DELPHI DIGITAL

The "Everything Rally" & Shifting Macro Tailwinds

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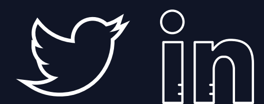

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Key Takeaways

- The crypto market has been the mirror image of the first half of 2019 the last three months with many crypto asset losses flashing bright red. Bitcoin has **fallen roughly 45% from its late June high** as investors and speculators alike yearn for a positive catalyst. This November featured bitcoin's worst monthly decline since last November's sell-off, which in hindsight presented a fairly attractive entry point for those with long term conviction. Despite its most recent drawdown, **BTC is still up almost 90% year-to-date,** even with the most recent drawdown, making it one of the best performing assets globally in 2019.

- The macro narrative that propelled bitcoin this summer has materially shifted in a few ways, most notably the Fed's move towards a more neutral policy stance, but the **long-term risk of broad fiat currency devaluation still supports the "digital gold" value proposition.** In our view, **the best backdrop for bitcoin is one defined by declining or benign market volatility, accommodative monetary policy (rate cuts, large-scale asset purchases), expansionary fiscal policy, and below-average expectations for economic growth.**

- The "Everything Rally" has characterized this year's above-average returns for most conventional asset classes, in large part driven by the drastic shift in rhetoric among major central banks. **Developed and emerging market equities, long-term Treasuries, U.S. investment-grade and high yield corporate bonds, oil and gold have all returned double digit percentage gains this year.** However, the risk-reward trade-off is not nearly as favorable at current levels, especially for U.S. government debt, as it was just a couple years ago. Near record-low bond yields and above-average equity market valuations indicate lower future returns and **greater asymmetric risk to the downside** for several asset classes.

- The U.S. dollar sits at the heart of the shift from 2017's "synchronized global growth" narrative to this year's "synchronized global slowdown" consensus view. **Global demand and growth did pick up in 2017, but it also coincided with the dollar's worst annual loss in almost 15 years.** Conversely, the dollar has gained more than 10% since its early 2018 bottom, which brought with it growing concerns over slowing economic activity.

- Investors continue to grapple with growing geopolitical unrest and trade war concerns, but the latest rebound - albeit mild - in a few key economic indicators and optimism for a U.S.-China trade deal has taken the wind out of the safety trade that dominated this summer. Nonetheless, **demand for safe haven assets remains relatively strong** despite the latest price pullback, however, as investors seek out protection against the next market drawdown.

Current State of Crypto Market

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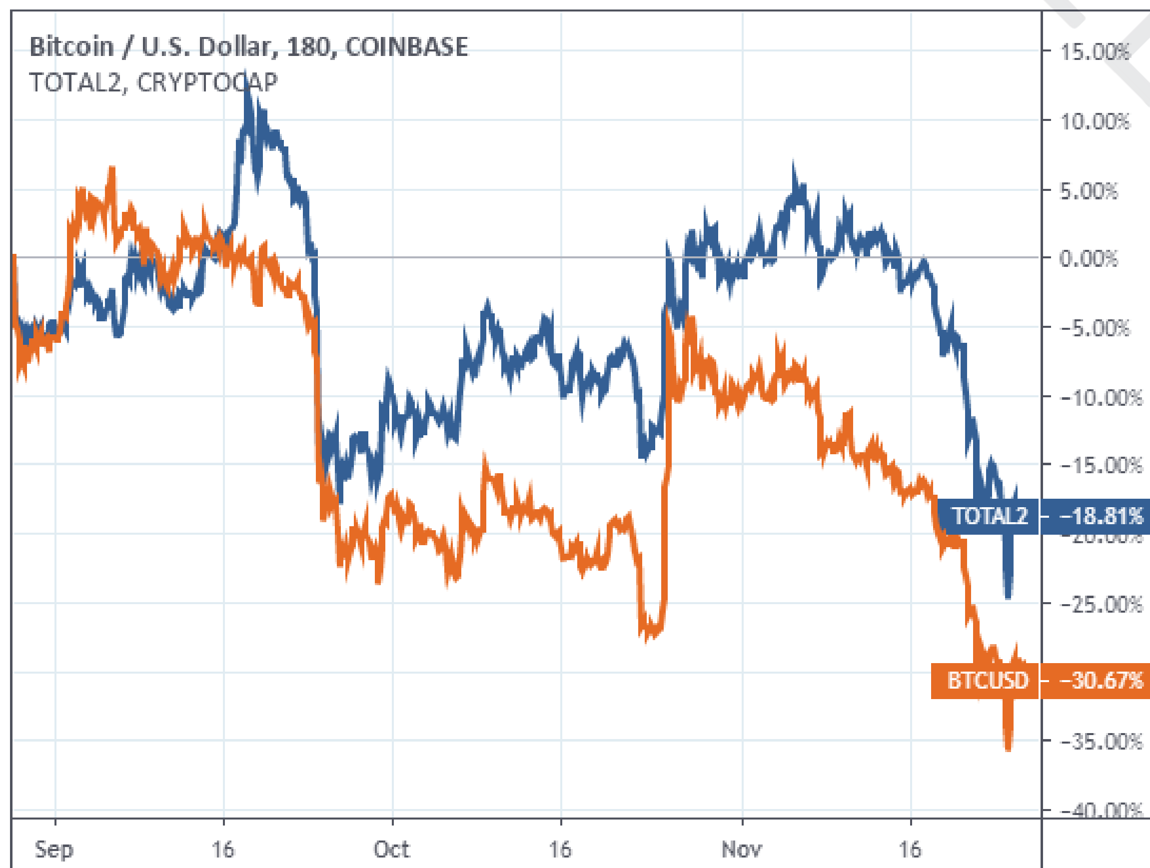
The crypto market has been the mirror image of the first half of 2019 these last three months with many crypto asset losses flashing bright red. Bitcoin, which makes up two thirds of the entire public crypto market, is **down roughly 45% from its late June high** as investors and speculators alike yearn for a positive catalyst. The rest of the market hasn't fared any better - with some names losing more than half their value over the same period - as enthusiasm towards crypto appears to wane, at least on the surface. It's important to note, however, **BTC has gained almost 90% year-to-date,** even with the most recent drawdown, making it one of the best performing assets globally in 2019.

BTC vs. Total Market ex-BTC - 3 Months



BTC vs. Total Market ex-BTC Performance YTD

Public interest in bitcoin remains far below its late 2017 peak, according to worldwide Google search trends, but similarly low levels were also reached at the end of 2018 before the 1H 2019 price surge.

Despite the recent turmoil, our conviction in this market has never been stronger. Behind the volatile price fluctuations there still lies a vibrant ecosystem filled with developers, entrepreneurs, analysts, and investors that refuse to stop pushing the limitations of this nascent space.

Data as of November 29th, 2019

Source: TradingView, CryptoCap, Coinbase

Bitcoin's Q4 Massacre

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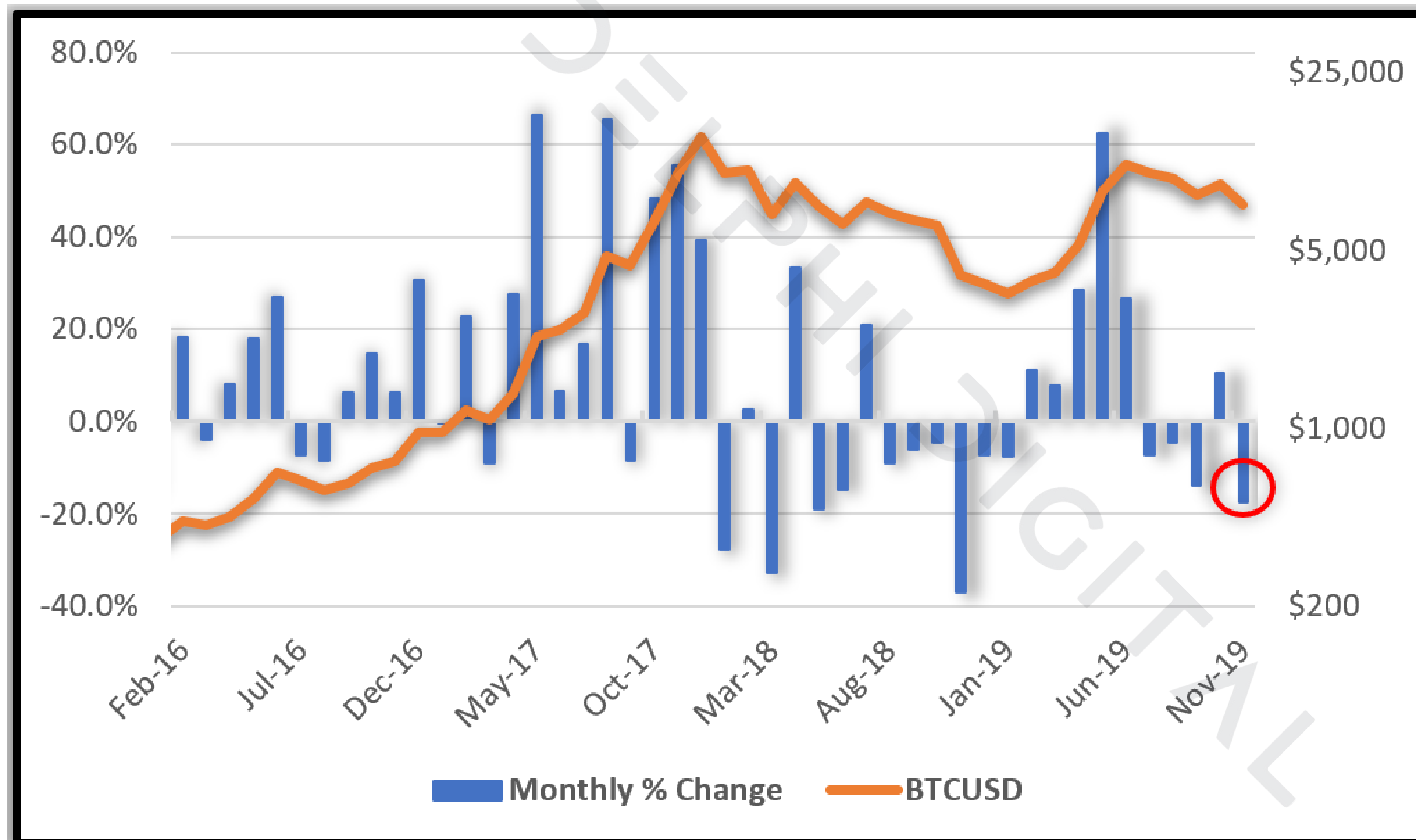
The last few weeks have an eerie sense of déjà vu given last year's Q4 crypto market slaughter, which saw bitcoin lose half its value in less than a month. Notably, we released our original State of Bitcoin report in mid-December 2018 calling the bottom in BTC following what we deemed as the final capitulation among bitcoin holders. **This November turned out to be bitcoin's worst monthly decline since last November's sell-off, which in hindsight presented a fairly attractive entry point for those with long term conviction.** The macro narrative that propelled BTC this summer has materially shifted in a few ways, but the long-term risk of broad-based fiat currency devaluation still supports the value proposition of a non-sovereign, censorship resistant digital asset with a provably scarce supply. Throughout this report, we'll explore what we believe to be the ideal macro backdrop for bitcoin and the potential headwinds it may face as the investing landscape shifts.

BTCUSD vs. Monthly % Change



Data as of November 30th, 2019
Source: Digital Assets Data

Best Crypto Performers Last 90 Days

Over the past 90 days, we've seen more alternative cryptocurrencies outperform Bitcoin than we did the rest of the year. Below, we've included the list of the top 15 performers with a market cap over $25 million for the last three months. As you can see, Synthetix ($SNX) comes in at number - returning over 500% on a satoshi basis. Institutional subscribers can read our SNX report from August here.

#	Project	Token	Market Cap	90D ROI (USD)	90D ROI (BTC)	Sector	Comments
1	Synthetix	SNX	$ 171,170,517	393%	504%	Derivatives Platform	SNX received a lot of attention this year as the DeFi narrative strengthened. Their derivatives platform surpassed Compound to become the #2 DeFi app for total USD locked after Maker. Additionally, in mid-October a wallet identified as a16z's was seen storing SNX. Our Institutional subscribers can read our deep dive on Synthetix here.
2	Thunder Token	TT	$ 29,313,292	174%	243%	Smart Contract Platforms	It was announced that ThunderCore will hard-upgrade the mainnet blockchain to use PaLa (instead of the original intended protocol, Thunderalla) and open source the implementation in Q1 2020. Ecosystem also has seen the staking pool service release and community developed Dapp growth YTD.
3	VeChain	VET	$ 380,149,072	56%	95%	Smart Contract Platforms	VET outperformed BTC in large part thanks to President Xi of China who expressed the need for faster development of the blockchain sector. China's bullish tone on blockchain in late October led to rallies across a number of Chinese related cryptos.
4	0x	ZRX	$ 151,847,978	47%	83%	Decentralized Exchanges	ZRX outperformed BTC in large part due to the upcoming 0x V3 protocol upgrade which includes a ZRX staking mechanism incentivizing market makers to provide liquidity and also introduces a set of bridge contracts aggregating liquidity from various DEX networks.
5	Nexo	NEXO	$ 59,127,847	36%	70%	Lending	Nexo benefited from the increasing demand of crypto backed loans. The lending platform lowered borrowing rates on instant credit lines to 5.9% APR after securing long term cost efficient financing. This was a notable price catalyst as bringing in an increased volume in business, is more attractive to NEXO holders who receive passive income in the form of 30% of the company's profits. Nexo was highlighted in our recent Thematic Insights on CeFi.
6	Basic Attention Token	BAT	$ 337,409,221	34%	68%	Advertising	The launch of the 1.0 version of the Brave browser to the general public was a major milestone. Brave rewards were enabled on iOS, completing cross-platform availability. Strong network growth with MAUs reaching 8.7m, advertiser waitlist reaching 10k, etc. as well as the integration into MakerDAO's MCD benefited BAT.
7	Crypto.com	MCO	$ 67,480,939	30%	63%	Payment Platforms	Outperformance largely driven by Crypto.com announcement in late October that its MCO Visa Card platform in Europe had been approved. The amount of MCO staked enables access to various tiered MCO Visa cards.
8	Cosmos	ATOM	$ 656,885,857	29%	62%	Interoperability	Gains in Cosmos' native token, ATOM, are likely driven by interest around the Cosmos Hub-3 upgrade to add support for the Interblockchain Communication Protocol (IBC). IBC enables interoperability for cross-chain communication between any two blockchains and connects them to the Cosmos hub.
9	NEO	NEO	$ 816,406,011	23%	53%	Smart Contract Platforms	In late October, President Xi announced China's push for blockchain supremacy, resulting in a rally across the board in Chinese cryptocurrencies, with NEO being one of the benefactors from the subsequent Chinese media frenzy that followed and drew in investors.
10	Maker	MKR	$ 606,196,751	22%	53%	Lending	Maker received a lot of the spotlight due to the launch of MCD, a highly anticipated milestone for the project itself & DeFi as a whole. The introduction of the DAI savings rate generated excitement as it enables DAI holders to earn interest & it unlocks new opportunities for Maker protocol integration on the backend of DeFi dapps.
11	Chainlink	LINK	$ 929,766,578	21%	51%	Data Management	LINK continued its strong performance YTD on the back of a series of announcements and ongoing support from its quite large community which has a loud voice relative to other projects.
12	Komodo	KMD	$ 102,408,245	15%	43%	Interoperability	KMD outperformed BTC on the back of a variety of product shipments, most recently Atomic Wallet, a non-custodial decentralized wallet with a built-in Atomic Swap DEX supporting 500+ digital assets.
13	Tezos	XTZ	$ 989,691,411	10%	37%	Smart Contract Platforms	Tezos was launched on leading exchanges, Coinbase and Binance, unlocking greater liquidity through access to a larger investor base. The primary catalyst for XTZ outperforming BTC was Coinbase's announcement in early November that it would be expanding access for XTZ staking services to all US investors, not just for institutions.
14	The Open Application Network	AION	$ 28,176,367	9%	36%	Smart Contract Platforms	AION outperformed BTC due to a rebrand from Nuco to the Open Application Network (OAN) and new strategic direction towards solving the "unintended consequences of platform economies".
15	Augur	REP	$ 111,807,088	4%	30%	Prediction Markets	Recent updates on the specifics of Augur V2, a major revamp to the existing decentralized predictions market platform, renewed investor optimism around REP. Launching early Q1 2020, V2 will integrate 0x for cheap order creation, modification, and cancellation in addition to integrating MakerDAO's DAI as the settlement currency, addressing previous concerns with volatility.

Data as of: November 19th, 2019, Sources: Alex Gedevani, OnChainFX

Select Liquid Smart Contract Platforms

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Ethereum

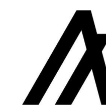
ETH 2.0 shard count reduced from 1,024 and block size increased from 16kB to 128kB. 100k tx/s possible when coupled with optimistic roll-ups. ETH 2.0 deposit contract has been tested and formally verified. ETH 2.0 phase 0 in 1Q20. Maker transitioned to multi-collateral dai and Synthetix gained momentum.

EOS

EOS 2.0 released includes EOS VM a new WebAssembly engine 16x faster than EOS 1.0. Block.One had a $24M settlement with the SEC over its ICO. New Governance proposal to stake tokens across 5 different time periods for varying returns.

Cardano

Released Shelly testnet with the goal of decentralizing the project by launching staking pools and delegation functionality. 100 staking pools have already been registered. Shelly mainnet planned for 1Q2020.

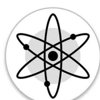


Algorand

Released Betanet to showcase new features including algorand standard assets (tokens, stablecoins, NFTs), atomic transfers, and smart contracts. Released BLS library to compress multiple signatures into one to enable more block space.

NEO

NEO had numerous technical updates, rebranded their website, and noted their 3 year anniversary as a live network. In September launched its NEO3 TestNet and NEO3 preview. The upgrade aims to increase network stability, performance and decrease development costs.



Cosmos

Was set to upgrade to Cosmos Hub 3, although technical difficulties prevented the launch and the network was rolled back to its earlier version. Hub 3 will split Gaia (codebase) from the SDK so developers can experiment without updating the Hub. A governance fund, and +25 validators (125 total) are planned too.

Tezos

Second upgrade Babylon was implemented featuring a new consensus mechanism (Emmy+), new michelson features, and a clear distinction between accounts (tz1, tz2, etc) and smart contracts (KT1). A 5% proposal quorum was implemented, so any proposal must obtain 5% of votes to proceed.

Hashgraph

Beta Mainnet launched in September, allowing developers to build on the platform and anyone can create an account. Platform boasts 100,000 tx/s, but a technical debate is underway as to this claim being just token transfers and not smart contract interactions.

Blockstack

STX tokens initially distributed through a hard fork and closed its $23M Reg A+ token sale. Released beta for Clarity SC language. 270 apps are live with 100 added in 3Q. STX was listed on binance and the team released a detailed token economic white paper. STX airdrop via Blockchain.com soon.

Tron

No major events for the project itself outside of exchange listings (Bitribe, SafePal and CoinBene). The Nile testnet was launched as a developer playground. Tron founder Justin Sun confirmed an investment in exchange Poloniex - which was previously acquired by Circle for $400M.

