



## Equity Market Report

November 2022

Nick Reece, CFA  
VP, Macro Research & Investment Strategy  
Merk Investments

## Summary

Based on the economic outlook and market history, I think the market probably makes new lows before making new all-time highs. The market typically bottoms *in* a recession rather than before a recession; and the US economy looks likely to enter a recession before the end of 2023. In other words, the rally off the mid-October lows is probably a bear market rally rather than a new bull market. As of last week's close, the S&P was just 17% off the previous all-time high, in mere correction territory. Meanwhile, an impending recession looks more likely now than at any point so far this year.

To recap, the max drawdown in the S&P 500 so far has been 25% over a 9-month period. That's shy of historical central tendencies in terms of both depth and duration. Historically, the mean bear market duration is 17 months (with a massive range: 1-42 months), the median is 13 months, and the central tendency is 8-21 months. The mean decline is 39% (also with an extensive range), the median is 34%, and the central tendency is 27-49%.

The Fed might pause/pivot in the coming months but that's only bullish for the equity market if we get a soft-landing (i.e., avoid recession), which seems unlikely. In other words, a Fed pause (and eventual pivot) is likely bullish for Treasury bonds but not for stocks, at least in the near-term.

If FTX is like Enron (as Larry Summers suggests), that would fit well with where we are now on the early 2000s market analog. The Enron scandal broke in October 2001, about a year before the ultimate low in the dotcom bust.

For active investors, tactical asset allocation likely warrants an underweight to equities relative to cash and mid-duration Treasuries. Within a domestic equities allocation, I continue to favor defensive sectors plus energy, and favor small-cap value over large-cap growth. While the path of least resistance might be lower for now, emerging markets look attractive from a long-term contrarian perspective, and should benefit from a secular dollar bear market over the next 5-10 years.

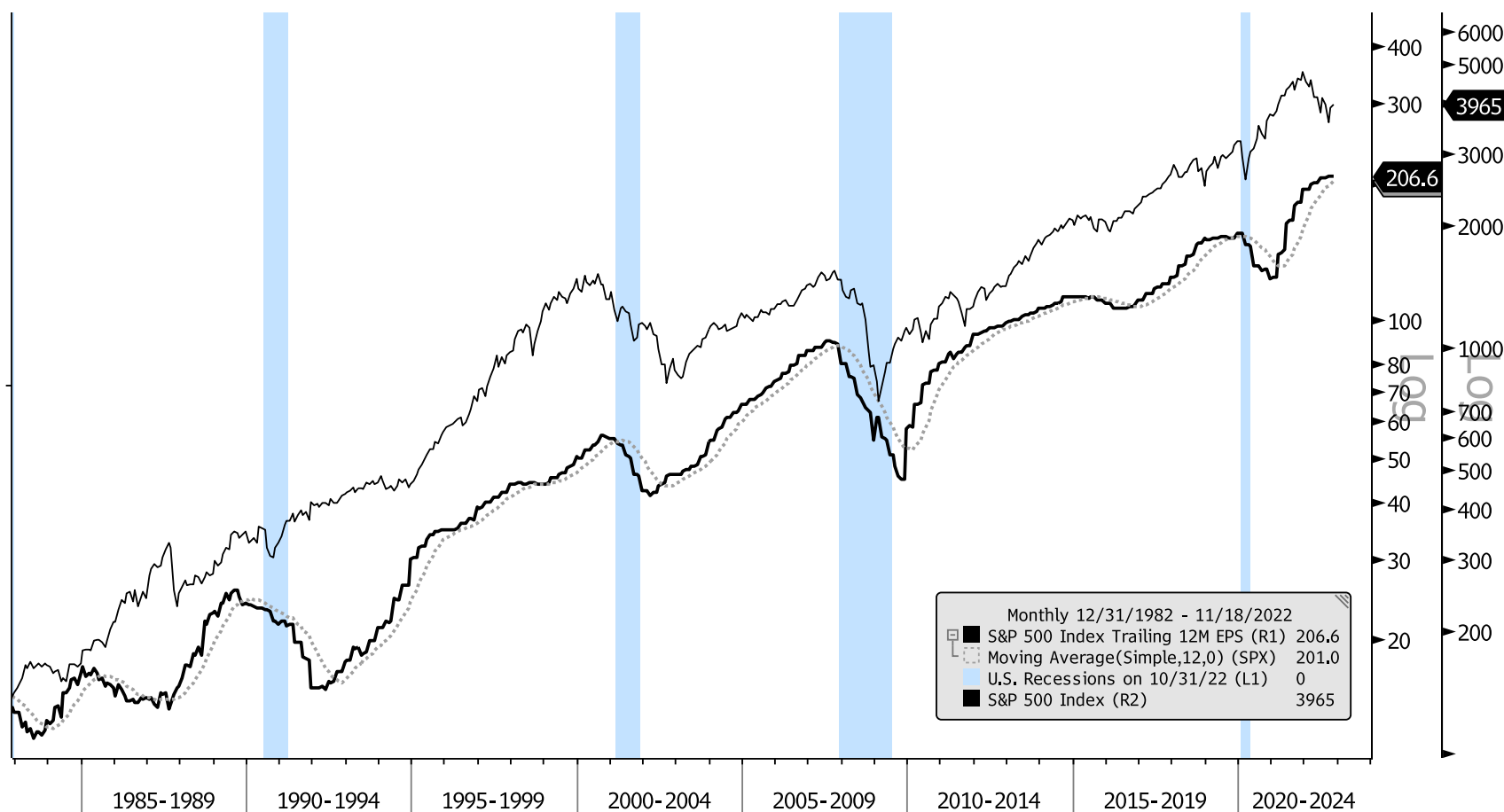
Currently, short-duration TIPS continue to look attractive from both an absolute and relative return standpoint. As of last Friday, the 1/15/2024 TIPS bond yields 2.6% real and the 1/15/2024 nominal Treasury bond yields 4.7% nominal. The breakeven inflation rate is 2.1% (i.e., 4.7% - 2.6%). Therefore, the TIPS bond is a better investment if you think headline CPI runs above 2.1% annualized between now and Jan 2024. For example, if headline CPI annualizes at 4%, the yield to maturity in nominal terms would be 6.5% (4% + 2.5%). Higher than expected inflation continues to be a risk to traditional stocks and bonds.

In summary, the balance of risks to the market remain skewed to the downside. As always, the outlook remains data dependent and everyone needs to put probability and reward-to-risk assessments in the context of their strategy, process, and time horizon.

