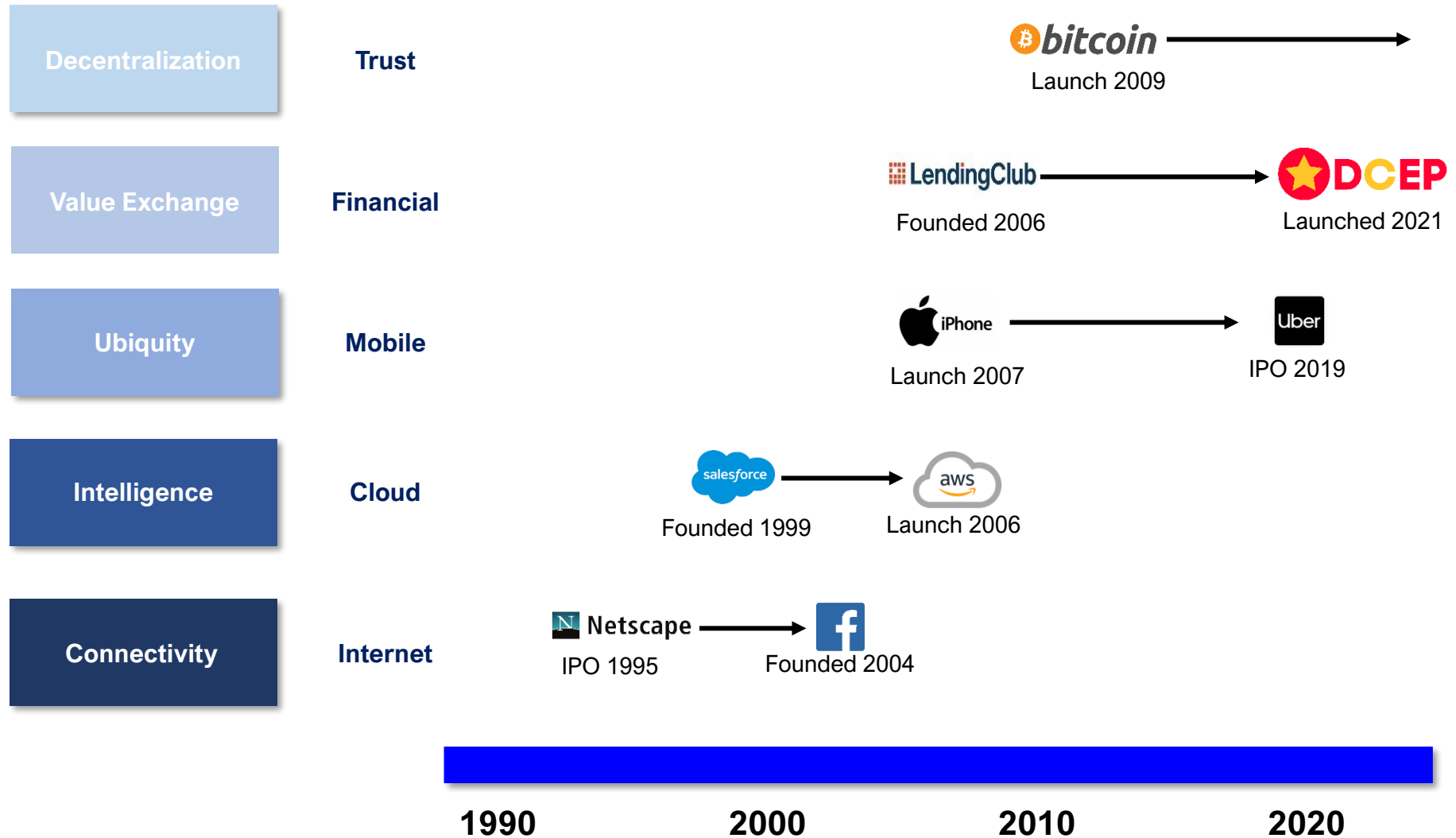
The average person spends almost **a month** per year (~3.5 weeks) to pay for “right to use” financial system.

Facebook rev per user (ad sales) **~\$25 per year**. For banks, **\$860-\$1,000 annually** (global).

Source: Fundstrat, Bloomberg

Technology Disruption

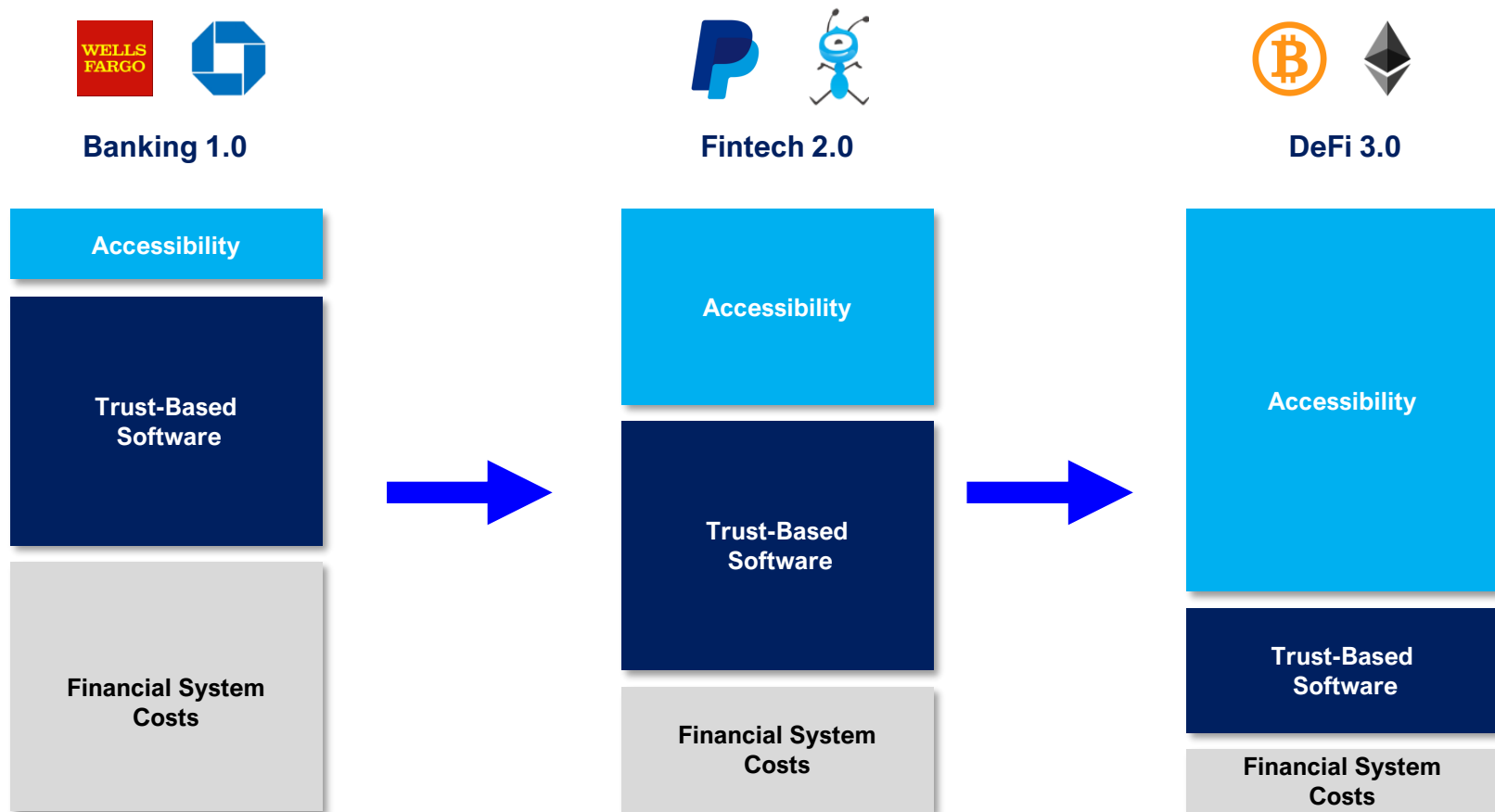
The New Technology Stack



Source: Fundstrat, Bain Capital Ventures Inspired

Technology Disruption

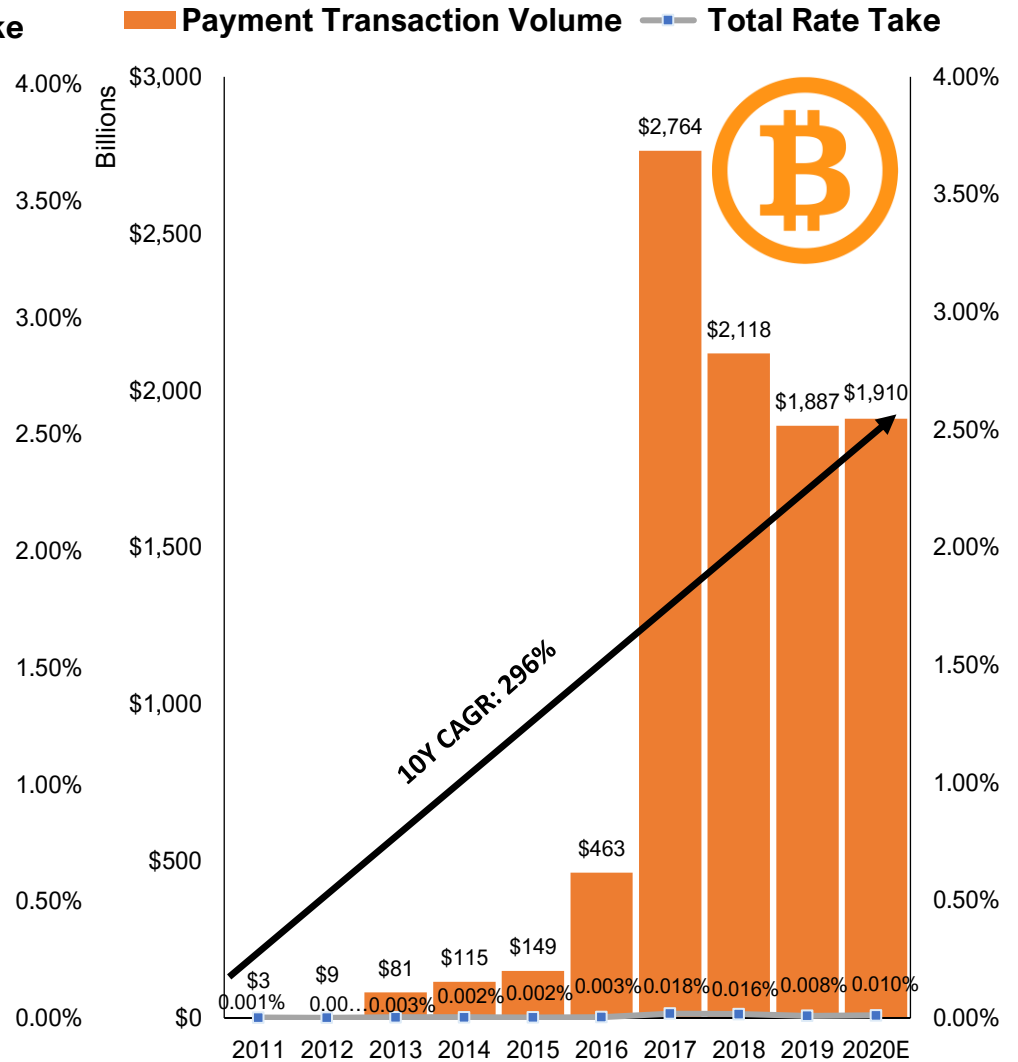
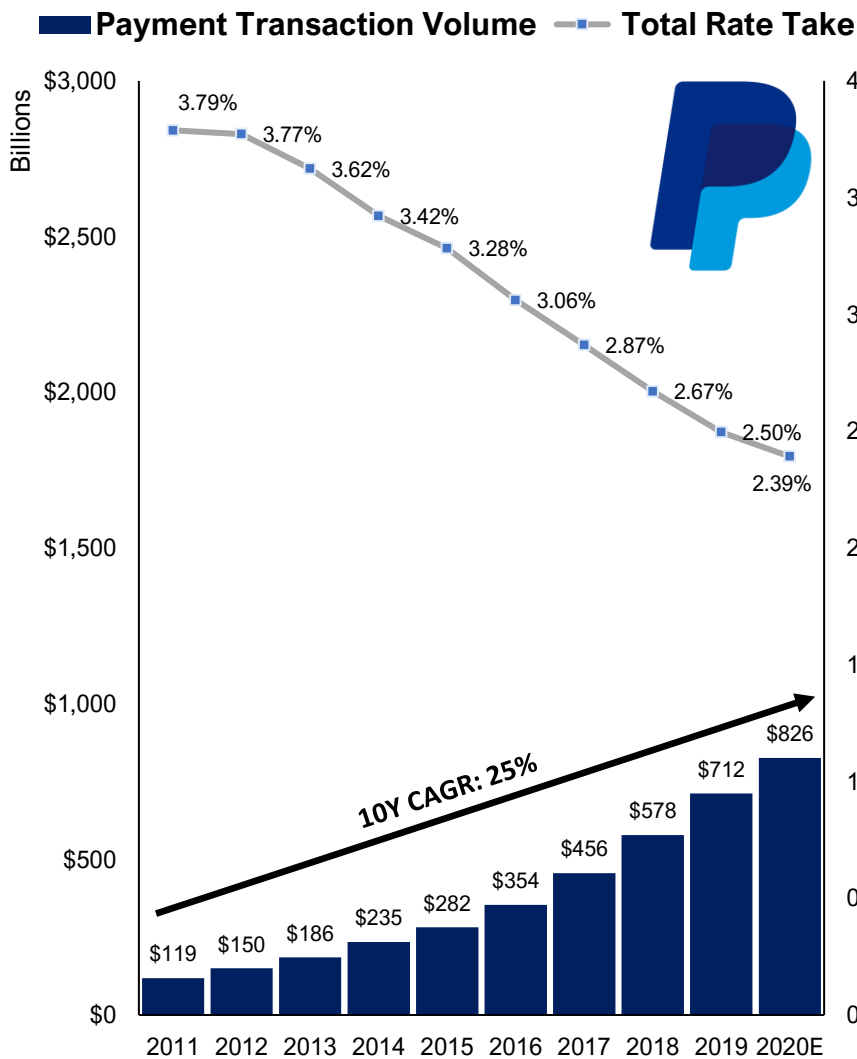
As Fintech Eats Finance, Crypto Is About To Eat Fintech