Select Non-Liquid Smart Contract Platforms

Polkadot*

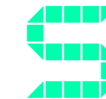
Substrate EVM can run Solidity (any Ethereum SC) on polkadot. Released Parathreads, or apps that can interact with the relay chain without needing a high capital lockup or fear of losing one's lease like in parachains. Testnet Relay Chain Kusama will upgrade to PoS soon with 50 validator slots

Near

Launched Stake Wars in October to find bugs on the platform and incentivize testers with tokens. Finality gadget has been coded and Nightshade's (protocol sharding design) work was merged into a master file. A testnet is currently running with 8 shards. Proof of space-time paper published for sybil resistance.

Nervos

Project completed a $72M token sale, on top of the $28M it raised last year. Mainnet launched, named Lina, a multi-layer PoW blockchain that is described as the first scalable PoW blockchain.



Solana

Completed $20M raise led by Multicoin. Ran a testnet of 200 CPUs across 23 regions and reached 47,370 tx/s and confirmation times of 2.34 seconds. Solana uses Proof-of-History to timestamp and order messages using a cryptographic clock to achieve scale

Kadena

PoW mainnet Chainweb went live in early November along with its wallet Chainweaver. Kadena raised $15M in 2018 but is aiming to raise another $20M through a dual token sale at $1 per token for non-accredited investors and $0.50 for accredited ones with a one year lockup.

AVA Labs

Released Athereum, a spork of Ethereum that uses the project's avalanche consensus protocol. Athereum is currently a testnet subnetwork on AVA. The native token will be ATH. The team ported over Ethereum's state as an alternative environment for developers to run Dapps.

Libra

Libra signed in 21 founding members to its board, after 7 entities left after expressing interest (Visa, Stripe, Ebay, Mastercard, Booking Holdings, Mercado Pago and Paypal). U.S. lawmakers have been grilling Facebook over its plans for Libra.

Dfinity

Dfinity released Motoko, its programming language optimized for its internet computer. This is a very early stage release, and is limited in functionality.

Telegram

The SEC issued an emergency restraining order against Telegram Group over its token sale. Telegrams tokens have not been distributed to buyers and reports stated the legal matters could take months to unwind. Telegram submitted a filing refuting the SEC's allegations in Mid-November.

CasperLabs

Released CasperLabs Highway, a spec for a live and secure PoS protocol. This has been described as a correct-by-construction PoS implementation and the protocol features both safety (nothing bad happens) and liveness (blockchain will proceed). Generally blockchains make tradeoffs between these two attributes.

Interoperability protocol with direct smart contract functionality.

The "Everything" Rally

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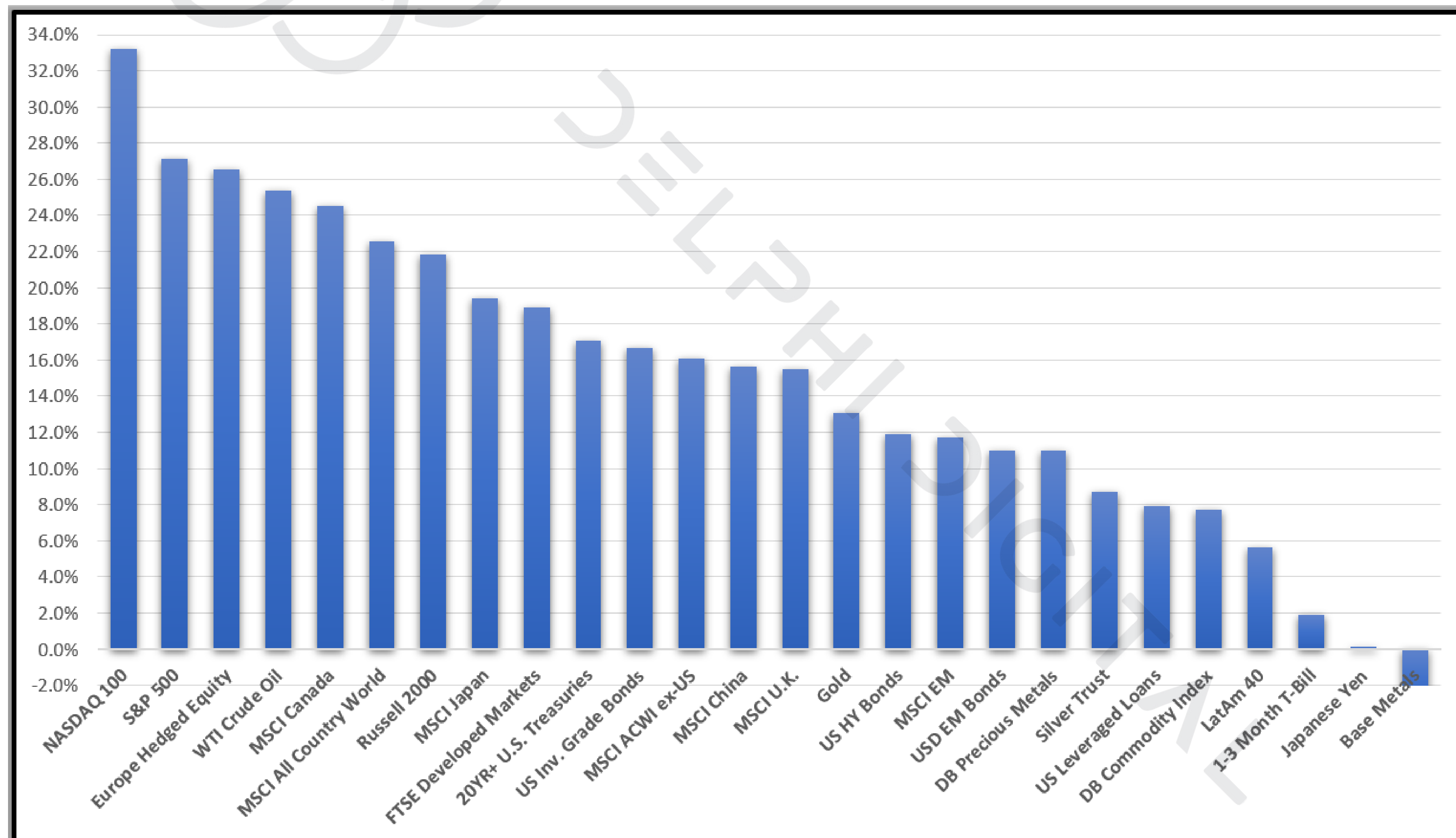
Name an asset class and odds are it's had a pretty good year so far. **The U.S. equity market, for example, has gained over 25% year-to-date,** pushing the S&P 500 to fresh all-time highs despite several headwinds facing the financial markets. The relative strength of the fixed income market has arguably been an even greater surprise, with **long-dated Treasuries returning almost 20% in 2019 alone.** Several commodities have also found themselves in positive territory on the year, notably gold, which finally broke out to a six-year high roughly three months ago. As we noted, bitcoin has struggled as of late, but let's not forget its **85% year-to-date gain still places it among this year's best performing assets.** However, as we approach the final weeks of 2019, the sustainability of the "everything" rally is certainly top of mind.

Global Asset Class Performance Year-to-Date (ex-BTC)



Data as of November 29th, 2019

Source: Bespoke Research, S&P Dow Jones, MSCI, FTSE Russell, Nasdaq, Deutsche Bank

Stocks, Stocks, Stocks

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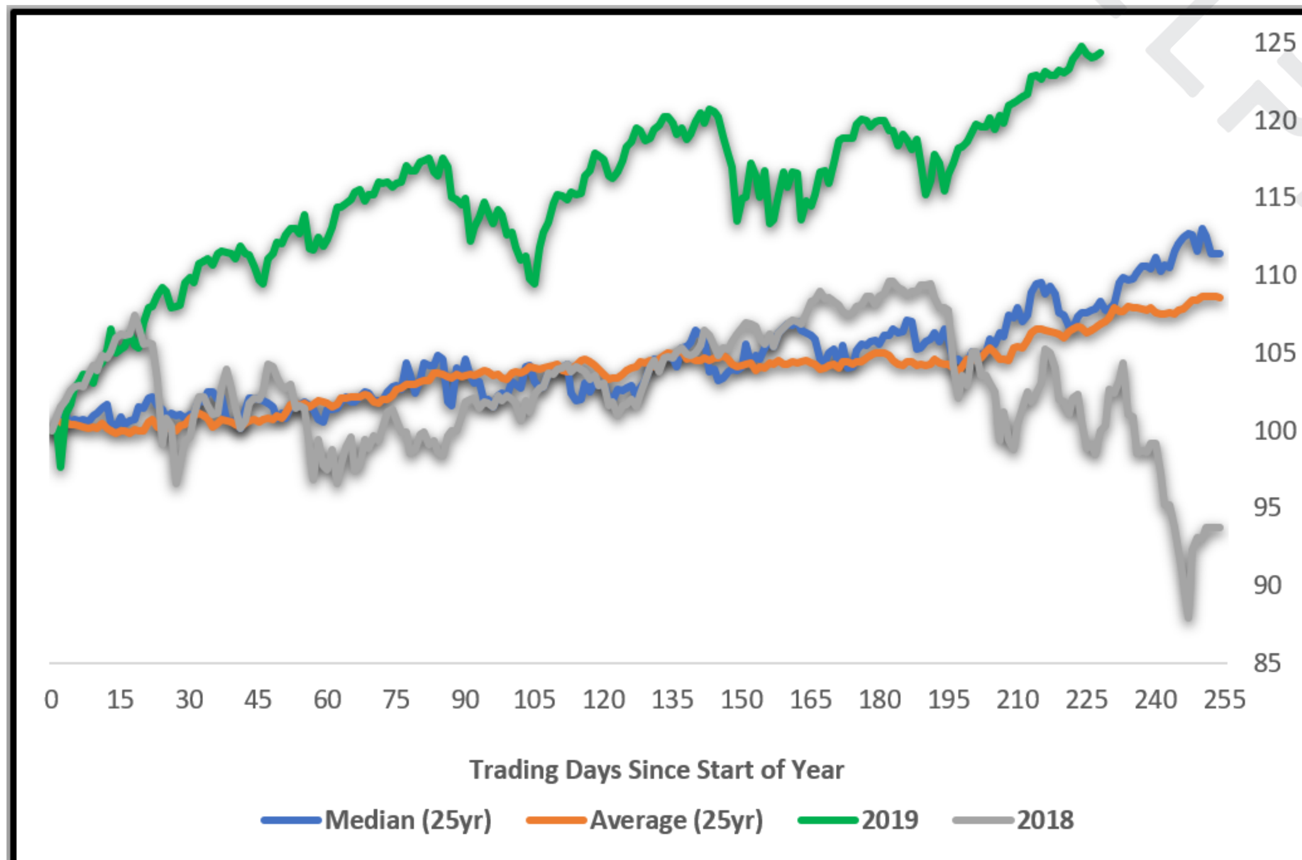
U.S. equities have taken flight this year with key benchmarks like the S&P 500 frequently breaking to fresh all-time highs. Part of the index's latest move has been driven by perceived progress on the trade front with China, but **much of this year's rise in equity prices can be attributed to multiple expansion rather than growing optimism towards corporate profitability.** In order for stocks to sustain their current ascent, the earnings outlook must, at a minimum, begin to slowly improve. Elevated fears over slowing growth prospects – largely fueled by trade uncertainty - have weighed on risk assets time and again over the last 18 months. **If expectations for corporate earnings suffer another wave of downgrades, it's likely stock prices will follow suit.**

S&P 500 YTD % Change vs. Last 25 Years



S&P 500 % Change by Quarter

	Q1	Q2	Q3	Q4
2019	13.1%	3.8%	1.2%	5.3%
2018	-1.2%	2.9%	7.2%	-14.0%
2017	5.5%	2.6%	4.0%	6.1%
2016	0.8%	1.9%	3.3%	3.3%
2015	0.4%	-0.2%	-6.9%	6.5%
2014	1.3%	4.7%	0.6%	4.4%
2013	10.0%	2.4%	4.7%	9.9%
2012	12.0%	-3.3%	5.8%	-1.0%
2011	5.4%	-0.4%	-14.3%	11.2%
2010	4.9%	-11.9%	10.7%	10.2%
2009	-11.7%	15.2%	15.0%	5.5%
2008	-9.9%	-3.2%	-8.9%	-22.6%
2007	0.2%	5.8%	1.6%	-3.8%
2006	3.7%	-1.9%	5.2%	6.2%
2005	-2.6%	0.9%	3.1%	1.6%
2004	1.3%	1.3%	-2.3%	8.7%
2003	-3.6%	14.9%	2.2%	11.6%
2002	-0.1%	-13.7%	-17.6%	7.9%
2001	-12.1%	5.5%	-15.0%	10.3%
2000	2.0%	-2.9%	-1.2%	-8.1%
1999	4.6%	6.7%	-6.6%	14.5%
1998	13.5%	2.9%	-10.3%	20.9%
1997	2.2%	16.9%	7.0%	2.4%
1996	4.8%	3.9%	2.5%	7.8%
1995	9.0%	8.8%	7.3%	5.4%
1994	-4.4%	-0.3%	4.2%	-0.7%
Avg (25yr)	***1.4%***	***2.4%***	***0.0%***	***4.2%***
Median	***1.3%***	***2.4%***	***2.5%***	***6.1%***
High	***13.5%***	***16.9%***	***15.0%***	***20.9%***
Low	***-12.1%***	***-13.7%***	***-17.6%***	***-22.6%***

**Average, median, high, low calculated over 25 year period (1994-2018)*

Data as of November 29th, 2019
Source: S&P Dow Jones, Bloomberg

Stocks Vulnerable Near Year-End

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The U.S. is home to one of the world's best performing equity markets over the last decade. Foreign markets, both developed and emerging, have largely underperformed U.S. peers. **The demand for U.S. assets in the face of rising geopolitical tension, negative yielding sovereign and corporate debt, and economic uncertainty helped fuel a continuation in this cycle's trend.** Conversely, the last few times the S&P 500 was this overbought at the same time the VIX traded near its current lows we saw a sizable pullback in U.S. stocks. Any material change or deterioration in renewed optimism for a trade resolution could spark a pick up in volatility, potentially serving as the catalyst for such a sell-off.

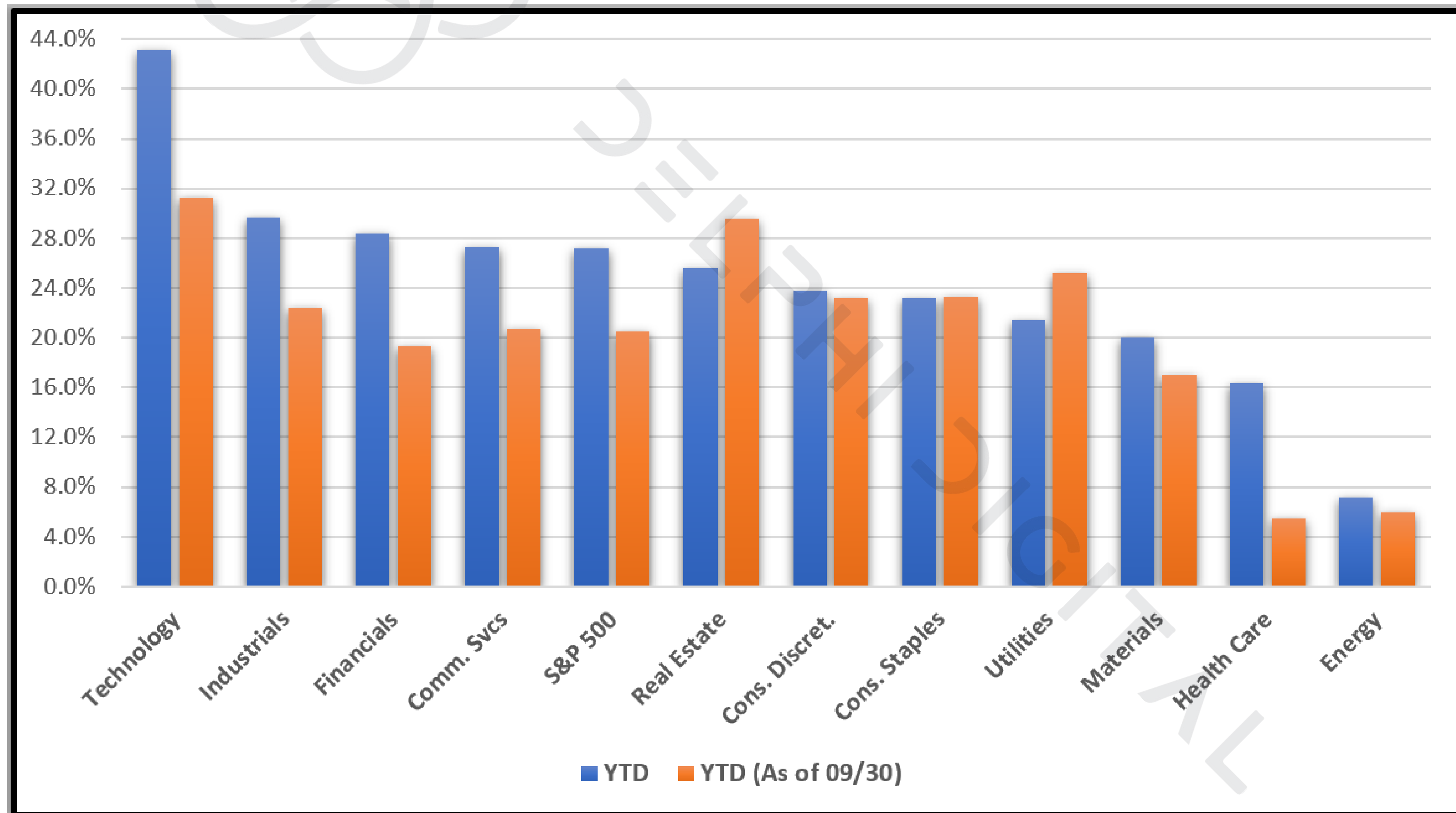
VIX Index vs. S&P 500 Price (Green) & 14-Day RSI (Bottom Panel)

Data as of November 27th, 2019
Source: S&P Dow Jones, TradingView, Cboe

Demand for Income & Growth

Risk assets like stocks have led other asset classes for most of the year, but underneath the surface we find signs that investors are not entirely bought in to a full "risk-on" narrative. Unsurprisingly, tech stocks are among this year's biggest winners, but the outperformance of defensive sectors like utilities (at least for most of the year) also indicate **heightened demand among investors for both income *and* growth** at a time when the macro environment looks poised to deliver little of either. As a result, absolute and relative valuations for these defensive sectors are well above historical averages and remain a key concern, especially for industries carrying substantial debt burdens (i.e. utilities).

