

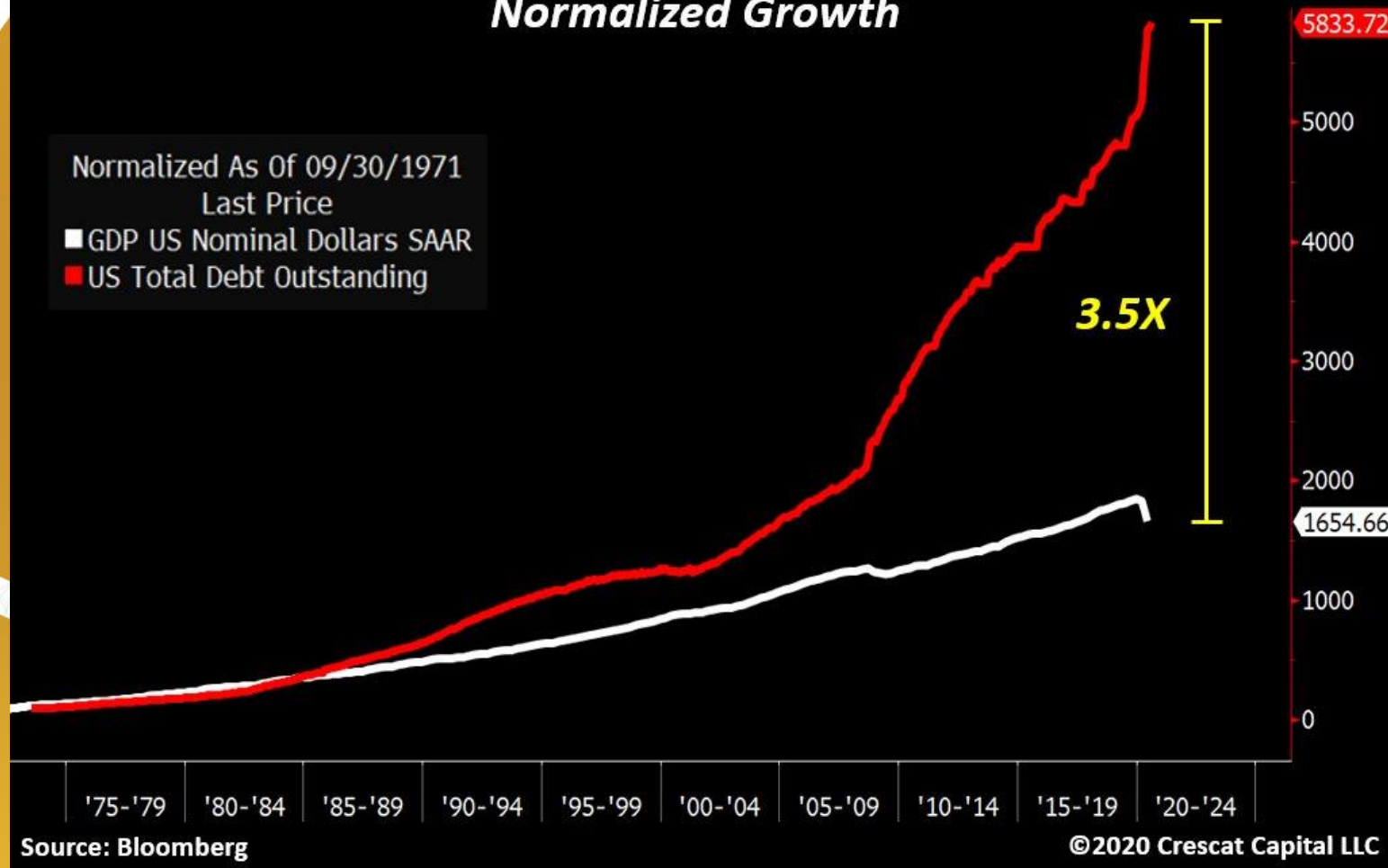


# CRESCAT CAPITAL®

THE VALUE OF GLOBAL MACRO INVESTING

# US National Debt vs. GDP

## Normalized Growth



National Debt has grown over 3.5x nominal GDP since the break of the gold standard.

# Crescat Macro Model



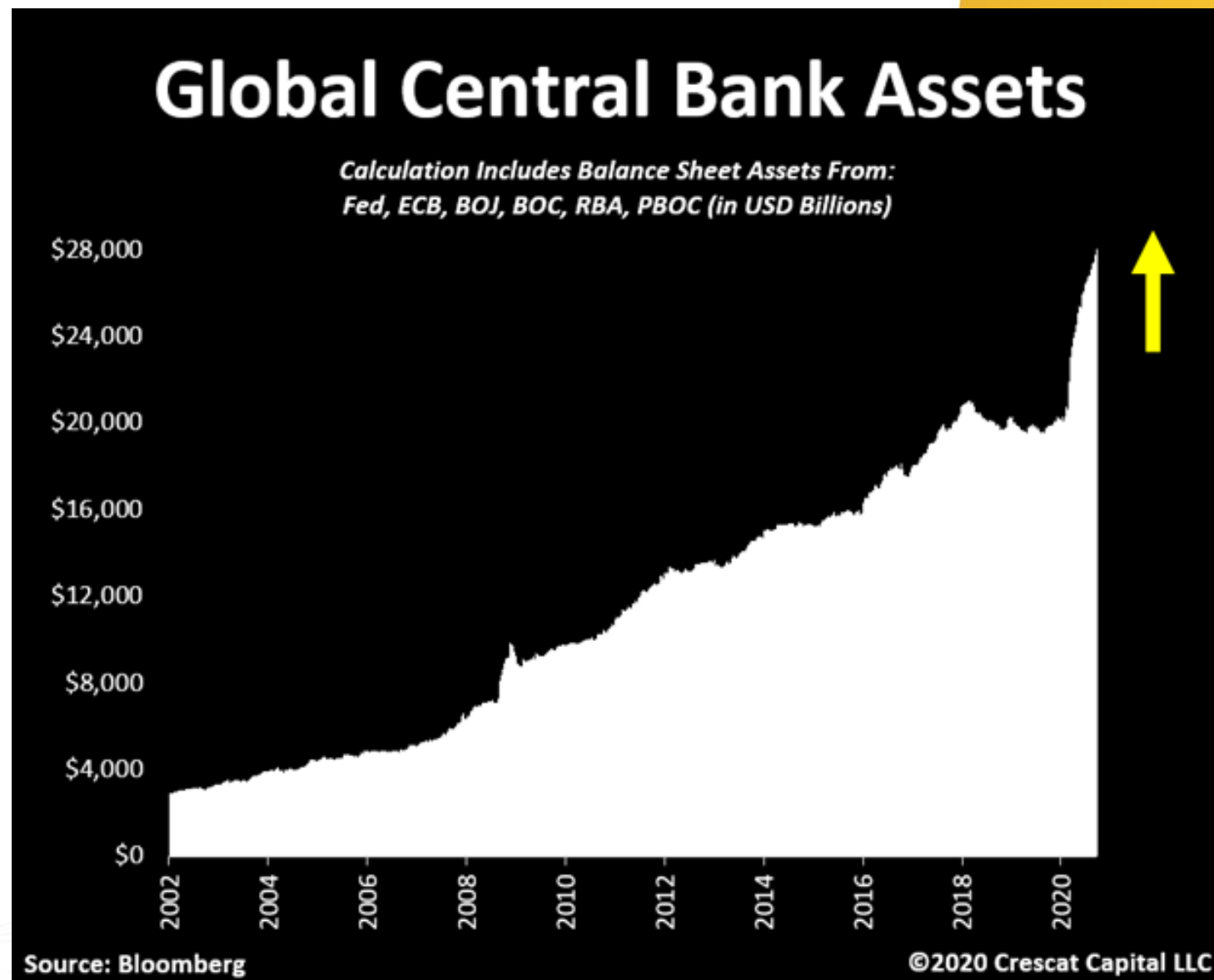
Source: BIS, IMF, BLS, Fed, Conference Board, Bloomberg

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Our recently plunging macro model from an extreme is signaling a major disconnect with current stock prices.



In 2020, central bank asset growth has inflected upward to surpass the \$28 trillion mark.



# Dow Jones Industrial Average



Source: Bloomberg

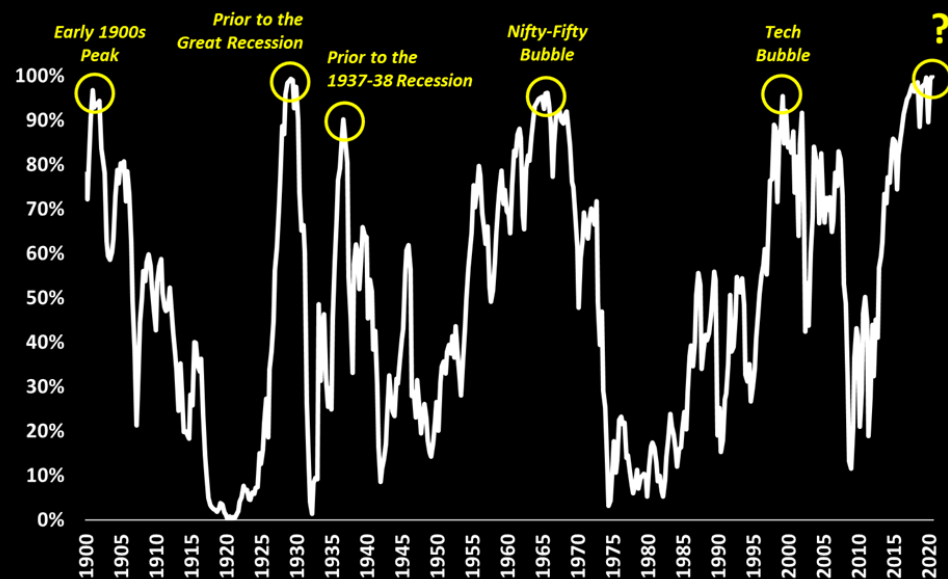
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The macro set-up today is eerily similar to the stock market crash of 1929 to 1932.





## Crescat US Equity Market Valuation Model



Model Factors	Most Recent Value	Historical Percentile
Median EV to Sales (Ex-Financials)	4.0	100%
US Total Market Cap to GDP	170%	100%
EV to Free Cash Flow Margin-Adjusted (Ex-Financials)	48.8	100%
Median Price to Sales	2.8	100%
Median Price to Book	3.9	100%
Median EV to EBITDA (Ex-Financials)	15.0	100%
Aggregate EV To Sales	3.0	100%
Aggregate EV to Trailing 12M EBITDA	17.5	100%
Aggregate EV to 2021 EBITDA Estimate	15.9	100%
Aggregate Price to 2021 Book Value Estimate	3.8	100%
Aggregate Price to Tangible Book Value	12.8	100%
Aggregate Price to Earnings	27.9	98%
Cyclically Adjusted P/E (CAPE)	32.9	97%
Aggregate Price to 2021 Earnings Estimate	25.6	97%
Aggregate Price to Book	3.9	91%

Source: Bloomberg, Yale/Robert Shiller, John Hussman

\*Numbers as of November of 2020

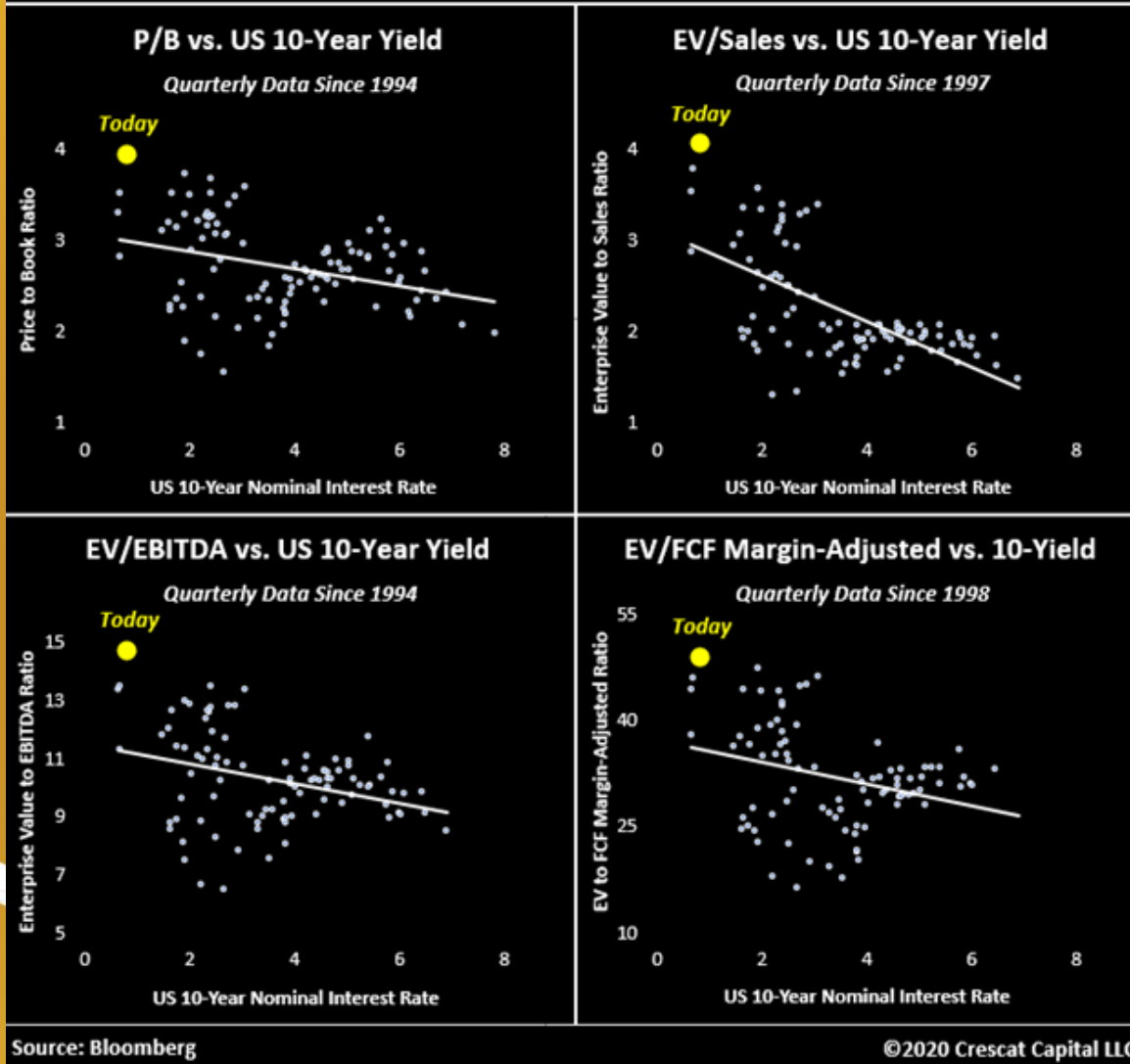
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Crescat's 15-factor valuation model is at record levels with 11 out of 15 fundamental metrics in the 100<sup>th</sup> percentile historically.



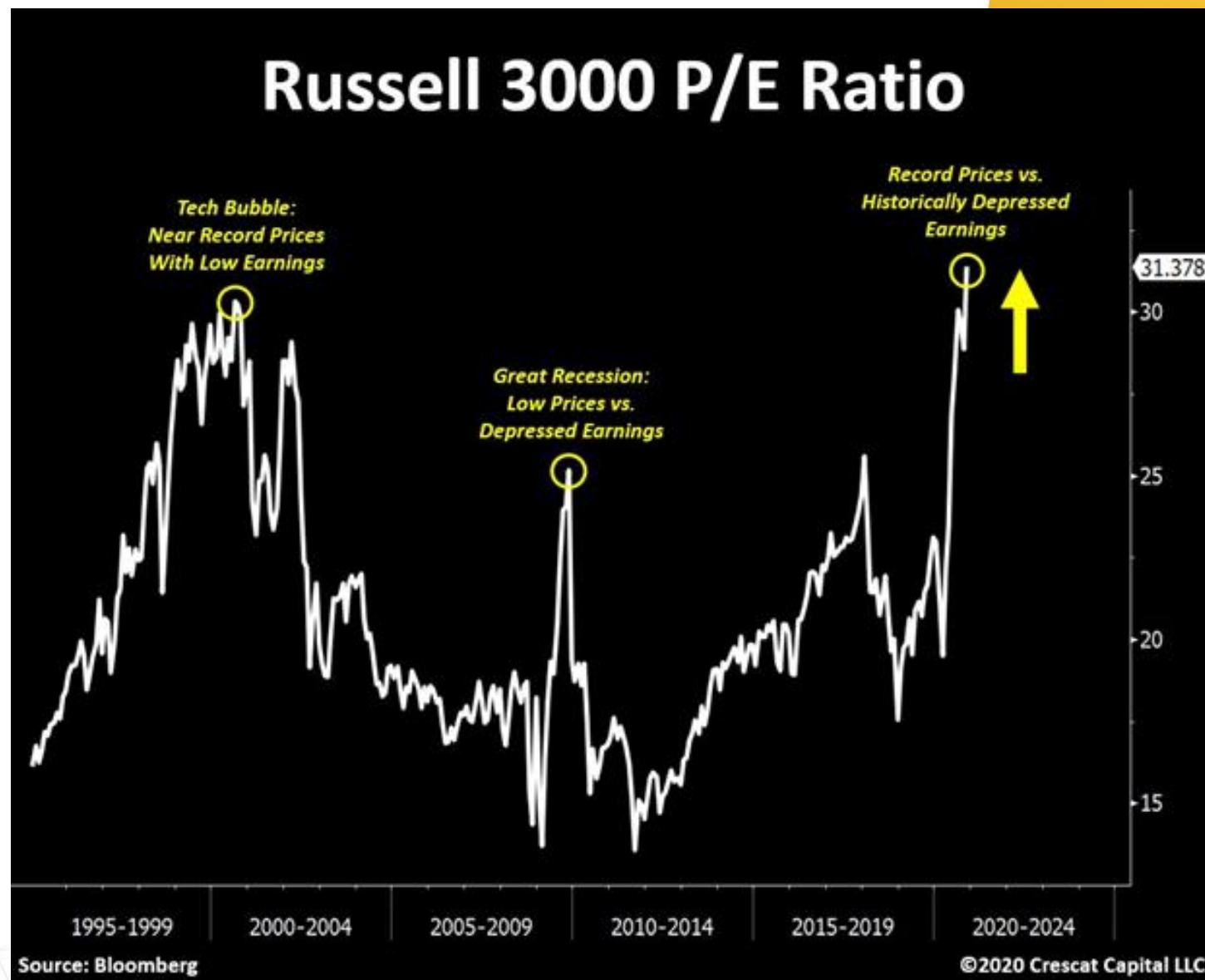
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## S&P 500 Median Valuation Metrics vs. US 10-Year Nominal Rates



Four different valuation metrics using median S&P 500 company data. Today's stock market multiples are the most extreme relative to interest rates in the last 25 years.