Source: Fundstrat

Technology Disruption

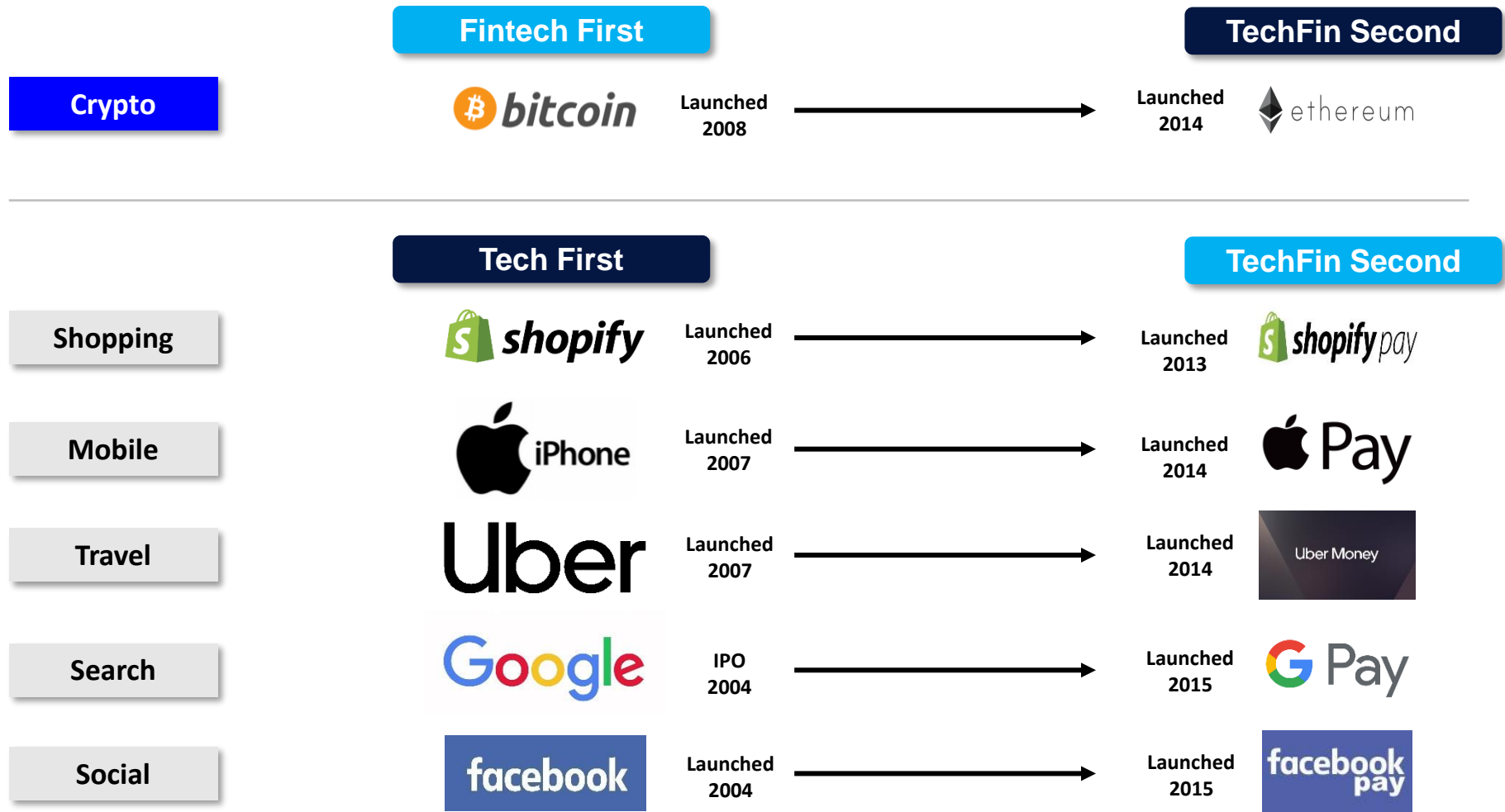
Bitcoin payments 3x larger, 99% cheaper & growing 12x faster vs. PayPal



Source: Fundstrat, PayPal, Date: 2011 (2020A: PayPal Q2 Annualized, Crypto Q3 Annualized)

Technology Disruption

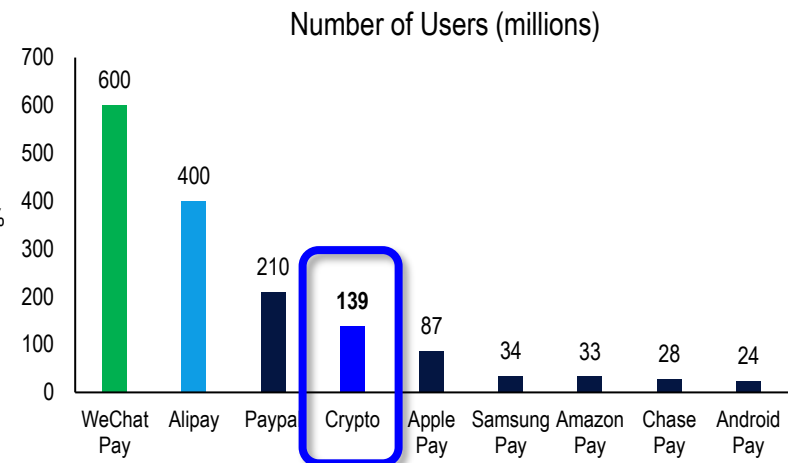
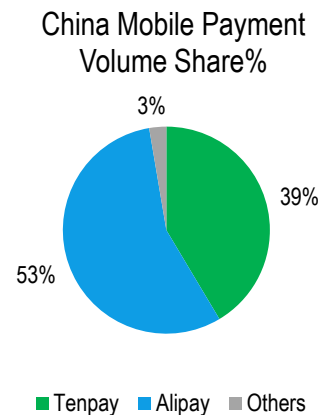
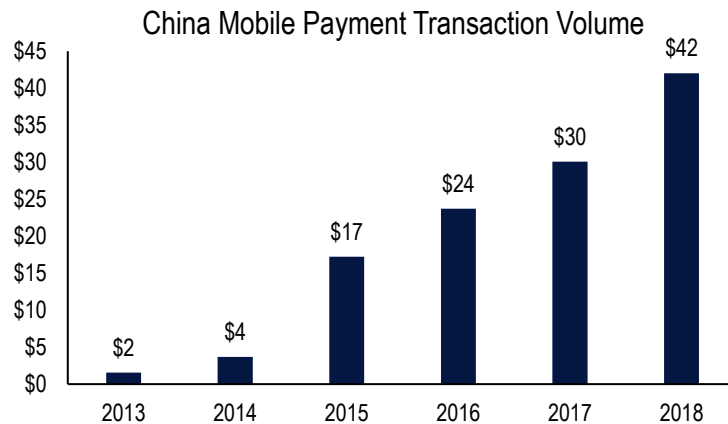
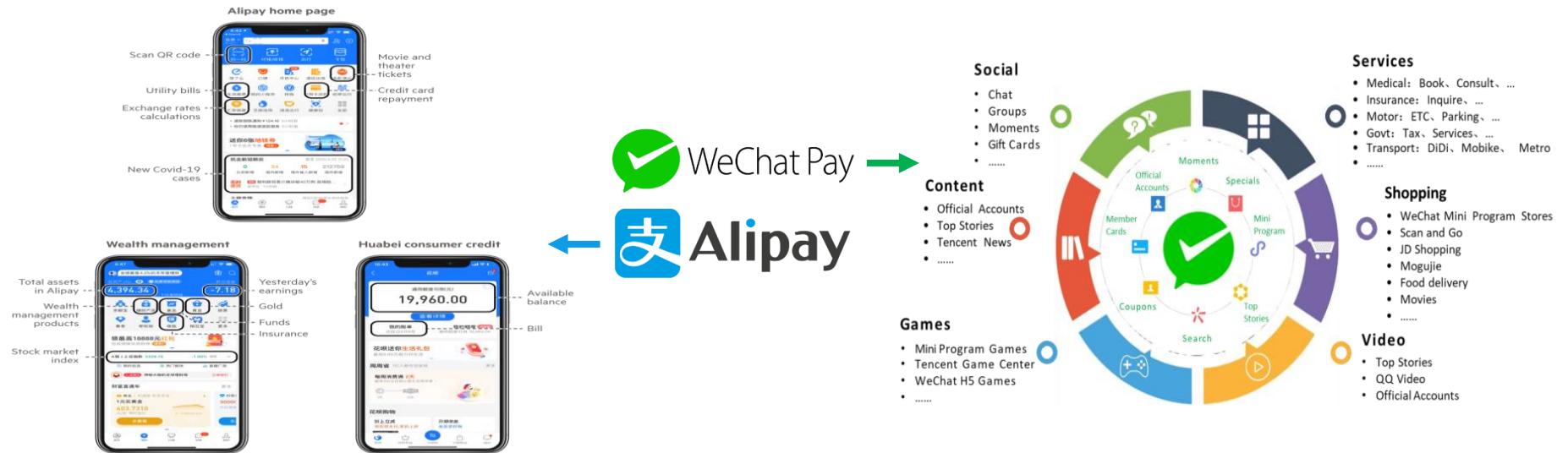
Fintech Natively Integrated As First But Not Last Crypto Killer App



Source: Fundstrat

Technology Disruption

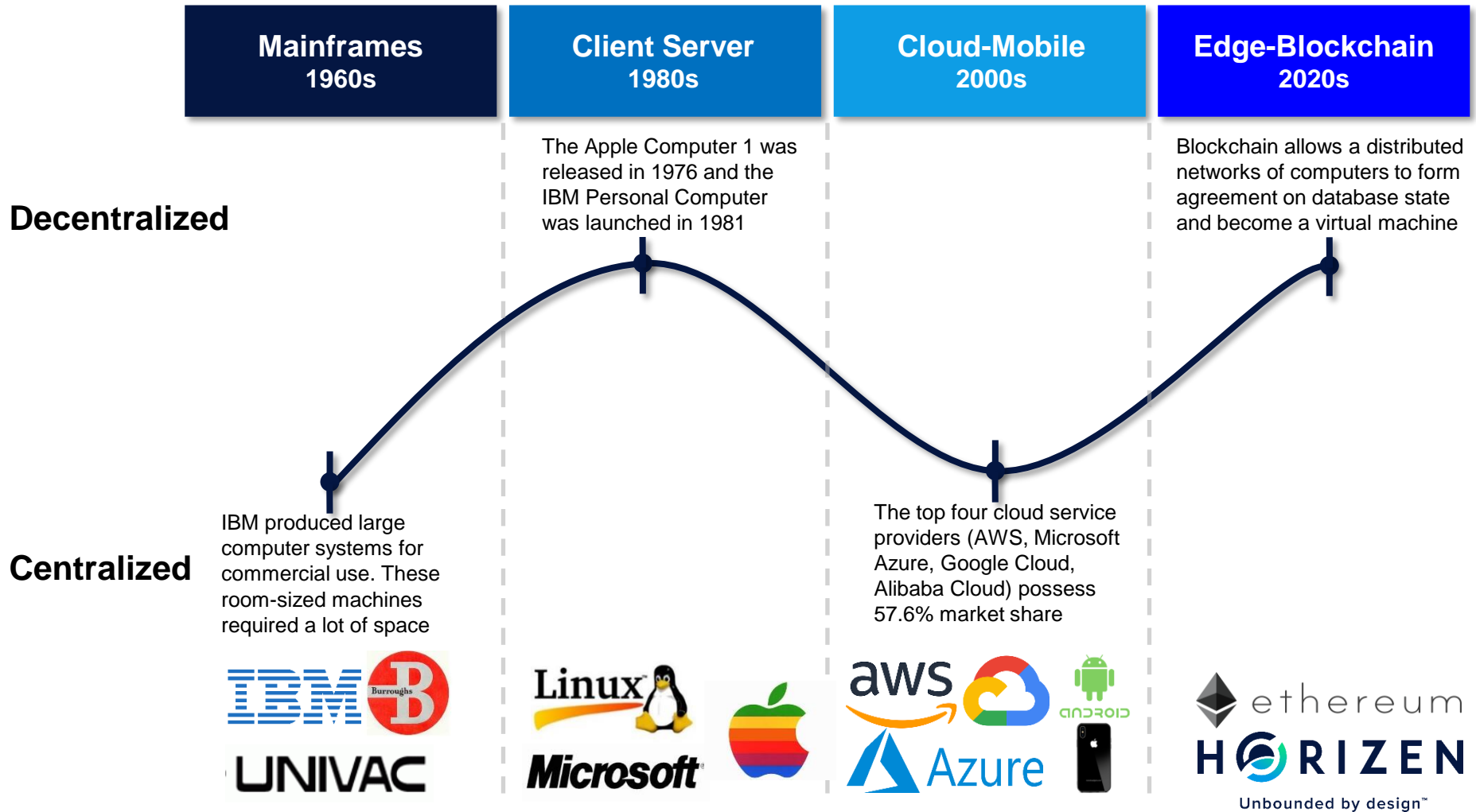
Crypto "currencies" Are Alipay & WeChat Pay Internet Economies 2.0