-Nick Reece, CFA

## Earnings Backdrop

S&P 500 Trailing 12-month Earnings per Share and the S&P 500



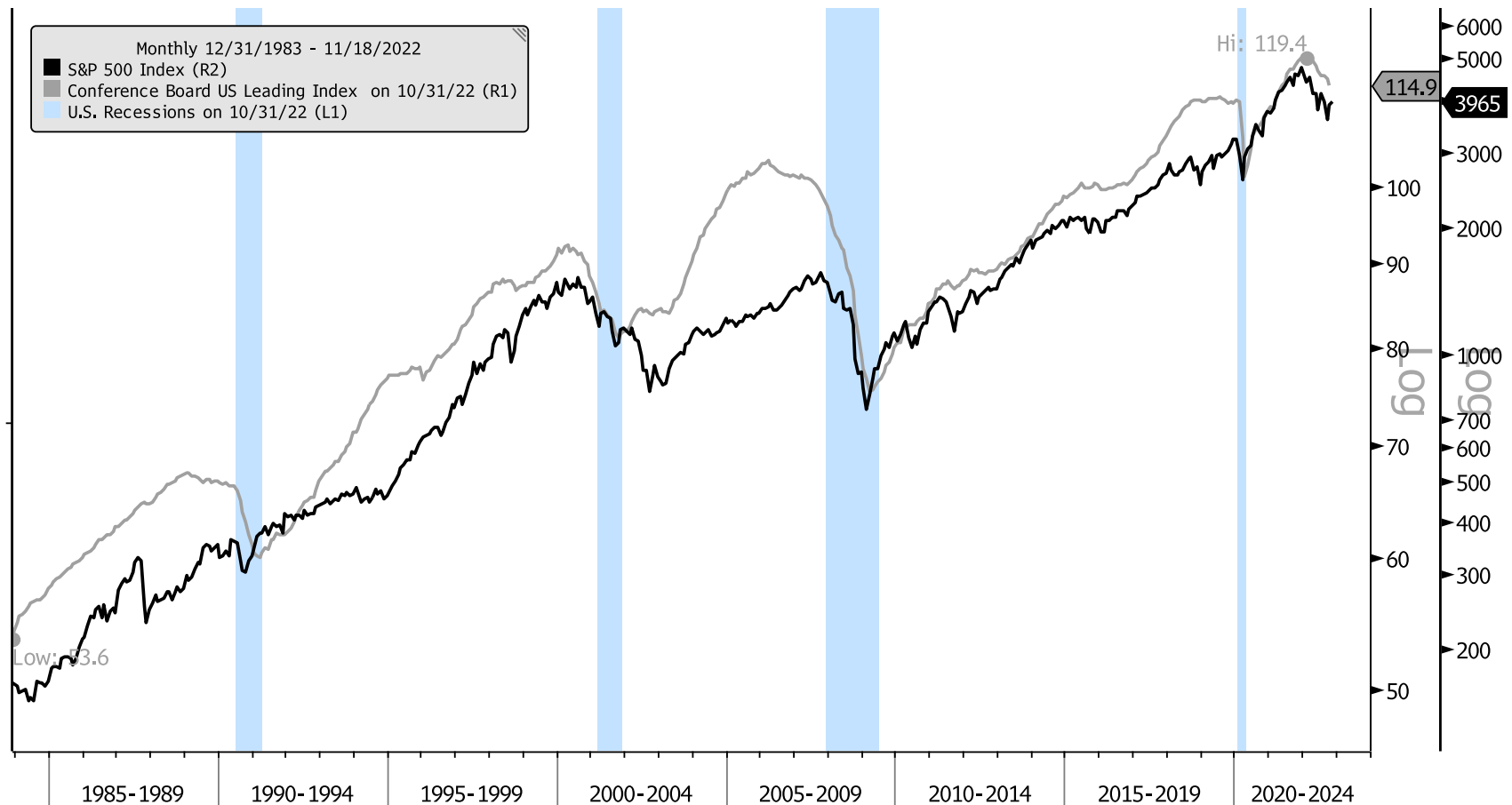
Source: © Merk Investments, Bloomberg

Analysis: Factset's 2022 calendar year earnings growth estimate is +5.2% (down from last month's estimate). Currently, 2022 earnings for the S&P are estimated to be 221 (down from last month's forecast). So, the market is trading at about 18x this year's earnings. Next year's earnings are expected to be 232 (down from last month's forecast). Chart Framework: I'd get incrementally negative if earnings fall below their 12-month moving average while the market is at or near bull market highs. This is more of a coincident or confirmatory indicator. Fundamentals don't exist in a vacuum; they should be looked at relative to price.

[https://advantage.factset.com/hubfs/Website/Resources%20Section/Research%20Desk/Earnings%20Insight/EarningsInsight\\_111722B.pdf](https://advantage.factset.com/hubfs/Website/Resources%20Section/Research%20Desk/Earnings%20Insight/EarningsInsight_111722B.pdf)

## Business Cycle Backdrop

### Leading Economic Indicators (LEI) Index and the S&P 500

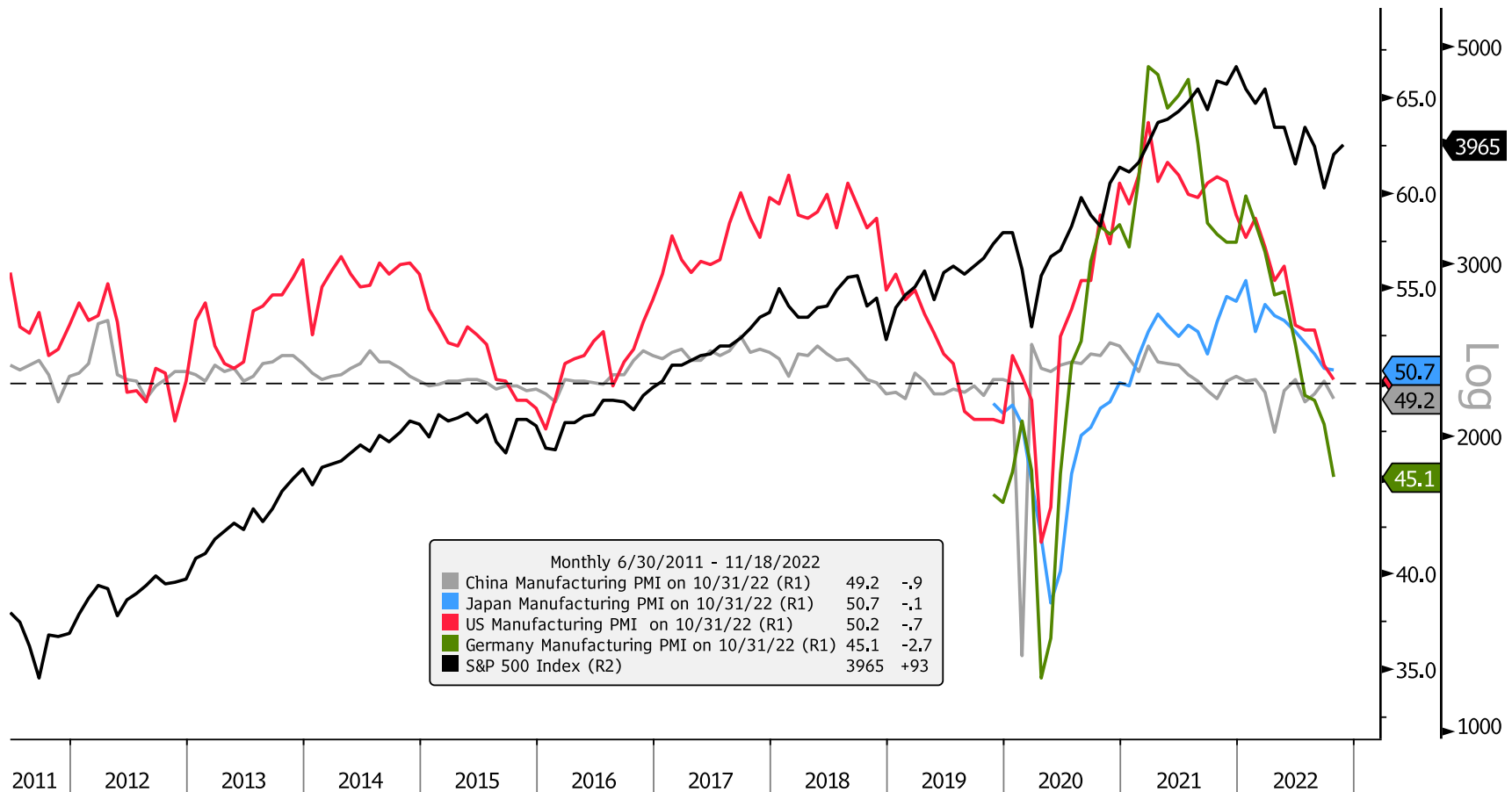


Source: © Merk Investments, Bloomberg

**Analysis:** The LEI index has moved lower over the past eight months, indicative of a coming recession. The last recession ended in April 2020, making it the shortest recession on record. It underscores why the market bottomed when it did—bear markets usually bottom before recessions end. It was a two-month recession, and about a one-month bear market. It might be better thought of as a crash. Chart Framework: I'd get incrementally positive on the market outlook if the LEI Index ticks up. Fundamentals don't exist in a vacuum; they should be looked at relative to price. If the market moves ahead of fundamentals deteriorating, there may be little to no benefit from taking defensive action. Currently, the market seems to be pricing in a high probability of at least a mild recession.