S&P 500 Sector Performance YTD



Data as of November 29th, 2019
Source: SPDR, S&P Dow Jones

"Quality" Assets in Vogue

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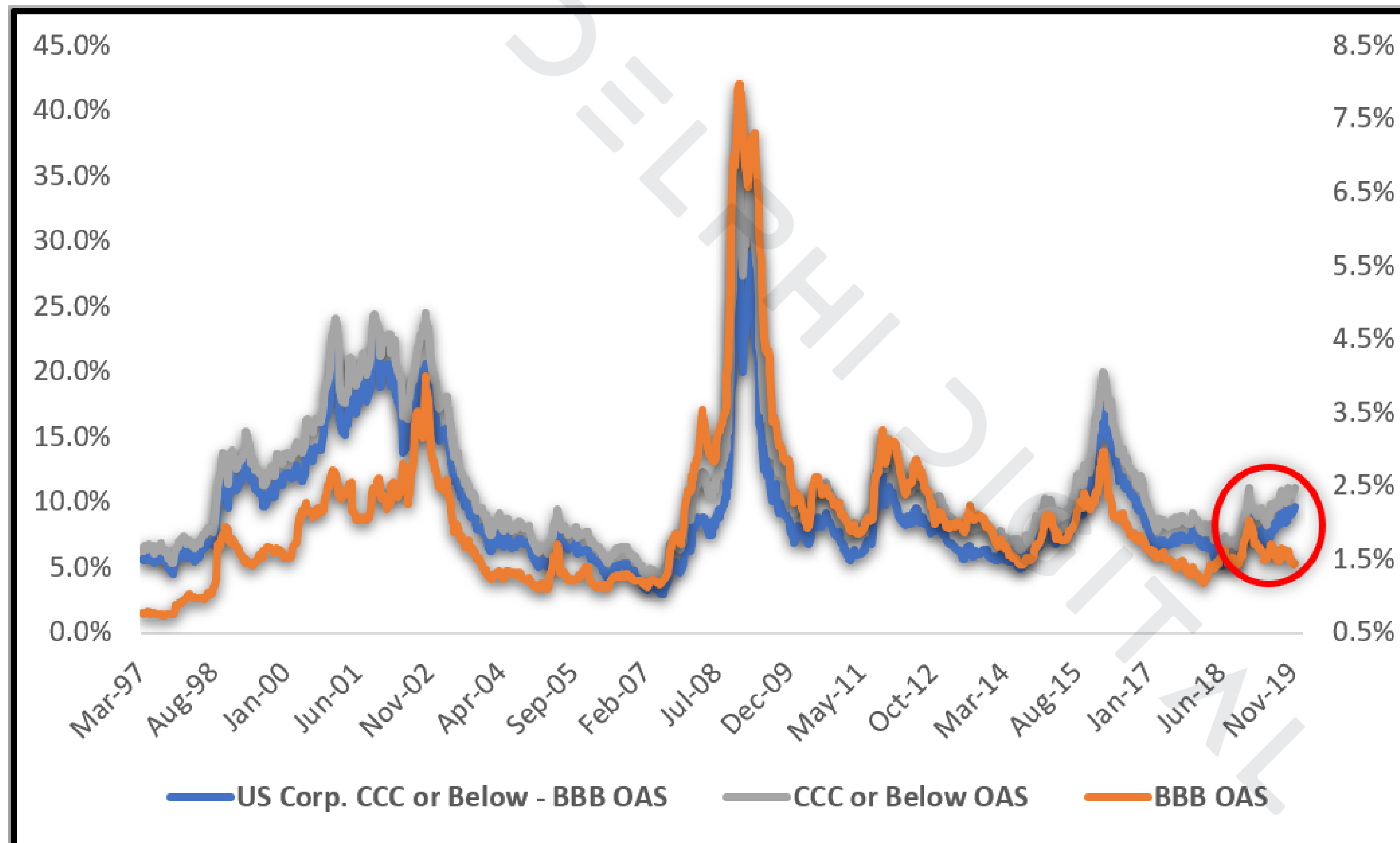
High-yield corporate bonds came out of the gate hot to start off 2019, but have failed to gain much momentum in the latter half of the year, even as U.S. investment-grade corporates continued to trend higher, **signaling greater demand for high quality assets.** The latest wave of tech IPO busts elevated concerns over key fundamental metrics like profitability, which doesn't help boost sentiment towards riskier borrowers. The "quality" factor in equity markets, notably those domiciled in the U.S., has also outperformed the broader market by almost 300 bps this year (though the criteria for "quality" is largely subjective). The recent craze around the return of the value trade hinders on a continuation in the trend away from high-flying, cash burning unicorns towards undervalued companies with strong balance sheets and viable paths to positive profitability.

U.S. Corporate Bond Spreads: CCC or Below vs. BBB OAS



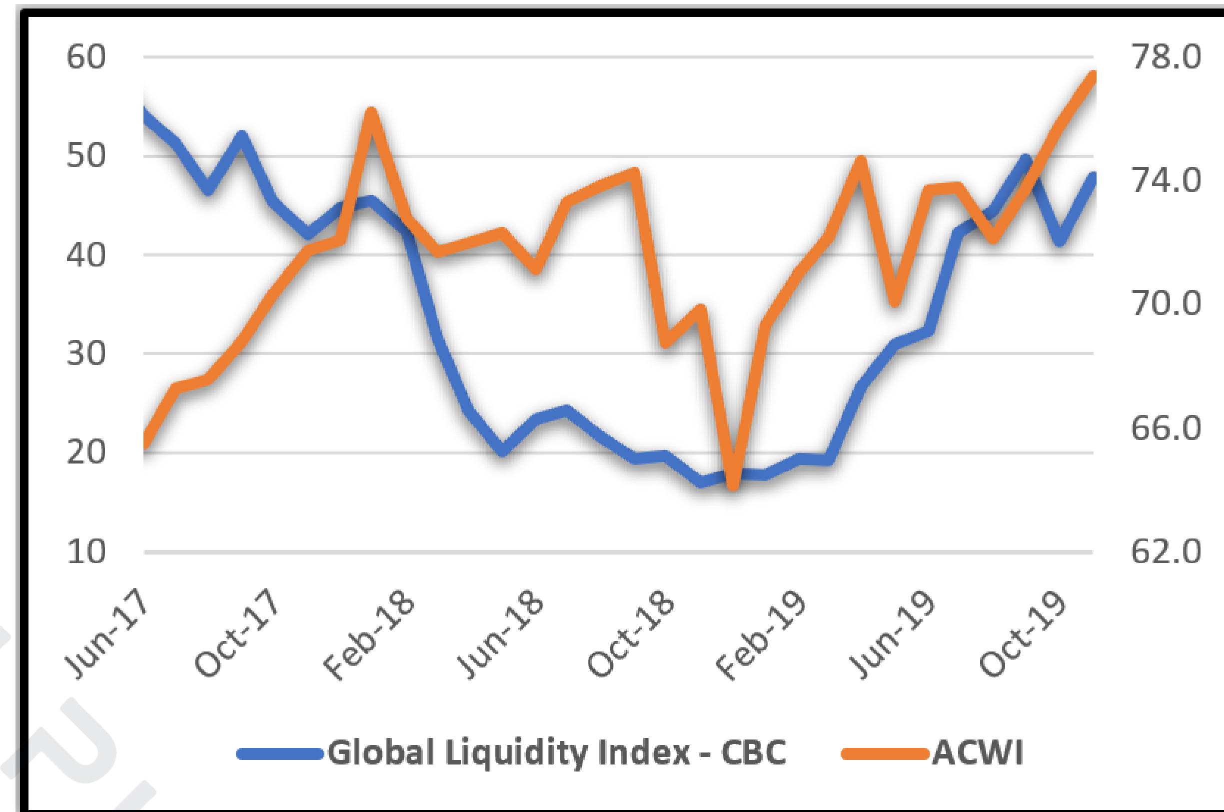
Data as of November 27th, 2019
Source: Federal Reserve Bank of St. Louis, ICE, BofAML

Central Bank Liquidity Returns

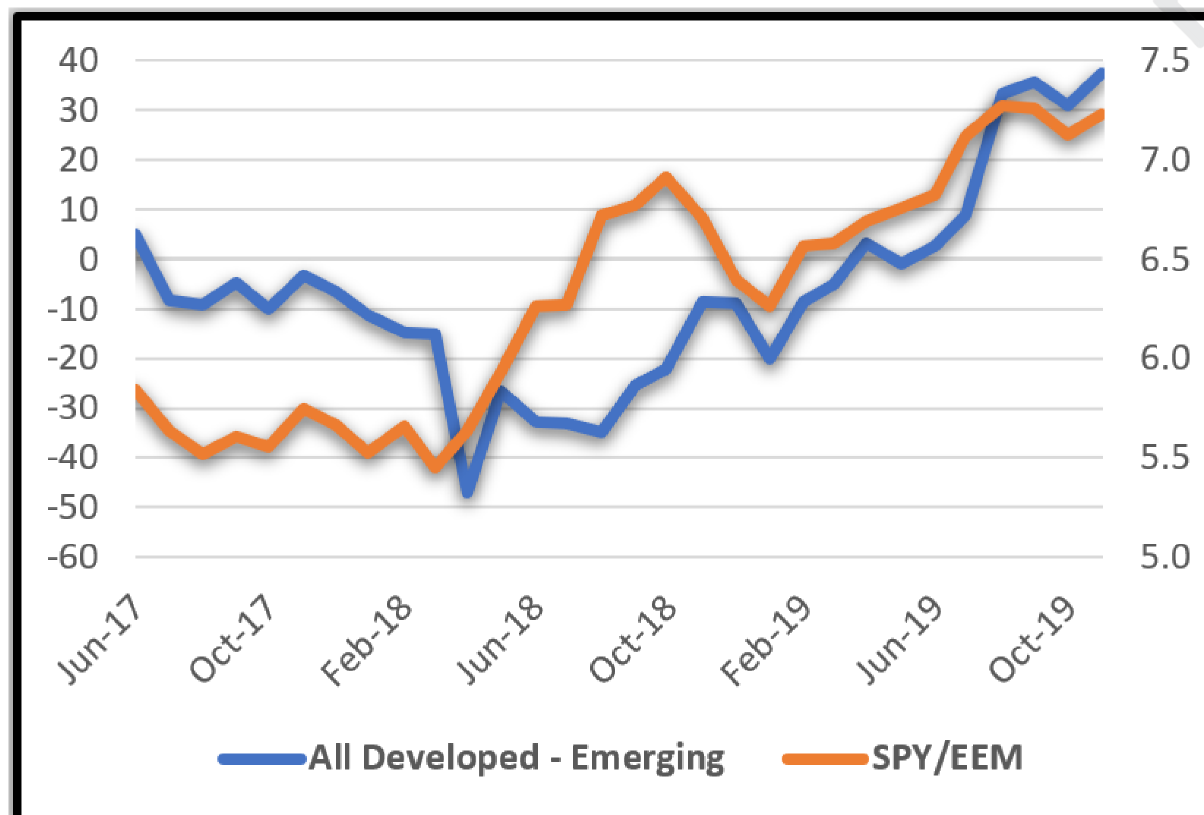
Emerging market economies, many of which are saddled with mounting dollar-denominated debt burdens, suffer when liquidity tightens. Increased demand for U.S. assets and growing concerns over a dollar shortage helped fueled the greenback's swell over the last 18 months.

A turnaround in emerging market liquidity conditions, notably in Asia, and the reversal in the safety trade could bode well for developing equity markets, especially if the U.S. dollar begins to weaken.

Crossborder Capital's Global Liquidity Index vs. MSCI ACWI



Developed-EM Liquidity Index vs. S&P 500/EM Stocks



Towards the end of 2017, other notable central banks issued more hawkish outlooks alongside the Fed, sparking widespread fears of a global tightening cycle; **the drastic reversal in central bank rhetoric helped fuel this year's rally in asset prices.**

Increased liquidity, which accounts for various funding sources like bank deposits and central bank money, typically serves as a boon for riskier assets. **Recent efforts by the Fed to prevent further stress in dollar funding markets helped alleviate concerns over the systematic risk a dollar shortage poses,** which hurts safer asset prices that outperform during periods of rising angst.

Data as of October 31, 2019
Source: Crossborder Capital

Safe Haven Trade Loses Steam

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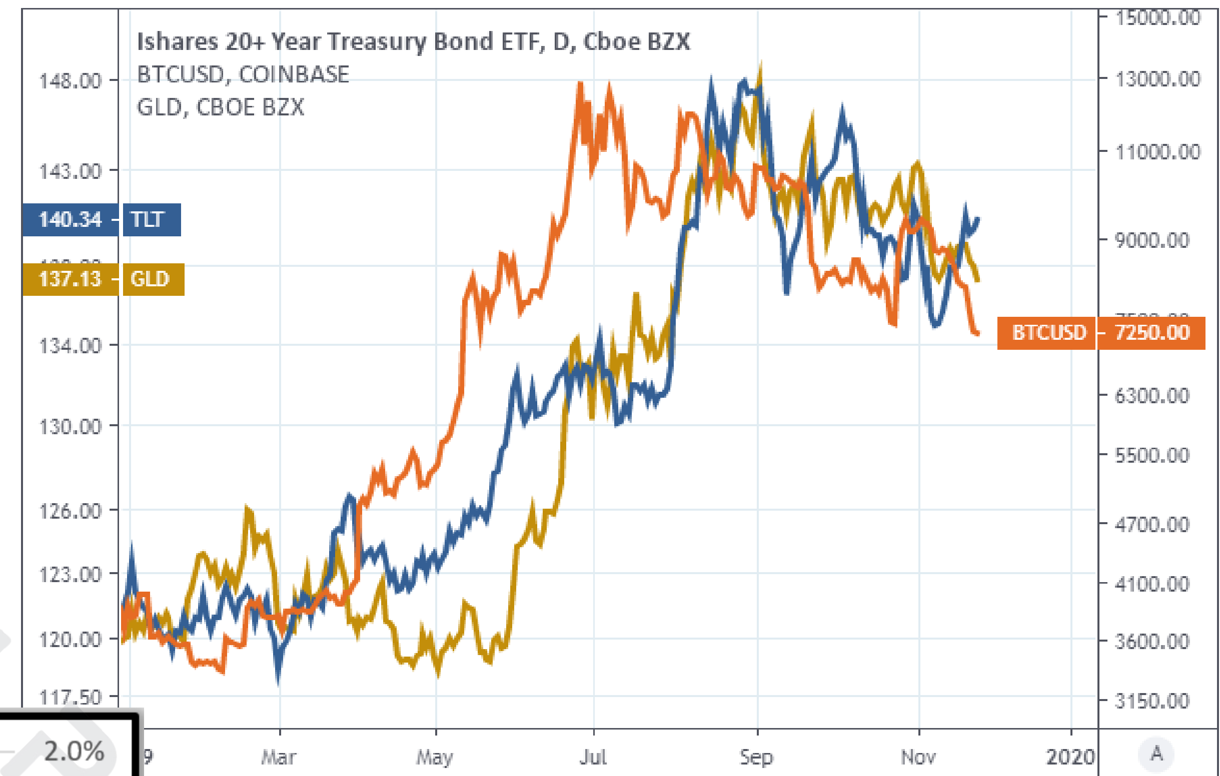
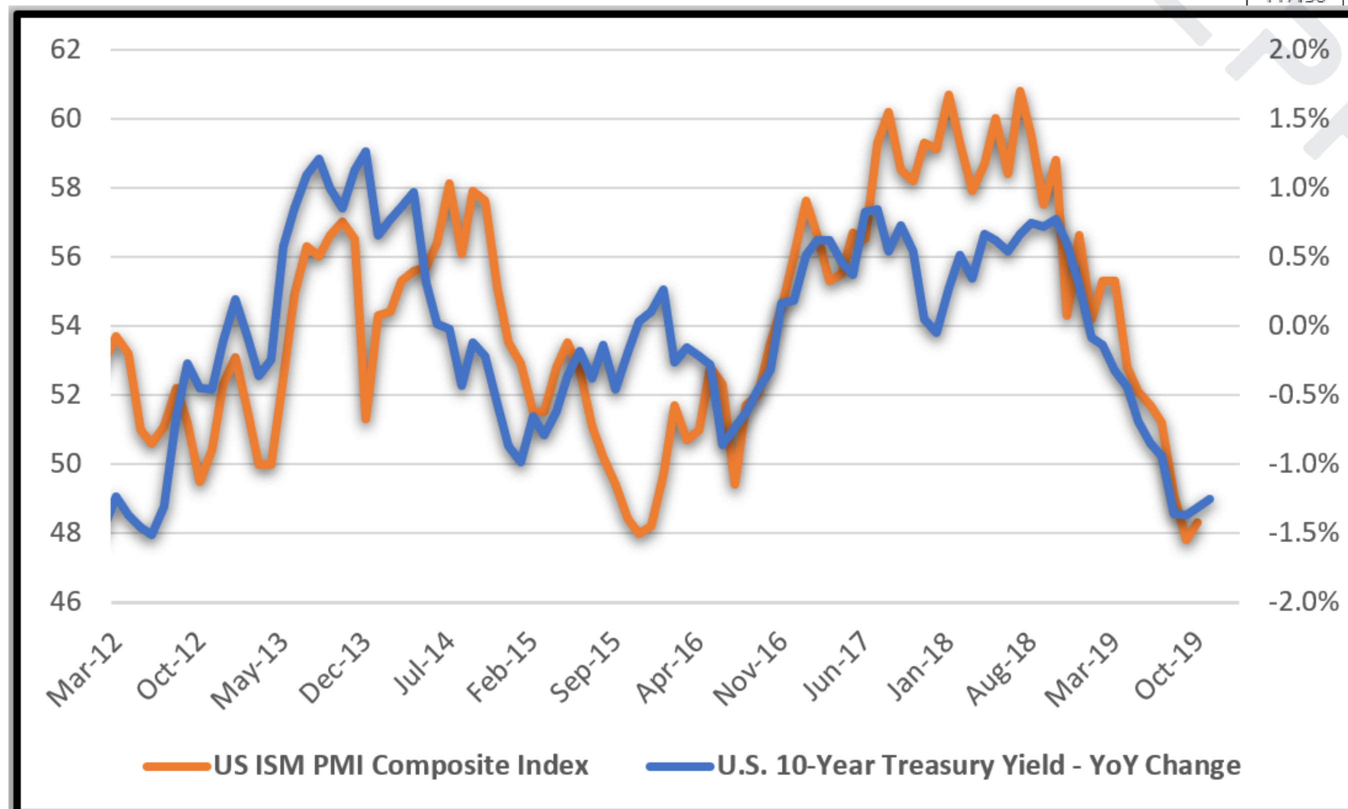
The safety trade has begun to unwind the last few months following this summer's run up in safe haven assets like Treasuries and gold. Even bitcoin, which historically exhibits little to no correlation with conventional asset classes over long time horizons, was out in front of the move as correlations between U.S. government bonds and gold hit extreme levels. **Attractive yield spreads and heightened demand for U.S. assets helped drive up Treasury bond returns this year as weakness in key indicators like manufacturing PMI coincided with a drastic drop in bond yields.**

Gold vs. Long-Dated U.S. Treasuries vs. Bitcoin



U.S. ISM PMI vs. 10-Year U.S. Treasury Yield YoY Change



Investors have grappled with growing geopolitical unrest and concerns over the fallout from intensified trade disputes. However, improving economic data (or shall we say a less pessimistic outlook among investors) and central bank intervention have pulled high-flying bond prices back down to earth. **Demand for safer assets remains relatively strong despite the latest price pullback, however, as investors seek out protection against the next market drawdown.** Net speculative long positioning in gold, however, still appears overextended, though demand from investors (via record high gold-backed ETF AUM) and central banks remains supportive of gold prices.