Source: Fundstrat, Financial Times, Octopus Media, iResearch, Bloomberg, Cambridge Global Crypto Benchmarking Study 2018

Technology Disruption

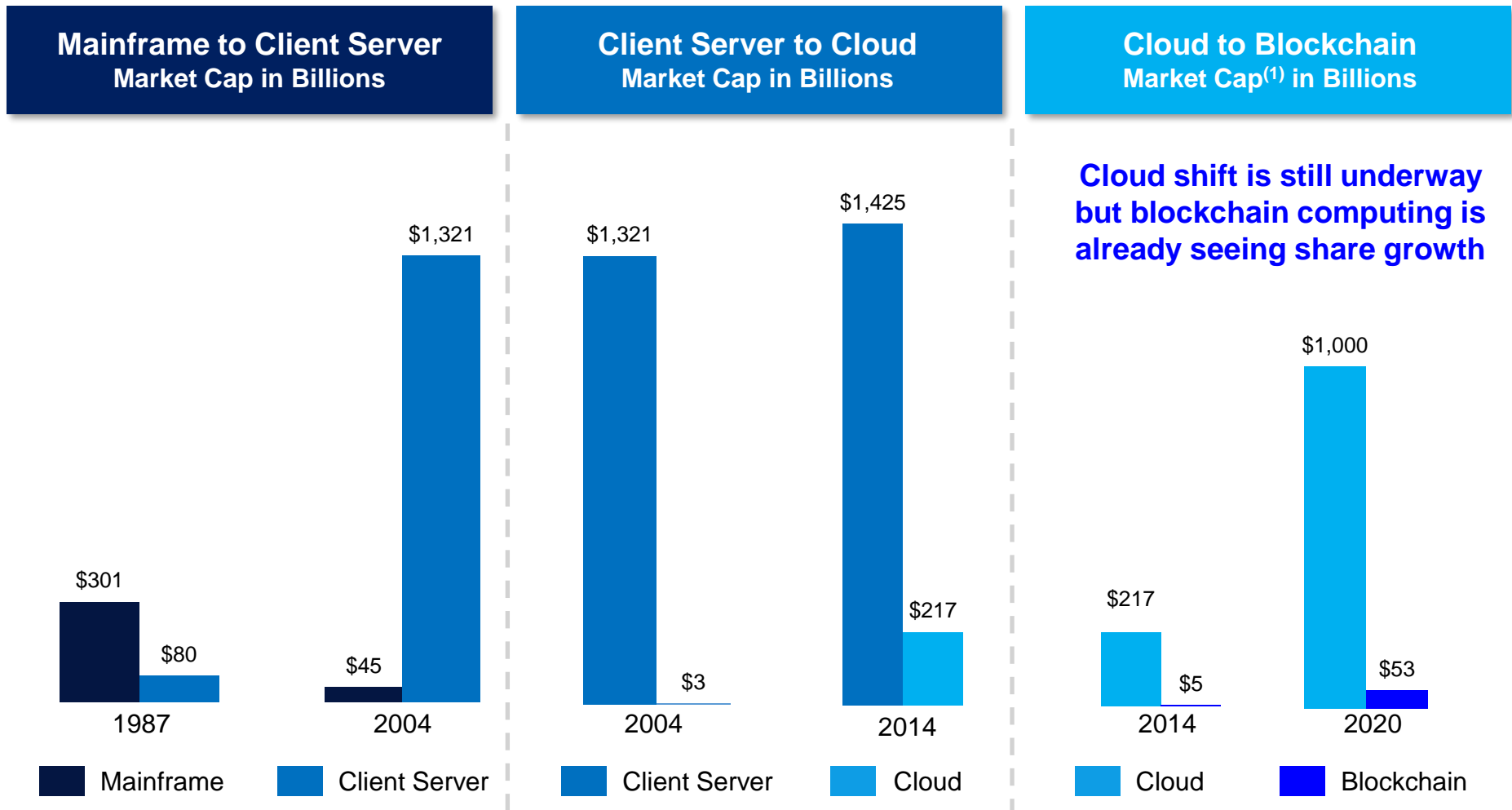
Blockchain DLT Networks Advance Cloud Computing



Source: Fundstrat

Technology Disruption









Cloud to Blockchain Platform & Value Shift Underway



Source: Fundstrat, Salesforce, Bessemer Cloud Report 2020, (1) 2020 Blockchain Market Cap represents FS Crypto Platform Index Market Cap; 2014 Blockchain Market Cap represents total crypto market cap, Coinmarketcap.

Technology Disruption

Crypto App Ecosystems Forming That Resemble Global Tech Giants

Businesses Application	Big Tech App Example	Crypto DApp Example
Digital Media Publishing Messaging Online Games Search Advertising Content Distribution		
E-Commerce App Store Marketplaces		
Cloud Services Developer Training Software Tooling Cloud Infrastructure		
Fintech Services Digital Wallet Digital Payments Saving & Investing Borrowing & Lending Digital Insurance		

Source: Fundstrat

Technology Disruption

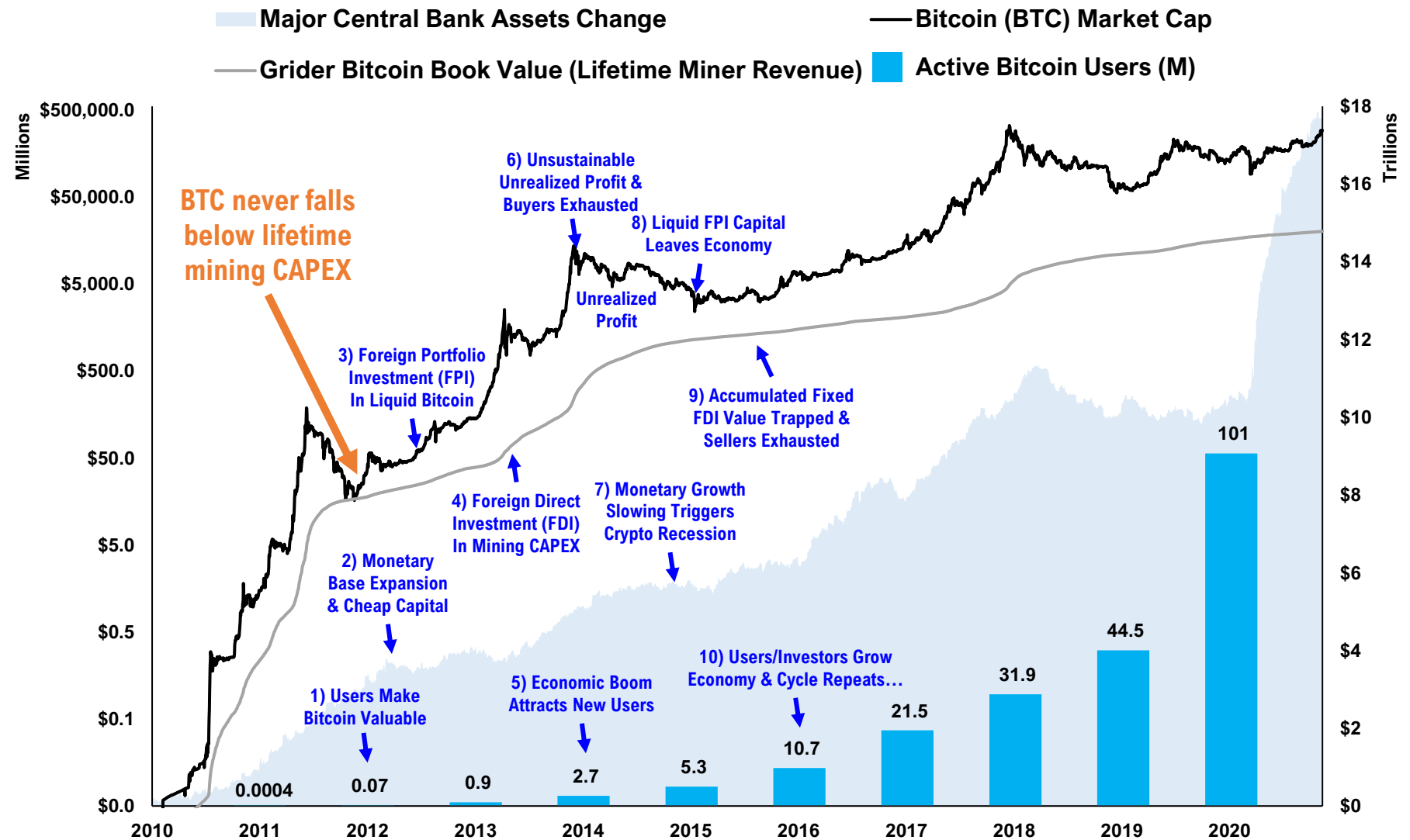
50%+ FAAMG Revenue or ~\$500B May Be Up For Disruption

facebook		Apple		amazon		Microsoft		Google		FAAMG	
Segment	Revenue	Segment	Revenue	Segment	Revenue	Segment	Revenue	Segment	Revenue		
Advertising	73,284	Services (Apps, Music, Maps, Cloud, etc.)	52,624	AWS Cloud	43,232	Server & Cloud Services	36,768	Google Advertising	119,468	More Likely	
				3rd-Party Seller Services	72,780	Office & Cloud Services	33,864	Google Cloud	12,028		
				Subscription Services	24,072	Windows	21,412				
				Other (Advertising)	16,884	Gaming	10,168				
						Advertising	7,964				
						LinkedIn	7,636			Less Likely	
Combined	73,284	Combined	52,624	Combined	156,968	Combined	117,812	Combined	131,496		Combined
Share%	98%	Share%	22%	Share%	44%	Share%	89%	Share%	86%		Share%
											532,184
											56%
Other	1,464	Products (iPhone, iPad, etc.)	186,116	Online Stores	183,584	Enterprise Services	6,180	Google Other	20,496	Less Likely	
				Physical Stores	3,774	Devices	4,808	Hedging gains	604		
						Other	3,420	Other Bets	592		
Combined	1,464	Combined	186,116	Combined	198,680	Combined	14,408	Combined	21,692		Combined
Share%	2%	Share%	78%	Share%	56%	Share%	11%	Share%	14%		Share%
										Less Likely	422,360
											44%
Total Revenue	74,748	Total Revenue	238,740	Total Revenue	355,648	Total Revenue	132,220	Total Revenue	153,188	Total Revenue	954,544

Source: Fundstrat, Bloomberg, Estimated Using Q2 2020 Annualized Revenue (\$ millions)

Digital Store of Value

Value Cycles: Capital Flows, Fixed Investment, Adoption & Innovation



Source: Fundstrat, Bloomberg, Bitcoin Charts, Blockchain.info, Cambridge University, Coinmetrics, Coinmarketcap