## Global Growth Backdrop

Large Economy Manufacturing PMIs (Purchasing Managers Index) and the S&P 500

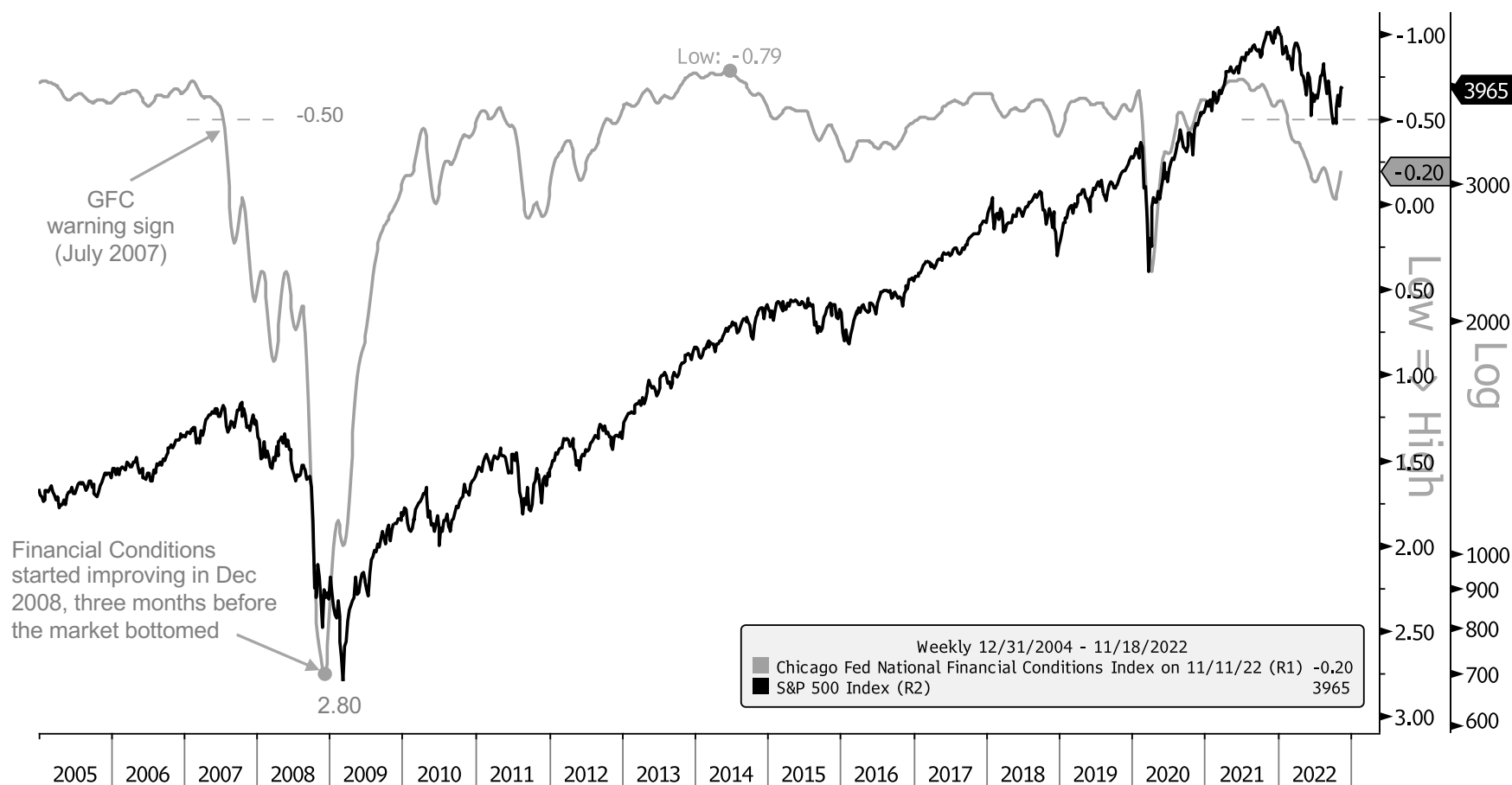


Source: © Merk Investments, Bloomberg

Analysis: Manufacturing PMIs were all lower over the past month. China and Germany are below 50. I remain negative on this framework. Chart Framework: I'd get incrementally positive on the market outlook with three or more PMIs moving higher or all PMIs back above 50. Fundamentals don't exist in a vacuum; they should be looked at relative to price.

## U.S. Financial Conditions

Chicago Fed National Financial Conditions Index (inverted in grey) and the S&P 500 (black)



Source: © Merk Investments, Bloomberg

Analysis: Financial conditions have eased slightly over the past month but remain restrictive. Chart Framework: I'd get incrementally positive on the market outlook if financial conditions materially ease. Fundamentals don't exist in a vacuum; they should be looked at relative to price.

## S&P 500 and G3 Central Bank Assets

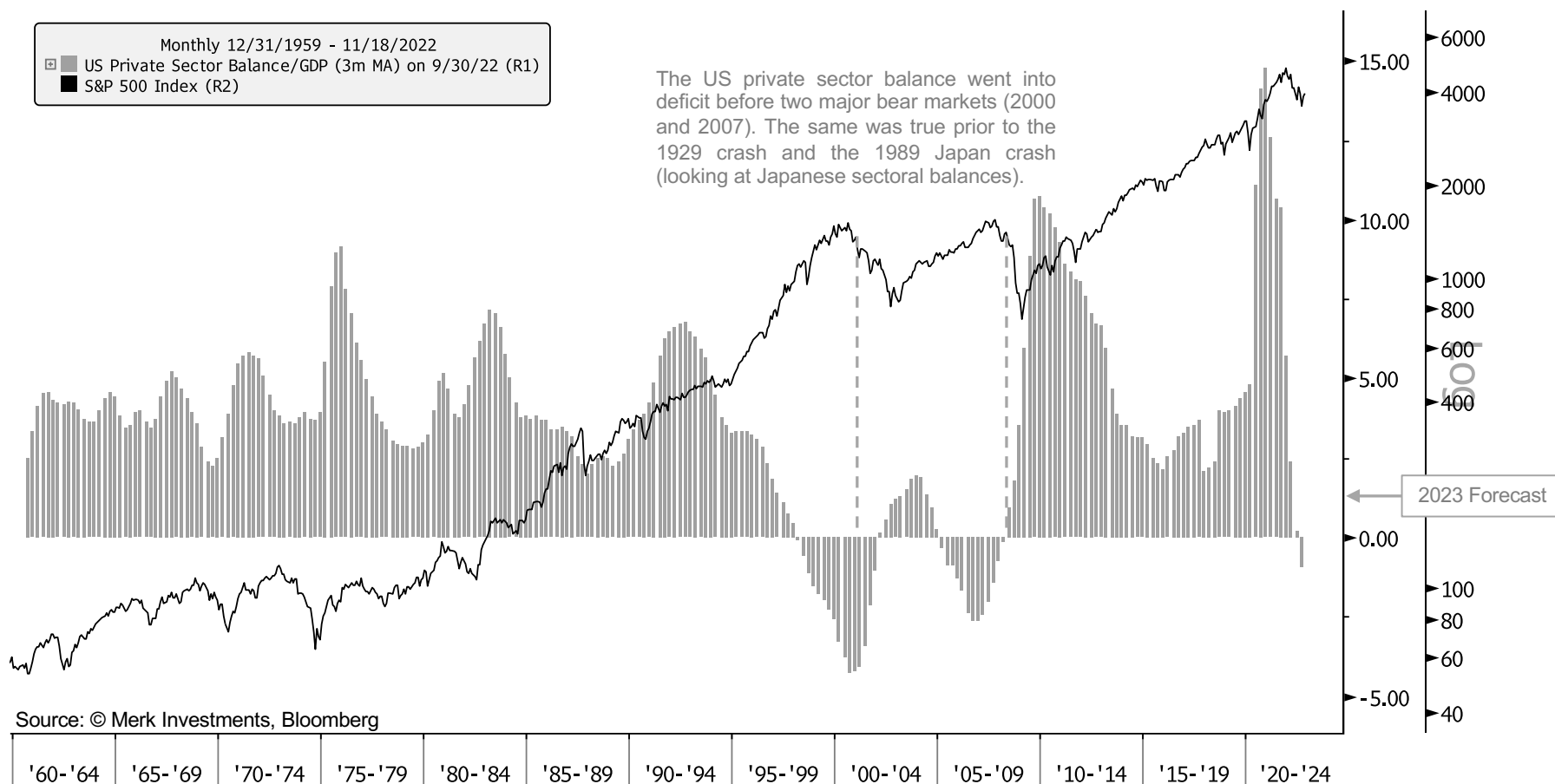
S&P 500 Index and G3 (U.S., Eurozone, and Japan) Central Bank Total Assets