Data as of November 29th, 2019

Source: SPDR, BlackRock, Coinbase, U.S. Treasury Department, ISM, TradingView

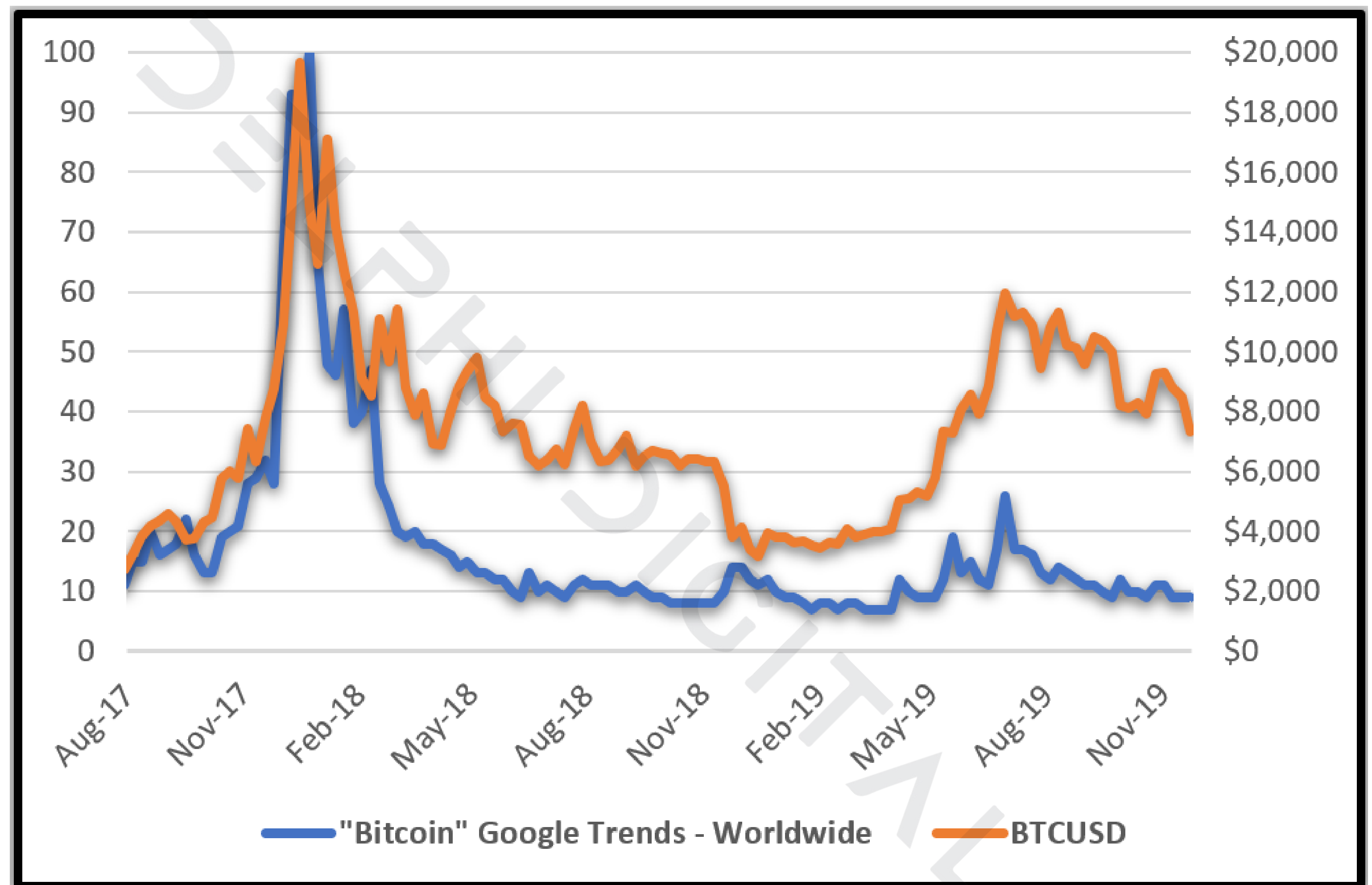
Bitcoin Enters the Macro Realm

Bitcoin is a notoriously uncorrelated asset with conventional security and commodity markets, at least over longer time horizons. Part of this is a testament to its unique characteristics; after all **the world has never seen a non-sovereign, censorship-resistant, digitally native asset with a hard-capped supply.** However, part of its inconsistent relationship with traditional asset classes is the **stark difference in its primary investor base:** whereas equity and fixed income markets are dominated by large institutional participants, the crypto market is predominantly driven by retail investors and traders. **Until the cross-asset investor profile is more in line with traditional markets, we expect bitcoin (and crypto at large) to trade rather inconsistently with other asset classes.**

However, there are signs that time may be approaching faster than some may think. For example, we've had several in-depth discussions recently with global macro strategists and investors keen on understanding the opportunities and risks that exist within the crypto and digital asset market, with a primary focus on - you guessed it - bitcoin.

The last several weeks have certainly felt like many folks are throwing in the towel when it comes to crypto. **Google search trends for "Bitcoin" worldwide confirm such disinterest,** though it hasn't changed our conviction on this space in the slightest.

Worldwide "Bitcoin" Google Searches vs. BTCUSD



Data as of November 29th, 2019
Source: Google Trends, Coin Metrics

Call Option on "Digital Gold"

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The turn towards "unconventional" monetary policies that have characterized this cycle is one of the notable reasons why bitcoin has historically traded more in line with risk assets. During such periods, investors tend to get pushed out the risk curve because 1) yields on fixed income alternatives fall, which raises reinvestment risk, and 2) future expectations for inflation *hopefully* pick up, which is the **sworn enemy of fixed income instruments** (declining interest rates also increase the value of cash-flow-generating assets (i.e. stocks) as discount rates are adjusted lower). Bitcoin's long-term value proposition as a non-sovereign store-of-value instrument is also heavily tied to broad-based depreciation of fiat currencies. **Accomodative monetary policy from global central banks serves as a boon for bitcoin since it increases the likelihood of currency devaluation relative to non-dilutable assets.** However, bitcoin as a far out-of-the-money call option on "digital gold" implies substantially higher volatility for the foreseeable future given its relatively small market value today.

Bitcoin vs. S&P 500 / Long-Dated U.S. Treasuries

Data as of November 29th, 2019

Source: SPDR, S&P Dow Jones, Brave New Coin, BlackRock, TradingView

Bitcoin in the Next Recession

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If the narrative around Bitcoin's success depends on a paradigm shift in the current financial system, how will BTC perform during the next recession? This is a question we've grappled with quite a bit the last several months as the economic outlook began to deteriorate, so it's probably no surprise our answer is…it depends. **In the event of a shallow recession,** one where GDP contracts for at least two consecutive quarters but no financial meltdown occurs, we believe **there's a decent probability bitcoin will outperform other asset classes.** The odds rise if the next downturn is characterized more as an inflationary recession, which tends to bode well for scarce assets like precious metals and BTC. On the other hand, **deflation can cause a vicious feedback loop for the global economy if the change in aggregate price levels begin to contract.** In short, falling prices for goods and services can cause consumers to hoard more cash if their expectation is their money will be worth more in the future than it is today. This reduces aggregate demand, which in turn causes prices to fall further, resulting in more saving and less consumption. Given bitcoin is typically measured against fiat currencies like the dollar, deflation can cause BTC to be worth less relative to the currencies its valued against. Demand for inflation hedging instruments also declines, further hurting the argument for buying bitcoin.

Conversely, if we were to see an economic downturn like 2008 (which we don't foresee), **bitcoin would likely suffer substantial losses alongside just about every other asset class** as investors scramble to sell anything they can. Also, **a downturn stemming from a liquidity crisis likely wouldn't bode well for bitcoin either** as investors looking to sell liquid investments would likely dump BTC. Even though the market for bitcoin isn't nearly as deep as that of gold or Treasuries, it is far more liquid than most alternative investments including private equity, VC, etc.

It's important to note we don't foresee a recession on the horizon in the near term, but rather a gradual slowdown in economic activity. Notably, the Organization for Economic Cooperation and Development (OECD) lowered its forecast for global growth in 2020 to 2.9% at the end of November following its downward revision to 3% in September.

Gold Price vs. Prior U.S. Recessions (Red Bars)

Data as of December 1st, 2019
Source: IDC, TradingView

Best Macro Backdrop for Bitcoin

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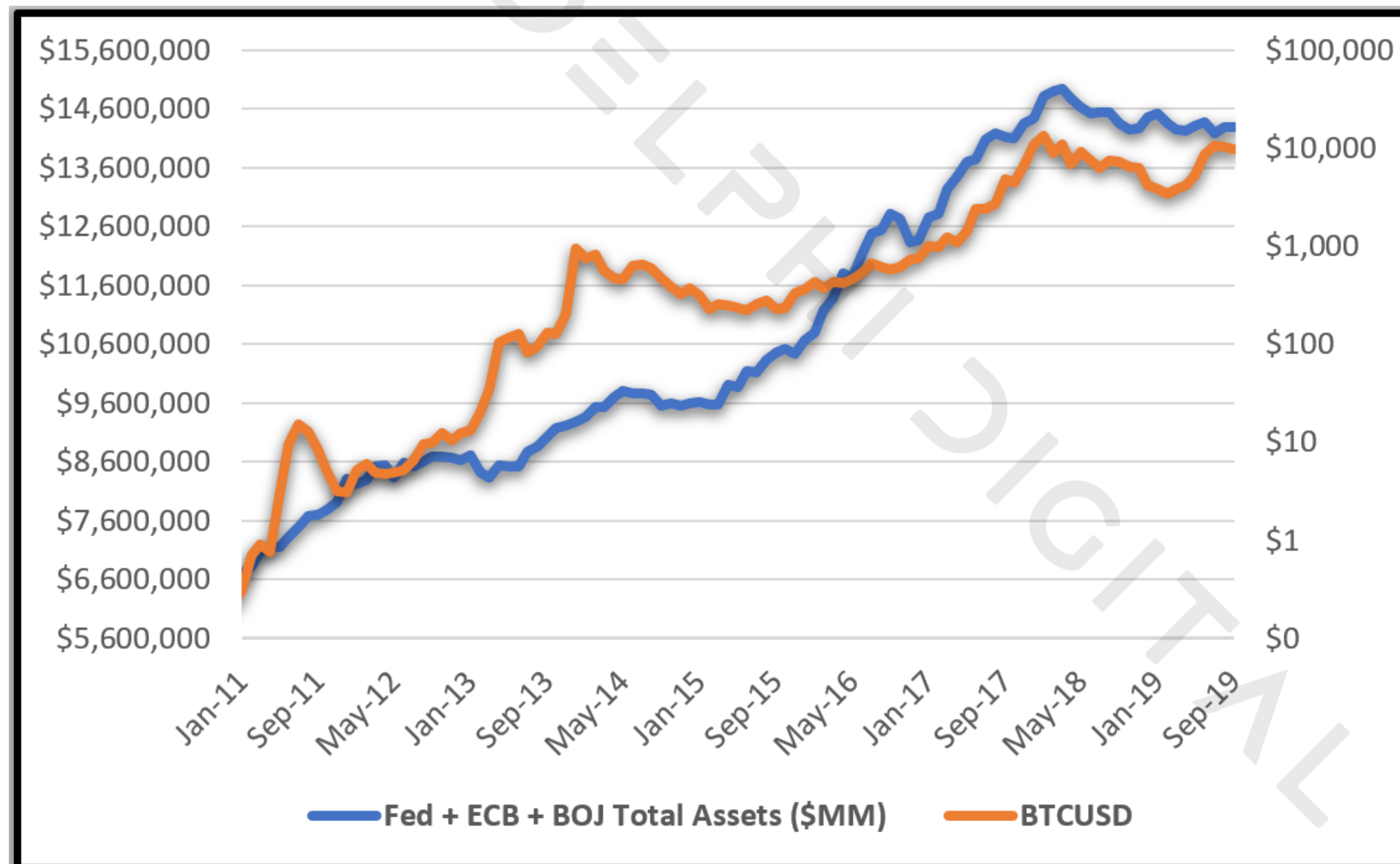
Putting all this together, we believe the **best backdrop for bitcoin is one defined by declining/benign market volatility, accommodative monetary policy (rate cuts, large-scale asset purchases), expansionary fiscal policy, and below-average expectations for economic growth.** We've noted how BTC tends to trade more closely with risk assets over longer periods of time but if stocks continue to rally on fundamental improvements like upward earnings revisions or stronger economic data then such a scenario would likely increase the probability of tighter - not looser - monetary policies. However, if price appreciation is driven more by multiple expansion or the "TINA" trade (There Is No Alternative) despite weakness in the underlying data, this would likely be a more favorable backdrop for bitcoin as it could lead to further monetary easing, especially if inflation remains at bay. Dovish central bank policies support both 1) currency devaluation and 2) more liquidity injected into the system, which would be supportive of risk assets and BTC, assuming its limited history serves as any guide.

Bitcoin vs. Major Developed Central Bank Assets



Data as of November 29th, 2019

Source: Federal Reserve, ECB, Bank of Japan, Coin Metrics

Misery Index Declines to Record Lows

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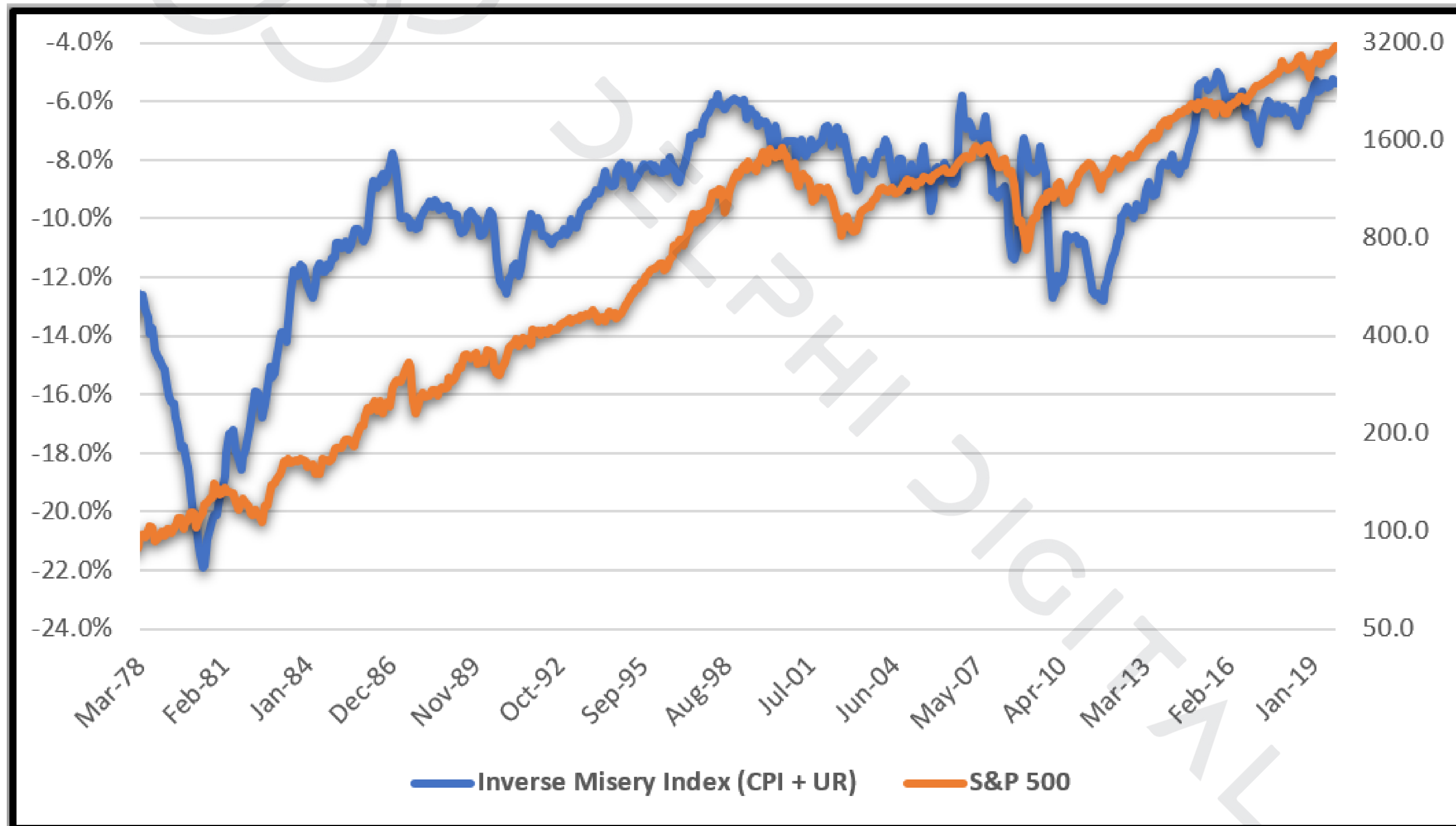
Inflationary pressures have failed to mount, which has given equity markets the green light with the Fed on hold for the foreseeable future. Core inflation readings would have to pick up drastically before the Fed would consider raising rates, especially in the face of growing uncertainty surrounding global trade and rising geopolitical risks. The Misery Index, which tracks the combined value of CPI and the unemployment rate, is nearing record low levels; falling unemployment and subdued inflationary pressures tend to bode well for asset prices, notably equity markets.

S&P 500 vs. Inverse of Misery Index (Blue)



Data as of November 25th, 2019

Source: S&P Dow Jones, Federal Reserve Bank of St. Louis, Bureau of Labor Statistics (BLS)

Steeper Yield Curve Not Bullish

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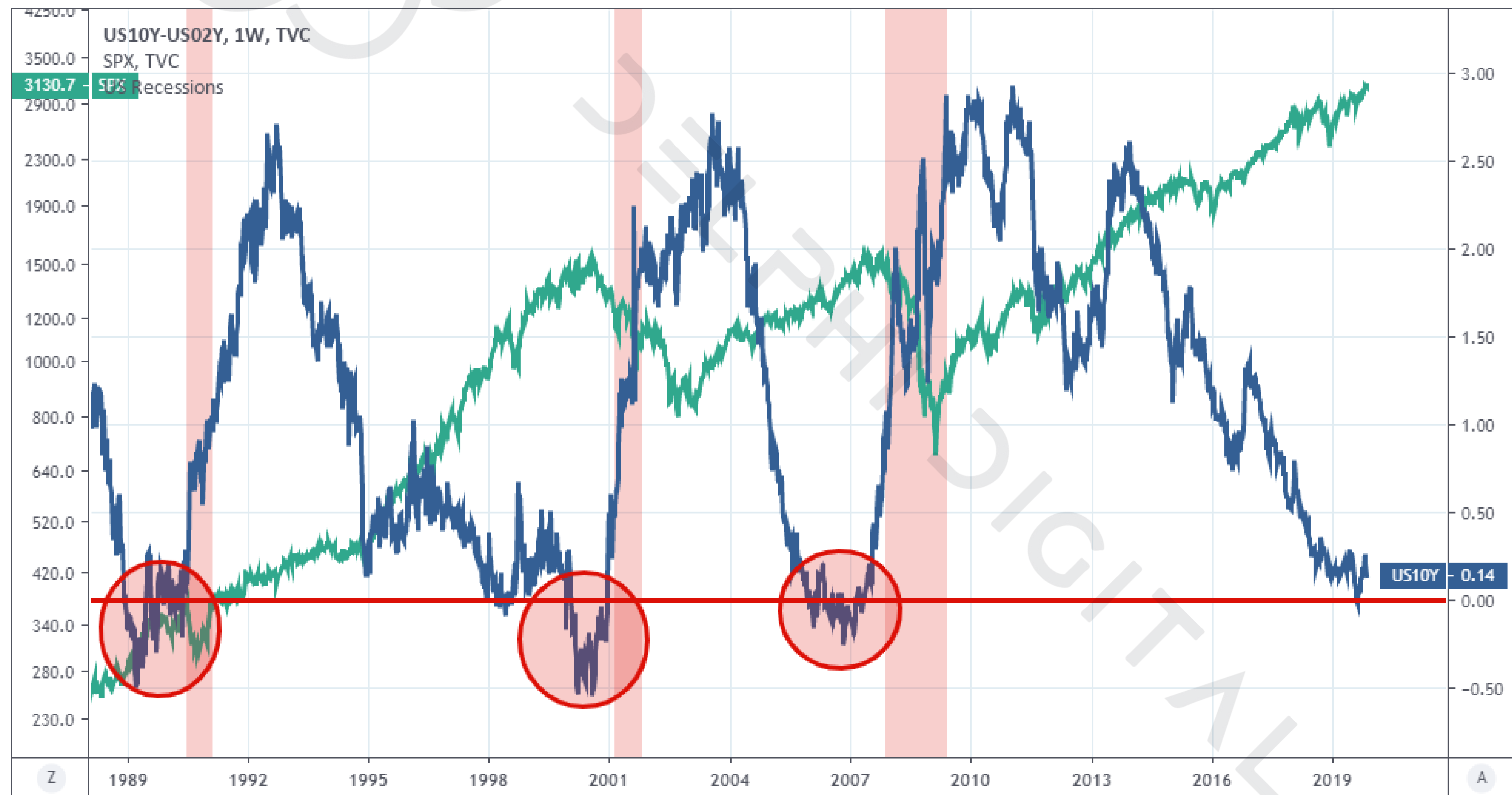
An ancillary "benefit" of the Fed's Treasury bill purchases has been a re-steepening of the yield curve, an indicator that has troubled many market participants following its inversion earlier this year. A steeper U.S. yield curve, typically measured by the spread between shorter-dated Treasury yields (< 2 years) and longer-dated equivalents (10+ years), is signaling to some the rise in recession concerns are unwarranted. However, **recessions don't typically occur until after the yield curve begins steepening,** plus the Fed's most recent efforts to alleviate pressure on the repo market have certainly been a contributing factor.