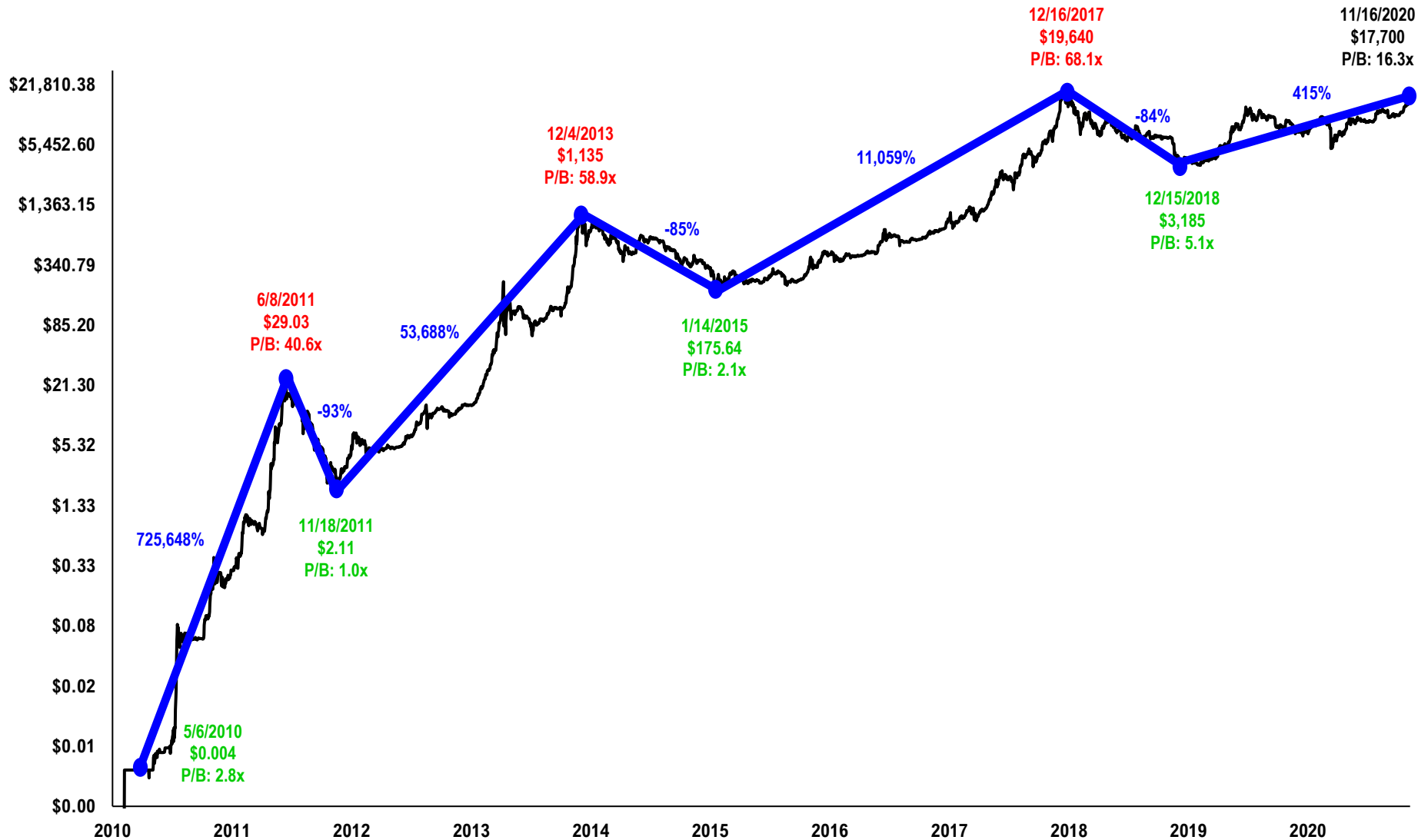
Crypto Thesis

Bitcoin Outlook

Portfolio Strategy

Market View: Fourth Bull Market Cycle Still Underway

Bitcoin & Crypto Outlook Is Positive As Expansion Enters 3rd or 4th Innings



Source: Fundstrat, Bloomberg, Bitcoin Charts, Coinmetrics, Coinmarketcap

Inflection Points: Valuations Have Room For Continued Expansion

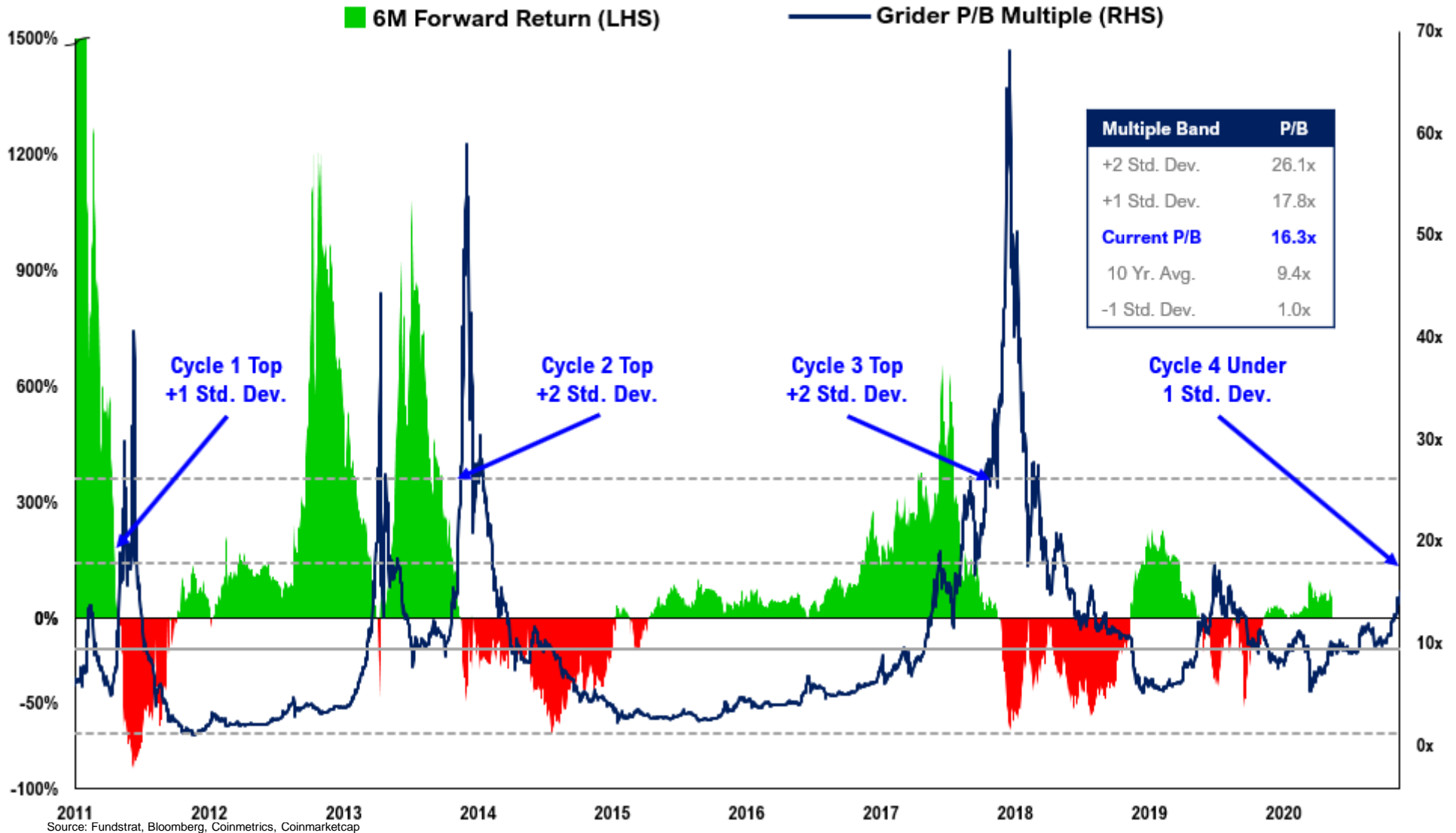
Crypto EM Boom & Bust Cycles Gauged By Grider Price to Book Multiples



Source: Fundstrat, Bloomberg, Bitcoin Charts, Coinmetrics, Coinmarketcap

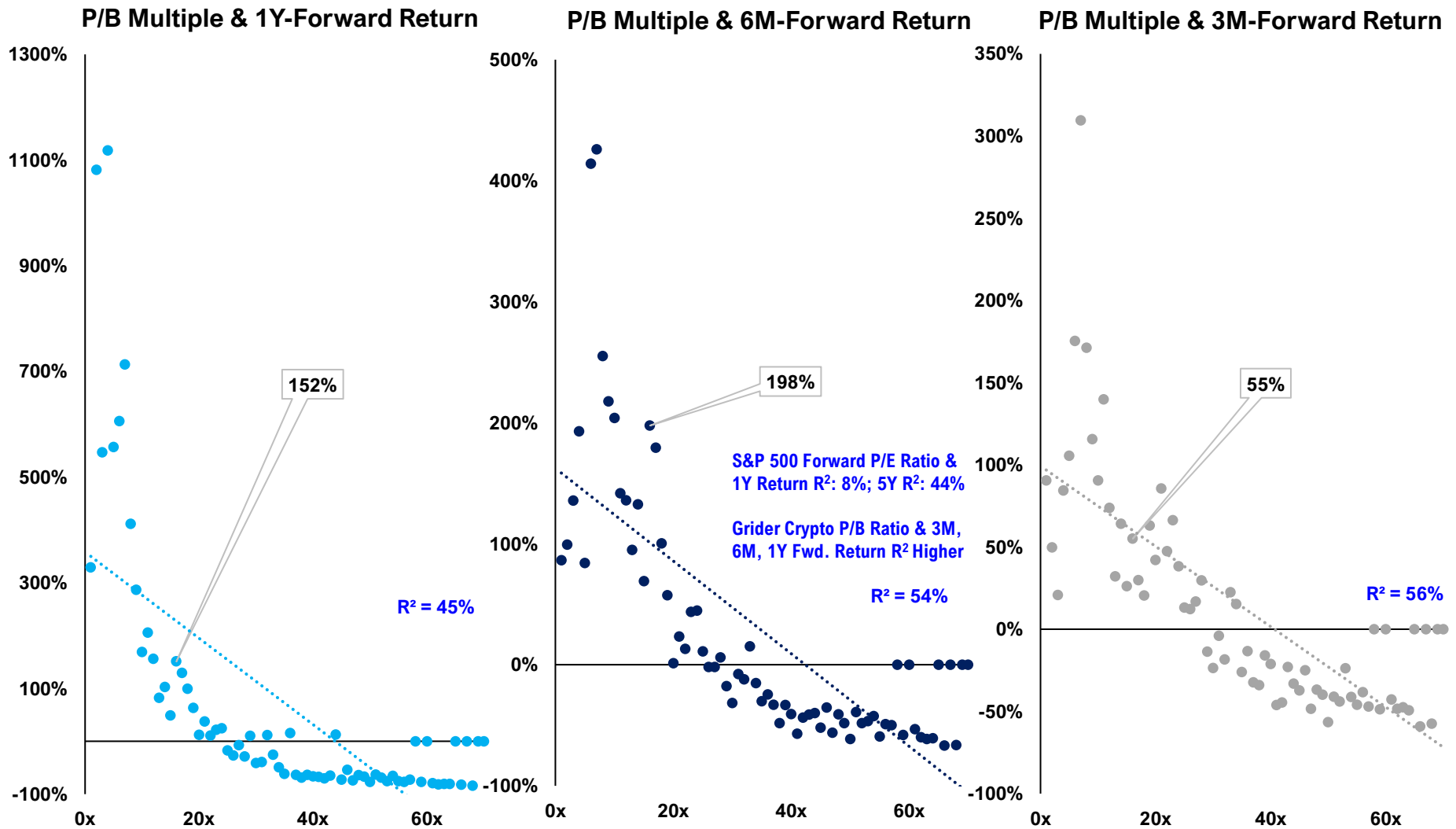
Return Dynamics: P/B Multiples Influence Forward Returns

Valuations Under +1 Std. Dev. Historically Have Room to Increase



Risk & Reward: Returns Have Been Strong From Current Levels

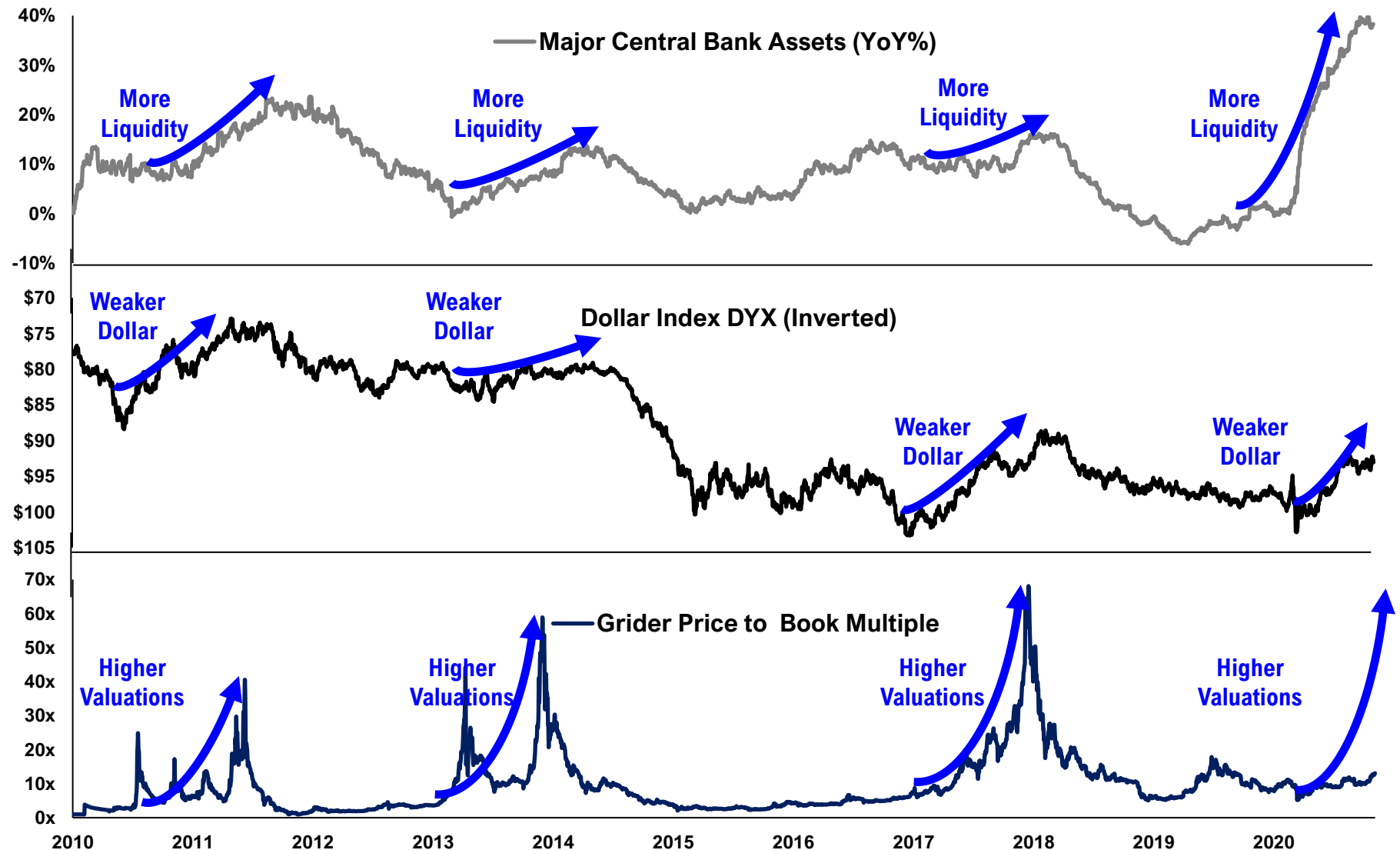
3M, 6M & 1Y Returns From Today's 16x P/B Have Been 55%, 196% & 152%