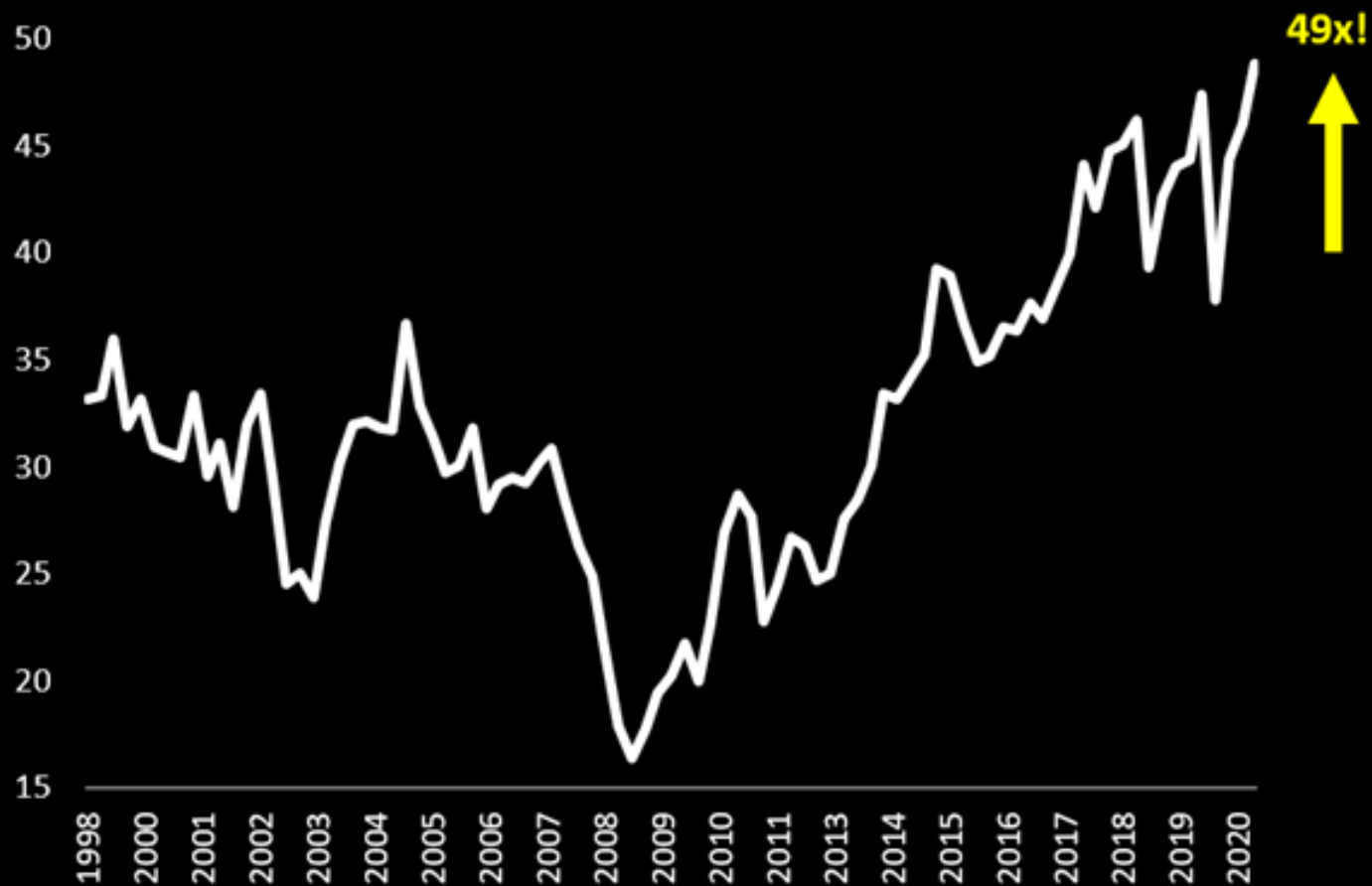
The aggregate P/E ratio for the Russell 3000 index is now higher than the tech bubble.





# US Equities EV to Free Cash Flow

*S&P 500 (Ex Financials) Median EV to FCF Multiples Cyclically Adjusted*

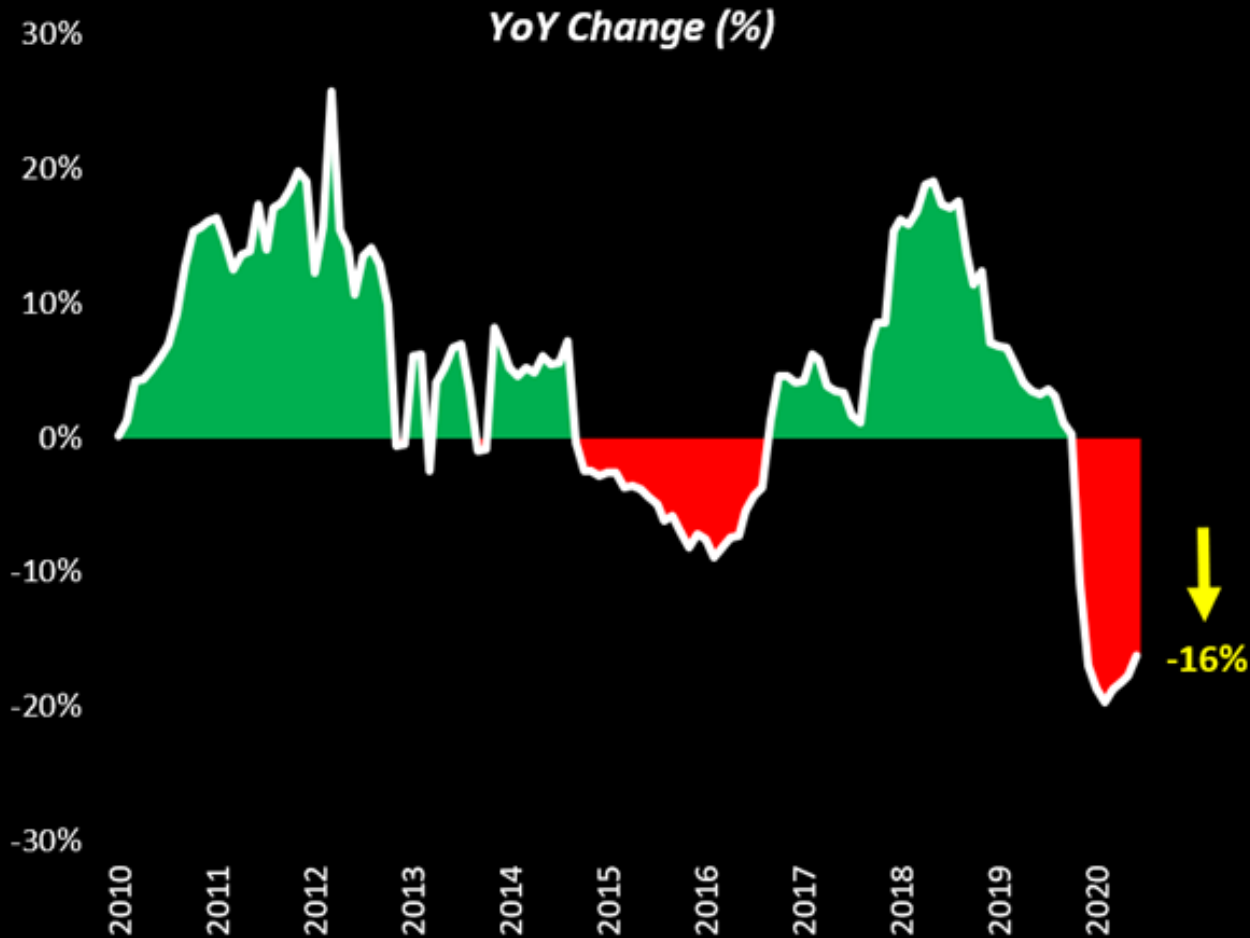


Source: Bloomberg, John Hussman

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Enterprise value compared to FCF illustrates the extreme valuation risks in today's stock and corporate bond market.

# S&P 500 CAPEX Estimate



Source: Bloomberg

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Lack of capital spending by US corporations should continue to drag on economic activity.



# US Tech Stocks Market Cap to GDP

MSCI USA Information Technology Index Market Cap / US Nominal GDP - in (%)



The aggregate market cap of info tech companies now represents a record 43% of US GDP

# US Tech Stocks Earnings Yield

*Median Earnings Yield of The Top 50 Largest Tech Companies By Market Cap*

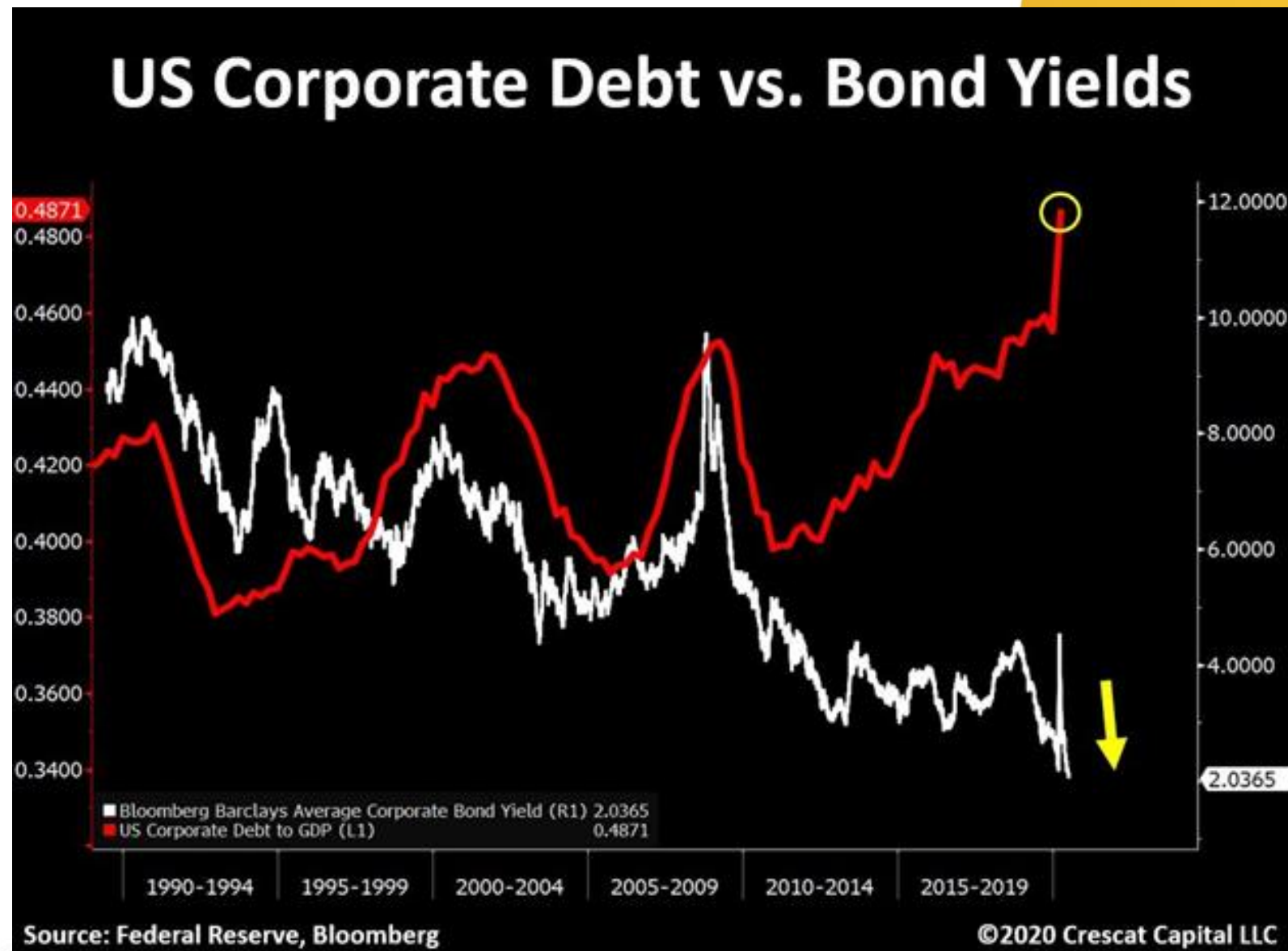


Source: Bloomberg

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On a median basis, rather than market weighted measurements, earnings yield for the tech sector is now almost as low as it was in March 2000.

The US corporate bond market has become one of the most central bank dependent parts of financial markets today.

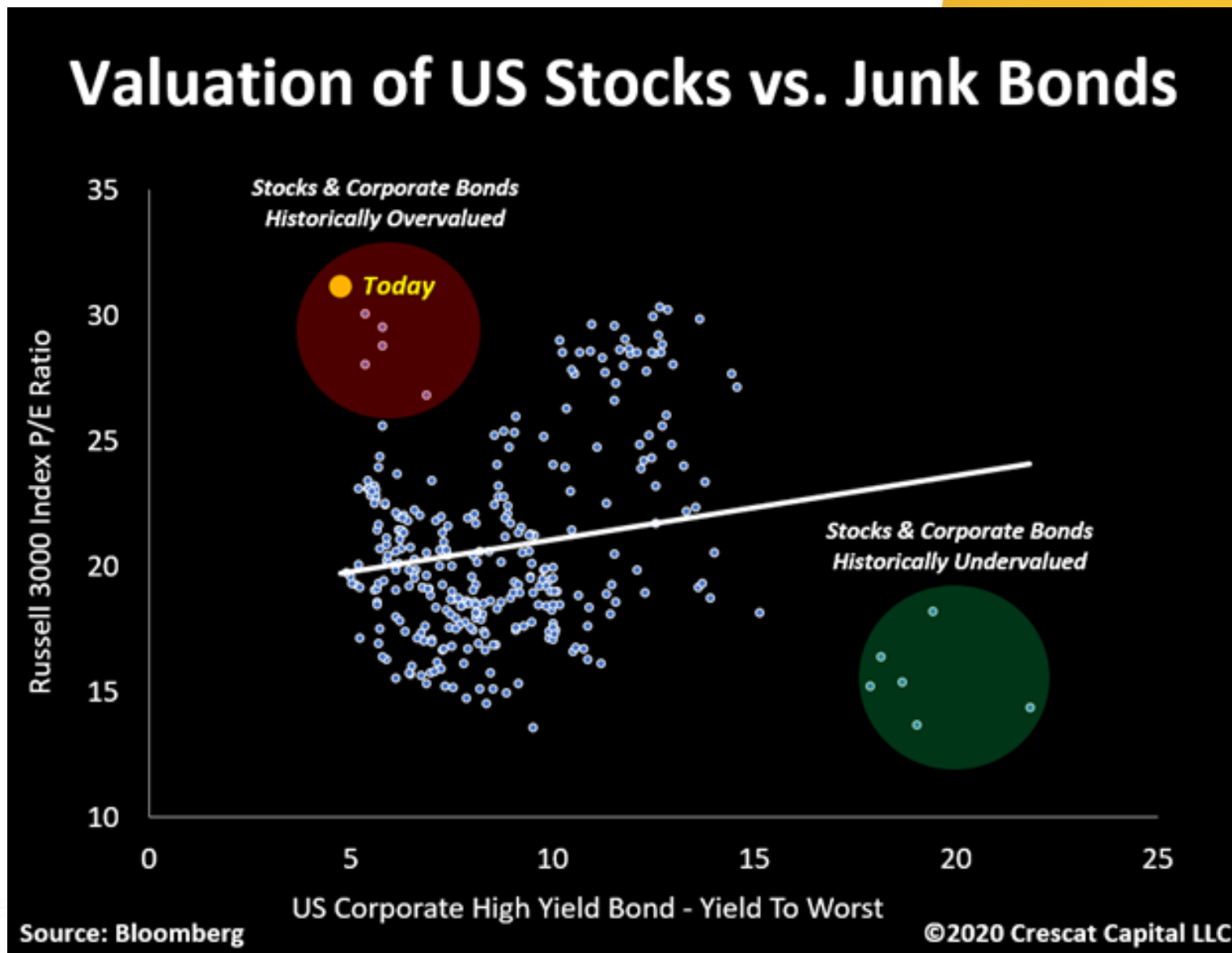




Corporate bonds  
now yield less than  
inflation expectation  
for the first time in  
history.