10YR-2YR U.S. Treasury Yield Spread vs. S&P 500 (Green) vs. U.S. Recessions



Data as of November 29th, 2019

Source: TradingView, S&P Dow Jones, U.S. Treasury Department

Gold's Post-Inversion Performance

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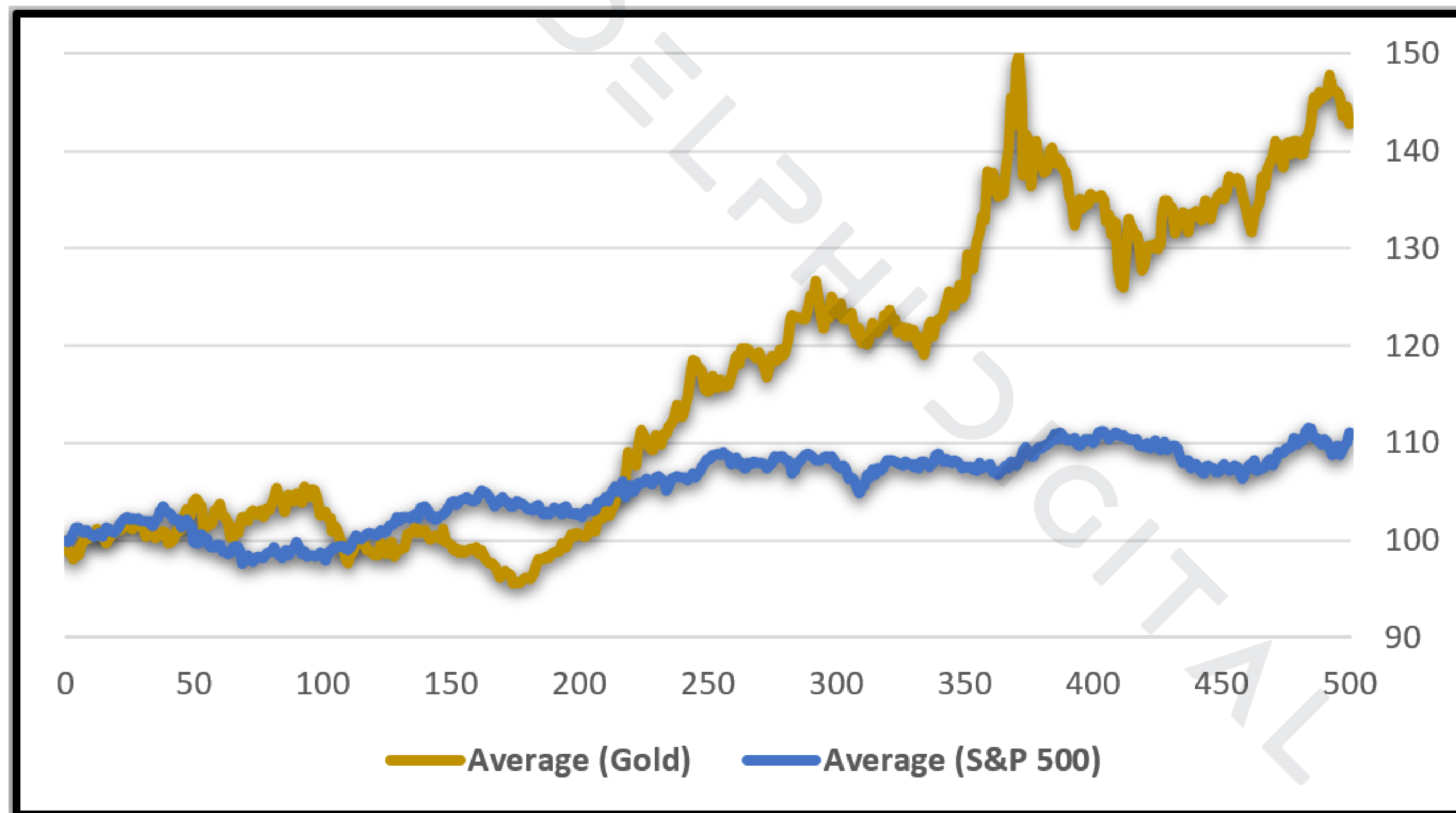
Gold was one of the star performers this summer, largely fueled by the stream of headlines around the growing mountain of negative yielding debt globally. Interestingly, demand for the precious metal has remained vibrant despite its recent price consolidation, **evident in the record high AUM for gold-backed ETFs and the continued accumulation of gold reserves among global central banks,** notably those in developing countries. The backdrop for gold - and precious metals generally - remains favorable, especially if recent improvements in certain economic indicators roll over once again. Multiple portions of the U.S. yield curve inverted earlier this year, which historically has been a good time to get long gold as it **tends to outperform risk assets like equities by a sizable margin in the years immediately following** such occurrences *(see our Contributors section for a more detailed analysis on this theme).*

Average Performance of Gold & S&P 500 After U.S. Inversion (Since 1970)



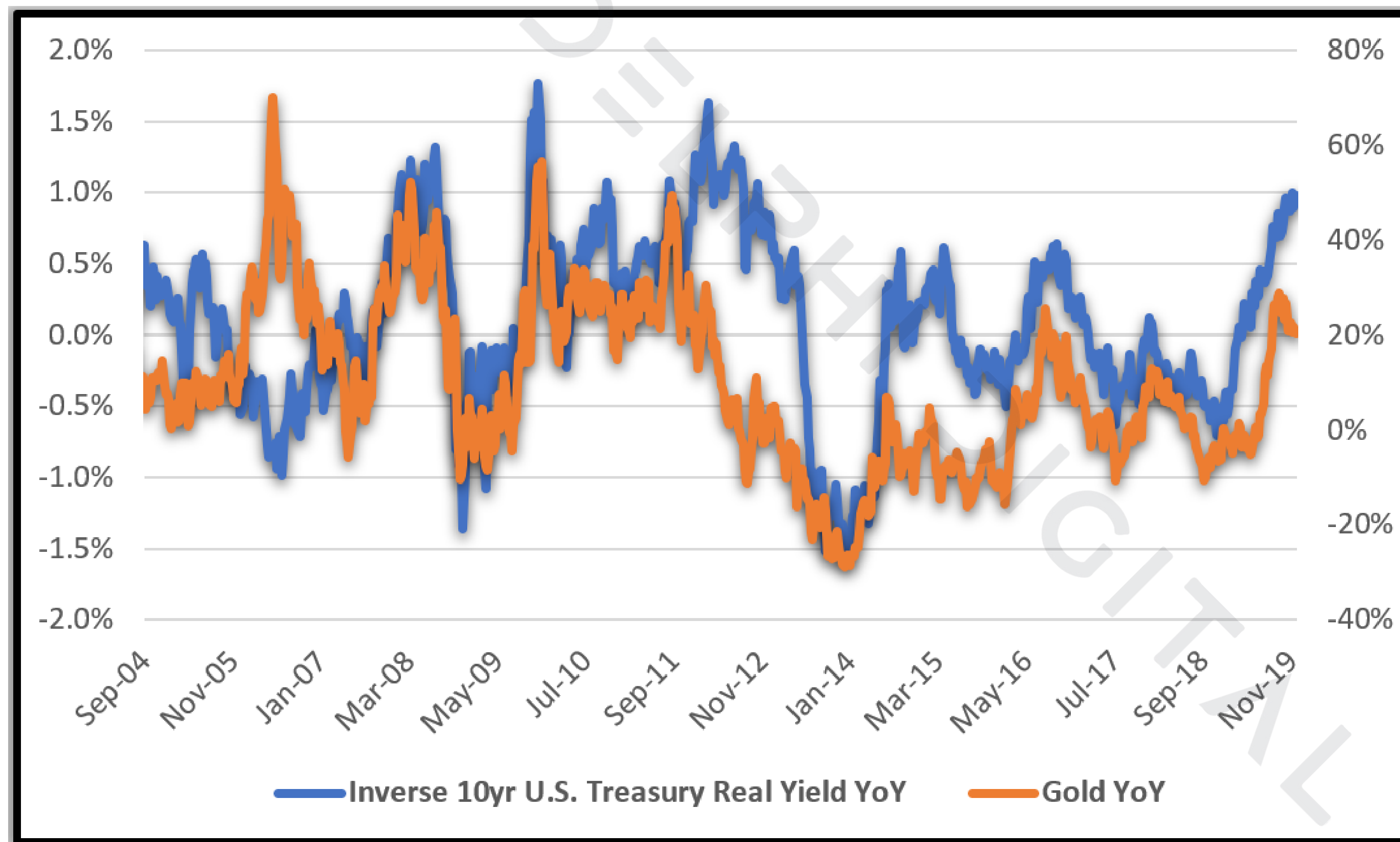
Data as of November 27th, 2019

Source: S&P Dow Jones, Federal Reserve Bank of St. Louis

Real Yields Suppressed

Nominal yields have backed up off their late summer 2019 lows when yields on 10-Year U.S. Treasuries fell below 1.5% and the world found itself awash with +$17 trillion in negative yielding debt. **The recent reversal in bond yields has coincided with a mild pullback in gold** (and a substantially more drastic sell-off in bitcoin) with the precious metal sitting 6% off its early September high (which also marked the bottom in bond yields). Real yields, which account for inflation, have trended lower for much of the last year, also exhibited a similar uptick the last several weeks. **Improved growth prospects aided the latest move higher in real yields, though the economic outlook remains muddled at best.** Hypothetically, if the Fed decided to shift its current stance in favor of tighter policy (i.e. rate hikes rather than cuts), gold would likely take a hit if yields rose further. However, in our view, inflation needs to pick up considerably before the Fed even entertains such a scenario.

Gold Price ($/oz) vs. Inverse 10yr US Treasury Real Yield YoY Change



Data as of November 29th, 2019

Source: S&P Dow Jones, Federal Reserve Bank of St. Louis

Inflation Pressures Fail to Materialize

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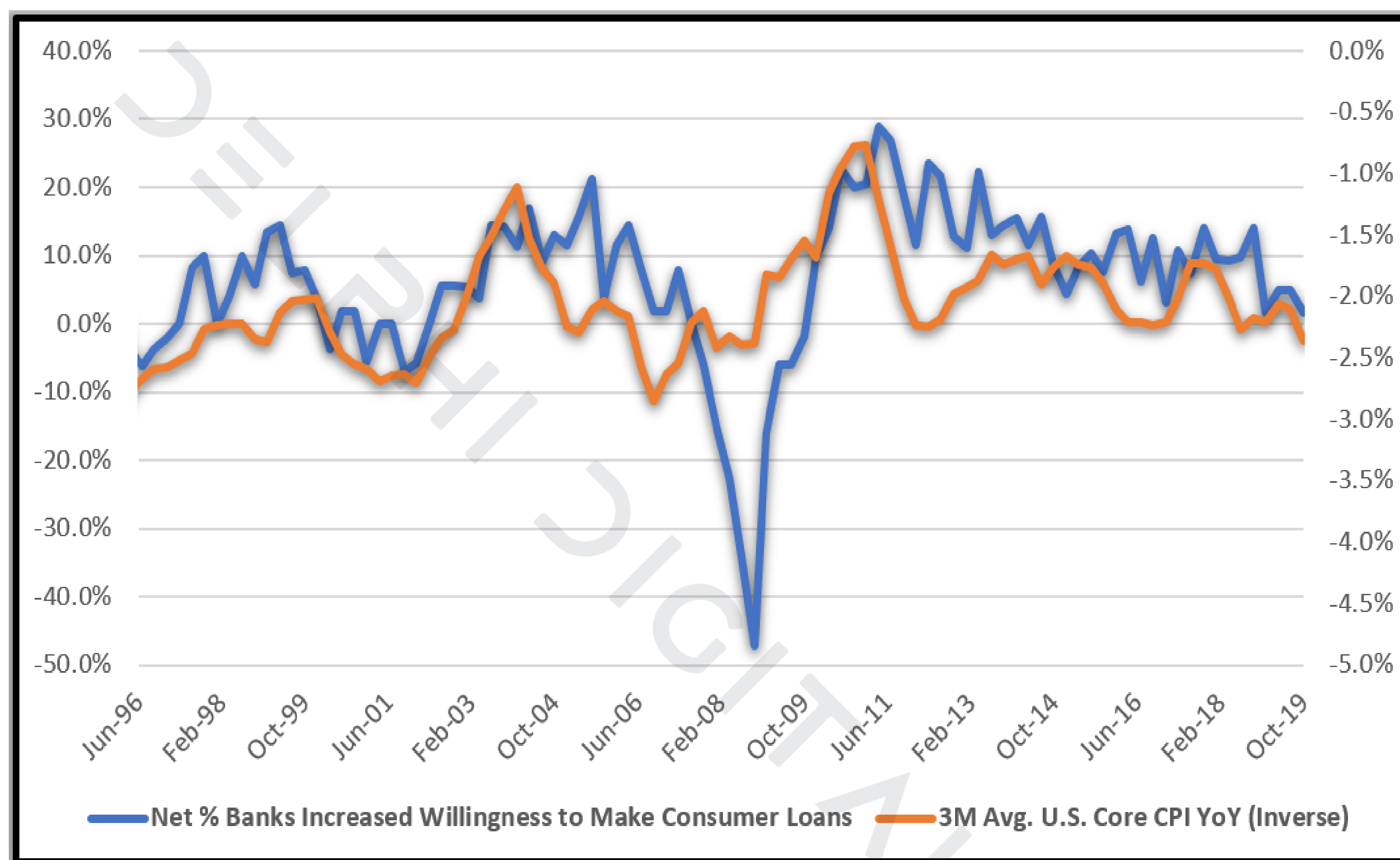
Inflation has been the hottest word in central banking since, well, the start of central banking. Policymakers have been puzzled by the lack of upward pressure on prices despite deploying such "unconventional" monetary policies (near-zero/negative benchmark rates, quantitative easing). If you ask ten different economists you're likely to get ten different arguments, ranging from the **deflationary effects of technology** to the misrepresentation of today's CPI constituents. Weaker commodity prices certainly haven't helped either. As with most things related to the economy, it is very likely a hodgepodge of various factors, including those previously mentioned.

In a debt-driven economy, access to credit is a critical component of both future growth and inflation, so the recent downward trend in banks' willingness to make consumer loans is a bit concerning (commercial & industrial loan growth is also rolling over but remains positive). Global debt levels are eye-opening, even when compared to economic output, but the music can keep playing so long as the credit markets allow it.

Economic downturns are usually exacerbated by the compounding effects of slowing (or contracting) aggregate demand and tightening credit markets, which serve as the lifeblood for most economies. **Tighter lending standards or a shift away from lending all together would have serious ramifications for the economy,** especially at a time when recession concerns are top of mind.

Banks Willingness to Lend vs. US Core CPI YoY (3M Avg)



Data as of November 27th, 2019
Source: BLS, Federal Reserve Bank of St. Louis

Federal Reserve On Hold

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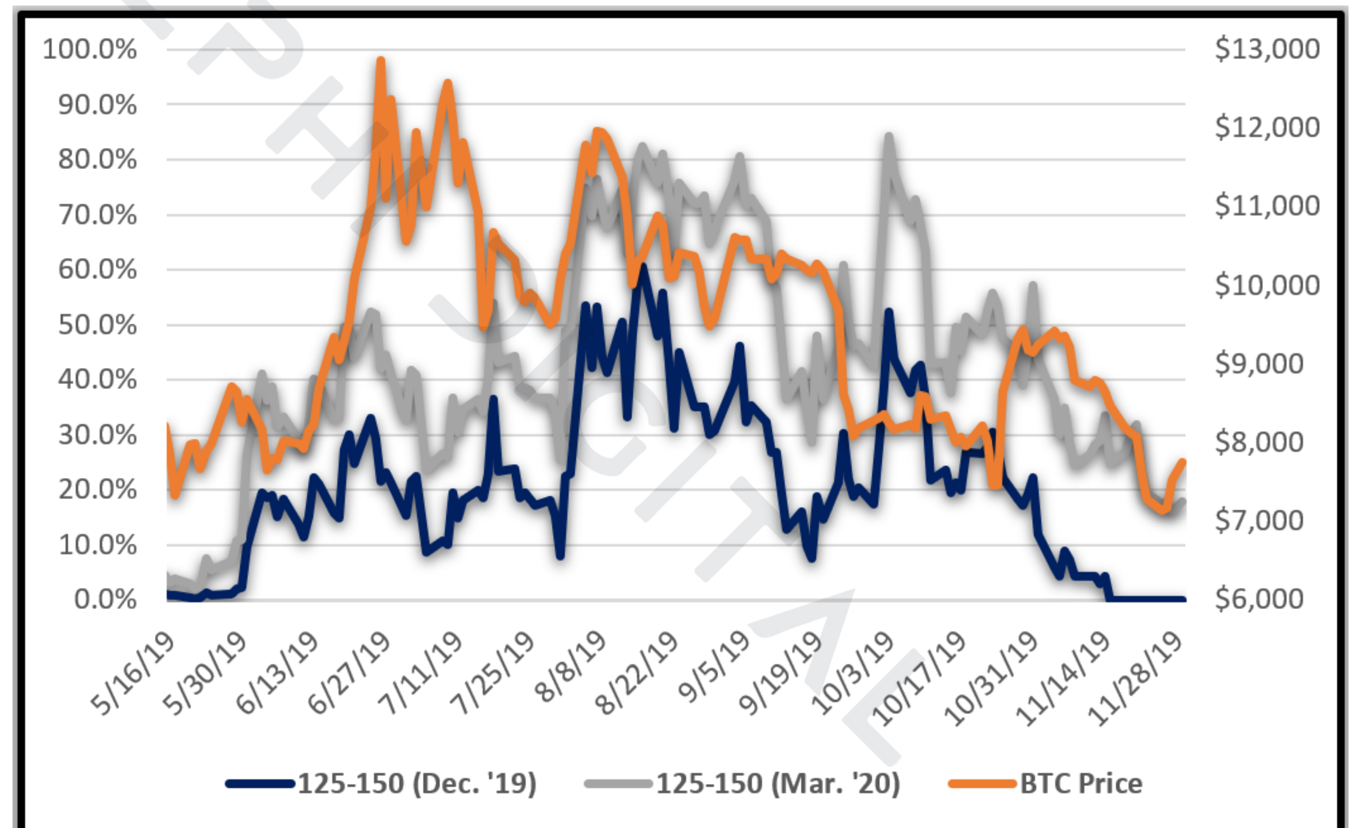
The infamous "Powell Pivot" that characterized the beginning of the year has shifted to the "Powell Punt" following the most recent statements by the Federal Reserve Chair, which stressed the **U.S. central bank's neutral position on monetary policy at this current juncture.** The market reaction has been largely positive, in part because simultaneously easing concerns over global trade tensions, which have boosted U.S. and international equity markets alike. The FOMC minutes from October's meeting reiterate the U.S. central bank's stance that current policy appears "appropriate", especially since the **effects of its three rate cuts in the latter half of 2019 won't be felt for several months.**

Reading between the lines, it seems clear Fed officials are hesitant to ease too quickly given the adverse lagged effects of their aggressive tightening between 2015-2018. However, **holding off on further rate cuts is not the same as a reversal towards rate hikes,** which the Fed has made abundantly clear will only occur if inflation picks up substantially from current levels. Deflationary risks have come back to the forefront as rate cuts and stimulus measures failed to put upward pressure on consumer prices, likely keeping the Fed's policy stance titled toward easier policy if the current trend continues.