Source: Fundstrat, Bloomberg, Coinmetrics, JP Morgan Asset Management: Guide to the Markets

Macro Tailwinds: More Liquidity, Weaker Dollar, Higher Valuations

Cycle Prices Rise As Monetary Backdrop Becomes More Accommodative



Source: Fundstrat, Bloomberg, Coinmetrics, Coinmarketcap

Bitcoin Forecast: Issuing FY-2021 Fundamental Economic

Expecting Book Value Per Coin of \$1,100 for FY-20E and \$1,454 for FY-21E

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020E	FY 2021E
Market Data													
Price (YE)	\$0.001	\$0.30	\$4.71	\$13.5	\$730	\$321	\$430	\$969	\$13,921	\$3,687	\$7,167	\$16,500	\$25,009
Return (YoY)	n/a	39171%	1471%	187%	5286%	-56%	34%	126%	1337%	-74%	94%	130%	52%
Market Cap (\$M)	\$0.001	\$1.51	\$37.72	\$143.77	\$8,901	\$4,384	\$6,458	\$15,577	\$233,524	\$64,362	\$129,970	\$306,662	\$473,018
Change (YoY)	n/a	121254%	2405%	281%	6091%	-51%	47%	141%	1399%	-72%	102%	136%	54%
Supply Out (M)	1.62	5.02	8.00	10.61	12.20	13.67	15.03	16.08	16.77	17.46	18.13	18.59	18.91
Dilution (YoY)	n/a	209%	59%	33%	15%	12%	10%	7%	4%	4%	4%	2%	2%
Financial Metrics													
Total Payment Volume (\$M)	\$0.000	\$1.998	\$2,510	\$8,810	\$81,361	\$115,074	\$149,167	\$462,617	\$2,763,896	\$2,117,775	\$1,887,381	\$1,973,881	\$4,934,703
Change (YoY)	n/a	942540%	125481%	251%	823%	41%	30%	210%	497%	-23%	-11%	5%	150%
Transaction Fee Revenue (\$M)	\$0.000	\$0.000	\$0.03	\$0.06	\$2.13	\$2.46	\$2.30	\$13.2	\$502	\$336	\$155	\$197	\$493
Change (YoY)	n/a	n/a	889381%	110%	3277%	16%	-7%	475%	3698%	-33%	-54%	27%	150%
Payment Processing Costs (\$M)		\$0.233	\$18	\$21	\$306	\$782	\$373	\$558	\$2,882	\$5,150	\$5,020	\$4,117	\$6,570
Change (YoY)	n/a	n/a	7438%	20%	1353%	156%	-52%	50%	416%	79%	-3%	-18%	60%
Grider Crypto Book Value (\$M)	\$0.001	\$0.23	\$17.85	\$39.0	\$347	\$1,132	\$1,507	\$2,079	\$5,463	\$10,949	\$16,124	\$20,438	\$27,501
Change (YoY)	n/a	18799%	7511%	118%	791%	226%	33%	38%	163%	100%	47%	27%	35%
Book Value Per Share (\$M)	\$0.001	\$0.047	\$2.23	\$3.7	\$28.5	\$82.8	\$100	\$129	\$326	\$627	\$889	\$1,100	\$1,454
Change (YoY)	n/a	6016%	4675%	65%	675%	191%	21%	29%	152%	93%	42%	24%	32%
Key Performance Indicators													
Transaction Take Rate%	n/a	n/a	0.001%	0.001%	0.003%	0.002%	0.002%	0.003%	0.018%	0.016%	0.008%	0.010%	0.010%
Change (YoY)	n/a	n/a	n/a	-40%	266%	-18%	-28%	85%	536%	-13%	-48%	21%	0%
Active Crypto Users (M)	n/a	n/a	0.0004	0.07	0.9	2.7	5.3	10.7	21.5	31.9	44.5	106	201
Change (YoY)	n/a	n/a	n/a	n/a	n/a	205%	97%	100%	101%	48%	40%	138%	90%
Average Revenue Per User (ARPU)	n/a	n/a	n/a	n/a	\$2.39	\$0.91	\$0.43	\$1.24	\$23.34	\$10.52	\$3.49	\$1.86	\$2.45
Change (YoY)	n/a	n/a	n/a	n/a	n/a	-62%	-53%	188%	1788%	-55%	-67%	-47%	32%
Customer Acquisition Cost (CAC)	n/a	n/a	n/a	n/a	\$345	\$429	\$142	\$104	\$267	\$495	\$398	\$67	\$46
Change (YoY)	n/a	n/a	n/a	n/a	n/a	25%	-67%	-26%	155%	86%	-20%	-83%	-31%
Valuation Metrics													
Value Per User (VPU)	n/a	n/a	n/a	\$2,034	\$10,021	\$1,617	\$1,208	\$1,457	\$10,858	\$2,017	\$2,920	\$2,892	\$2,348
Price to Book (P/B)	n/a	6.4x	2.1x	3.7x	25.6x	3.9x	4.3x	7.5x	42.7x	5.9x	8.1x	15.0x	17.2x

Source: Fundstrat, Bloomberg, Blockchain.info, Cambridge University, Coinmetrics, Coinmarketcap, 1) Ark Invest

Updated Outlook: Prior vs. FY-2021 Estimates & Forecast: \$25K

Bitcoin Has Meet Our FY-2020E While Our FY-2021E Imply Further Upside

	<u>Actual vs. Actual</u>			<u>Current vs. FY-2020E</u>			<u>FY-2020E vs. FY-2021E</u>			<u>Current vs. FY-2021E</u>		
	Prior Revision (5/14/20)	Current (11/18/20)	Delta	Current (5/14/20)	FY-20E (5/14/20)	Delta	FY-20E	FY-21E	Delta	Current	FY-21E	Delta
Crypto Book Value Per Coin	\$987	\$1,087	10%	\$1,087	\$1,100	1%	\$1,100	\$1,454	32%	\$1,089	\$1,454	33%
Grider Price to Book Multiple	9.9x	16.3x	64%	16.3x	15.0x	-8%	15.0x	17.2x	15%	16.3x	17.2x	12%
Bitcoin (BTC) Price Target	\$9,801	\$17,700	81%	\$17,700	\$16,500	-7%	\$16,500	\$25,009	52%	\$17,700	\$25,000	41%

Source: Fundstrat, Bloomberg, Coinmetrics, Coinmarketcap

Flows & Liquidity: \$4.3B Demand & 35x Multiplier = Bitcoin \$25K

Description

Bitcoin (BTC) Order Book Data

Bitcoin Price	a	\$17,763.21
BTC Supply	b	18,546,234
Market Cap	a*b=c	\$329,440,648,264
Bids 10% Below Price	d	\$190,571,566
Price 10% Lower	a*0.9=e	\$15,987
Market Cap 10% Lower	b*e=f	\$296,496,583,437
Value Change	f-c=g	-\$32,944,064,826
Gross Multiplier	d/g=h	-173x
Multiplier Haircut	i	80%
Capital Flow Multiplier	h*i=j	-35x

Hypothetical Buy Capital Flow Scenario

Stable Coin Market Cap	K	\$21,762,857,434
Share Flows to Bitcoin%	L	20%
Bitcoin Capital Flows	k*L=m	\$4,352,571,487
Capital Flow Multiplier	j=n	35x
Bitcoin Market Cap Change	m*n=o	\$150,485,615,701
Implied Bitcoin Market Cap	c+o=p	\$479,926,263,964
Implied Bitcoin Price	p/b=q	\$25,877
Implied Return	q/a-1=r	46%

Bitcoin (BTC) Implied Price

	Hypothetical Demand (\$B)									
	\$1B	\$2B	\$3B	\$4B	\$5B	\$6B	\$7B	\$8B	\$9B	\$10B
10x	\$18,302	\$18,842	\$19,381	\$19,920	\$20,459	\$20,998	\$21,538	\$22,077	\$22,616	\$23,155
20x	\$18,842	\$19,920	\$20,998	\$22,077	\$23,155	\$24,234	\$25,312	\$26,390	\$27,469	\$28,547
30x	\$19,381	\$20,998	\$22,616	\$24,234	\$25,851	\$27,469	\$29,086	\$30,704	\$32,321	\$33,939
40x	\$19,920	\$22,077	\$24,234	\$26,390	\$28,547	\$30,704	\$32,861	\$35,017	\$37,174	\$39,331
50x	\$20,459	\$23,155	\$25,851	\$28,547	\$31,243	\$33,939	\$36,635	\$39,331	\$42,027	\$44,723
60x	\$20,998	\$24,234	\$27,469	\$30,704	\$33,939	\$37,174	\$40,409	\$43,644	\$46,880	\$50,115
70x	\$21,538	\$25,312	\$29,086	\$32,861	\$36,635	\$40,409	\$44,184	\$47,958	\$51,732	\$55,507
80x	\$22,077	\$26,390	\$30,704	\$35,017	\$39,331	\$43,644	\$47,958	\$52,272	\$56,585	\$60,899
90x	\$22,616	\$27,469	\$32,321	\$37,174	\$42,027	\$46,880	\$51,732	\$56,585	\$61,438	\$66,291
100x	\$23,155	\$28,547	\$33,939	\$39,331	\$44,723	\$50,115	\$55,507	\$60,899	\$66,291	\$71,683

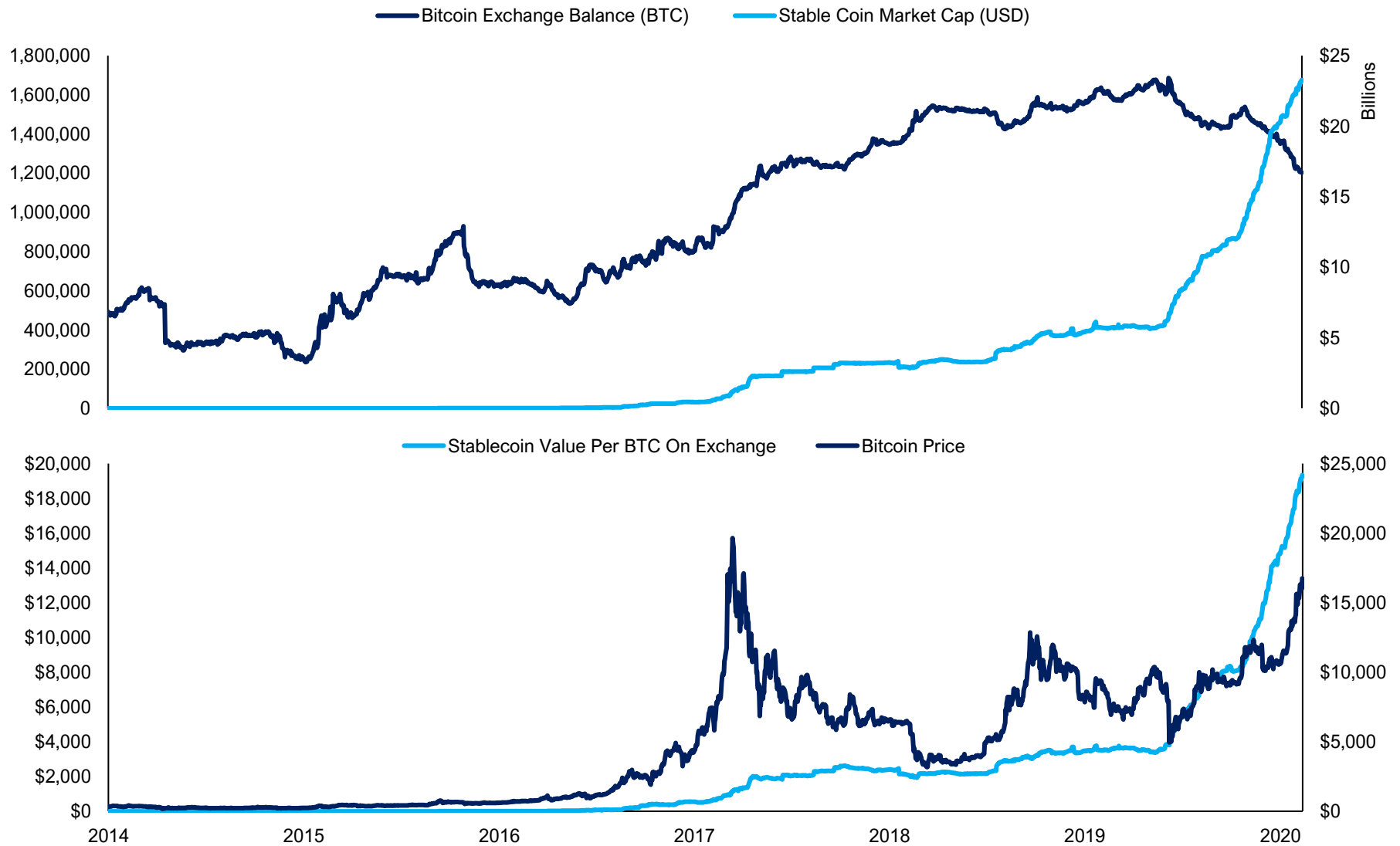
Bitcoin (BTC) Implied Return

	Hypothetical Demand (\$B)									
	\$1B	\$2B	\$3B	\$4B	\$5B	\$6B	\$7B	\$8B	\$9B	\$10B
10x	3%	6%	9%	12%	15%	18%	21%	24%	27%	30%
20x	6%	12%	18%	24%	30%	36%	42%	49%	55%	61%
30x	9%	18%	27%	36%	46%	55%	64%	73%	82%	91%
40x	12%	24%	36%	49%	61%	73%	85%	97%	109%	121%
50x	15%	30%	46%	61%	76%	91%	106%	121%	137%	152%
60x	18%	36%	55%	73%	91%	109%	127%	146%	164%	182%
70x	21%	42%	64%	85%	106%	127%	149%	170%	191%	212%
80x	24%	49%	73%	97%	121%	146%	170%	194%	219%	243%
90x	27%	55%	82%	109%	137%	164%	191%	219%	246%	273%
100x	30%	61%	91%	121%	152%	182%	212%	243%	273%	304%