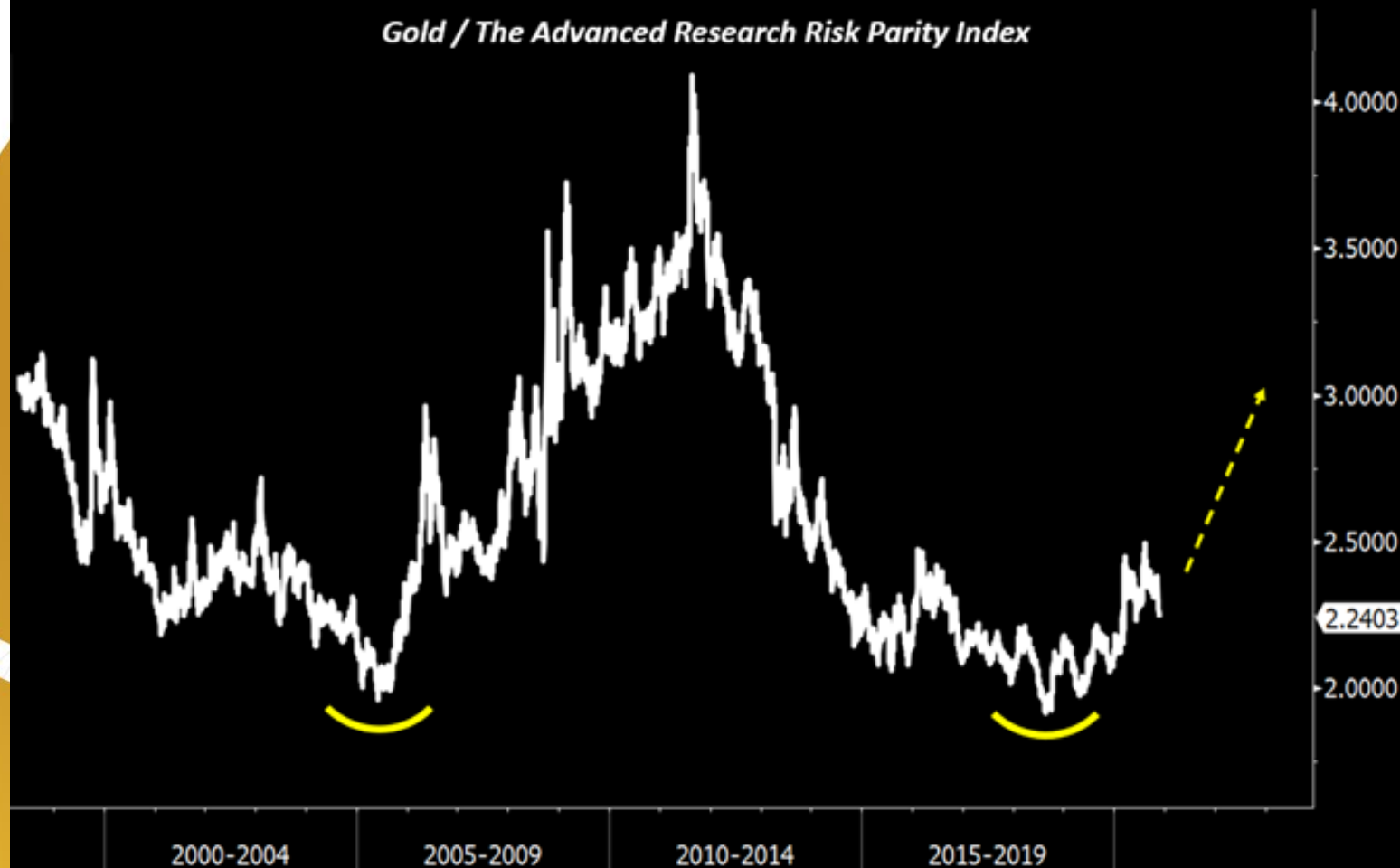


For the first time in history, junk bonds and stocks are record overvalued in tandem.



# Gold-to-Risk Parity Index Ratio

*Gold / The Advanced Research Risk Parity Index*



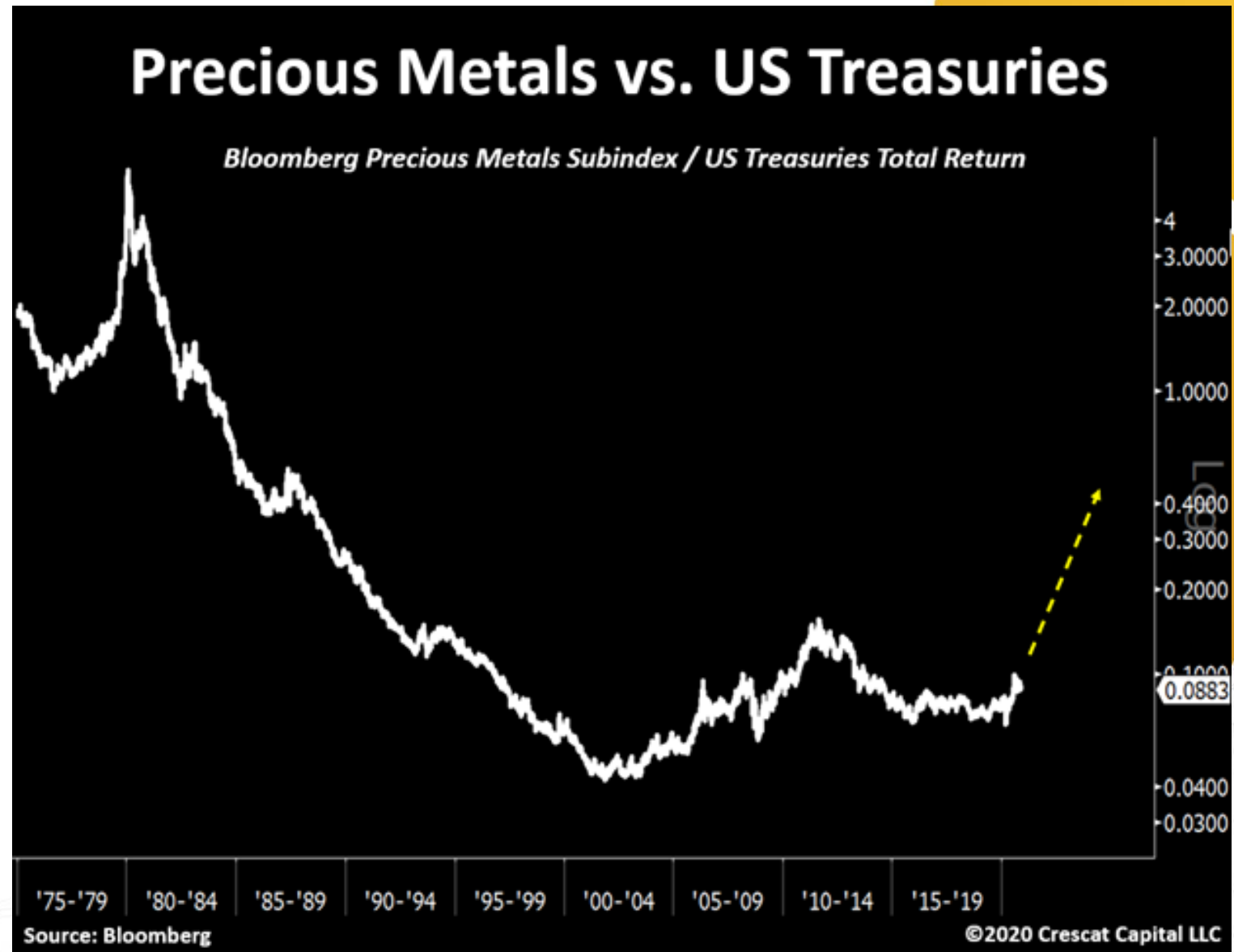
Source: Bloomberg

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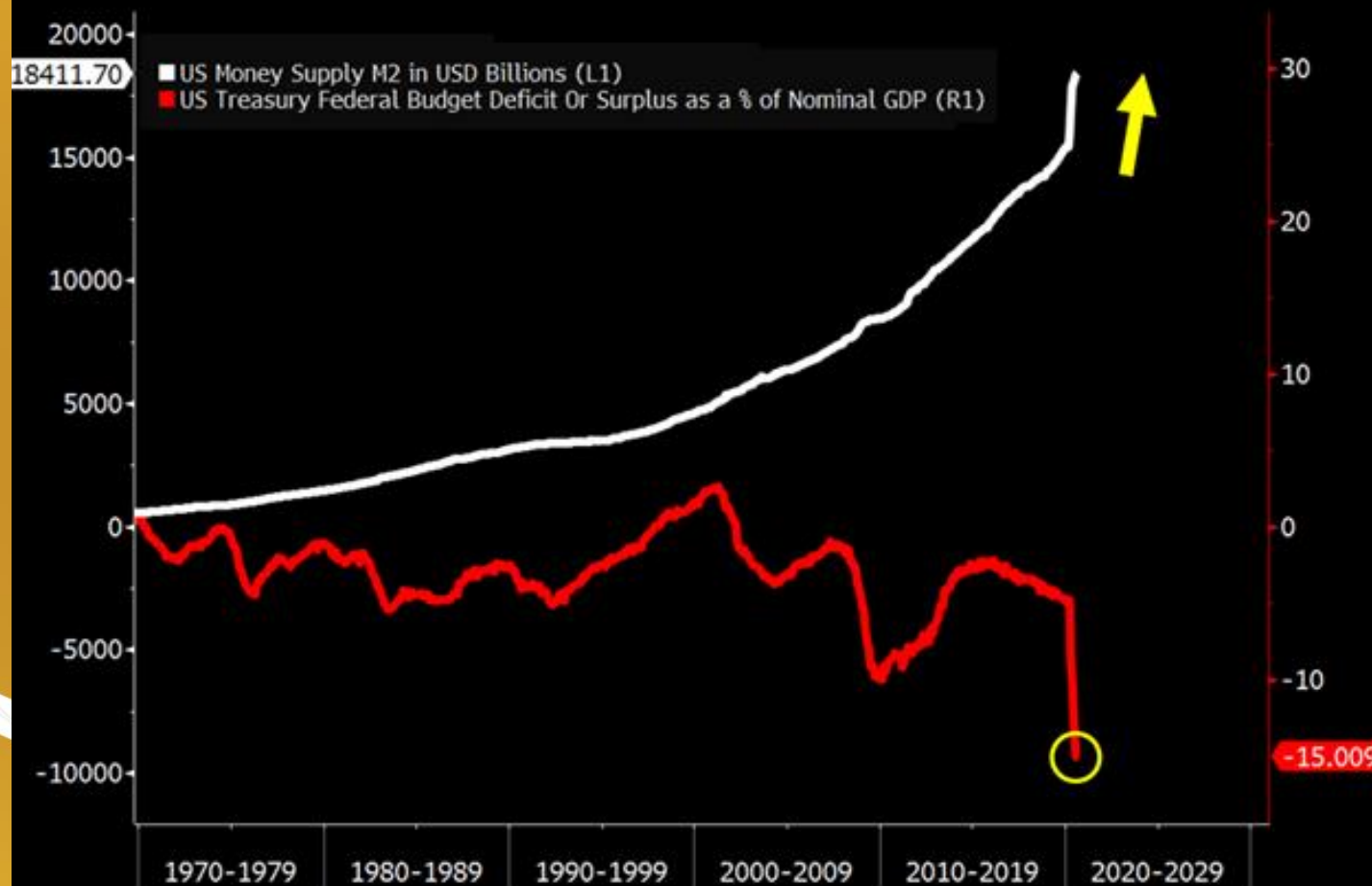
After 2011, the gold-to-risk parity ratio went through a precipitous downward trend that began to reverse in the fourth quarter of 2018. This ratio seems to have formed a double bottom.



The Precious Metals to US Treasuries ratio is still near all-time lows. In years to come, we believe investors will favor gold and silver over sovereign assets.



# Money Supply vs. Fiscal Deficit



Source: Bloomberg

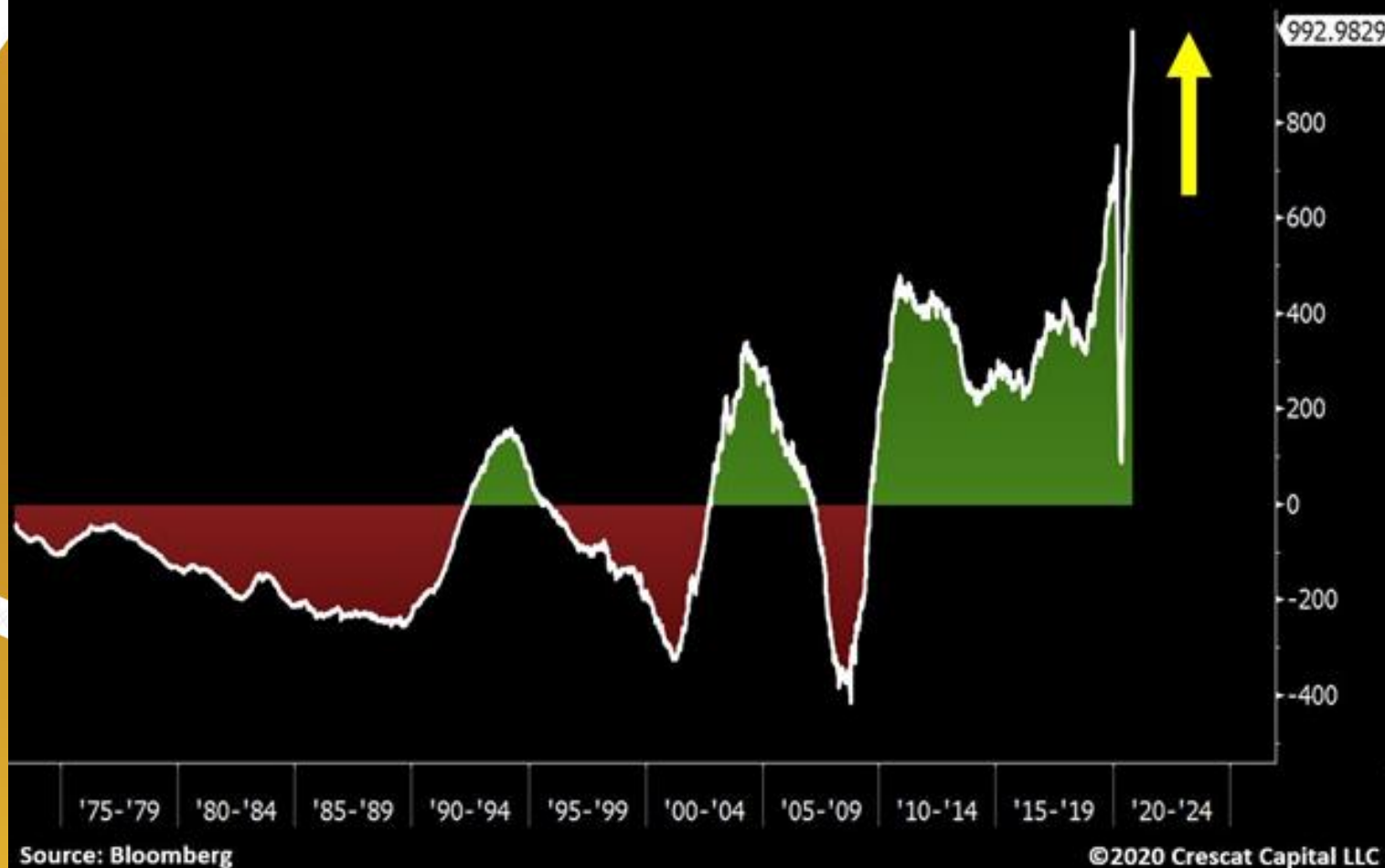
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Monetary and fiscal disorder have perhaps gone too far this time around and significant monetary debasement is, in our view, inevitable.