A strong argument for bitcoin's long-term value proposition is its potential to hedge against broad-based currency weakness, both in advanced and developing economies. Therefore, it's not entirely surprising we've seen BTC sell-off as market expectations for additional Fed rate cuts plummeted the last couple months in the face of the FOMC's more neutral stance.

The U.S. central bank sits at the center of global monetary policy, though **other major peers continue to pursue more accommodative strategies,** which should bode well for BTC longer term (assuming the Fed remains an exception rather than the rule).

BTC vs. Probability of Fed Funds Rate (Dec.'19 & Mar.'20 Meeting)



Data as of November 30th, 2019
Source: CME, Coin Metrics

Global Monetary Policy Diverges

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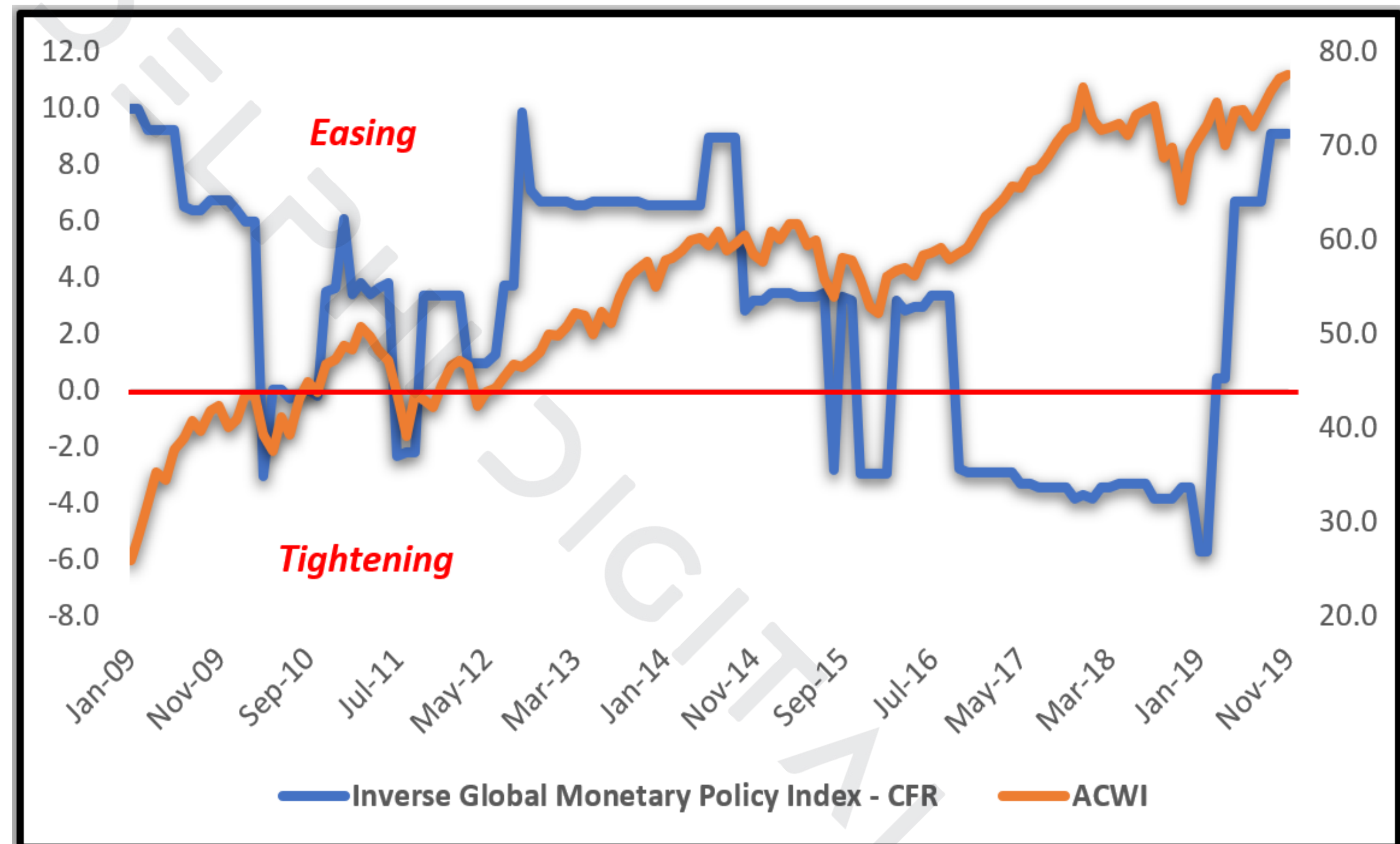
While the Fed appears steadfast in their telegraphed decision to pause further rate cuts, other central banks continue to ease policy considerably. Despite potential deviation among central bank policies, **just about every policymaker seems to be concerned with the adverse effects of ongoing trade wars.** Even the Fed has been vocal about such worries, with more dramatic rhetoric coming from its European and emerging market peers. The Bank of Canada, for example, has avoided cutting rates this year even as most global peers argued for "insurance cuts" as the basis for easier policy stances, which now boasts a higher key benchmark rate than the U.S. Commentary from its leaders, however, support the notion policymakers at large are increasingly apprehensive towards tighter policy given uncertain global trade conditions.

Christine Lagarde, the new head of the ECB, has joined her U.S. counterparts in **calling for greater fiscal stimulus to combat a weakening growth outlook.** Negative rates in Europe have left much to be desired, not to mention members of the ECB appear split on the appropriate path of monetary policy going forward (the ECB restarted its asset purchase program in November despite such conflicts though). If fiscal stimulus measures were enacted, the ECB will look a lot like its U.S. counterpart financing public debt in hopes of sparking greater economic activity.

Current debt levels in several countries put some constraints around the amount of additional spending potential, but **expansionary fiscal policy is likely critical for Europe to re-energize its stagnant economic situation.**

CFR's Global Monetary Policy Tracker vs. MSCI All Country World Index



Data as of November 27th, 2019
Source: CFR, Bloomberg, IMF, MSCI

Demand for Scarce Assets

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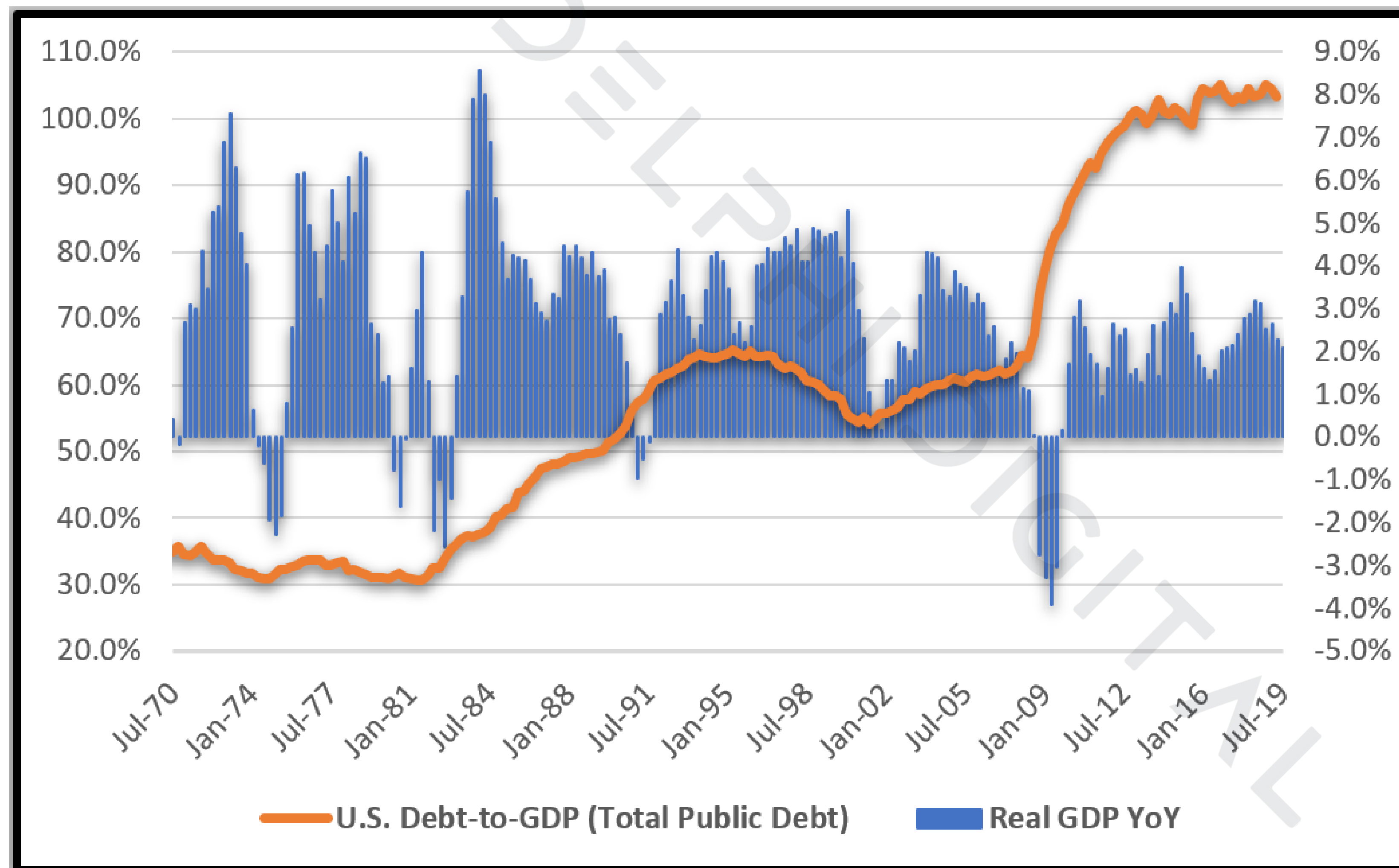
Taking on more debt is not necessarily a problem when rates are hovering near historical lows, especially if such stimulus measures spark a resurgence in economic growth prospects. However, there's a strong likelihood running larger fiscal deficits to support such stimulus will only make the growing debt problem worse, **increasing the risk of currency devaluation as governments attempt to inflate away their mounting obligations. The shift towards easier monetary policy and expansionary fiscal stimulus strengthens the value proposition for scarce assets like bitcoin and gold,** especially as the effectiveness of lower (or even negative) interest rates and central bank asset purchases diminish. With Pandora's box of unconventional policy tools cracked wide open, it's not difficult to imagine a future where major central banks like the ECB – and possibly even the Fed – take a page out of the Bank of Japan's playbook and expand the scope of asset purchases in a desperate effort to extend the expansion.

<ins>*U.S. Debt-to-GDP vs. Real GDP YoY*</ins>



Data as of November 29th, 2019
Source: Federal Reserve Bank of St. Louis

Dollar Liquidity - "Not QE"

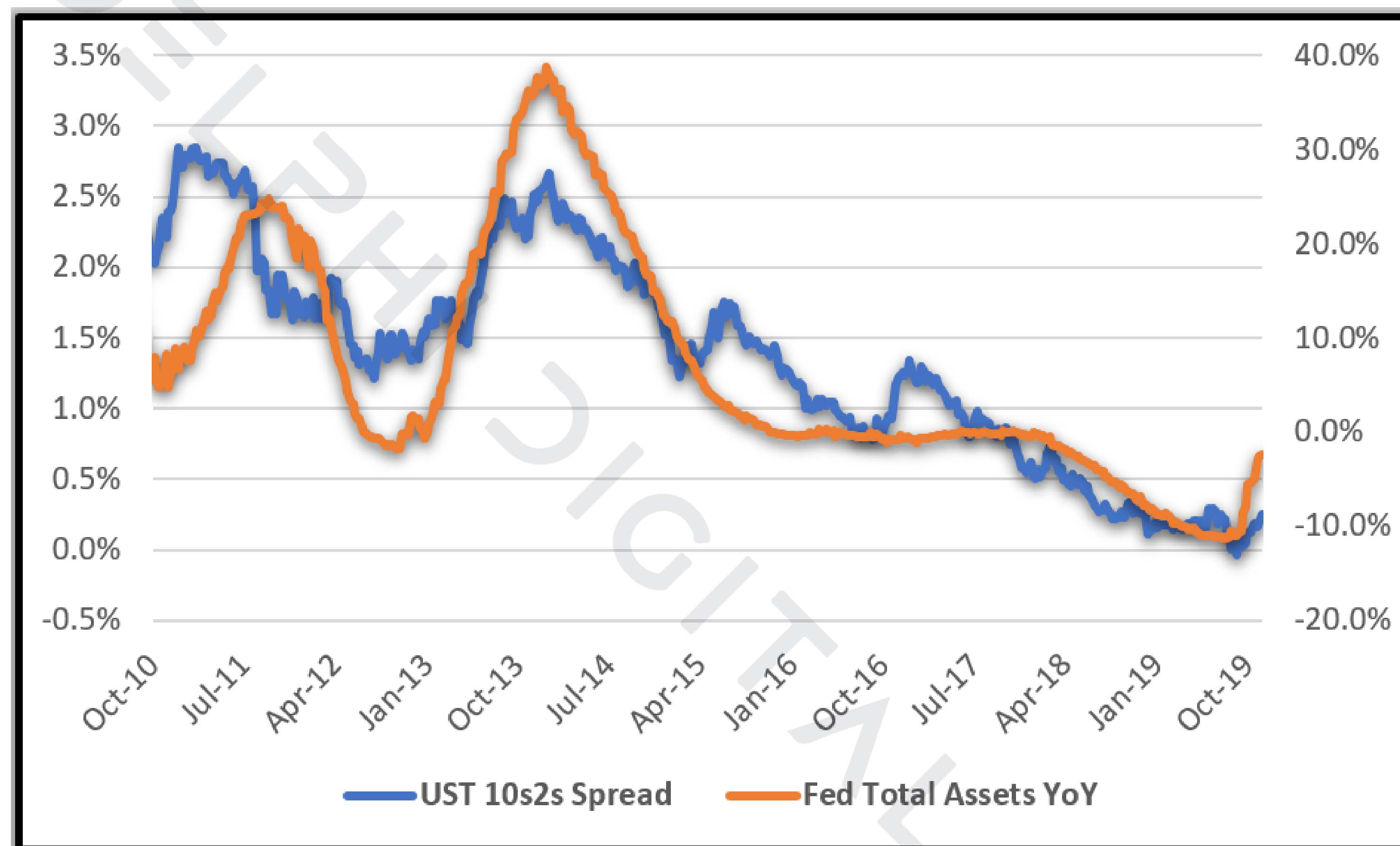
Don't call it QE. It may walk like QE, talk like QE, even have similar effects as QE. But don't call it QE. That's been the message from members of the Federal Reserve since policymakers announced plans to purchase sizable quantities of Treasury bills (roughly $60 billion per month) in an effort to increase bank reserves and reduce the risk of another rate spike in repo markets. **Since the Fed began expanding its balance sheet again, the U.S. yield curve (measured by the spread between 10 and 2-year Treasuries) has steepened roughly 25 bps.**

There are a few key differences between its latest program and large-scale asset purchases, notably that the Fed is targeting short-dated Treasuries rather than longer maturity notes as was the case during previous rounds of quantitative easing. However, despite policymakers' desperate attempts to distinguish between the two programs, it's clear many market participants are viewing this latest move through a similar lens.

The Fed is essentially financing the U.S. federal deficit, at least in part, through its recent T-bill purchase program. This is important to note given Chairman Powell's recent commentary on the U.S. fiscal situation, which indicate he and his colleagues have come to the sobering realization **more accommodative monetary policy may not be enough to jumpstart the domestic economy – or save it in the next downturn - without complementary fiscal stimulus.**

Powell's latest call to action took aim at legislators, encouraging them to clean up the unsustainable deficit situation or else risk "economic ruin", especially if more expansionary fiscal policy is required sooner than later.