Source: Fundstrat, Bloomberg, Coinmetrics, Coinmarketcap, CoinMarketBook, Date: 11/18/2020

Catalyst: \$23B Crypto-Ready Dry-Powder On Sidelines

Stablecoin Dollars On Rapid Rise As BTC Exchange Balances Fall



Source: Fundstrat, Bloomberg, Coinmetrics, Coinmarketcap

Crypto Thesis

Bitcoin Outlook

Portfolio Strategy

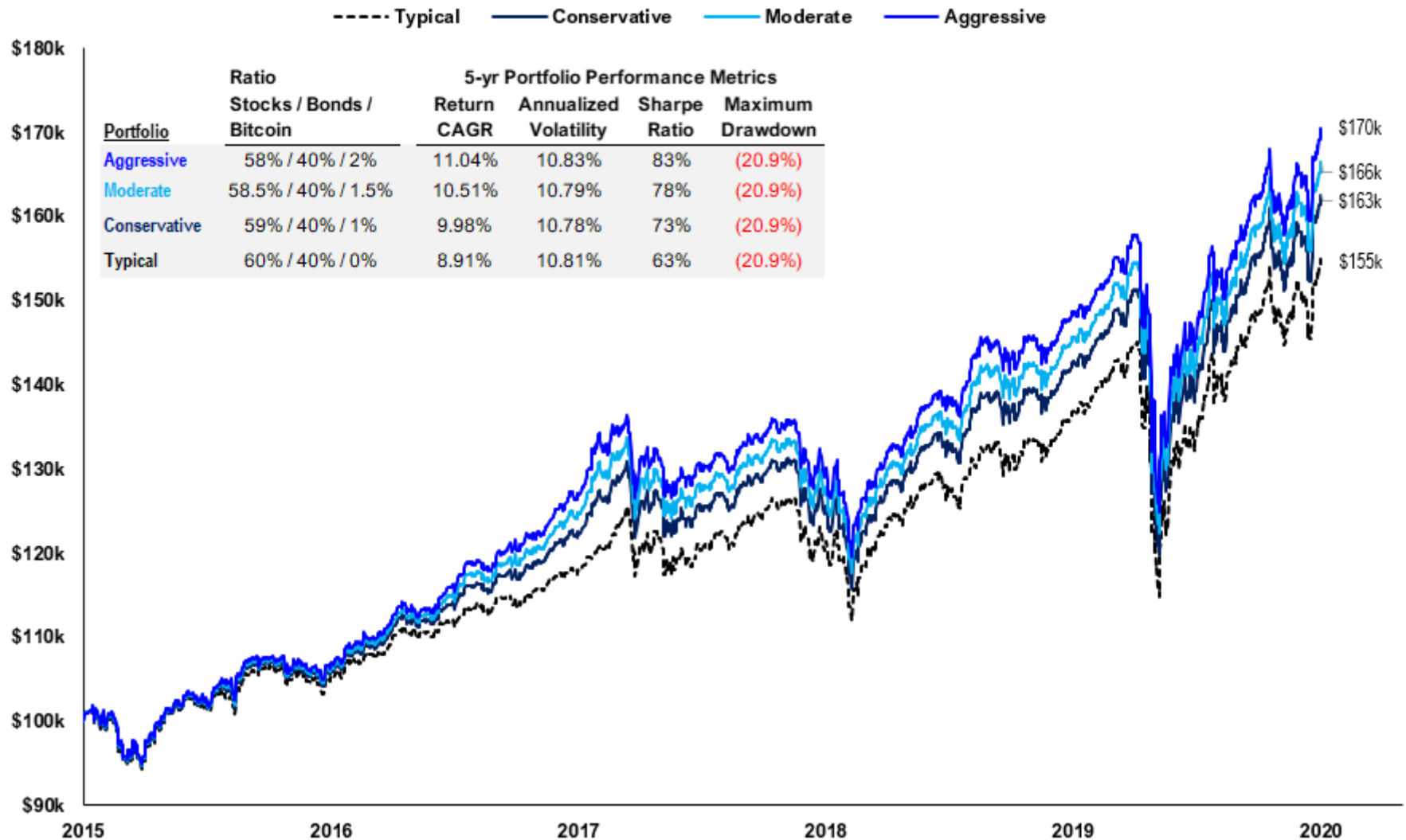
Thematic (3-5Y): Maintaining 1-2% Crypto Asset Exposure

Best	Best	Best	Best		Best	Best	Best		Best	Best
FY-2010	FY-2011	FY-2012	FY-2013	FY-2014	FY-2015	FY-2016	FY-2017	FY-2018	FY-2019	YTD 2020
Bitcoin 39171%	Bitcoin 1471%	Bitcoin 187%	Bitcoin 5286%	Dollar 13%	Bitcoin 34%	Bitcoin 126%	Bitcoin 1337%	Dollar 4%	Bitcoin 94%	Bitcoin 123%
Gold 30%	Gold 10%	MSCI EM 15%	S&P 500 30%	S&P 500 11%	Dollar 9%	Oil 45%	MSCI EM 34%	US Treasuries 1%	Oil 34%	Gold 25%
Commodities 17%	US Treasuries 10%	MSCI World 13%	MSCI World 20%	US Bonds 6%	US Treasuries 1%	Commodities 12%	MSCI World 22%	US Bonds 0%	S&P 500 29%	S&P 500 11%
MSCI EM 16%	Oil 8%	S&P 500 13%	Oil 7%	US Treasuries 5%	US Bonds 1%	S&P 500 10%	S&P 500 19%	Gold -2%	MSCI World 24%	US Treasuries 8%
Oil 15%	US Bonds 8%	Gold 7%	Dollar 0%	MSCI World 2%	S&P 500 -1%	MSCI EM 9%	Gold 14%	S&P 500 -6%	Gold 18%	MSCI World 7%
S&P 500 13%	Dollar 1%	US Bonds 4%	US Bonds -2%	Gold -1%	MSCI World -4%	Gold 8%	Oil 12%	MSCI World -11%	MSCI EM 15%	US Bonds 7%
MSCI World 10%	S&P 500 0%	US Treasuries 2%	US Treasuries -3%	MSCI EM -5%	Gold -10%	MSCI World 6%	US Bonds 4%	Commodities -11%	US Bonds 9%	MSCI EM 7%
US Bonds 7%	MSCI World -9%	Dollar -1%	MSCI EM -5%	Commodities -17%	MSCI EM -17%	Dollar 4%	US Treasuries 2%	MSCI EM -17%	Commodities 8%	Dollar -4%
US Treasuries 6%	Commodities -13%	Commodities -1%	Commodities -10%	Oil -46%	Commodities -25%	US Bonds 3%	Commodities 2%	Oil -25%	US Treasuries 7%	Commodities -9%
Dollar 2%	MSCI EM -20%	Oil -7%	Gold -28%	Bitcoin -56%	Oil -30%	US Treasuries 1%	Dollar -10%	Bitcoin -74%	Dollar 0%	Oil -34%
Worst					Worst					

Source: Fundstrat, Bloomberg

Tactical View (6-12M): Recommending 1.5% Active Crypto Exposure

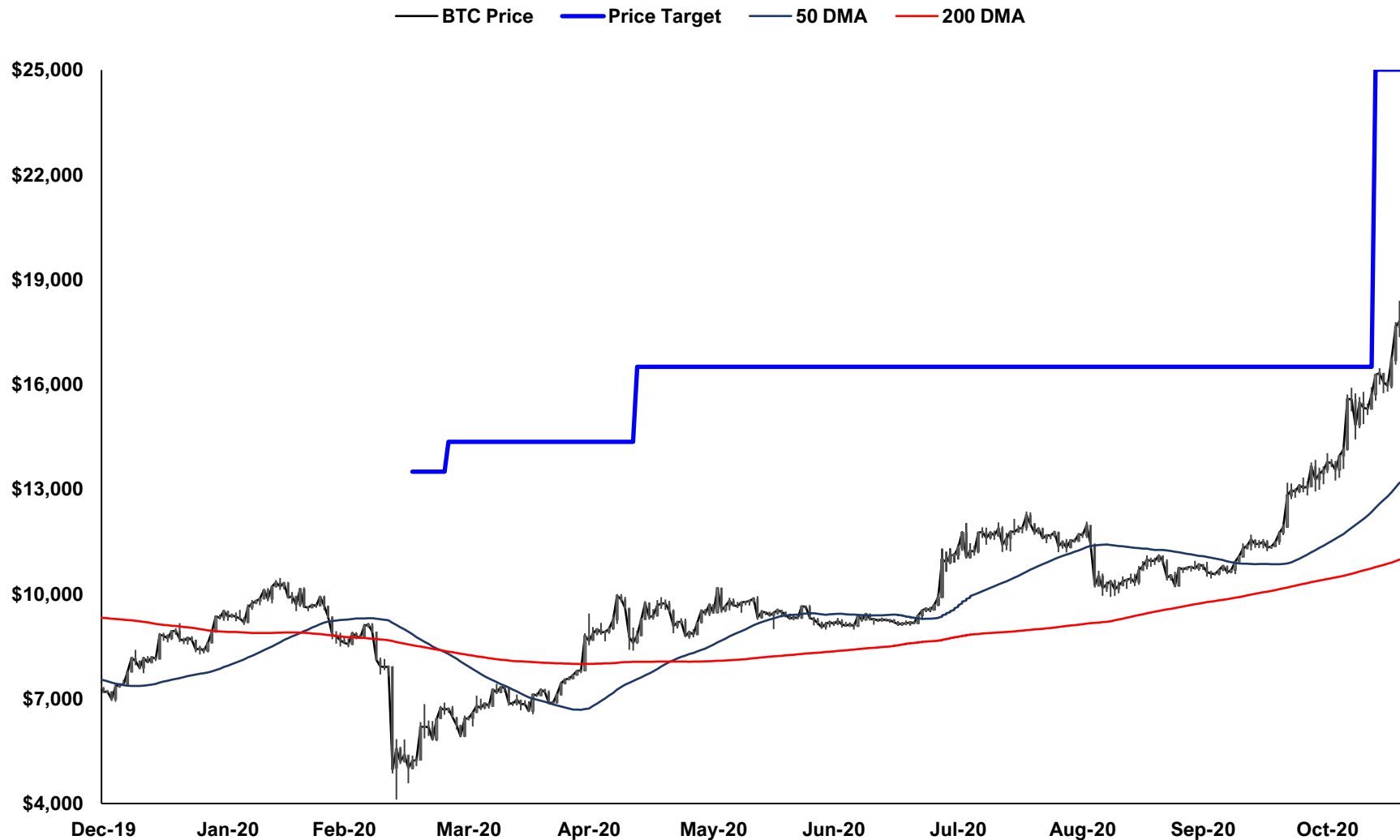
Mid-Cycle Allocation: Meaningful Exposure But Dry Powder For Pullbacks



Source: Fundstrat, Bloomberg, Lipson, Coinmetrics, Coinmarketcap

Bitcoin Target: Current Price Target: \$25,000

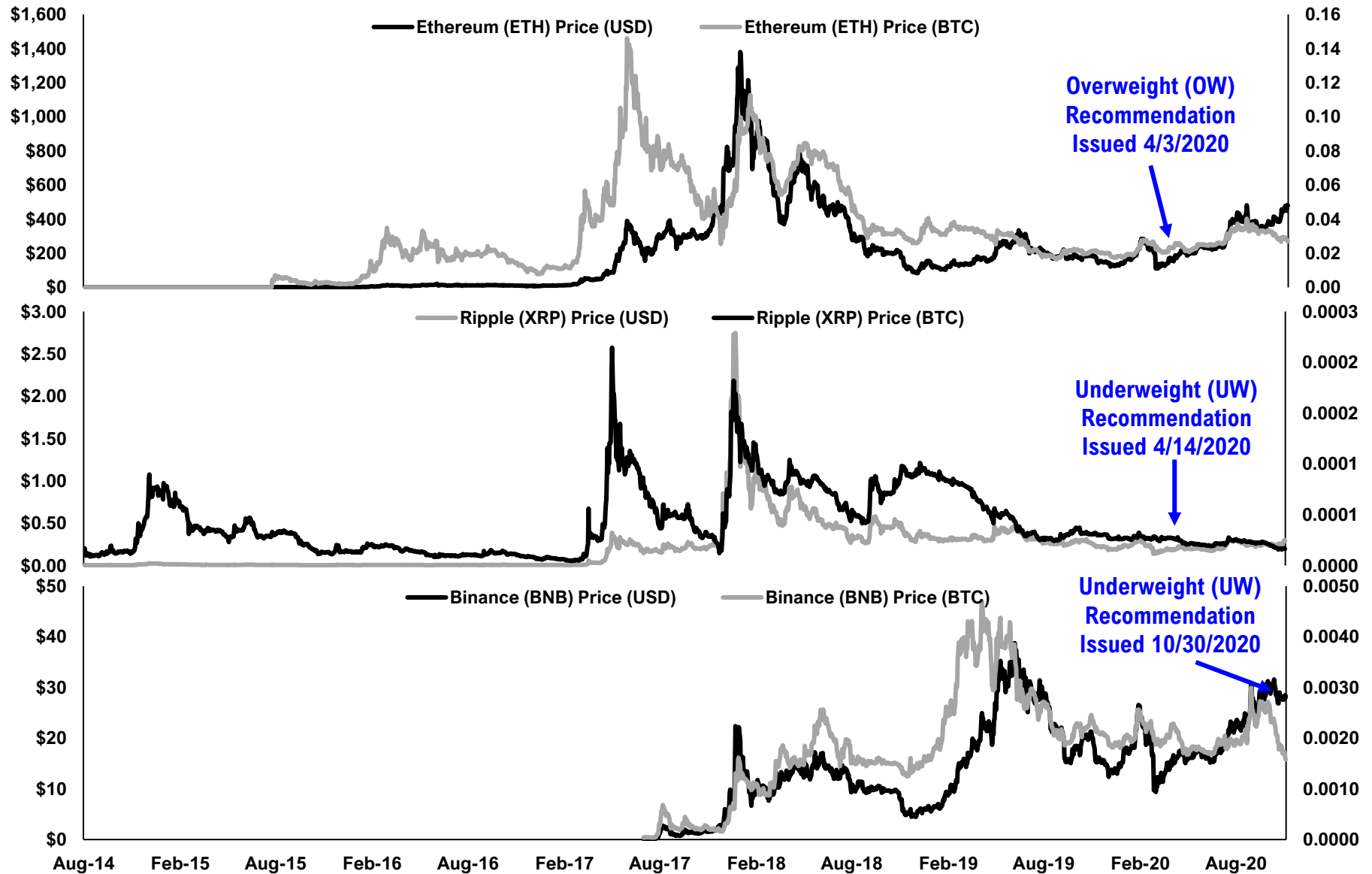
BTC Rallied 3x Since Our Initial Target But New Target Offers 40% Upside