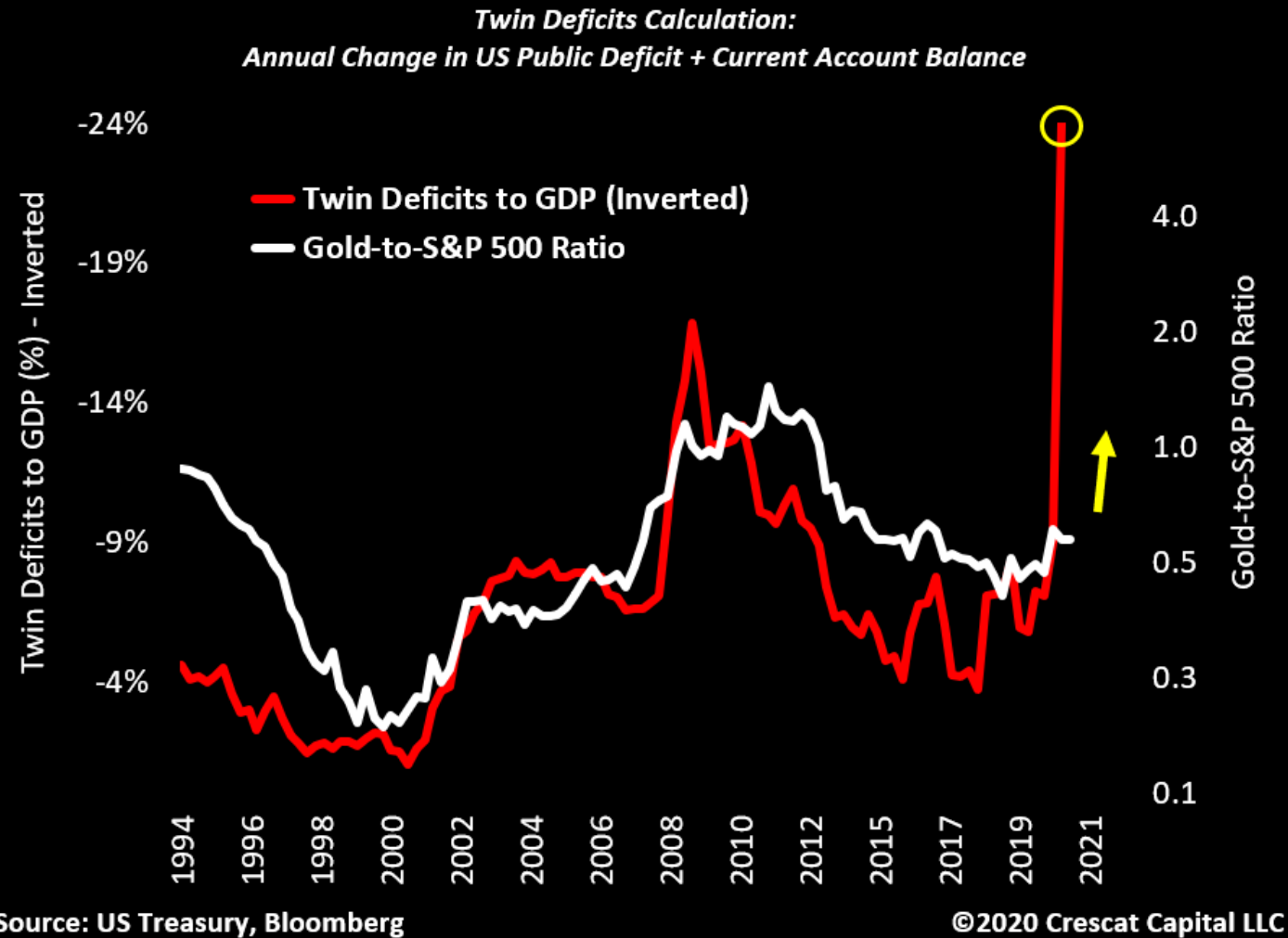
# US Banks Treasury Holdings vs. C&I Loans

*Calculation: Treasury Holdings – Commercial & Industrial Loans in USD Billions*



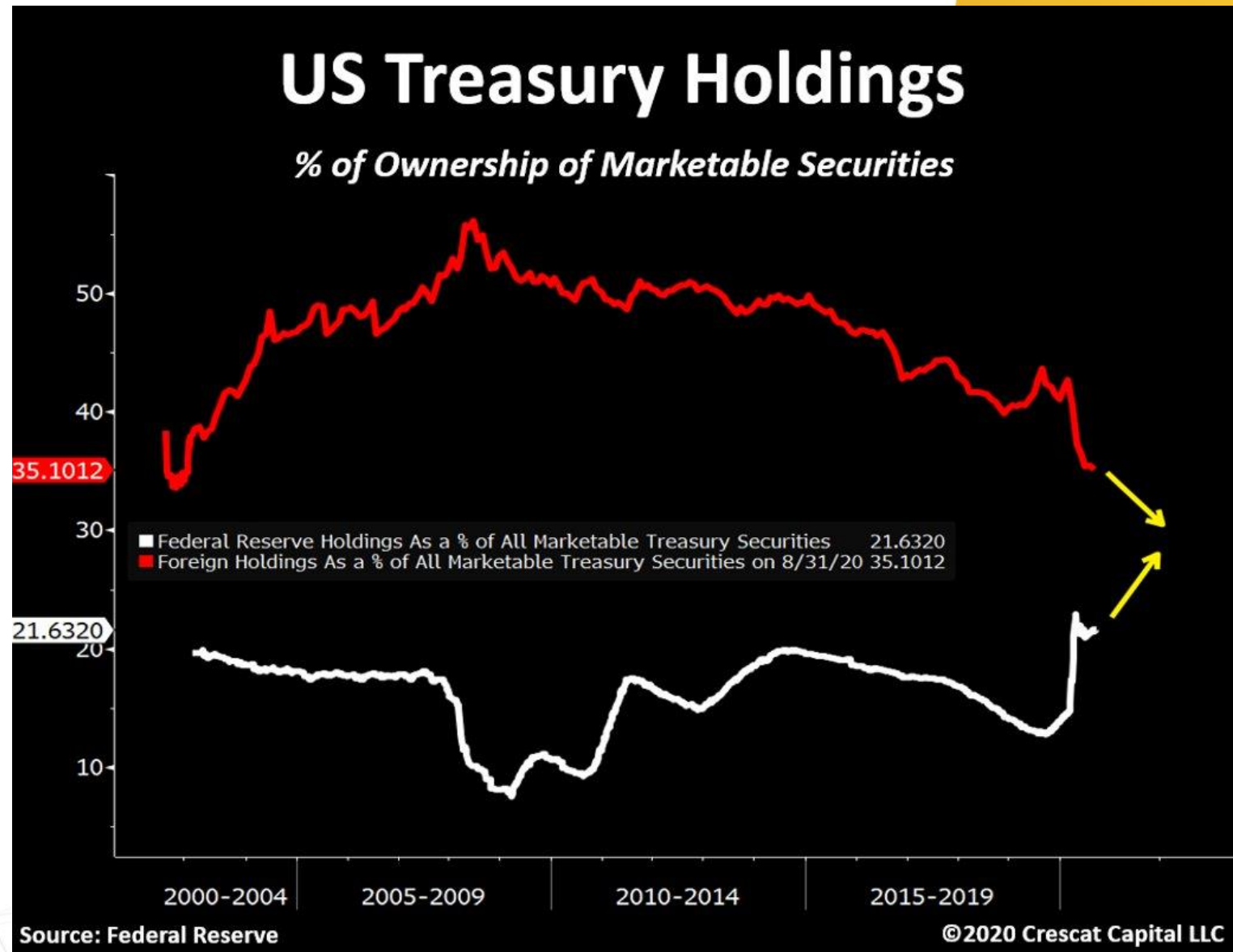
Financial institutions hold a record \$993B of government loans, which is now larger than commercial and industrial loans.

# Twin Deficits vs. Gold-to-S&P 500 Ratio

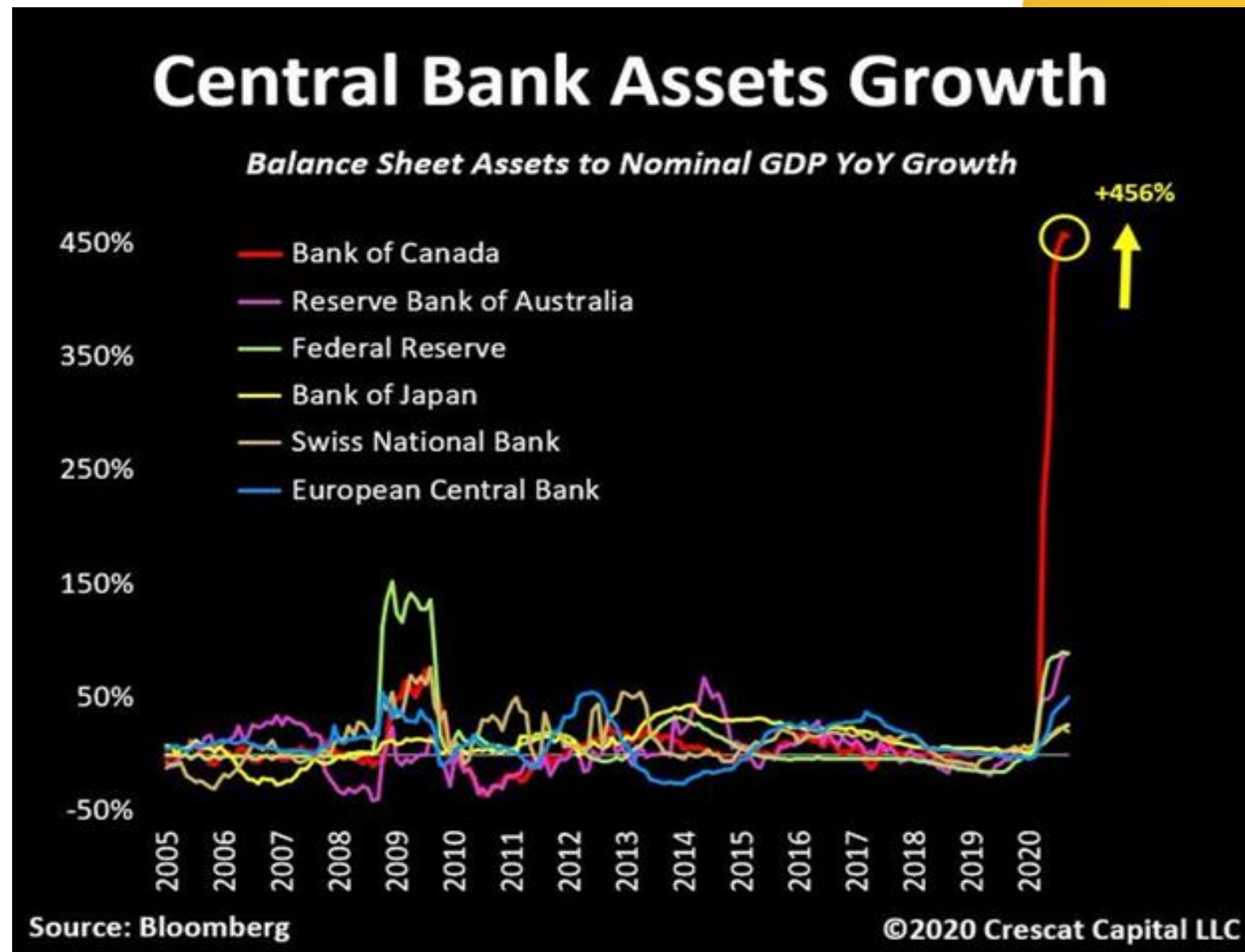


History has proven during times of fiscal disorder gold tends to outperform equities. Inverted twin deficits suggests a massive upward move in the gold to S&P 500 ratio is still ahead.

Foreign investors are currently holding the lowest percentage of marketable US Treasuries in 20 years. The Federal Reserve is becoming the buyer of last resort.



The Federal Reserve added about \$3 trillion of assets to its balance sheet since late February when the pandemic began to noticeably hit the US and stocks started selling off.





# Global Negative Yielding Bonds

USD Millions



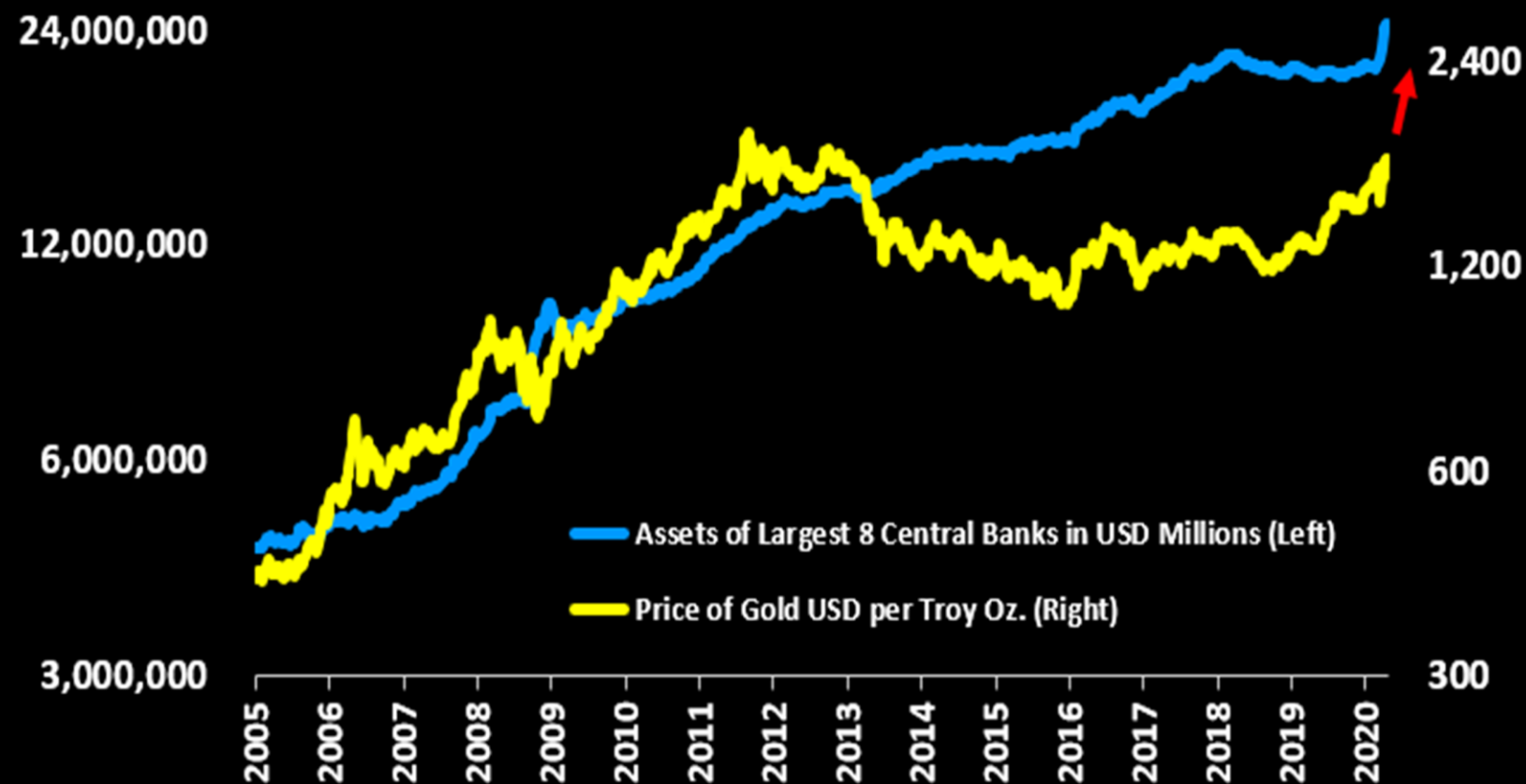
Source: Bloomberg

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Global negative yielding bonds are again breaking out, now worth in aggregate a record of \$17.5T.