Analysis: G3 (Fed, ECB, and BoJ) central bank total assets continue to decline. Fed QT has fully ramped up now, and the ECB has ended QE. It's important to include policy makers in market analysis. I'm currently negative on this framework. Chart Framework: I'd get incrementally positive on the market outlook if total G3 assets started moving higher again. Fundamentals don't exist in a vacuum; they should be looked at relative to price.

## Private Sector Balance and S&P 500

U.S. Domestic Private Sector Surplus/Deficit relative to GDP (12-month Moving Average) (grey) and the S&P 500 Index (black)

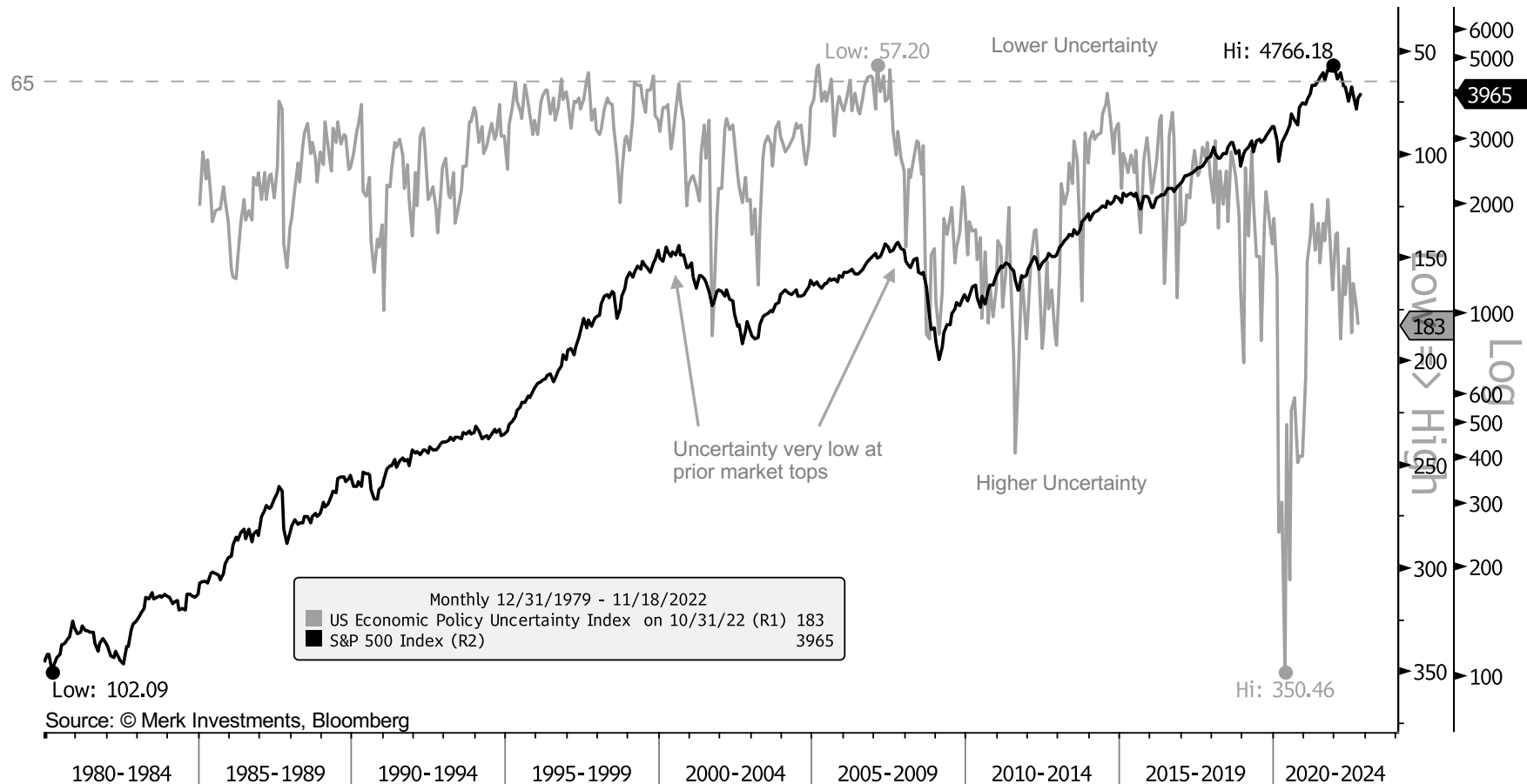


**Analysis:** The domestic private sector balance has been negative so far this year. The domestic private sector balance went into deficit before two major bear markets (that started in 2000 and 2007). The same was true ahead of the 1929 crash and the 1989 Japan crash (looking at Japanese sectoral balances). The US private sector balance is the inverse of the US government budget deficit net of the trade deficit. In other words, US govt deficits flow to US households and businesses, and to the rest of the world via the trade deficit. The private sector surplus is forecast to be +0.4% for 2022 and +1.1% for 2023. I'm currently neutral/negative on this picture—the balance should be positive again next year. **Chart Framework:** I'd get incrementally positive on the market outlook if the domestic private sector balance moves back above a 1% surplus, and negative if it is below zero for multiple quarters. Fundamentals don't exist in a vacuum; they should be looked at relative to price.



## Uncertainty ("Wall-of-Worry")

U.S. Economic Uncertainty Index (inverted in grey) and S&P 500 (black)