U.S. Treasury 10yr-2yr Yield Spread vs. Fed Total Assets



Data as of November 27th, 2019
Source: Federal Reserve Bank of St. Louis, U.S. Treasury Department

Dollar Effects on Global Slowdown

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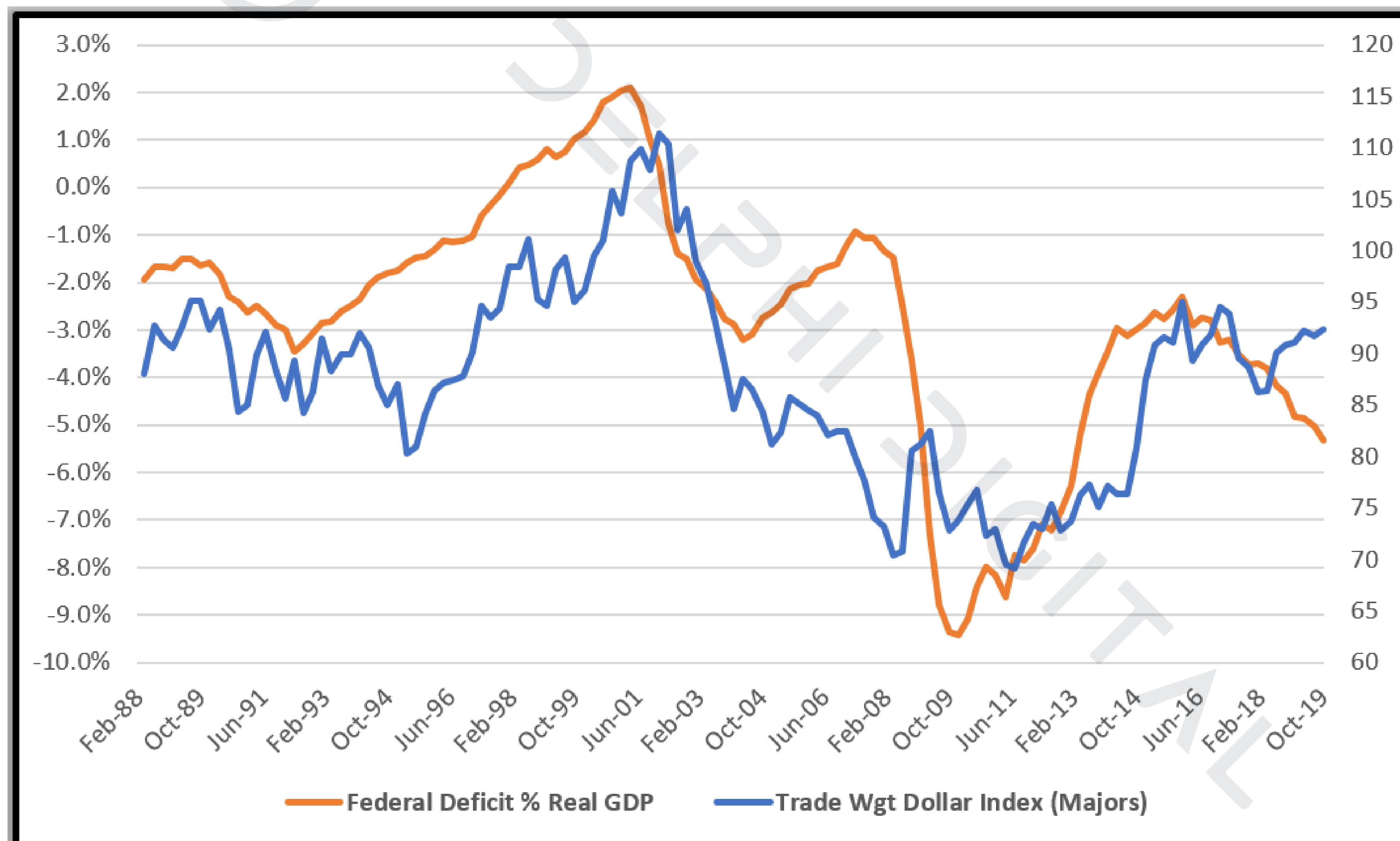
In our view, **the dollar sits at the heart of the shift from 2017's "synchronized global growth" narrative to this year's "synchronized global slowdown"** consensus view. Global demand and growth did pick up in 2017, but it also coincided with the **dollar's worst annual loss in almost 15 years.** Conversely, the dollar has gained more than 10% since its early 2018 bottom, which brought with it growing concerns over slowing economic activity. The U.S. continues to run sizable federal deficits, though this is unlikely to be detrimental to the dollar in the immediate term, especially if demand for "safer" assets remains elevated. However, over the long run, the increase in additional Treasury supply will likely put substantial pressure on the greenback, **especially if aspiring global superpowers back up their latest anti-dollar rhetoric in favor of a new global reserve currency,** thus thwarting the demand for dollars.

U.S. Federal Deficit % GDP vs. Dollar Index

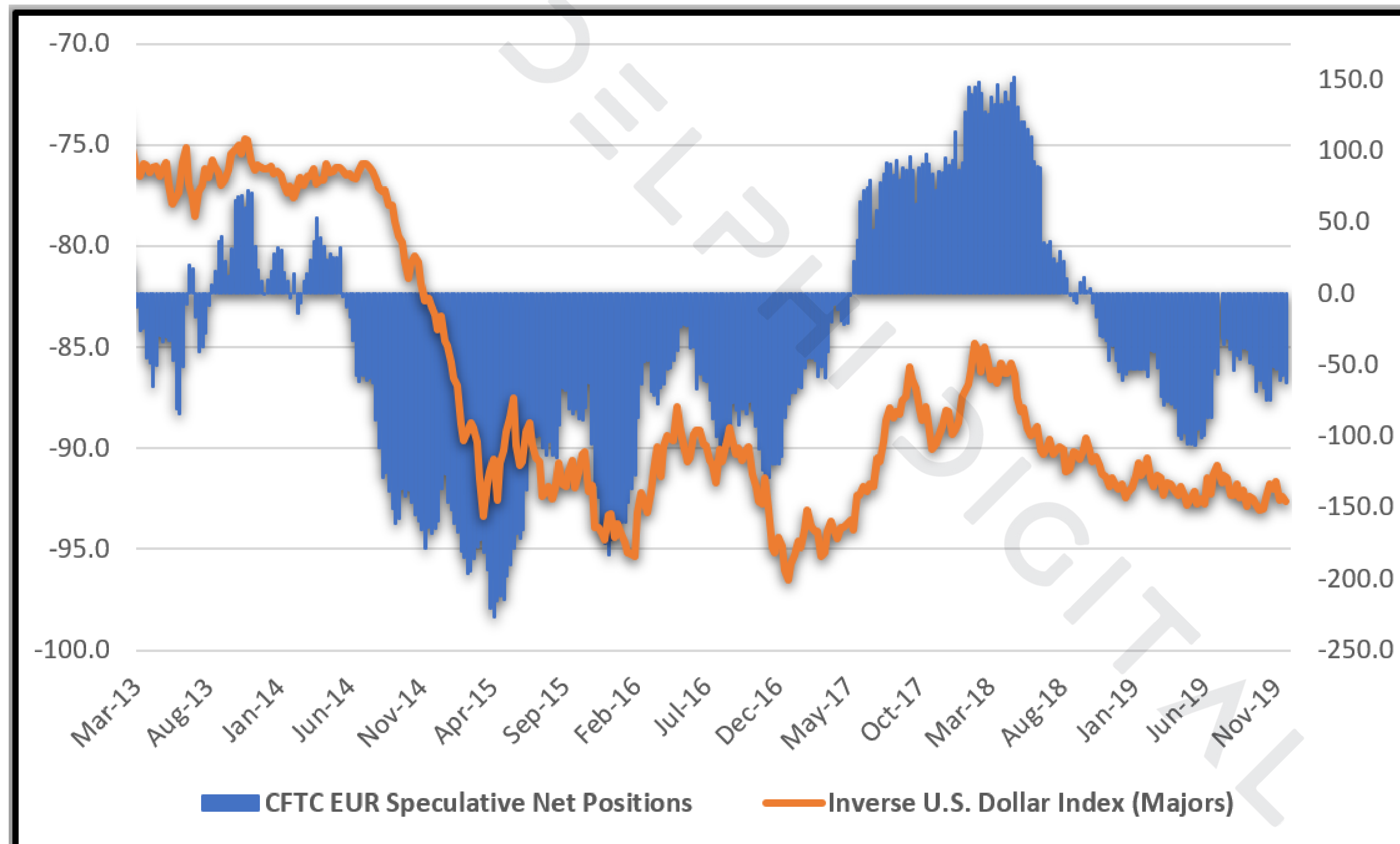


Data as of November 29th, 2019
Source: Federal Reserve of St. Louis, ICE

Threat of a Stronger Dollar

We've noted for some time the growing threat of a dollar shortage and its potential adverse effects on global economic activity, particularly if increased demand for dollars caused the greenback to strength swiftly. The scope of the measures undertaken by the Fed to calm the repo situation do warrant some concern, although such measures in isolation don't pose a major systemic risk in our view. If anything, **the balance sheet expansion may serve as a windfall for financial assets, barring another fiasco in the repo market.** It may even curb further strength in the dollar, though another surge in demand for safe assets could very well reverse any short-term weakness. Net speculative long positioning (often measured using inverse euro positioning as a proxy) also has room to the upside relative to prior extremes, so it may be too early to call the top for the greenback just yet.

Inverse U.S. Dollar Index vs. Net Speculative Euro Positions (CFTC)



Data as of November 30th, 2019

Source: CFTC, ICE, Federal Reserve Bank of St. Louis

Dollar's Network Effect

Crypto adversaries often leverage the “bitcoin isn’t backed by anything” argument as the ultimate trump card to end any argument. However, we view this argument as narrow-minded and, quite frankly, misinformed. **Bitcoin’s value is backed by the demand for a non-sovereign, censorship-resistant, digitally native asset with a predetermined hard-capped supply.** Its current value is also backed by the **demand for an apolitical speculative asset** that may or may not turn out to be one of the world’s most valuable safe havens.

Let’s flip the table and examine the same argument for the U.S. dollar; what backs the world’s global reserve currency? It’s quite simple: **the global demand for dollars.** And today that demand is strong. Not only is the dollar the most widely used transactional currency; its demand is also driven by foreign central banks, countries & companies reliant on dollar-denominated debt, large institutional investors (pension funds, endowments, asset managers, etc.), and even the average U.S. taxpayer. In our last quarterly report, we discussed the reasons why the dollar serves as the global reserve currency and how the U.S. Treasury market exemplifies strong network effects. Interestingly, one could liken this system to some of today’s proposed token economic models, though before everyone gets all fired up, let us add a caveat that the comparison is far from perfect. But if you think of Treasury bond holders as validators or delegators in this system, there are some notable similarities. For example, owning Treasuries entitle you to interest payments based on the stated coupon of the bond, like buying a token you can stake to earn monetary rewards. The longer you own the bond, the more dollars you’ll receive, which provides incentives for bond holders.

The attractiveness of owning Treasury bonds is largely tied to the relative value of the native currency it is priced in, in this case the U.S. dollar, which also fluctuates. Let’s say a Treasury note offers 2% a year but the dollar weakens 4-5% - your relative purchasing power would decline. If demand for Treasuries decreases, bond prices will fall (assuming consistent supply). **If everyone suddenly lost confidence in the U.S. government’s ability to repay its outstanding debts, the value of Treasury bonds would drop as investors fled for safer alternatives.** The dollar could take a beating if those alternatives were foreign assets, comparable to the potential capital flight risk many developing nations face today. Granted, holders of Treasuries have no real governance rights or say in how the U.S. government operates, but neither do many of the token holders in these various crypto networks. All in all, **the value of fiat currencies lies in the balance between their supply and demand,** with the latter being a critical component to the dollar’s current status as the global reserve currency.

Data as of December 1, 2019

Source: Ben Garrison (Cartoon)

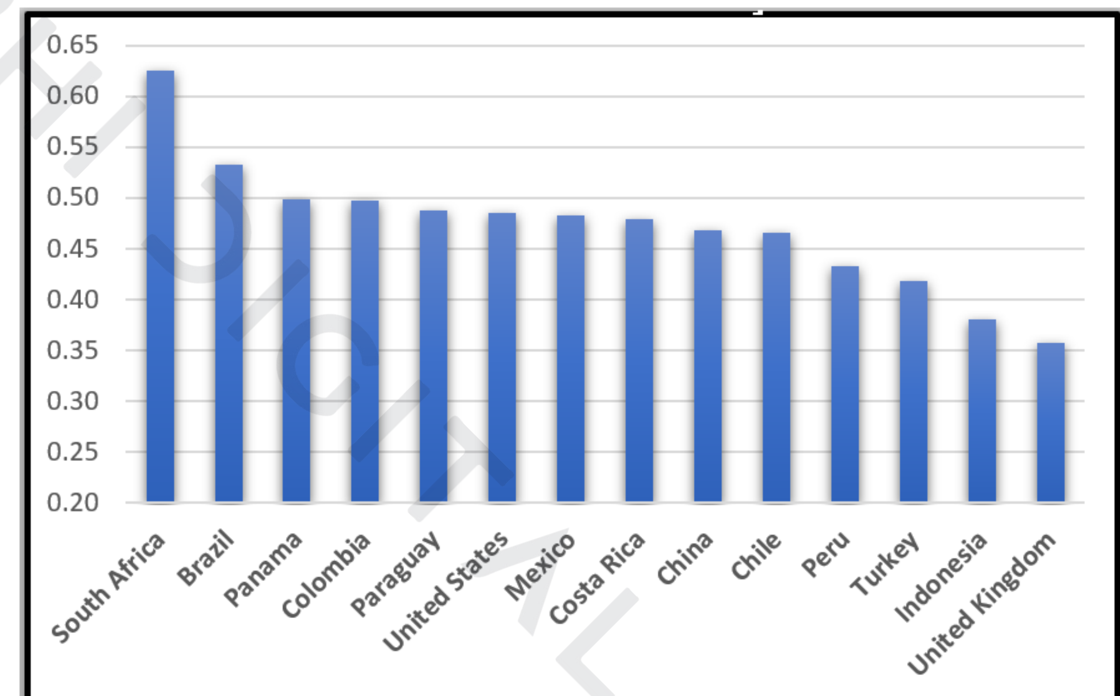
The Great Consolidation

Just about every corner of the world has experienced consolidation in some capacity over the last few decades, whether it's 1) wealth consolidation widening the inequality gap, asset consolidation among the largest institutional investors (BlackRock, Fidelity, Vanguard, State Street), corporate consolidation as industries becoming more concentrated, or even technological consolidation with the power of today's most influential technologies lying in the hands of few rather than many.

This Great Consolidation has had significant effects on income inequality. In theory, a capitalist system rewards those who produce the highest quality goods at the cheapest relative price. Industries characterized as being "capital intensive" have a higher likelihood of being more concentrated as significant barriers to entry deter natural competitors otherwise eager to capture market share. When a handful of incumbents dominate an industry, whether it's manufacturing or information services, the end result is a **reduction in both competition and employee power over critical processes like wage negotiation.** If a few corporate giants have an oligopoly over a specific industry, there's little optionality for current or prospective employees to negotiate better pay unless they shift careers and explore other alternatives. Greater concentration can also lead to sub-optimal levels of investment, which can drag on growth if it causes higher unemployment than a more competitive market otherwise would.

But how we did we get here? **What is the root cause of the consolidation of economic power? And what has driven inequality and wealth concentration to such extreme levels?** Historically, anti-trust laws have served as the ultimate backstop against monopolistic business practices as the threat of breaking up corporate giants theoretically keeps a cap on the level of concentration within industries or sectors. However, such laws have long **focused primarily on the price impact to consumers when evaluating various degrees of monopolistic forces as opposed to the broader welfare of citizens and customers alike.** Many of today's leading companies are not built from decades of physical infrastructure investment; **they sit atop strong foundations of "intangible" assets erected from unprecedented access to user information.**

Notable Gini Coefficients by Country



Data as of November 30th, 2019
Source: World Bank, Census Bureau

The Great Distribution

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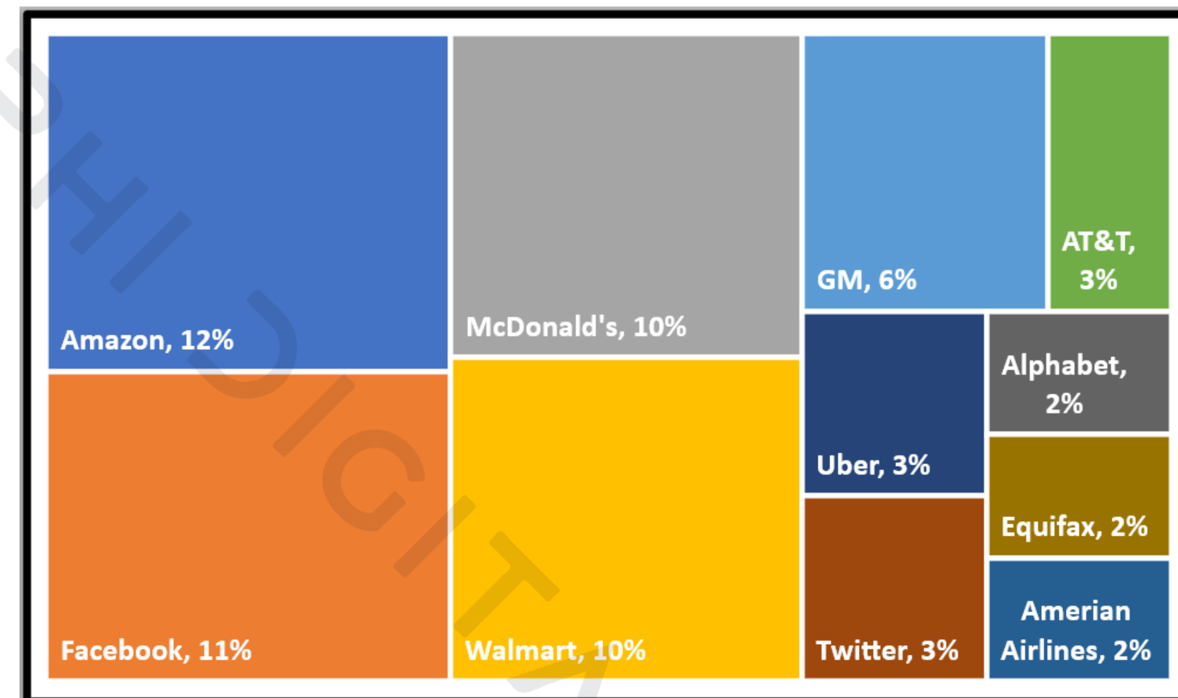
Today's monopolists are hiding in plain sight. It's no secret tech giants like Google and Facebook know more about us than we know about ourselves; the **crux of their immensely profitable business models depends on it.** In exchange for "free" services like instantaneous search or addictive social networks, big tech firms track, store, and repackage users' information to sell to a wide array of end clientele ranging from advertisers to teams leveraging artificial intelligence and machine learning to create better products and services. Current incumbents have a stronghold over wage growth and, to some degree, productivity. **The decline in labor unions coupled with the rise in technological monopolies have put downward pressure on wages** as the world transitions to a more digitally native economy. Interestingly, the 2020 U.S. Presidential election could accelerate the crackdown on big tech given many Democratic candidates have included some sort of anti-tech/trust spin to their campaigns.

Decentralized networks have the potential to disrupt today's incumbents while simultaneously increasing opportunity for those left behind. But they won't achieve mainstream adoption overnight; a paradigm shift in the relationship between consumers and service providers is required. **Enhanced privacy or the notion of true data ownership are critical components of the new digital age,** but they're unlikely to spark this paradigm shift alone. **Monetary incentives, cost efficiencies, or better user experiences**, however, can.

One of the difficulties in monetizing one's own data is the **dichotomy between the little value an individual's information offers on its own versus the immense value users' information can offer in aggregate.** Creating an efficient marketplace to sell one's data to interested parties would be a step in the right direction, but how do you put a price on each person's information without the foresight of the total amount of information a firm could realistically obtain? Eventually, these systems will improve, but we expect early prototypes to suffer from asymmetric information and, therefore, price inefficiencies.

Companies' Share of Twitter Mentions by 2020 Presidential Candidates



***Data from High Lantern Group compiled from May 15th - Nov. 15th, 2019**

Data as of November 15th, 2019

Source: High Lantern Group, Axios

Contributor Pieces

The Necessity of Data & Investment Models

Ryan Alfred

Ryan is President of Digital Assets Data. Ryan is also a co-founder of Distributed Global where he has a seat on the Investment Committee. Prior to that, Ryan was Co-Founder, President and COO of BrightScope. In 2012 Ryan was named to Forbes' Top 30 under 30 in Finance and to the Smart Money Power 30. Ryan received his bachelor's degree in Economics from Harvard University.

Bitcoin and other public cryptonetworks represent a new and highly valuable investable asset class for investors. When investors get the rare opportunity to investigate a new asset class, inclusion of those assets into portfolios occurs slowly because it requires new ways of thinking about valuation, as well as new sources of data. One way to bridge that divide is to produce high-quality data, promote open standards for how that data is normalized, and produce open models for how to use that data to evaluate the new asset class. This evolution has started to occur for the Bitcoin network and other public cryptonetworks, but it has a long way to go.