# Global Central Bank Assets vs. Gold



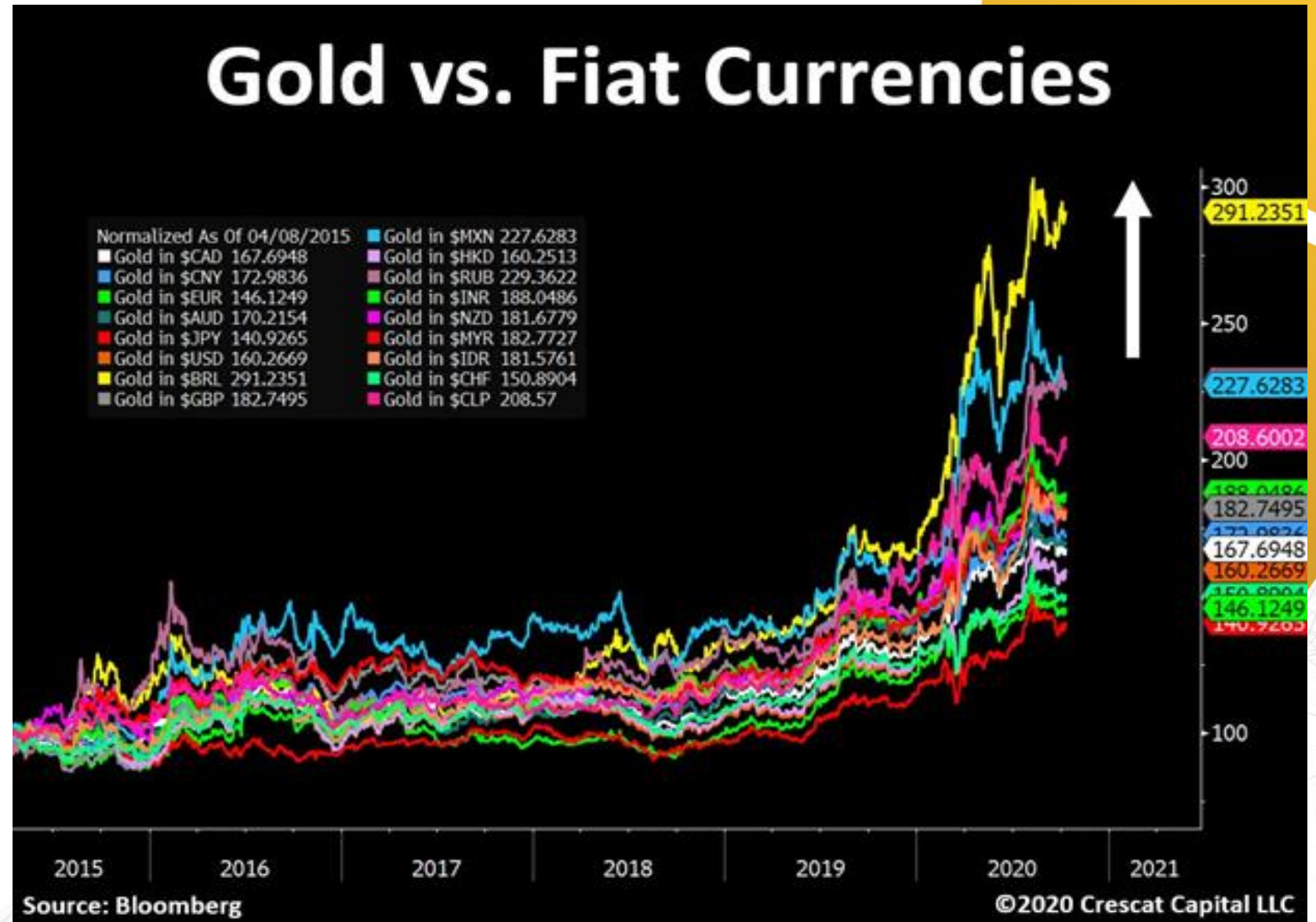
Source: Bloomberg, Central Banks

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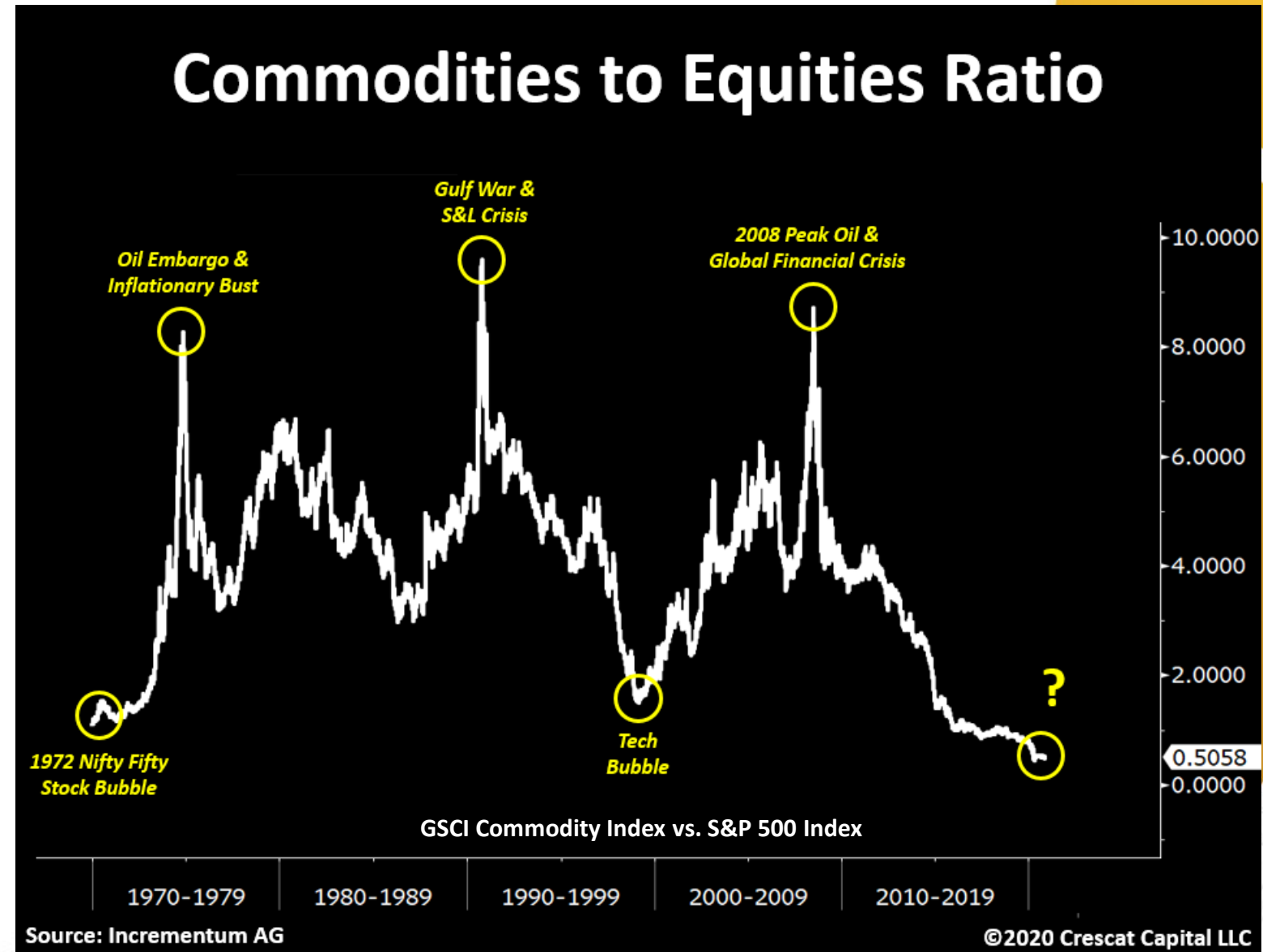
Money printing only supports financial asset bubbles for so long. Ultimately, QE drives flows out of overvalued stocks and credit and into undervalued precious metals.

# Gold vs. Fiat Currencies

Fiat currencies around the world are in a race to the bottom. The price of gold has been rising across all of them.



The commodity-to-equity ratio is at a 50-year low.



# Commodities to GDP Ratio

*Bloomberg Commodity Index / US Nominal GDP*

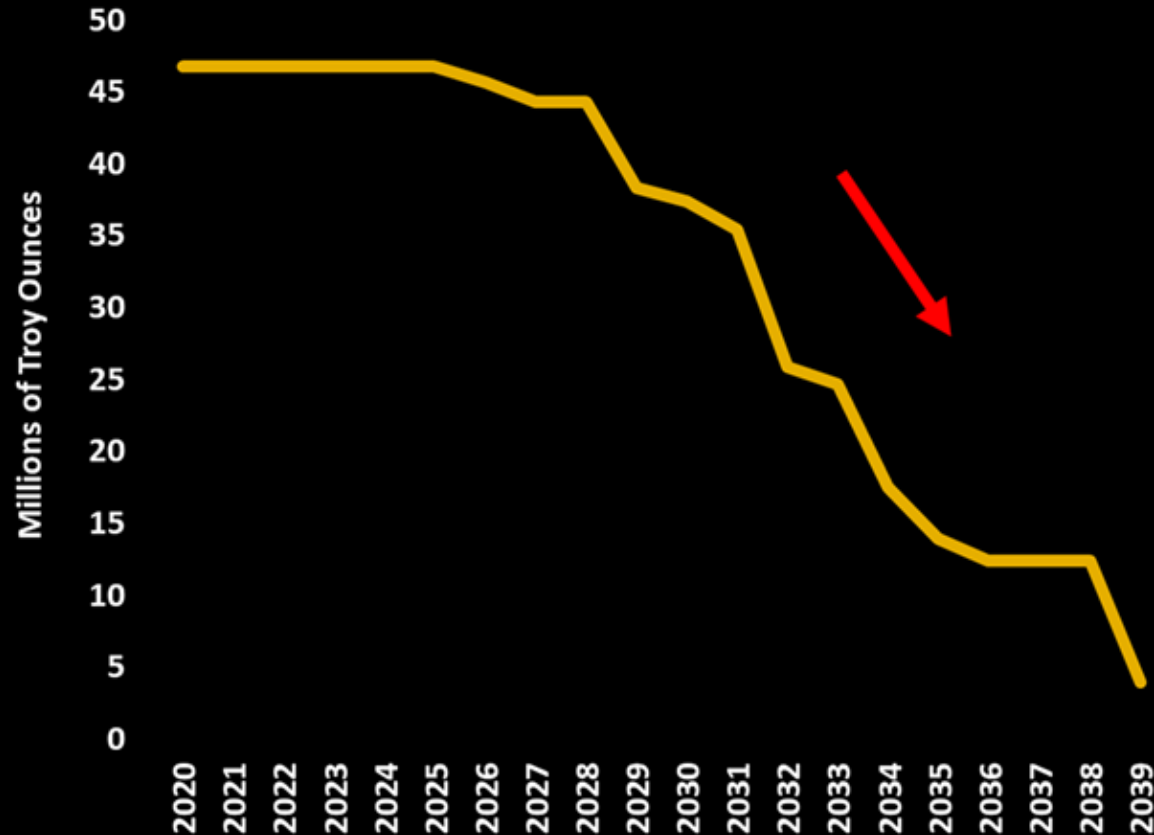


Tangible assets have massively underperformed, particularly in the last year. The commodities to GDP ratio just reached a 60-year low.



# Gold Supply Cliff

Top 20 Global Gold Producers  
Projected Production from Proven and Probable Reserves



Source: S&P Global Market Intelligence

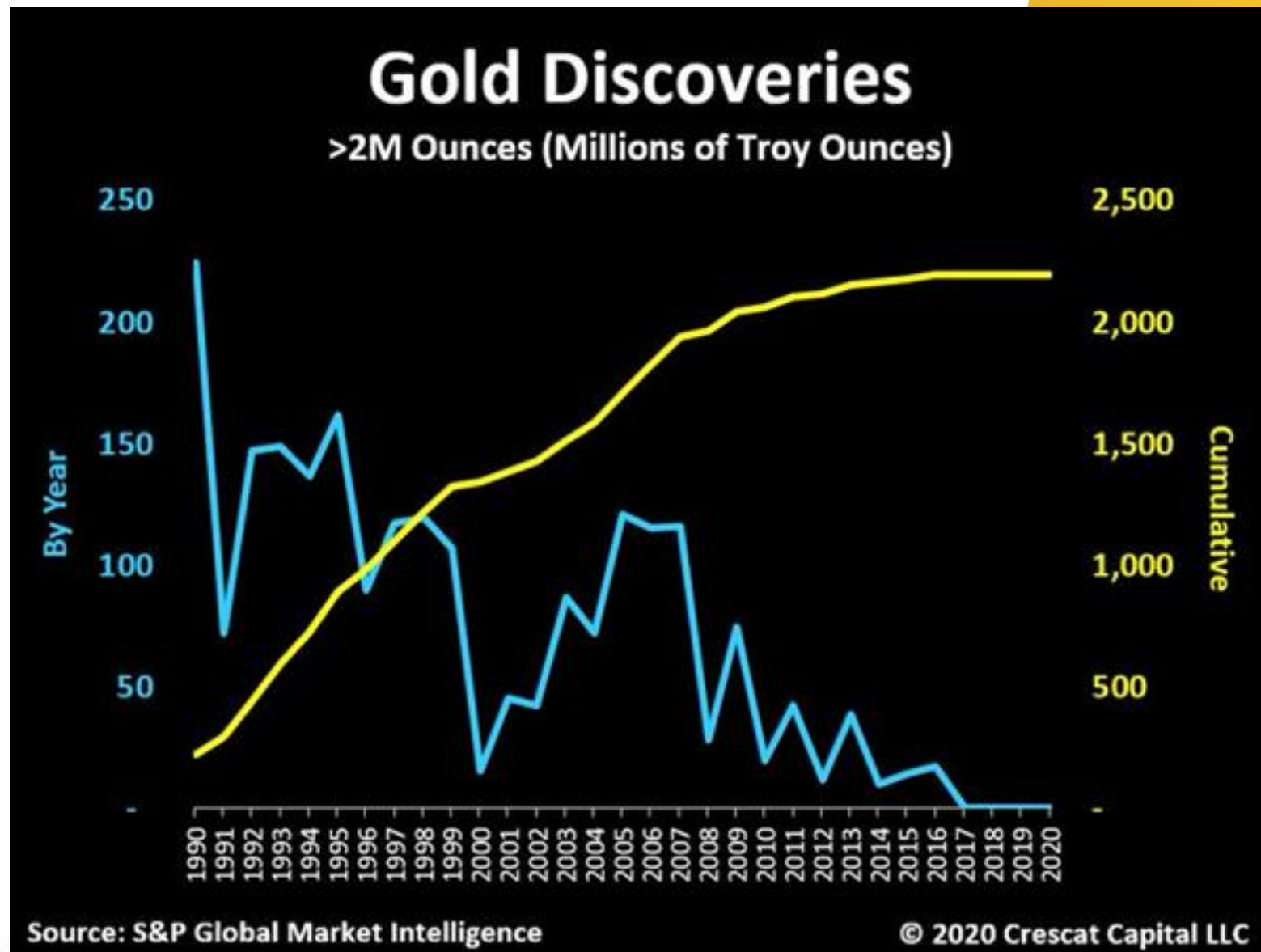
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Majors have underinvested in exploration and must replace their reserves. Supply shortfall a macro positive for gold prices. Extremely bullish for junior explorers.

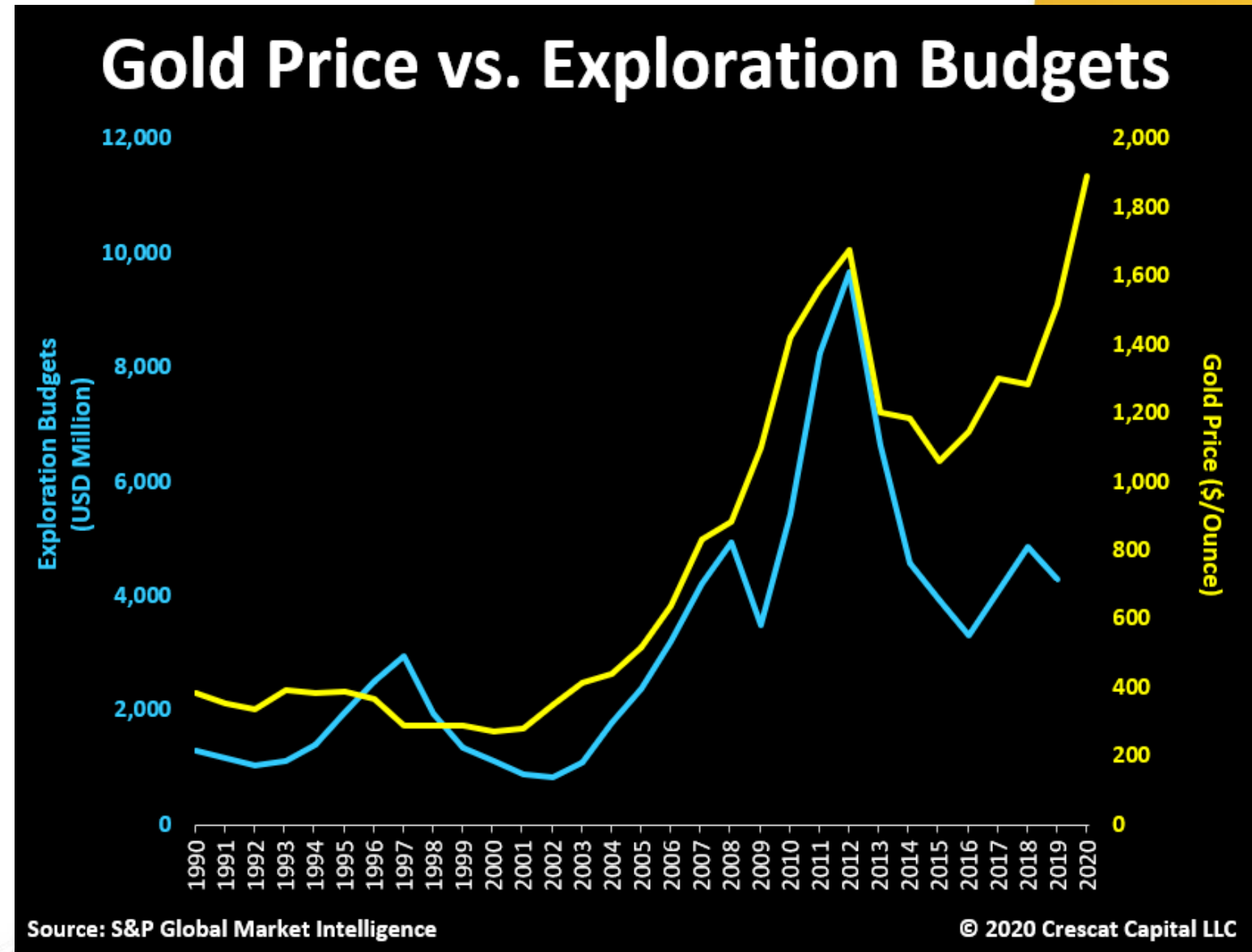




There were zero gold discoveries above 2 million ounces in the last 3 years. Precious metals companies are reluctant to spend capital even though gold prices have reached all-time highs.