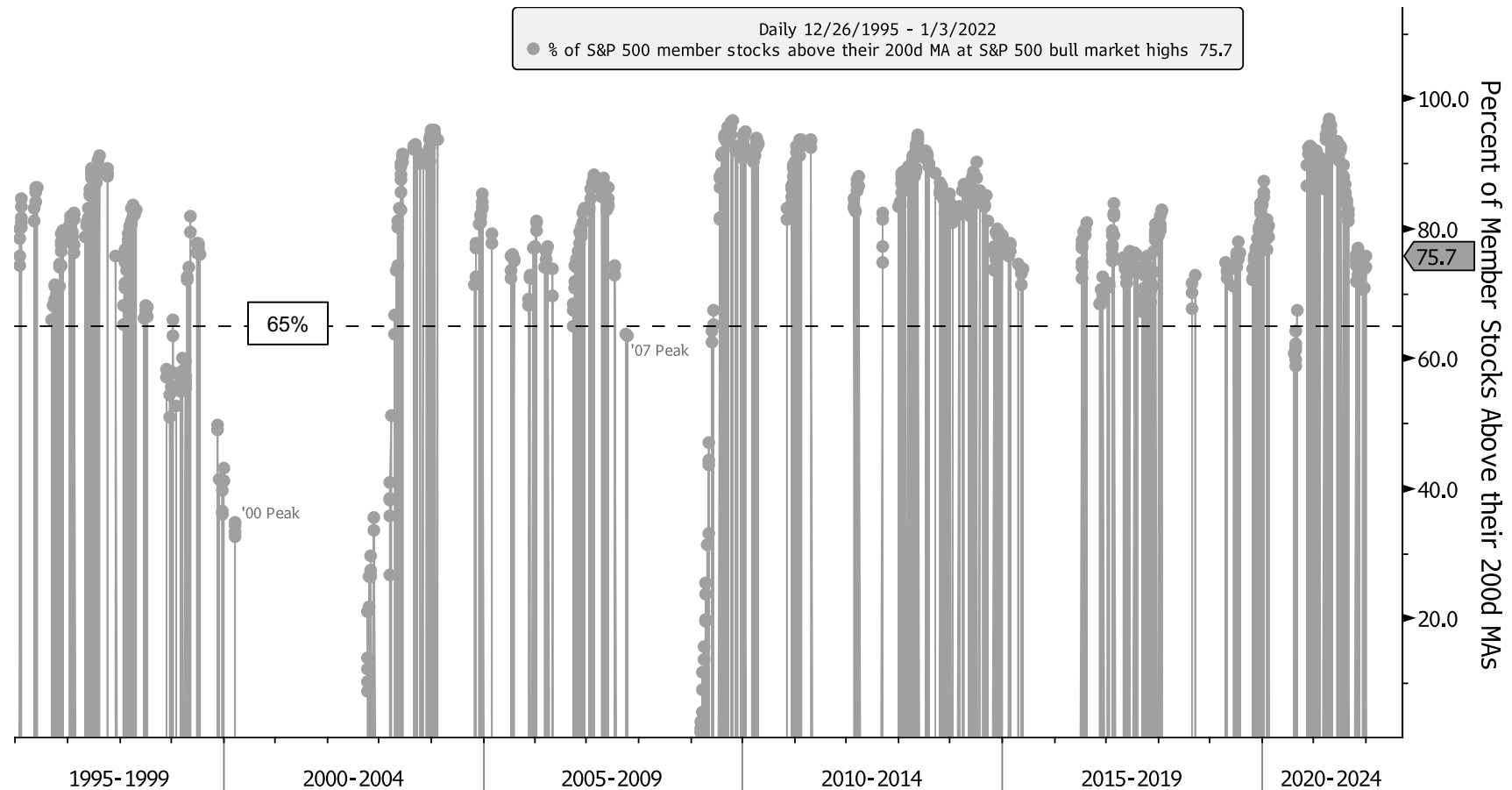


**Analysis:** There is a wall-of-worry for the market to climb. Counterintuitively, I would argue that uncertainty is generally a positive for the market on a forward-looking basis, as it provides more room for uncertainty to decline. Worrying headlines are fuel for a bull market. As the expression goes: if you wait for an all-clear sign, you'll buy at the top. This chart also reminds us that markets don't bottom on good news. Chart Framework: I'd get incrementally negative on the market outlook around the 65 level on policy uncertainty (dashed line) with the market flat to higher. Fundamentals don't exist in a vacuum; they should be looked at relative to price.

**Methodology:** The index quantifies newspaper coverage of policy-related economic uncertainty, the number of federal tax code provisions set to expire in future years, and disagreement among economic forecasters. <http://www.policyuncertainty.com/methodology.html>

## Market Breadth

Percent of S&P 500 member stocks above their 200d Moving Averages when the S&P 500 Makes a New Bull Market High

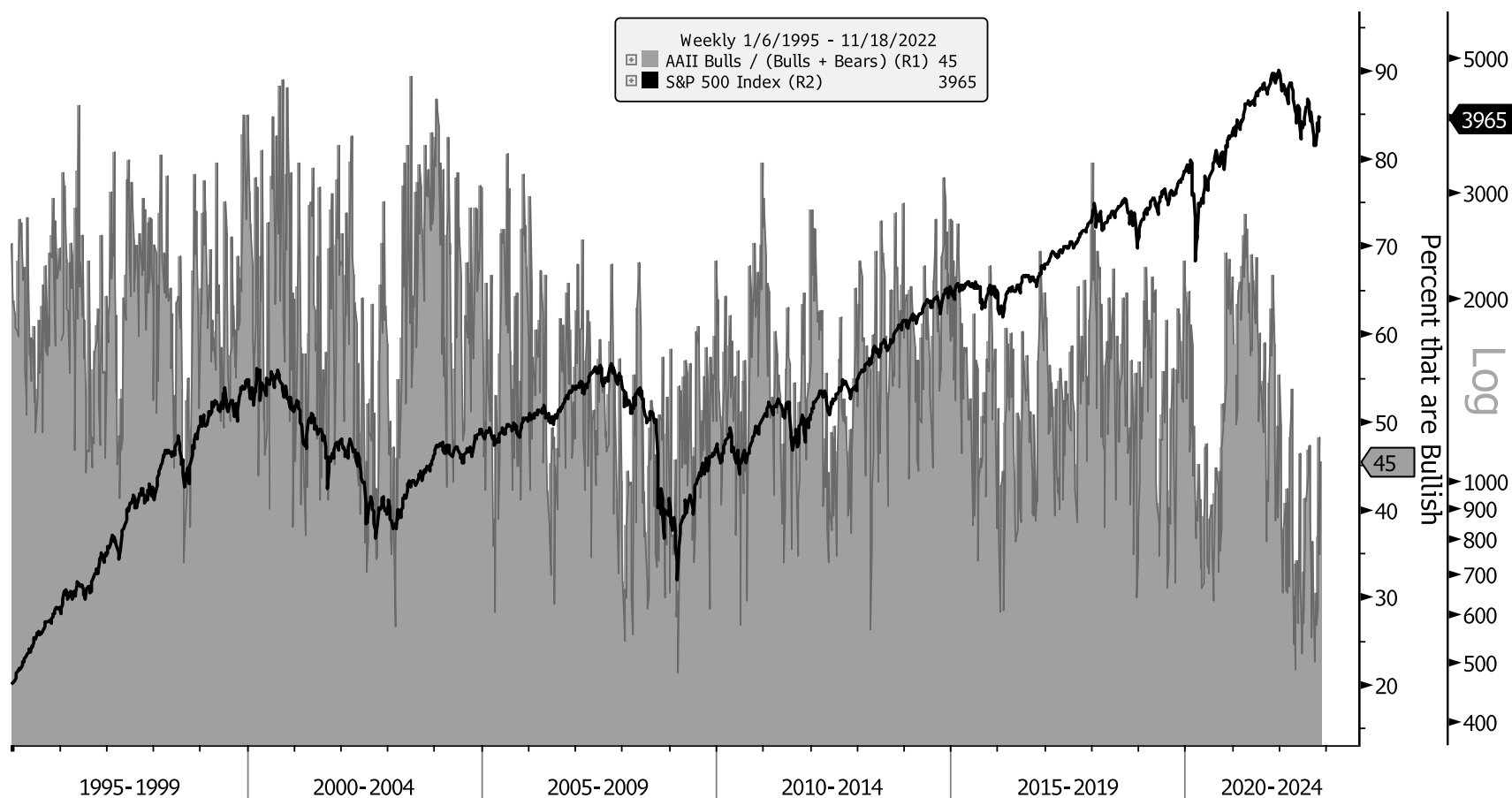


Source: © Merk Investments, Bloomberg

Analysis: Breadth at the most recent market high (1/3/2022) was 76% (well above the 65% warning level). Typically, as a bull market ages, breadth declines—you can see that in the 1999/2000 peak and the 2007 peak. The last bull market (2009-2020) had an unnatural end due to the pandemic/lockdowns. As a result of the crash and new bull market, breadth was reset to 2009 levels and then started gradually coming down. Chart Framework: I'd get incrementally negative on the market outlook if the S&P made new bull market highs with breadth below 65%.