Let's first discuss why getting traditional investors and allocators comfortable with this new asset class is a valuable goal. As the first digitally native, provably scarce, non-sovereign digital currency, Bitcoin is a natural target for regulators the world over who are concerned with money laundering and also view a digital currency as a threat to their sovereignty. Broadening who has exposure to Bitcoin is an important bulwark against over-regulation in democratic countries. Getting regulators and investors comfortable with the asset class is in part a data-driven exercise, for example:

- Companies interested in listing an ETF on a US stock exchange need to demonstrate to regulators that Bitcoin's price discovery occurs at regulated venues and that significant market manipulation is impossible, given surveillance agreements.
- Data can be used to demonstrate where adoption of cryptocurrency is happening globally for reasons other than speculation. For example, data from platforms like LocalBitcoins and Paxful can help make the case that people around the world are buying bitcoin for its fundamental properties - inflation hedge, censorship-resistance, and seizure resistance - rather than simply for speculative purposes.
- Showing how this asset class fits into a portfolio and what small allocations have done to portfolio performance over the last 5 years is an interesting exercise for institutional investors living in a world of declining expected returns on all of their core investment categories.

Demand for cryptocurrency data started amongst crypto native investors and organizations, but we are noticing a trend where traditional investors and managers who are interested in the category want to start their exploration with data. In many ways data consumption is a leading indicator of future flows and allocations. We are thrilled to partner with Delphi Digital to continue to increase awareness and understanding of this new asset class.

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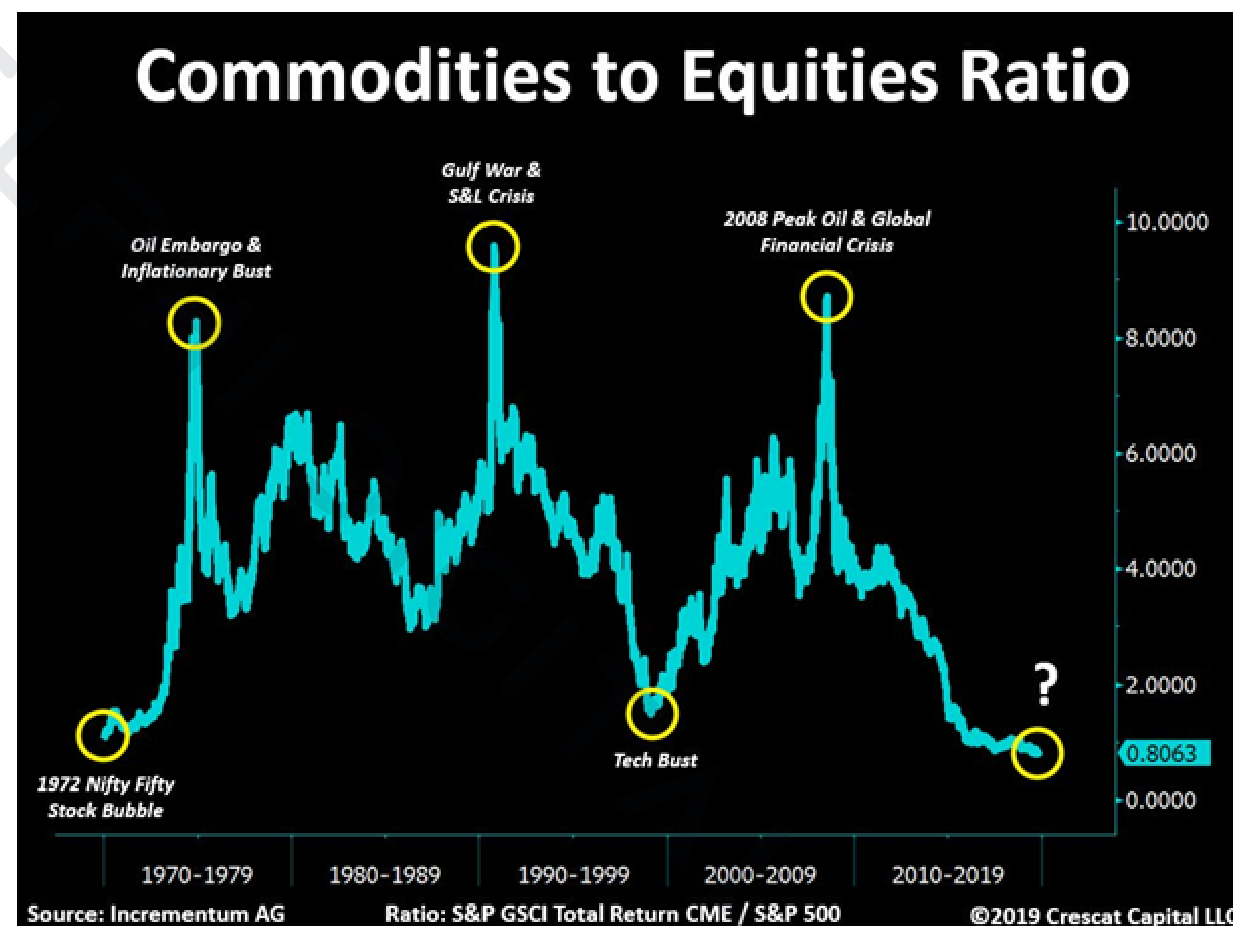
Looking Ahead with Tavi Costa

Tavi Costa

Tavi Costa is a Global Macro Analyst and Portfolio Manager at Crescat Capital. "Tavi" built Crescat's macro model that identifies the current stage of the US economic cycle through a combination of 16 factors. His research has been featured in financial publications such as Bloomberg, The Wall Street Journal, CNN, Real Vision, Reuters, etc.

The longest economic expansion in history stands against a profusion of deteriorating macro indicators. With stocks now near record overvalued in almost all fundamental multiples, the onset of a recession could be detrimental to investors. The only two historic analogs to today's excessive valuations were the times prior to the tech bust and the Great Depression in 1929. Hypothetically, just a cyclical mean reversion move in stocks would imply a 50+% drawdown in prices. Yet, most remain largely oblivious of the risks upon us and continue to rely on irresponsible central bank policies to keep markets afloat. The next monetary and fiscal experiment will likely come at a cost. An important ratio of commodity versus equity valuations just reached a fresh 50-year low, and we believe a major cyclical turn is ahead.



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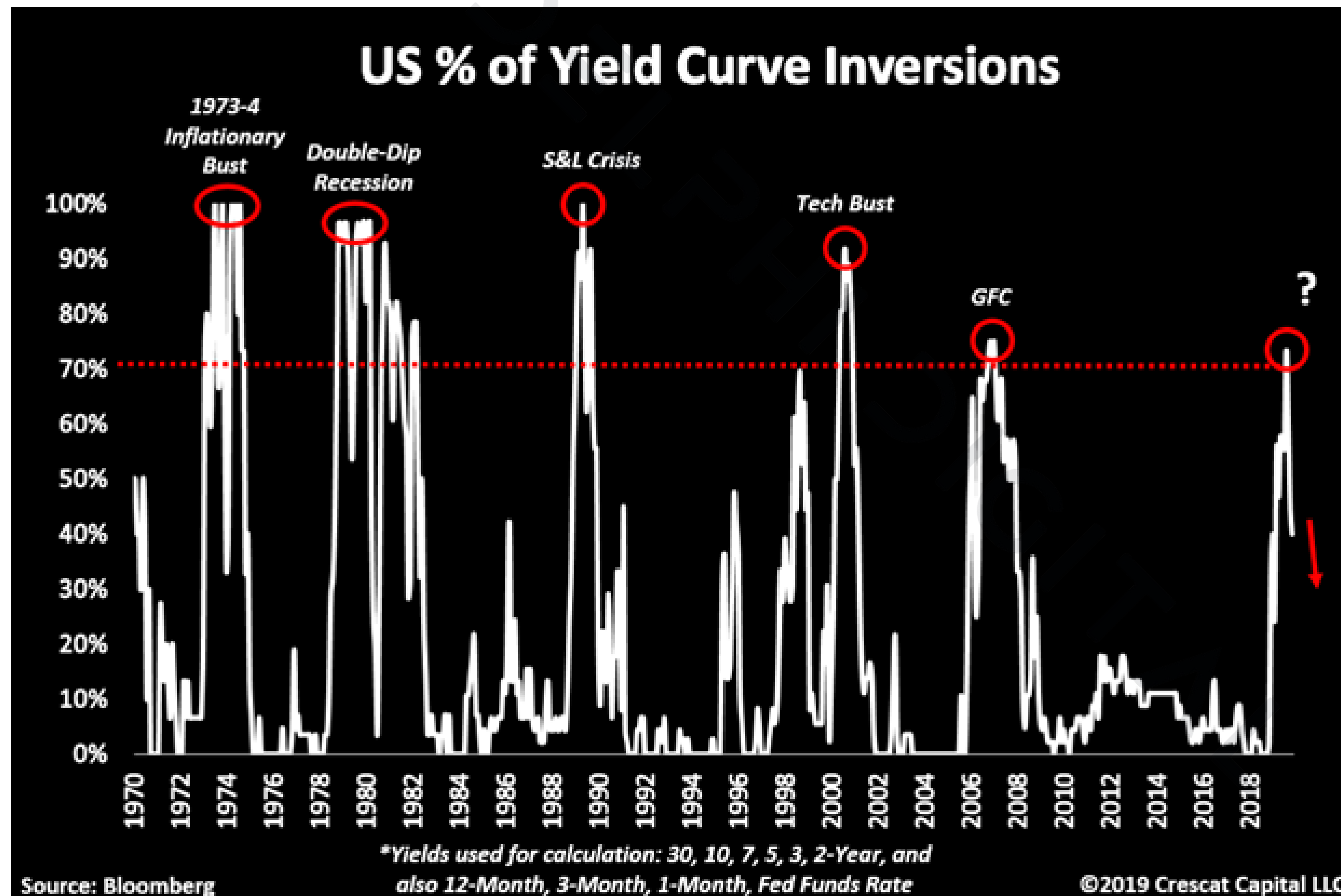
To set the scene, the recent distortions in the Treasury yield curve are still among the most relevant macro indicators supporting the bearish thesis. Our comprehensive calculation shows that from all 44 spreads across the yield curve, 73% of them were inverted in August of this year. More importantly, every prior time 70% or more of the yield curve inverted a recession followed.

The entire Treasury curve now yields less than core CPI. It's the second time in history we have seen this, the first being in early 2016. That time, the Fed had already hiked rates at the end of 2015 and was in quantitative tightening mode. This time, the Fed has cut interest rates three times in three months and has returned to quantitative easing at an alarming 45% annualized rate. With $15+ trillion worth of sovereign bonds with negative yields and central banks easing globally, we believe precious metals are in the early stages of a multi-year bull market.



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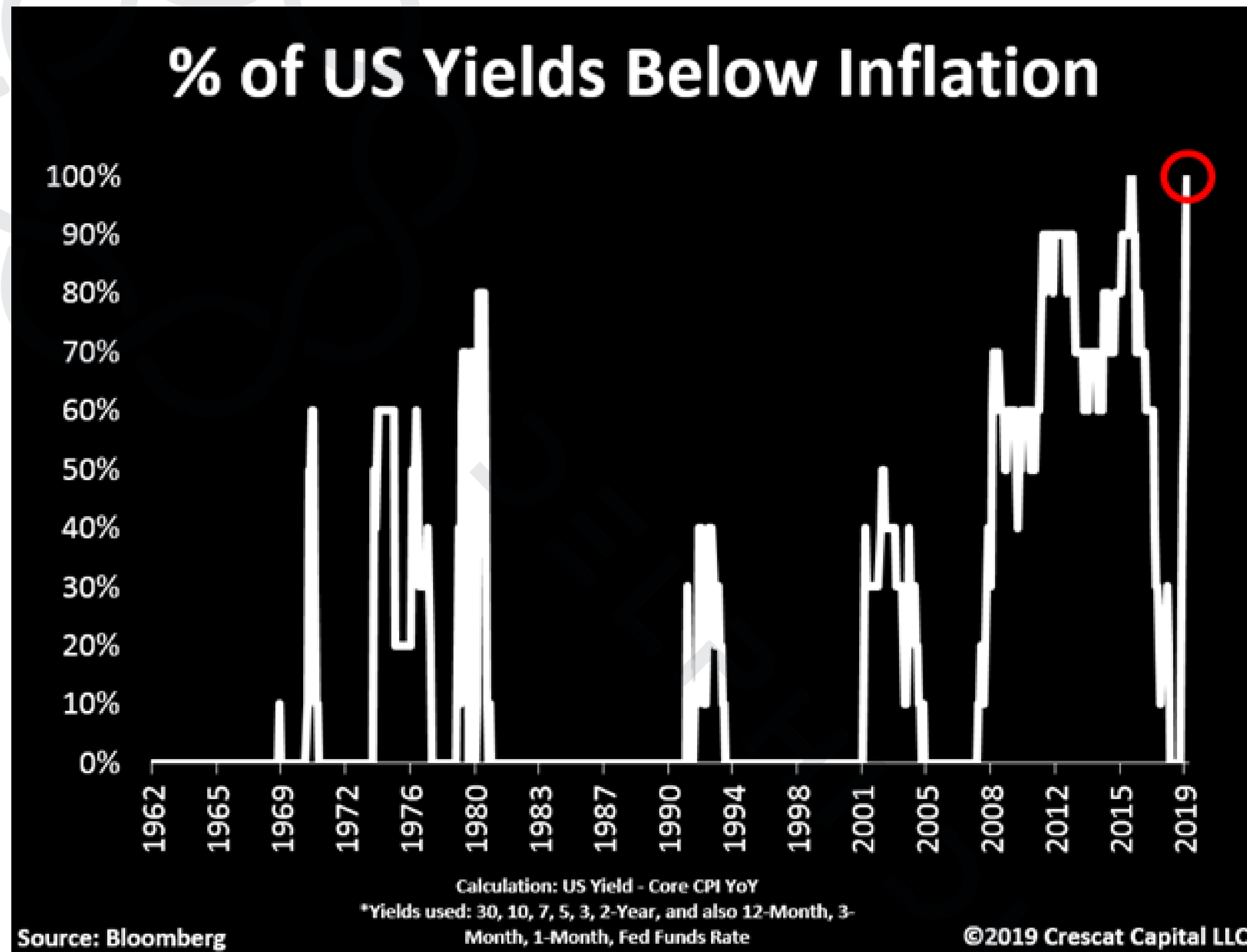
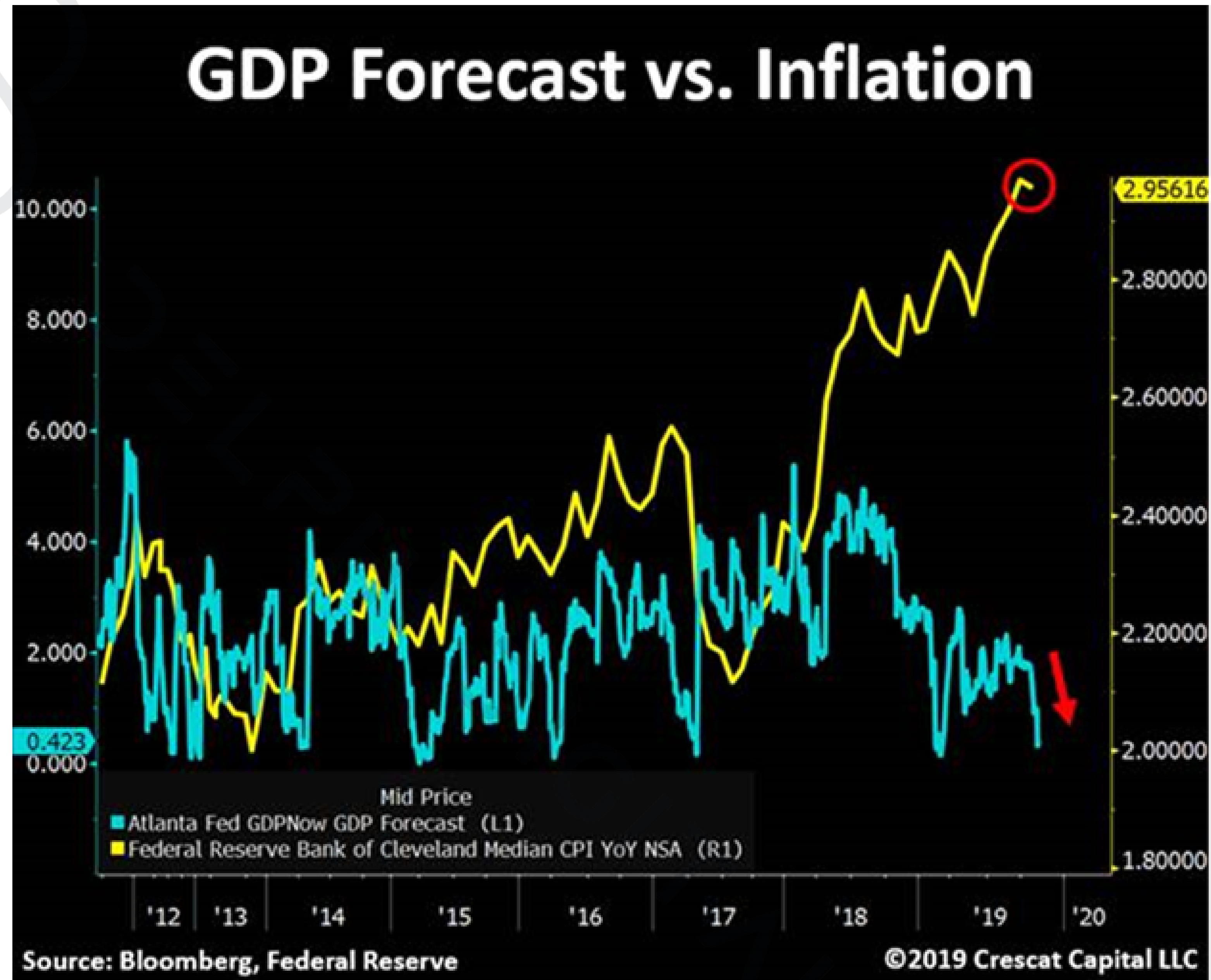


When we look at the chain of events historically, it's Fed tightening late in the business cycle that leads to yield curve inversions and then recessions. By the time the Fed starts easing, it's a confirmation that the downturn is ripe to unfold. When such times has also have coincided with stocks at record valuations, severe equity bear markets have ensued. Today, given the historic levels of debt and macro imbalances worldwide, the next decline is likely to be among the worst. In our view, a new wave of global fiat debasement policy is in its early stages and a shift in the global monetary order could be underway. To get a glimpse of this in the US, note how the Atlanta Fed's GDP nowcast has been declining in the face of rising consumer prices. This scenario could be extremely bullish for scarce and non-dilutable forms of haven assets such as precious metals and bitcoin.

Looking Ahead with Tavi Costa

Bitcoin is a bold bet on technology, cryptography, and the revolution of digital assets. It provides an outlet for investors besides precious metals to protect against depreciating fiat currencies. Bitcoin is limited in supply like precious metals. As the first mover, it has the network-effect advantage over other cryptocurrencies which are abundant. At Crescat, precious metals are our preferred hedge against fiat money printing and over-valued financial assets. However, we believe that a small position in bitcoin could provide valuable diversification and hedging. For those living under corrupt governments with strict capital controls, it is important to note that cryptocurrencies provide a functional and disruptive means of escape. With core and median CPI at decade highs, and inflation expectations at 50-year lows, we view bitcoin as a call option on the eventuality of rising inflation and currency crises globally.



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