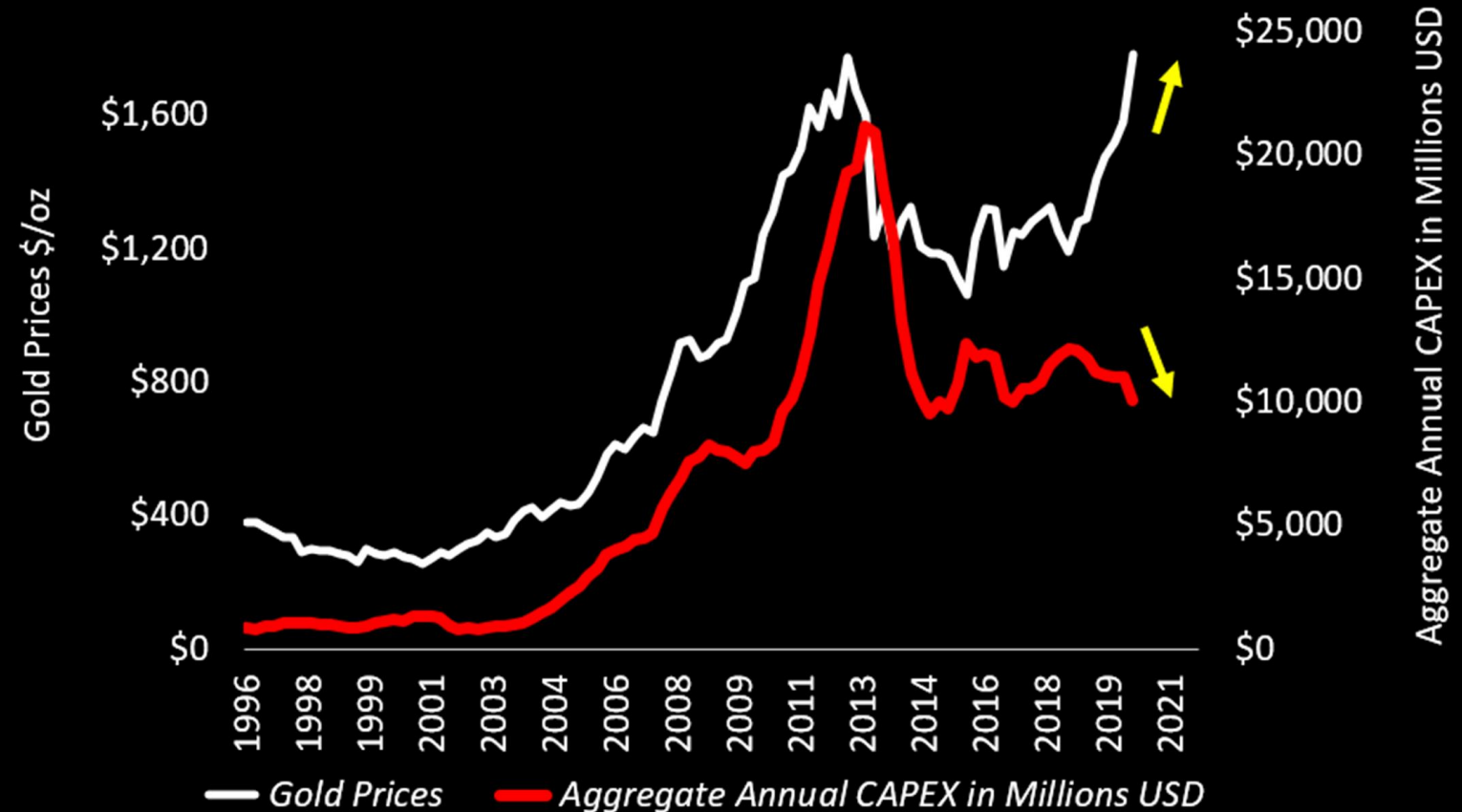
Exploration budgets and gold prices have been diverging for over 8 years.



Miners have been reluctant to spend capital even though gold prices have been moving higher. Thus, supply is constrained, an incredibly bullish fundamental backdrop for gold and silver.

# Gold vs. Miners' CAPEX

*Top 50 Miners by Market Cap in the Canadian & US Stock Exchanges*



Source: Bloomberg

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# Gold Miners' Free Cash Flow Yield

*Median Trailing 12-Month Free Cash Flow to Enterprise Value*



Source: Bloomberg

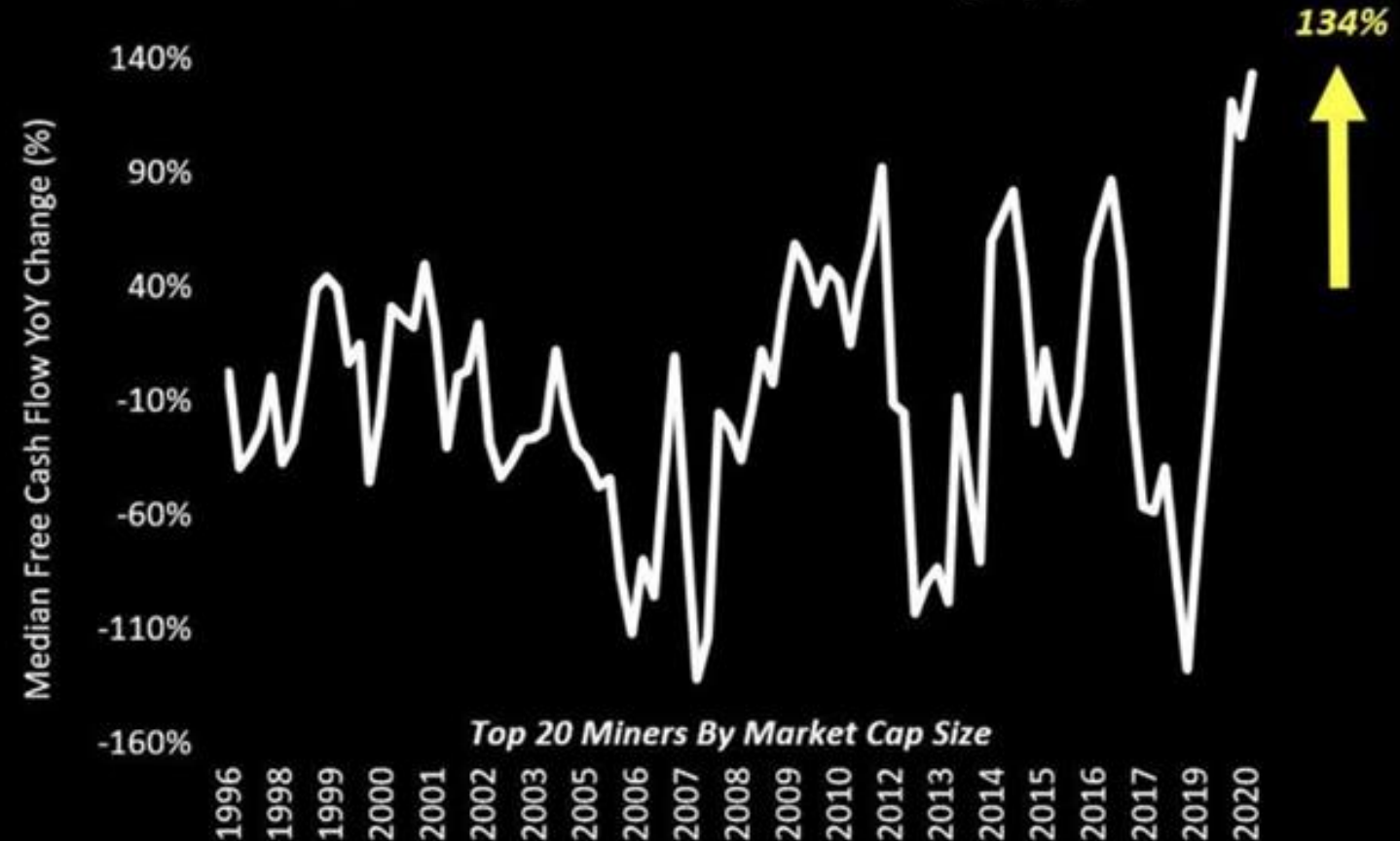
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Gold and silver mining companies are the real beneficiaries of today's macro environment with strong balance sheets, high growth, and still incredible undervaluation.



# Gold & Silver Miners

*Median Free Cash Flow YoY Change (%)*



Source: Bloomberg

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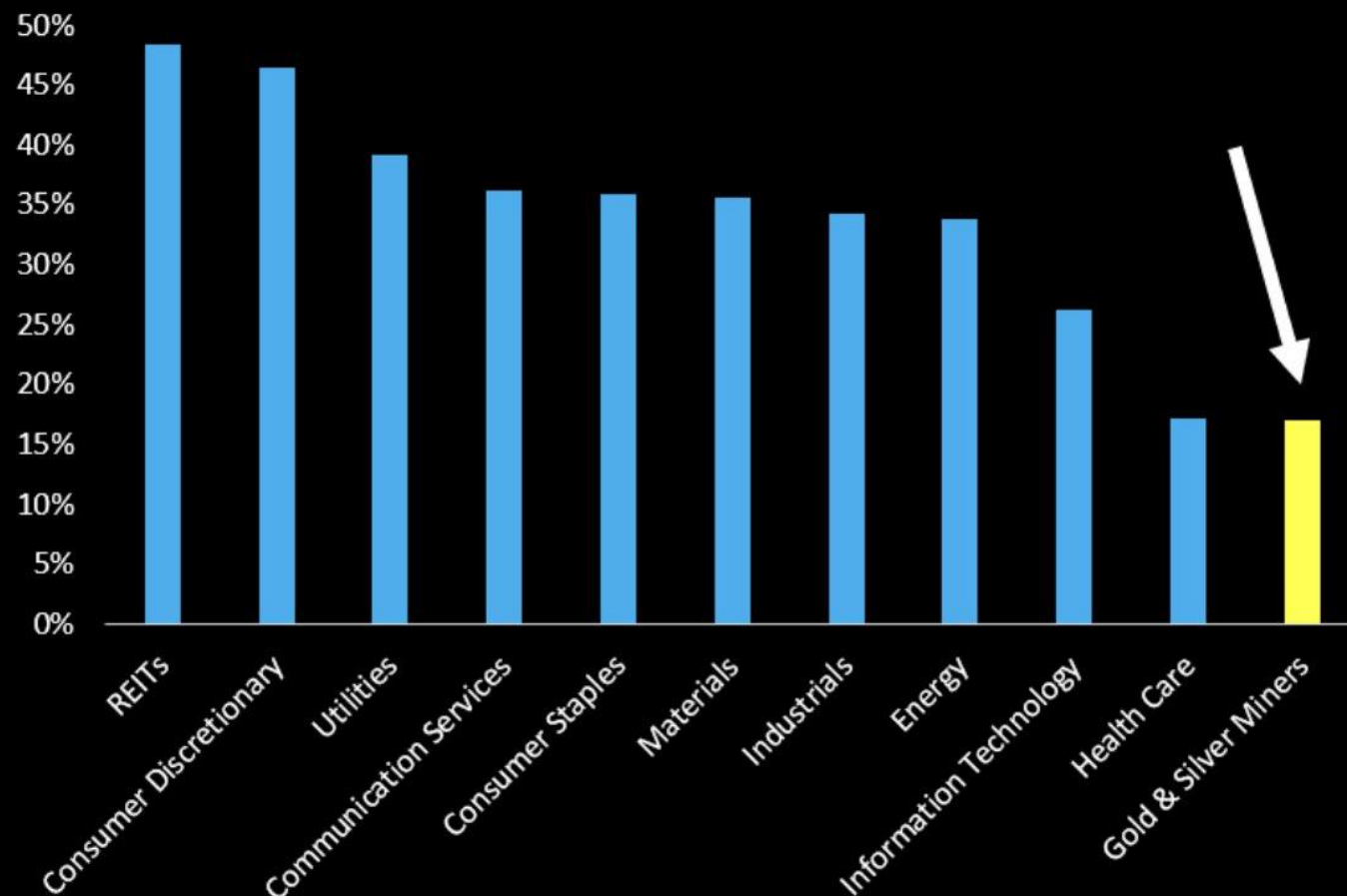
Free cash flow among the top 20 miners have grown by 134% year over year in their latest report





# Median Total Debt to Assets Ratio

*Russell 3000 Index & Top 50 Precious Metals Miners By Market Cap*

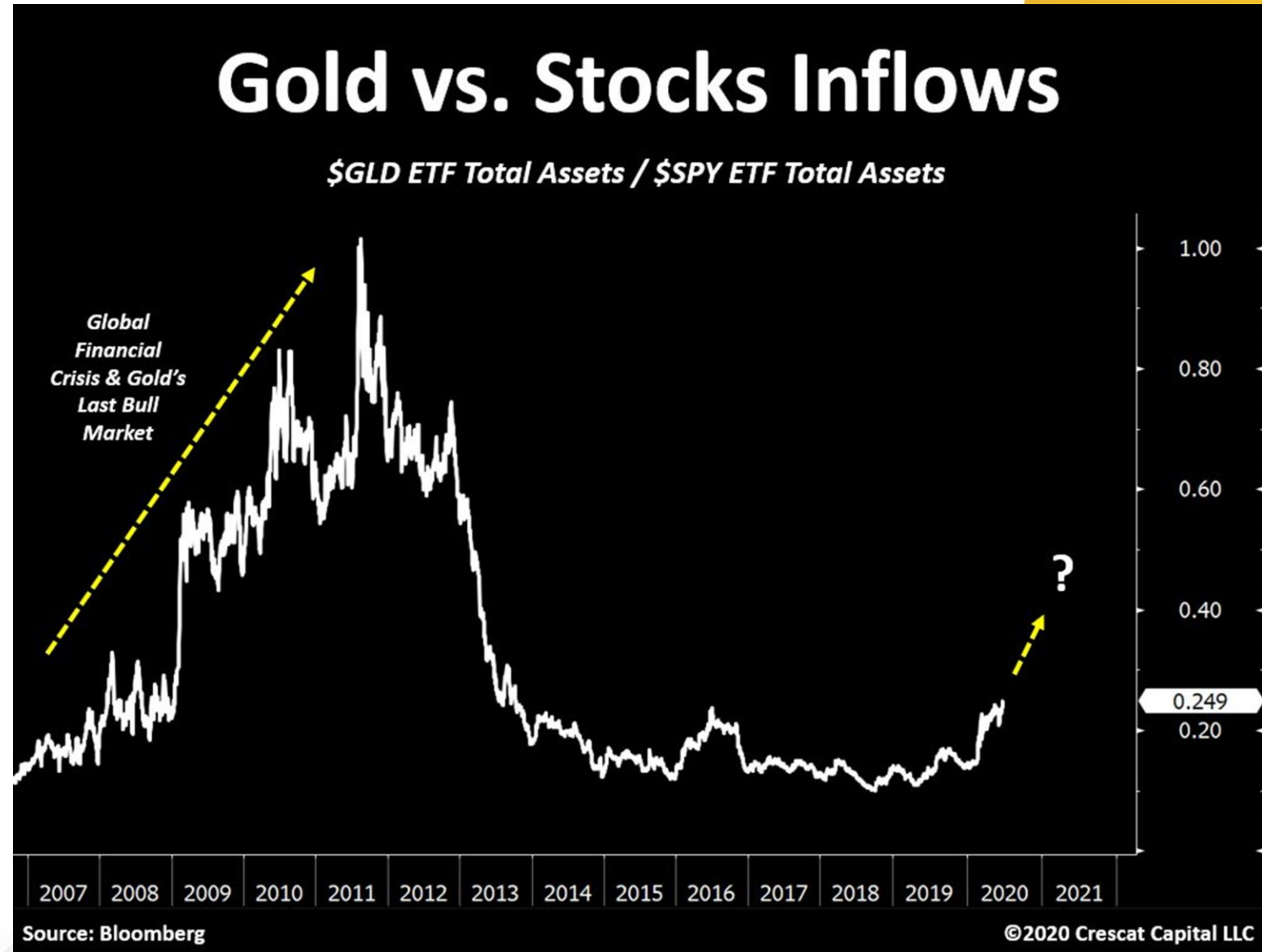


Source: Bloomberg

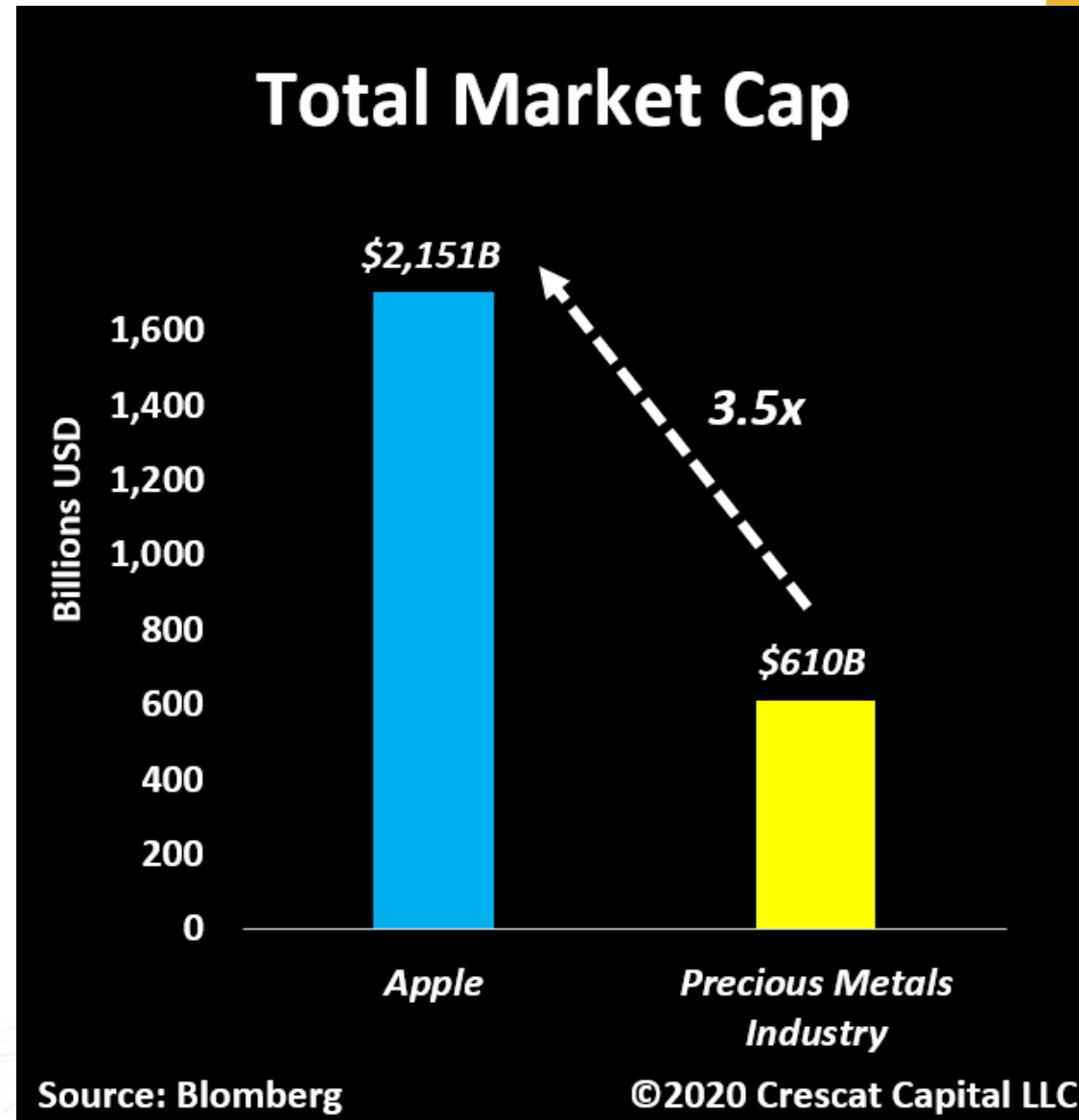
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If precious metals stocks were a sector, they would have the cleanest balance sheets of them all.