## Market Sentiment

Percent that are Bullish (bulls / bulls+bears) and S&P 500

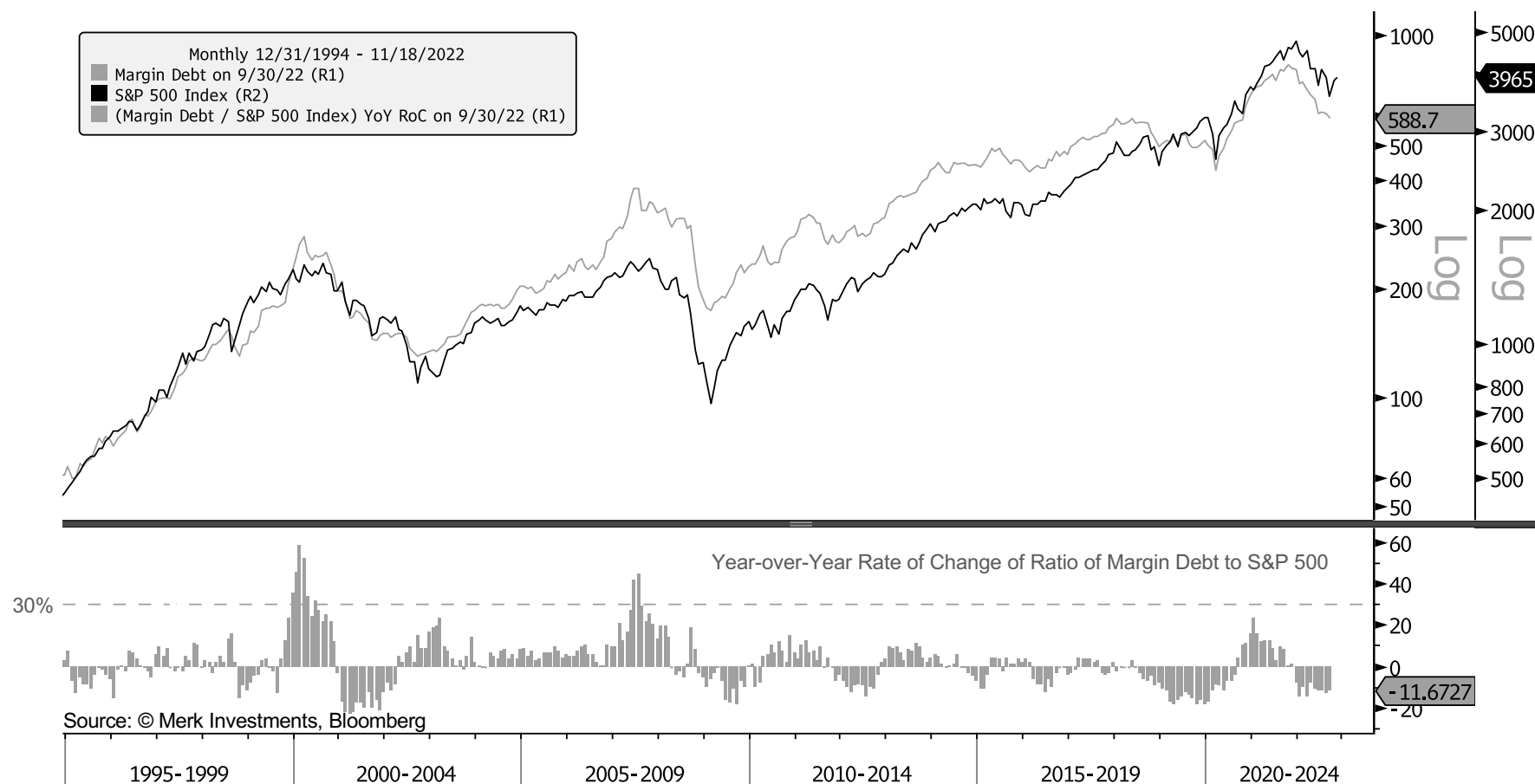


Source: © Merk Investments, Bloomberg

Analysis: Sentiment is currently 45% bullish. This chart should be looked at from a contrarian perspective, particularly at extremes. Given that bullish sentiment is currently in the middle of the range, my interpretation of this chart is neutral for the market. Chart Framework: I'd get incrementally negative on the market outlook with sentiment near or above 70, and positive near or below 30. The neutral range is roughly between 40 and 60.

## Margin Debt

Margin Debt and S&P 500 (top panel), 12-month change in Ratio of Margin Debt / S&P 500 (bottom panel)



Analysis: Nominal margin debt build-up has been roughly in-line with the market's rise over the past two years. In the previous two major market tops for the S&P 500 (2000 and 2007), margin debt rose significantly relative to the equity market, possibly reflecting the euphoric phase of the bull market, or long positions switching from strong hands (unleveraged) to weak hands (leveraged). It may be worth noting that margin debt didn't rise relative to the stock market (bottom panel) coming into the 2020 Covid-crash and the market recovered to new all-time highs quickly. Also, commentators that focus on the dollar value of margin debt have been (wrongly) warning about it since 2013. Chart Framework: I'd get incrementally negative on the market outlook if the YoY rate of change of the ratio (bottom panel) moves above 30 with the market at or near all-time highs. It might be worth noting that margin debt build-up was one of the key features of the 1929 bubble market top.

## Margin Debt

YoY Percentage Change in the S&P 500 (black) and Margin Debt (grey)

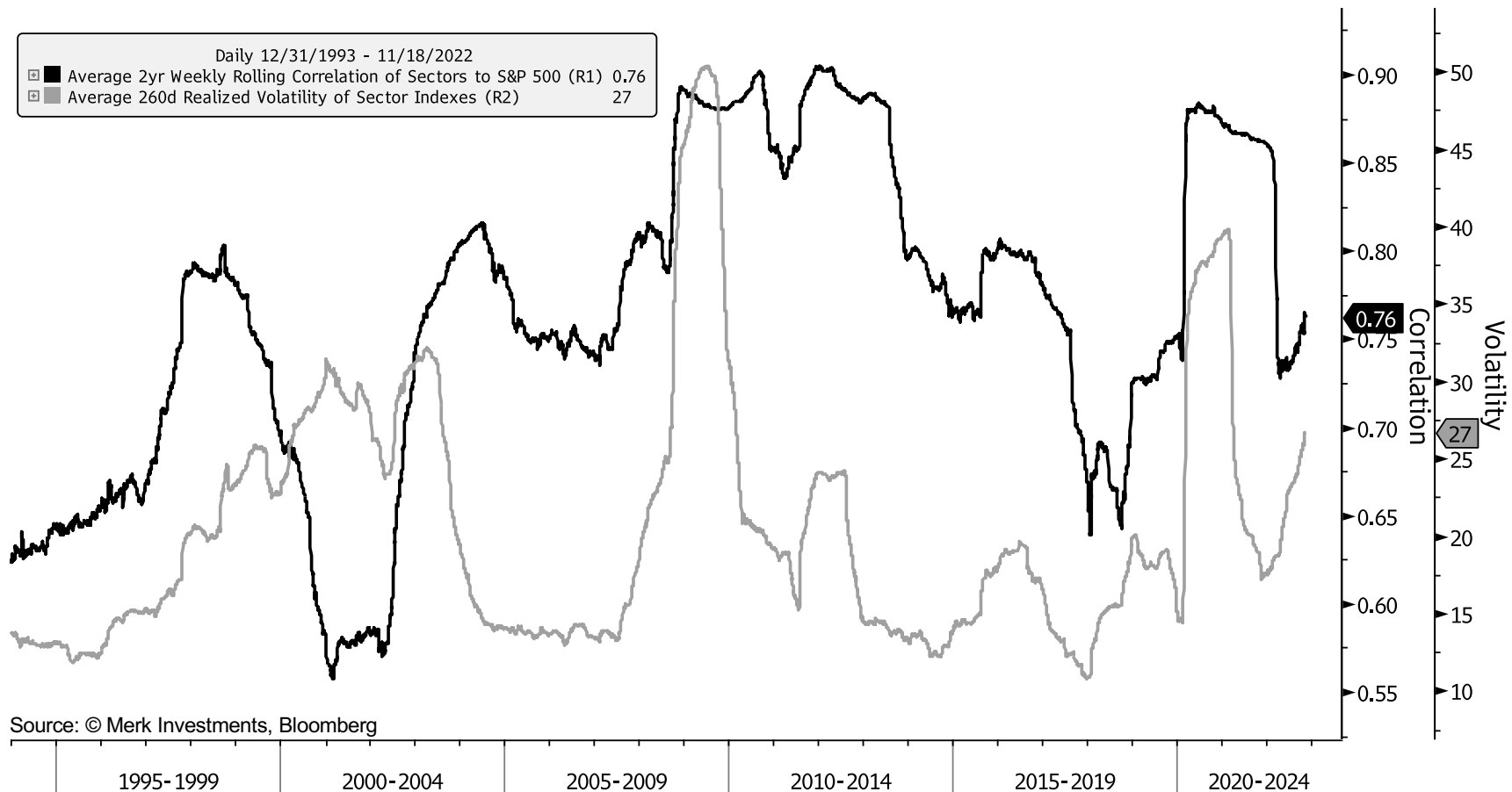


Source: © Merk Investments, Bloomberg

Analysis: This is another way of looking at margin debt relative to the market. Margin debt grew rapidly coming out of the Covid crash, but so did the market's value. 2020's rise in margin debt is in stark contrast to the build up seen in 2000 and 2007, which were not accompanied by an offsetting rise in the market's value.