Source: Fundstrat, Bloomberg, Coinmarketcap

Asset Selection

Remain OW ETH, UW BNB & Shift XRP UW to MW



Source: Fundstrat

Trading (3-6M): Flows Matter More Than Fundamentals After BTC ATH

Flows From A 10% Bitcoin Sell-Off Could Move Top Alts ~30-500%

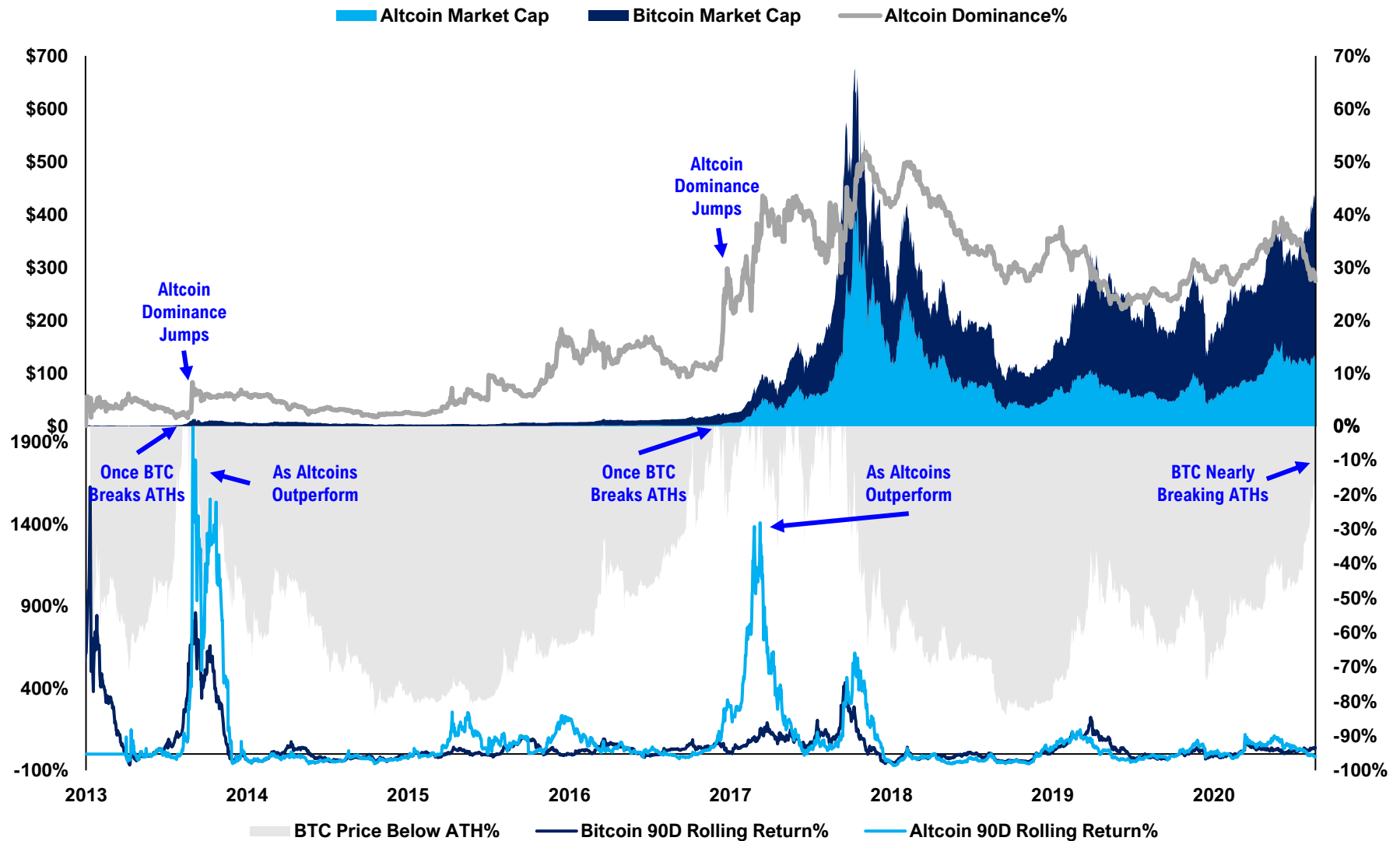
#	Asset	Market Capitalization	Bids 10% Below Price	Market Cap 10% Lower	Value Change	Gross Multiplier
1	Bitcoin	\$329,461,268,873	\$190,571,566	\$296,515,141,986	-\$32,946,126,887	-173x
2	Ethereum	\$54,307,613,315	\$65,359,947	\$48,876,851,984	-\$5,430,761,332	-83x
3	XRP	\$13,292,546,131	\$20,733,256	\$11,963,291,518	-\$1,329,254,613	-64x
4	Chainlink	\$5,274,435,503	\$13,117,915	\$4,746,991,953	-\$527,443,550	-40x
5	Litecoin	\$4,850,173,981	\$26,474,099	\$4,365,156,583	-\$485,017,398	-18x
6	Bitcoin Cash	\$4,596,979,616	\$8,432,104	\$4,137,281,654	-\$459,697,962	-55x
7	Polkadot	\$4,094,497,988	\$3,882,414	\$3,685,048,189	-\$409,449,799	-105x
8	Binance Coin	\$4,041,572,787	\$6,433,477	\$3,637,415,508	-\$404,157,279	-63x
9	Cardano	\$3,297,223,441	\$8,362,154	\$2,967,501,097	-\$329,722,344	-39x
10	Bitcoin SV	\$2,995,976,338	\$7,756,746	\$2,696,378,704	-\$299,597,634	-39x

#	Asset	Market Capitalization	Gross Multiplier	Bitcoin 10% Value Shift	Altcoin Value Change	Altcoin Market Cap	Value Change%
2	Ethereum	\$54,307,613,315	83x	\$190,571,566	\$15,834,601,144	\$70,142,214,459	29%
3	XRP	\$13,292,546,131	64x	\$190,571,566	\$12,217,961,966	\$25,510,508,097	92%
4	Chainlink	\$5,274,435,503	40x	\$190,571,566	\$7,662,478,630	\$12,936,914,133	145%
5	Litecoin	\$4,850,173,981	18x	\$190,571,566	\$3,491,356,782	\$8,341,530,763	72%
6	Bitcoin Cash	\$4,596,979,616	55x	\$190,571,566	\$10,389,501,888	\$14,986,481,504	226%
7	Polkadot	\$4,094,497,988	105x	\$190,571,566	\$20,098,188,744	\$24,192,686,732	491%
8	Binance Coin	\$4,041,572,787	63x	\$190,571,566	\$11,971,891,018	\$16,013,463,805	296%
9	Cardano	\$3,297,223,441	39x	\$190,571,566	\$7,514,296,372	\$10,811,519,813	228%
10	Bitcoin SV	\$2,995,976,338	39x	\$190,571,566	\$7,360,662,608	\$10,356,638,946	246%

Source: Fundstrat, Bloomberg, Coinmetrics, Coinmarketcap, CoinMarketBook

Bitcoin & Altcoins

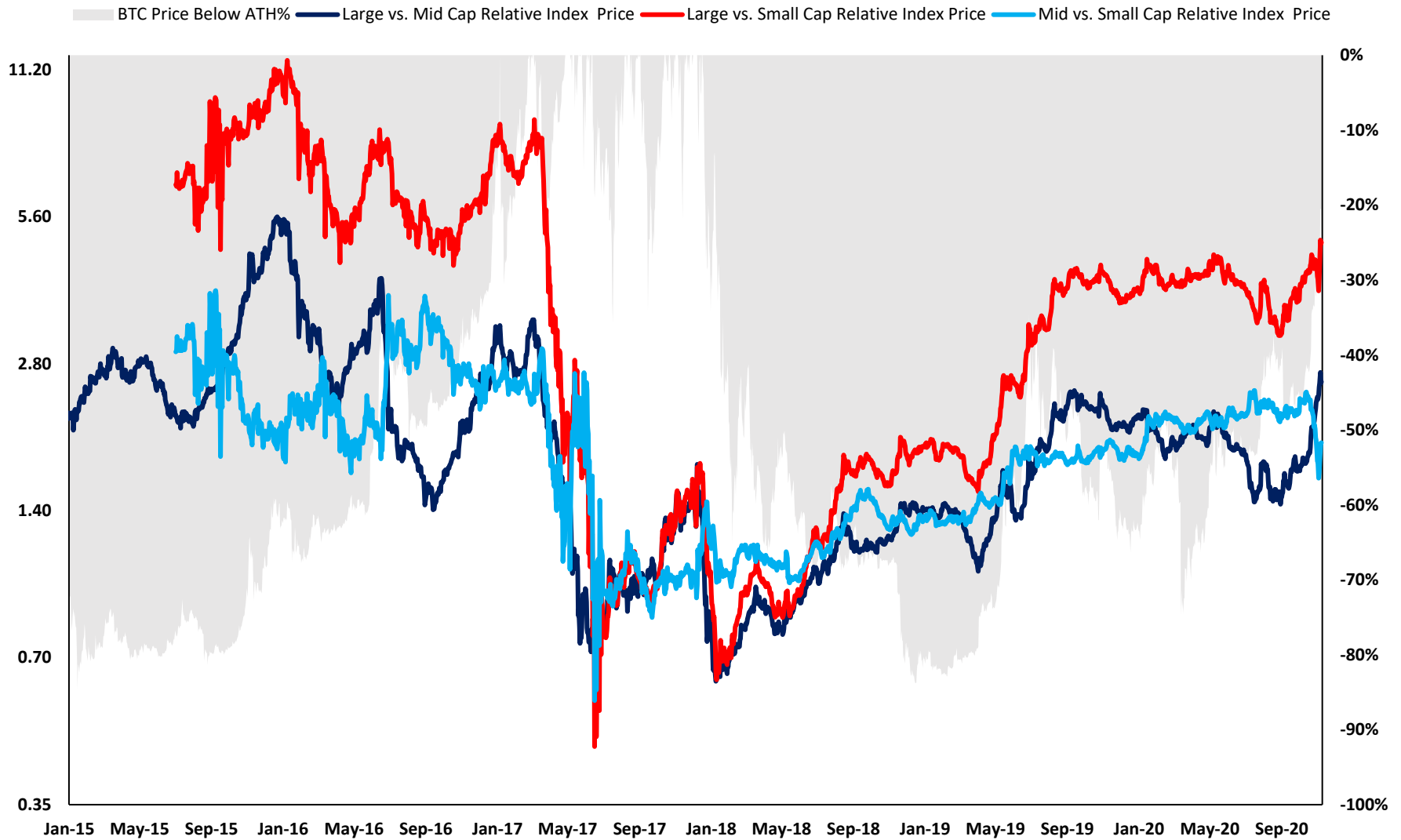
Altcoin's Have Outperform After Bitcoin Breaks ATHs