Gold inflows are not only rising, but also starting to outpace S&P 500 flows.



The entire precious metals industry is dirt cheap. Apple's market cap is 3.5 times the size of the whole precious metals industry.



# Precious Metals Miners vs. Global Stocks

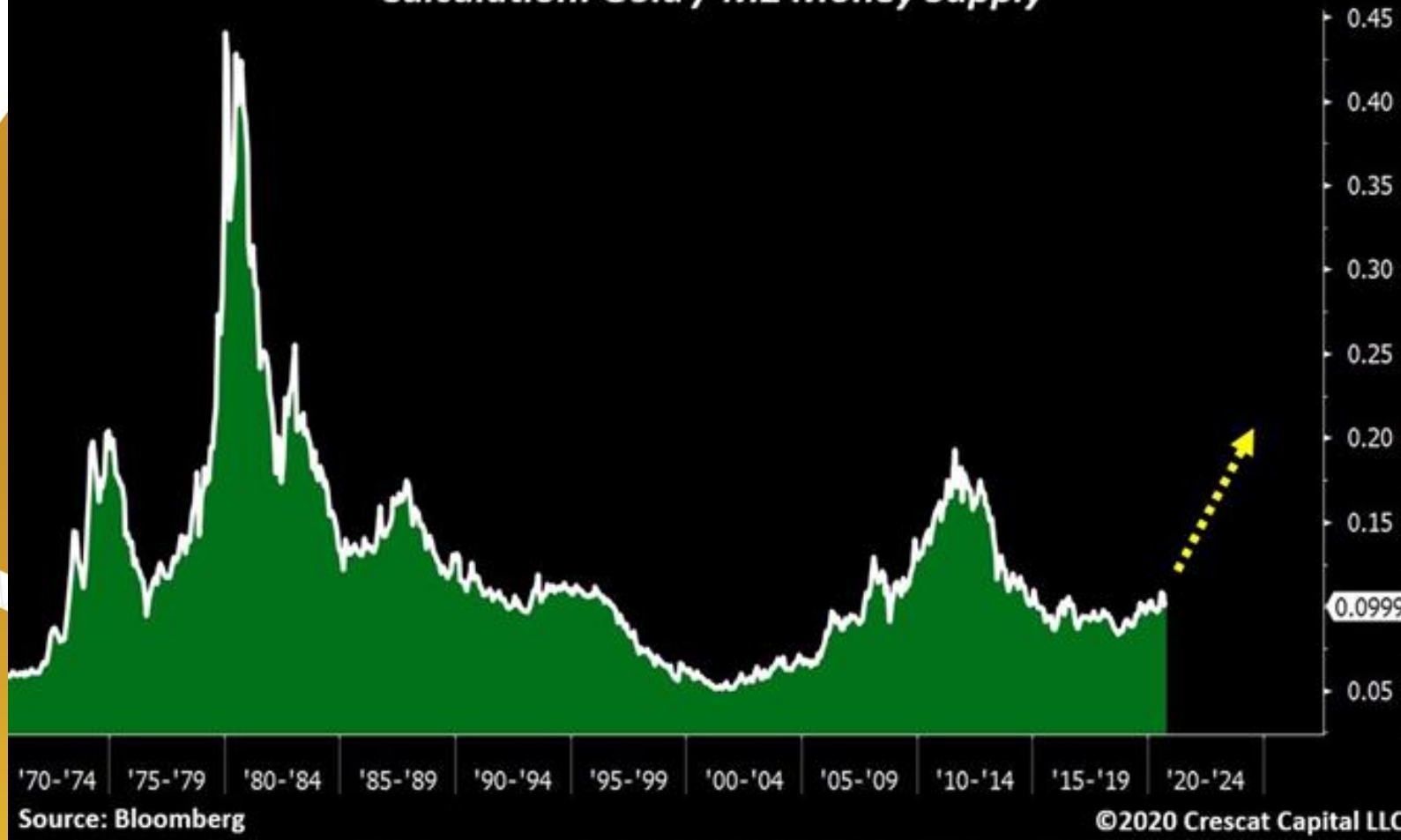
*Philadelphia Stock Exchange Gold and Silver Index / MSCI World Index*



Gold and silver mining stocks compared to global stocks are still near record lows.

# Gold vs. Money Supply

*Calculation: Gold / M2 Money Supply*

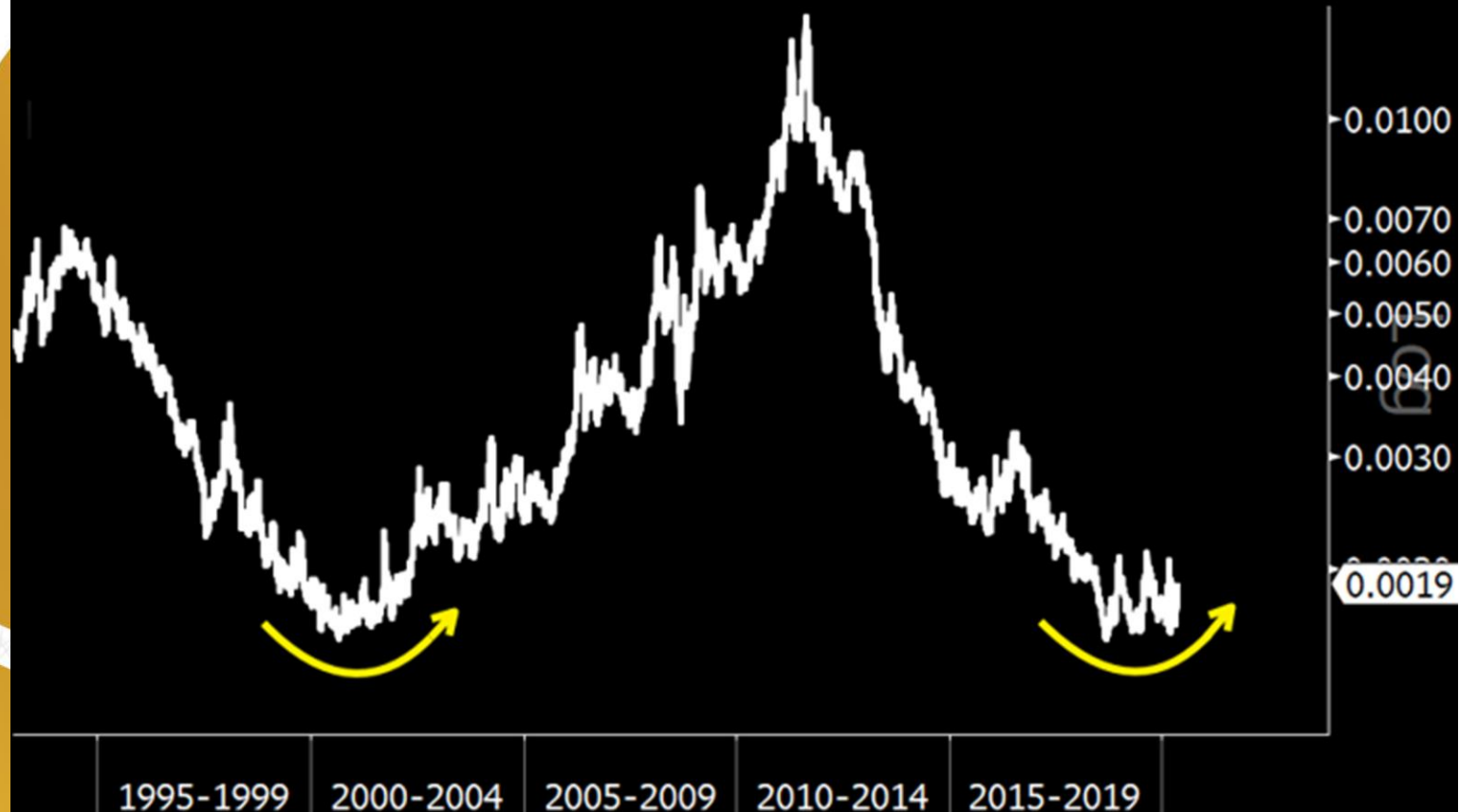


Price of gold relative to M2 money supply still looks historically attractive with significant upside likely ahead.



# Silver-to-Equities Ratio

*Calculation: Silver / Russell 3000 Total Return*

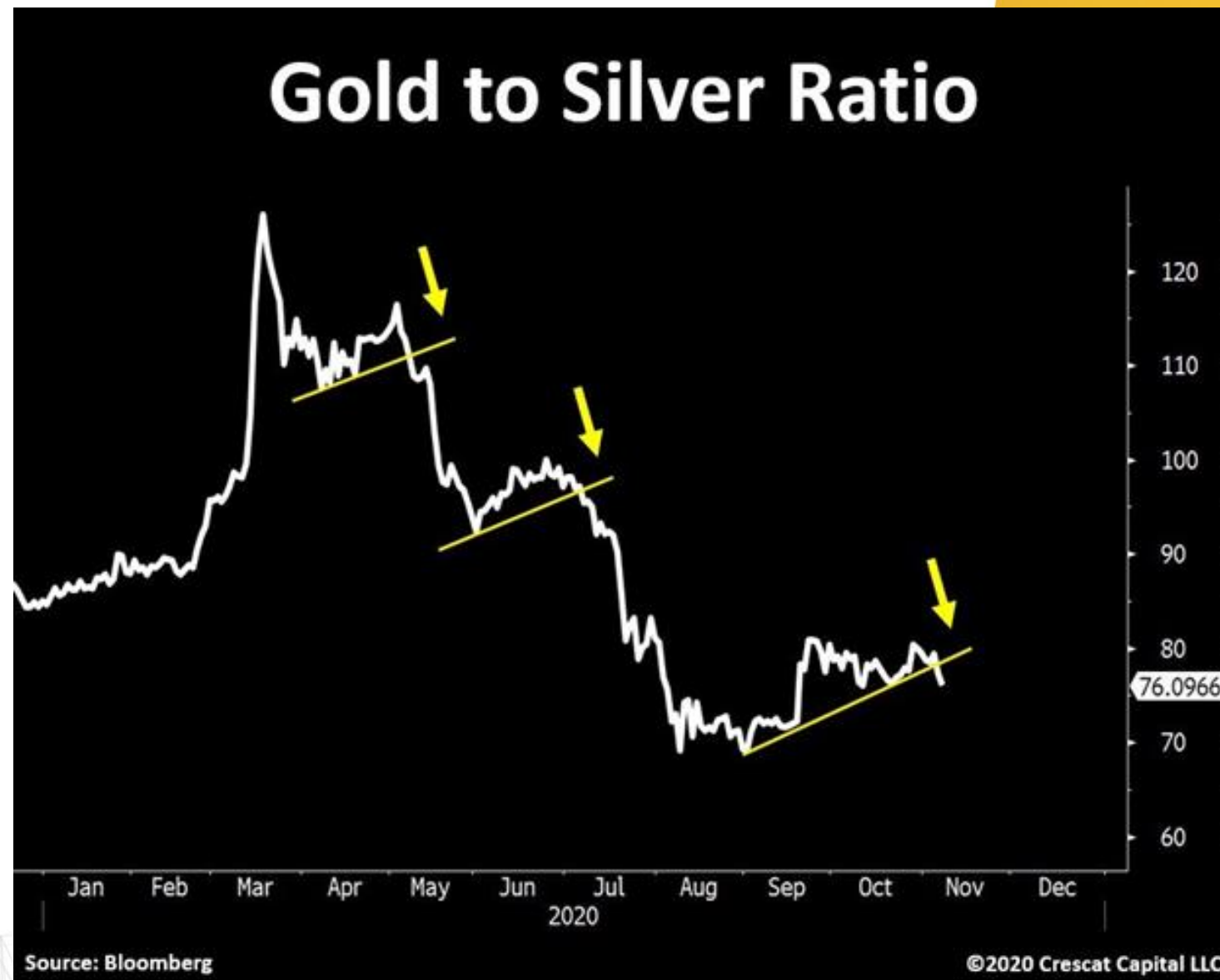


Source: Bloomberg

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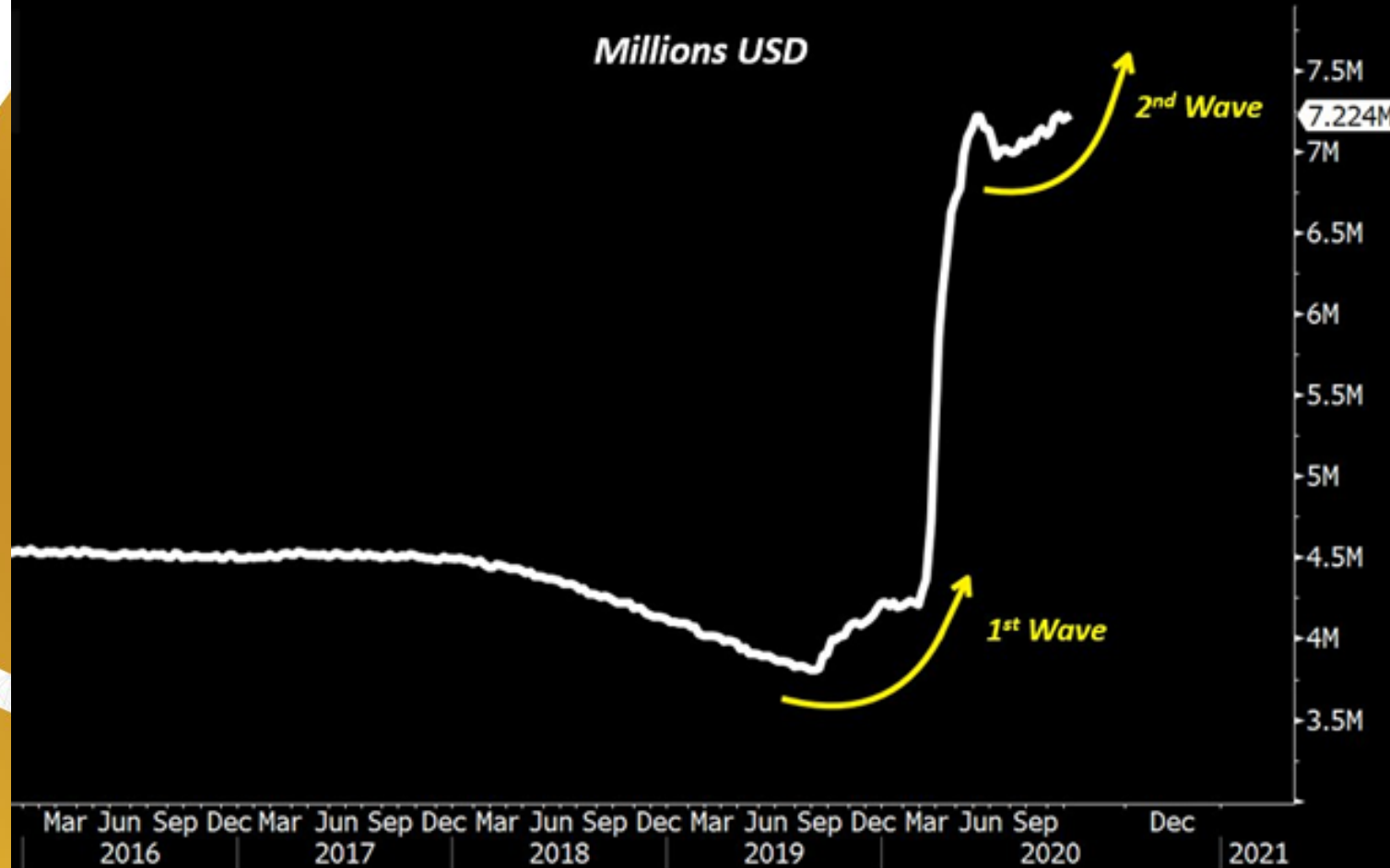
The silver-to-equities ratio is a clean looking double bottom, a battle of two extremes.