## S&P 500 Correlation and Volatility

Avg. 2-yr Correlation of GICS\* Sector Indexes to the S&P 500 Index and Avg. GICS Sector Index 1-yr realized volatility

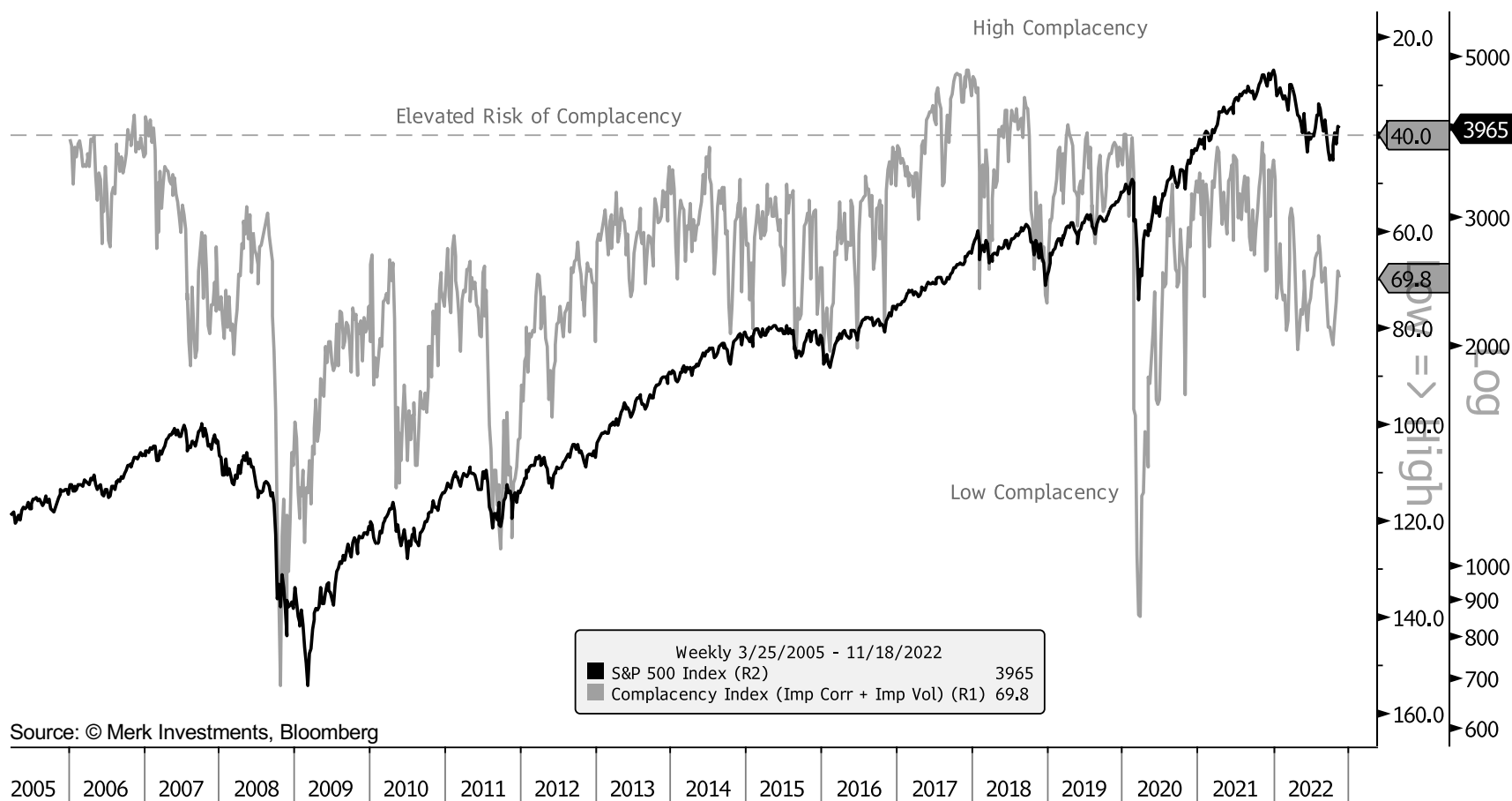


Analysis: Realized volatility has been moving higher from a relatively low level and correlation has also been rising recently. In my view, this chart should be looked at from a contrarian perspective, and currently suggests a neutral outlook medium/longer term as both correlation and volatility are near average levels. Framework: S&P 500 subsequent medium-term returns are likely to be most attractive when both correlation and volatility are high and have lots of room to decline (like in 2009).

\*GICS = Global Industry Classification Standards. The 10 sectors used for this analysis are: Consumer Disc., Consumer Stap., Energy, Financials, Health Care, Industrials, Information Technology, Materials, Telecommunication Services, and Utilities. In 2016 Real Estate was added as an 11<sup>th</sup> GICS Sector, which had been part of the Financials sectors. The S&P 500 stocks are each assigned to a sector. The correlation reading (black line) represents the average of all sector correlations to the S&P 500 (i.e., Correlation between Financials and S&P 500 + Correlation between Energy and S&P 500 etc., divided by 10). The volatility reading (grey line) represents the average the sector volatilities (i.e., Volatility of Financials + Volatility of Energy etc., divided by 10)