Source: Fundstrat, Bloomberg, Coinmetrics, Coinmarketcap

Size Positioning

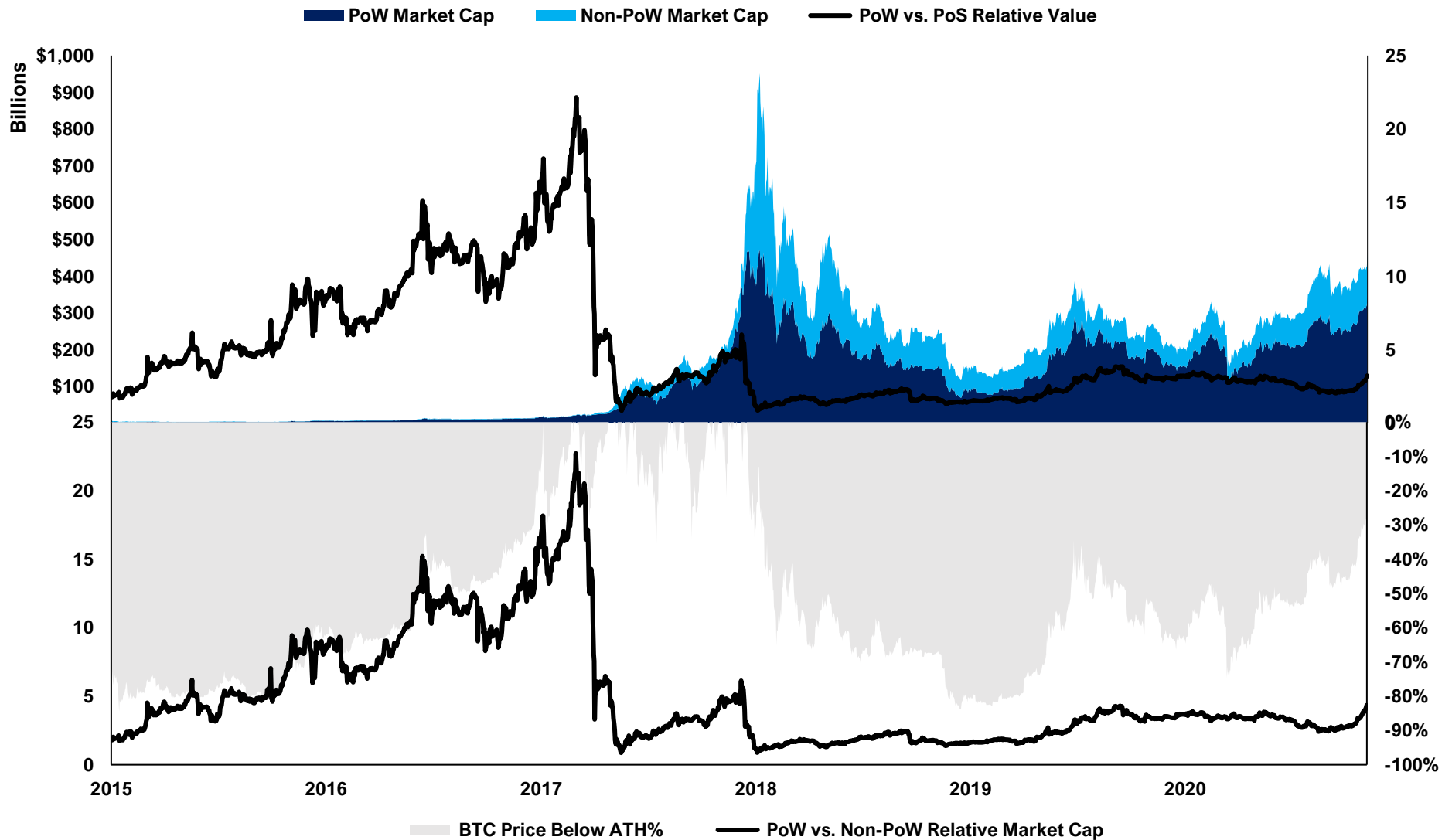
Reduce Large Cap OW to MW After BTC ATHs



Source: Fundstrat, Bloomberg, Coinmetrics, Coinmarketcap

Defensive vs. Cyclical

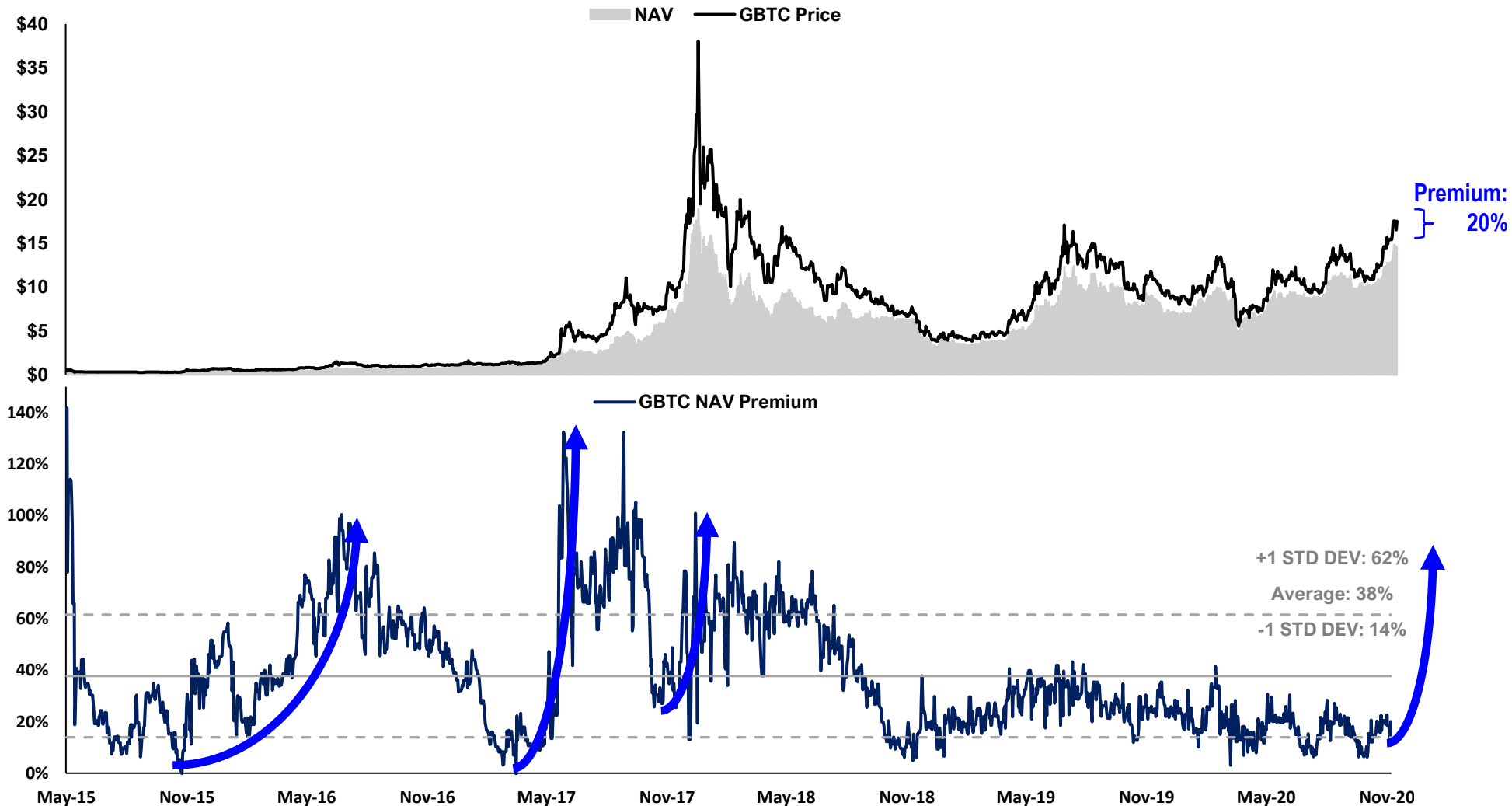
Tilt PoW From OW to MW After BTC ATHs



Source: Fundstrat, Bloomberg, Coinmetrics, Coinmarketcap

Bitcoin Stock Exposure

GBTC NAV Premium At 20% But Has Reinflated During Prior Bull Markets



Source: Fundstrat, Bloomberg

Crypto Stock Exposure

Publicly Traded Equities Offering Crypto Beta

	Name	Ticker	Price	Market Cap	52W Range (High - Low)	Avg. Daily Volume (10 day)	7D Return	P/B Ratio
Higher Crypto Beta	Mining Companies							
	Canaan	CAN	\$2.7	\$520,307,407	\$13 - \$1.8	\$15,848,781	9.9%	78.9x
	Ebang International Holdings	EBON	\$7.4	\$1,032,508,208	\$15 - \$3.8	\$5,463,736	-10.4%	47.2x
	Marathon Patent Group	MARA	\$2.4	\$130,558,286	\$5.3 - \$0.4	\$24,348,056	-0.8%	2.7x
	Hive Blockchain	HVBTF	\$0.4	\$138,268,226	\$0.5 - \$0.1	\$549,198	-3.8%	-
	Hut8 Mining	HUT	\$1.2	\$114,144,142	\$2.1 - \$0.5	\$755,399	-8.6%	2.8x
	Riot Blockchain	RIOT	\$4.0	\$208,801,401	\$4.6 - \$0.5	\$28,020,723	9.0%	3.3x
	TAAL Distributed Information Technologies	TAAL	\$1.5	\$37,974,054	\$3.7 - \$1	\$35,537	-7.8%	1.4x
	Investment Vehicles							
	Grayscale Bitcoin Trust	GBTC	\$18.0	\$10,026,280,273	\$18.9 - \$5	\$175,194,218	2.4%	1.2x
Lower Crypto Beta	Grayscale Bitcoin Cash Trust	BCHG	\$14.9	\$293,513,367	\$34 - \$4.1	\$1,218,254	-13.1%	6.2x
	Grayscale Digital Large Cap Fund	GDLC	\$13.3	\$200,643,341	\$37.6 - \$3.5	\$1,135,361	-14.8%	1.4x
	Grayscale Ethereum Trust	ETHE	\$63.6	\$1,773,874,268	\$259.5 - \$24.1	\$11,393,278	5.5%	1.5x
	Grayscale Ethereum Classic Trust	ETCG	\$5.5	\$80,704,002	\$23.8 - \$4.7	\$900,104	-4.8%	1.2x
	Grayscale Litecoin Trust	LTCN	\$145.0	\$1,490,426,392	\$190 - \$23	\$760,896	98.6%	24.4x
	The Bitcoin Fund	QBTC.U	\$21.5	\$203,857,178	\$23.2 - \$10	\$4,345,242	-0.1%	1.1x
	Bitwise 10 Crypto Index Fund				Applications filed for making Bitwise shares tradable			
	Bitwise Bitcoin Fund							
	Financial Services/Other							
		Galaxy Digital	BRPHF	\$4.3	\$1,434,494,799	\$4.9 - \$0.4	\$1,041,506	8.0%
	Overstock.com	OSTK	\$54.5	\$2,237,898,573	\$128.5 - \$2.5	\$222,170,218	-19.0%	6.3x
	MicroStrategy	MSTR	\$192.3	\$1,889,817,067	\$204.4 - \$90	\$31,549,747	3.6%	4.9x
	Silvergate Capital	SI	\$28.3	\$531,634,068	\$29.8 - \$7.6	\$7,772,129	2.7%	1.9x
	Square	SQ	\$177.2	\$80,789,837,088	\$201.3 - \$32.3	\$2,183,468,946	-10.5%	38.9x

Source: Fundstrat, Bloomberg

Definitions

- **Active Crypto Users:** Estimated users based on the greater of Blockchain.info Bitcoin wallets or the lower bound of crypto users estimated by Cambridge University.
- **Average Revenue Per User:** Annual transaction fee revenue divided by the number Active Crypto Users.
- **Bitcoin:** the most popular blockchain cryptocurrency, has been evolving into a store of value, while another popular blockchain cryptocurrency, Ethereum, is developing use cases in areas such as decentralized applications, smart contracts and token issuance
- **Blockchain:** a distributed database existing on multiple computers at the same time. It is constantly growing as new sets of recordings, or 'blocks', are added to it. Each block contains a series of transactions or other information, a timestamp and a link to the previous block, and a cryptographic hash or signature. Any change to a block changes the signature, which affects the header field for the next and subsequent blocks. Thus, any altered block is immediately identifiable, making the blockchain immutable.
- **Consensus:** the process by which all of the computers reconcile their version of the database and come to an agreement as to which entries to add into their database in the latest block, and to discard their block and replace it with the one a minimum percentage of other computers (typically 51%-67%) all agree is the valid block.
- **Customer Acquisition Cost:** Number of new Active Crypto Users divided by the Payment Processing Cost during period.
- **Distributed Ledger:** a more general version of a blockchain, and encompasses other constructs, as long as the ledger is independently replicated across multiple computers with no single computer acting as the source of data in the ledger.
- **Grider Crypto Book Value:** The sum USD value of all miner revenue (transaction fees plus newly issued block rewards or Payment Processing Costs) for all time from genesis up to the end of that interval. The methodology expanded on the Hayes mining model, which looks at the current costs, and instead tracked the cumulative or aggregate lifetime costs. The model was first developed in December of 2017 and made public in January 2018 by David Grider in the following linked [report](#) on page 9 and 13 described as Cryptocurrency Mining Store of Value Model and methodology later more fully detailed in the following linked [report](#).
- **Grider Book Value Per Share:** The Grider Crypto Book Value divided by the number of native crypto assets outstanding.
- **Grider Crypto Book Value Multiple:** The market capitalization (price times number of assets outstanding) divided by the Grider Crypto Book Value.
- **Major Central Banks:** Collectively, the Federal Reserve (FED), European Central Bank (ECB), Bank of Japan (BOJ) and the Peoples Bank of China (PBOC)
- **Mining:** the process by which Bitcoin or other token “Miners” process and validate transactions, with the first miner to solve a cryptographic puzzle validating the block and receiving a reward (currently 6.25 bitcoin each); other miners have to then replicate the result to confirm and move on to the next block.
- **Payment Processing Costs:** Value of all newly issued Bitcoin paid to miners as block rewards which dilute (inflate) the existing supply, and which we view as similar to stock compensation and classify as an expense to network stakeholders.
- **Total Take Rate:** The total transaction fee revenue (USD) divided by the total transaction value (USD) sent during the period.

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