Gold-to-silver ratio is starting to break down again. This is exactly the leadership one would expect in a healthy bull market for precious metals.



# Fed Balance Sheet Assets

Millions USD



Source: Federal Reserve

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By the end of 2021 \$8.5T of US Treasuries will be maturing.



# US Economic Activity

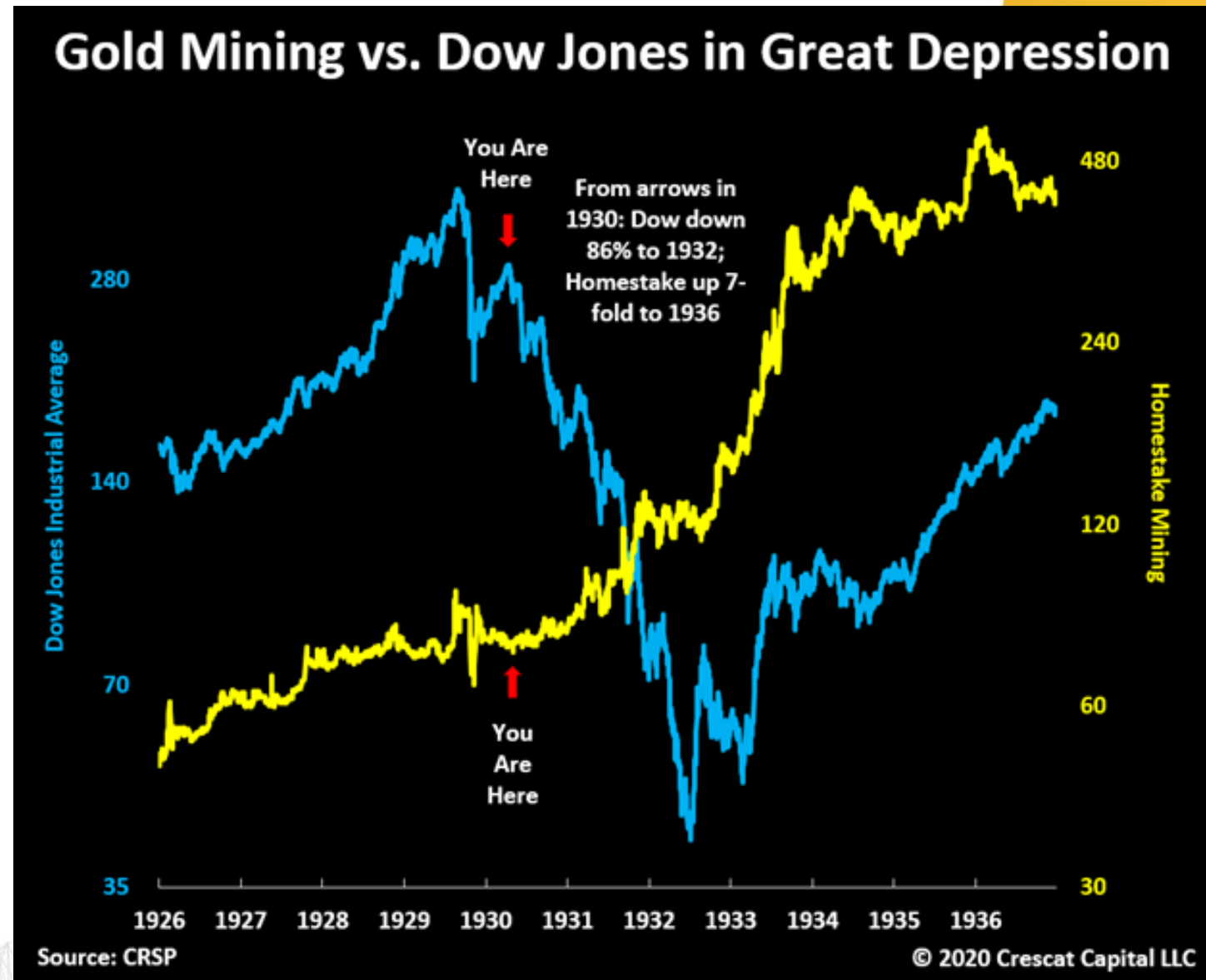
US Federal Reserve of New York Weekly Economic Index



Just from the US government side, it took \$4T of debt to get economic activity back to the worst levels of the great recession.

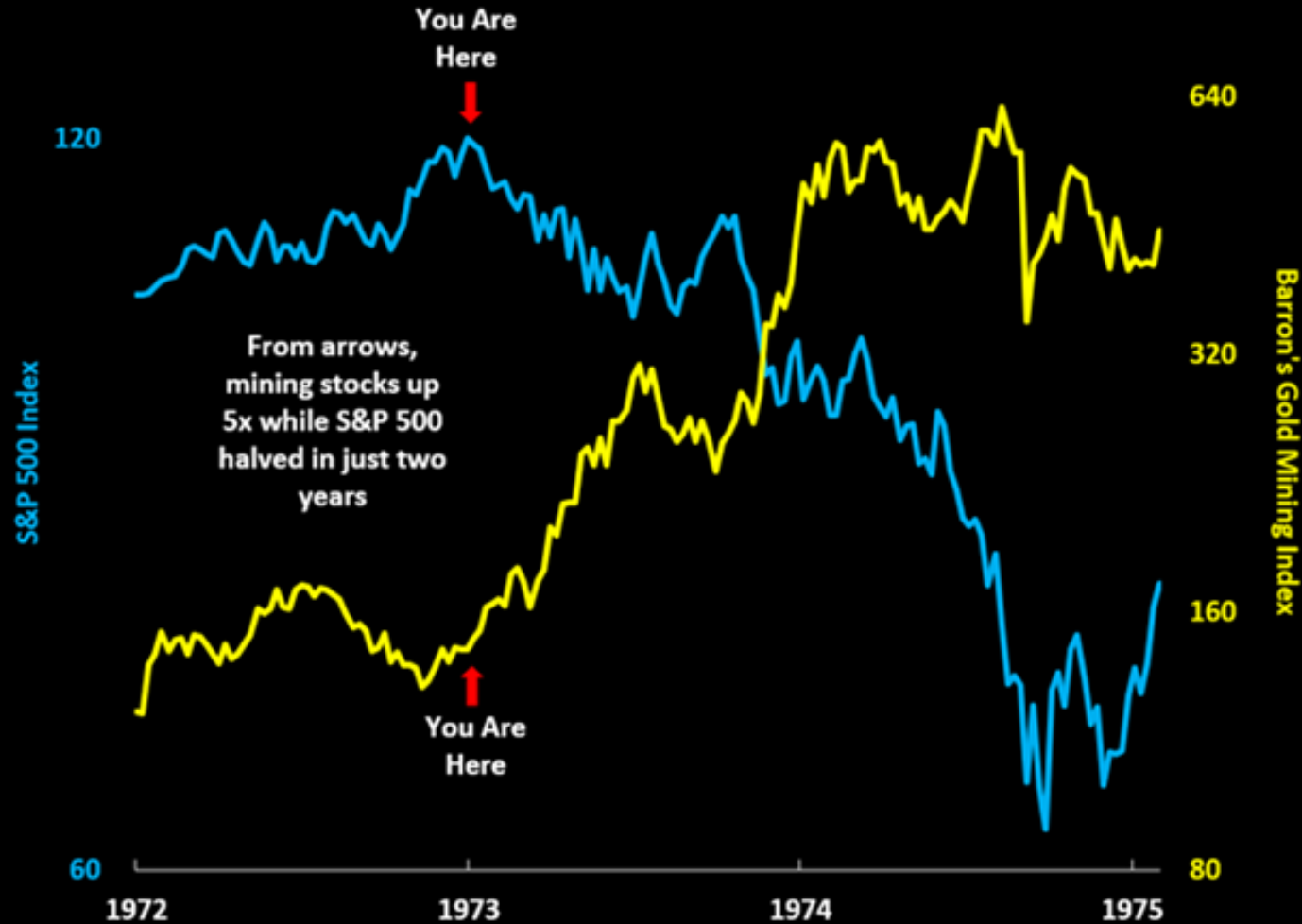


Gold mining companies acted in counter cyclical fashion to create wealth during the credit deflationary bust of the Great Depression.





## Gold Miners vs. S&P 500 in 1973-74



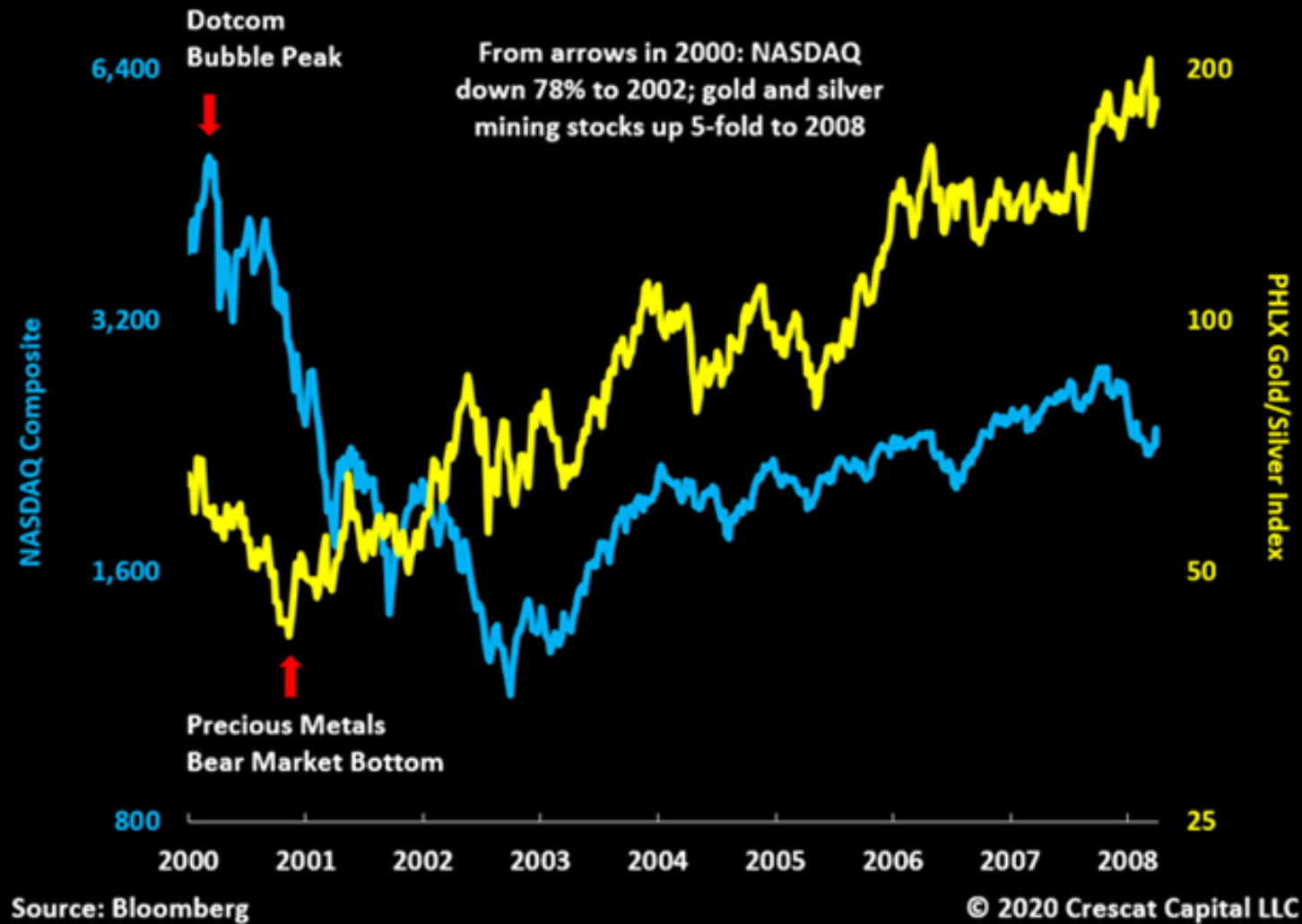
Source: Gold Charts R Us

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The Barron's Gold Mining Index increased 5-fold during the 1973-74 Stagflationary Recession.

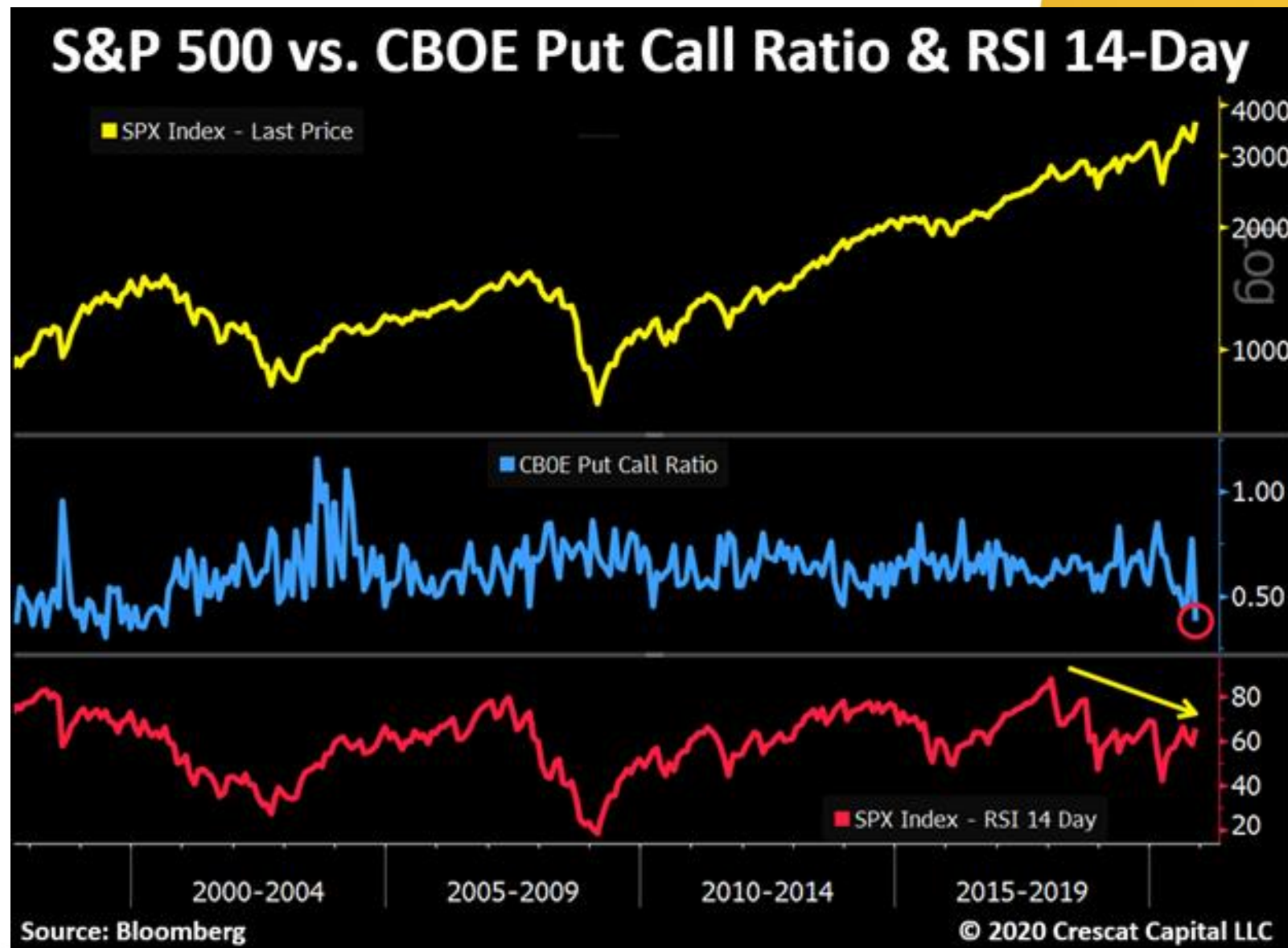


## Gold Miners vs. NASDAQ in Tech Bust



The Philadelphia Stock Exchange Gold and Silver Index increased five-fold from 2000 to 2008 while the Nasdaq composite declined 78% from 2000 to 2002.

Speculative long call option positioning today relative to puts is the highest it has been since the peak of the tech bubble.



The percentage of S&P 500 Index members that are above their 200-day moving average just reached a new extreme for the uber-high valuation environment of the last five years.





# US Stocks vs. Financial Conditions



Financial conditions today, driven by historic low interest rates and tight credit spreads, are the loosest yet, the easiest of the past thirty years, at the same time as valuations and leverage are the highest.