## S&P 500 Implied Correlation and Volatility

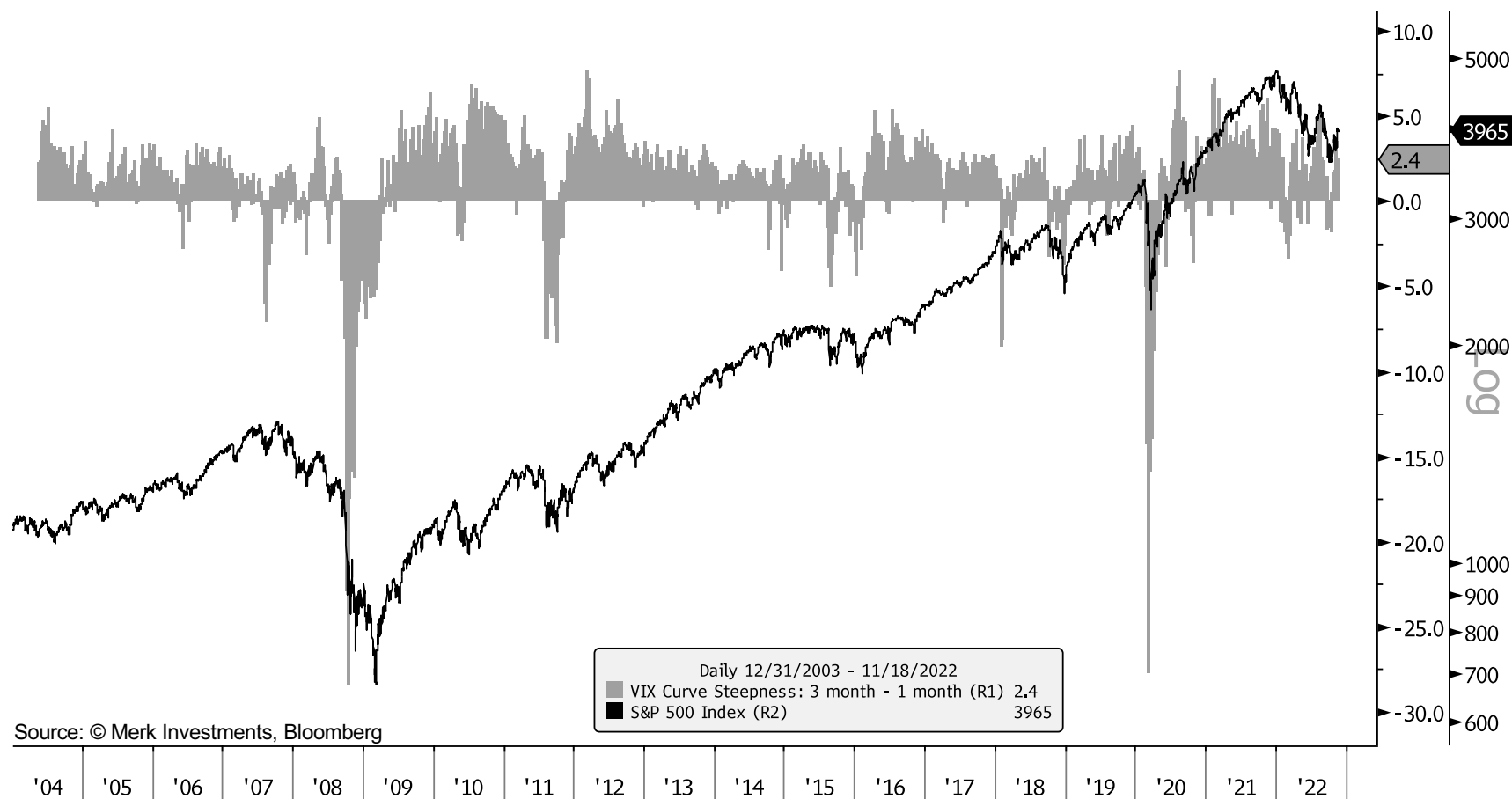
S&P 500 Index (black) and CBOE Implied Correlation Index + CBOE Implied Volatility Index (VIX) (grey)



Analysis: The complacency index (Implied Correlation + Implied Volatility) is near the middle of its long-term range. Risk of complacency is elevated at or below 40 (inverted axis). Prior to the current bear market, complacency was relatively elevated.

## VIX Curve

(3-month futures implied VIX minus 1-month futures implied VIX) and S&P 500



Analysis: As of last week's close, the VIX curve was positively sloped—meaning three-month future expected VIX is higher than one-month future expected VIX. VIX represents an estimate of the 30-day implied volatility of the S&P 500. In my view, when the VIX curve is negative a market drawdown phase is likely still ongoing. When positive, it may suggest the drawdown may be over for the time being. Chart Framework: In my view, this chart is best used for judging when drawdown periods might be over. If a negatively sloped VIX curve (i.e., grey area below zero) persisted, that could be a sign of stress remaining in the market. To some extent, I think this metric gives an idea of how far out into the future the market is willing to look. In other words, when the VIX curve is inverted the market is focused on the very short-term.



## S&P 500 Technicals

S&P 500 daily open-high-low-close chart with 50-day and 200-day Moving Averages (MA)

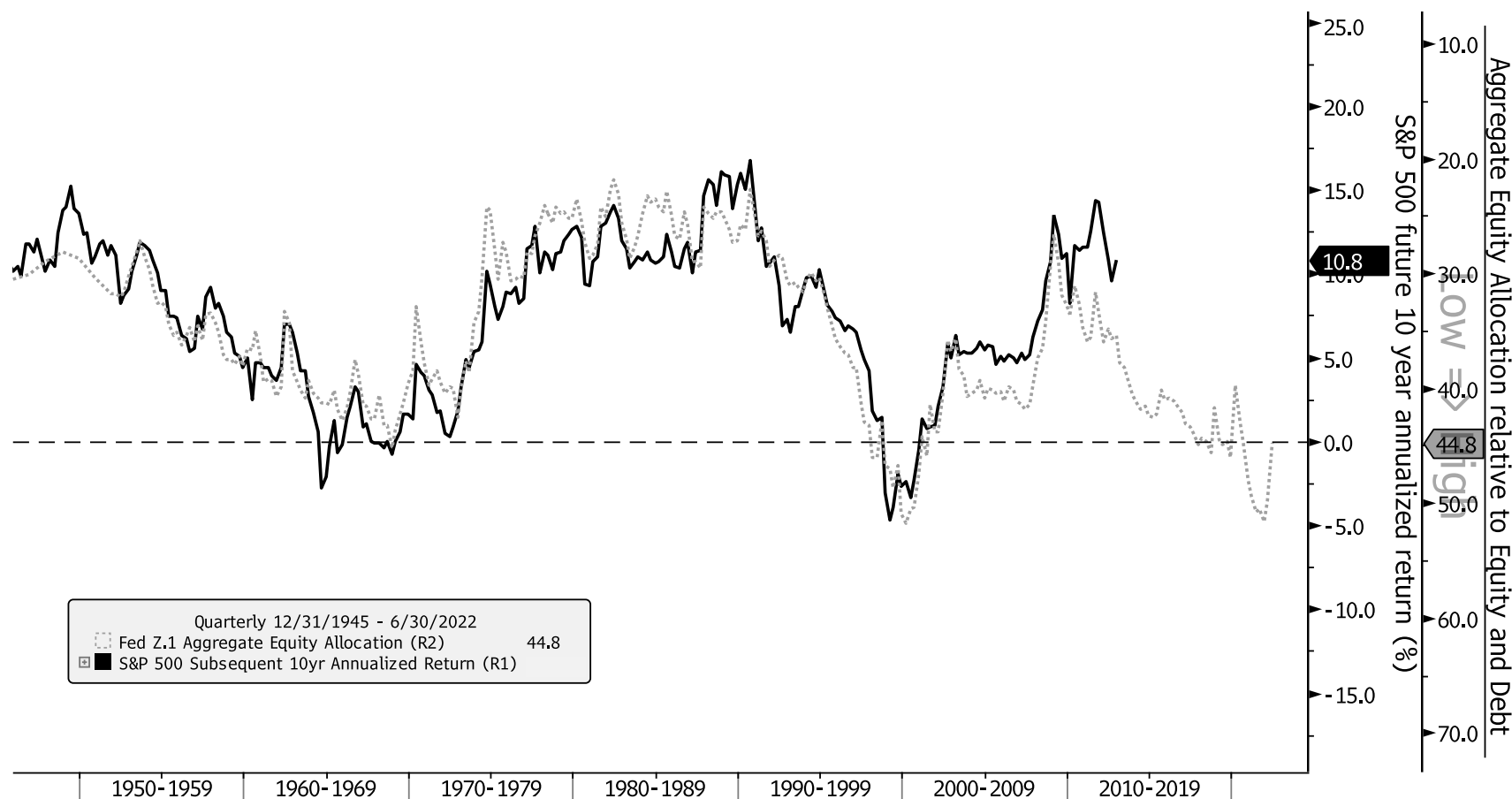


Source: © Merk Investments, Bloomberg

Analysis: The 50-day moving average remains below the 200-day moving average and the 200-day moving average remains in a downtrend. I'm currently negative on this picture. Chart Framework: I'd get incrementally positive on the market outlook if/when the S&P 500 200d MA moves back into an uptrend and when the 50-day MA crosses back above the 200-day MA.

## S&P 500 Valuation Indicator

Aggregate Equity Allocation Proxy (From Fed Z.1 Report) and S&P 500 Subsequent 10-year annualized Returns



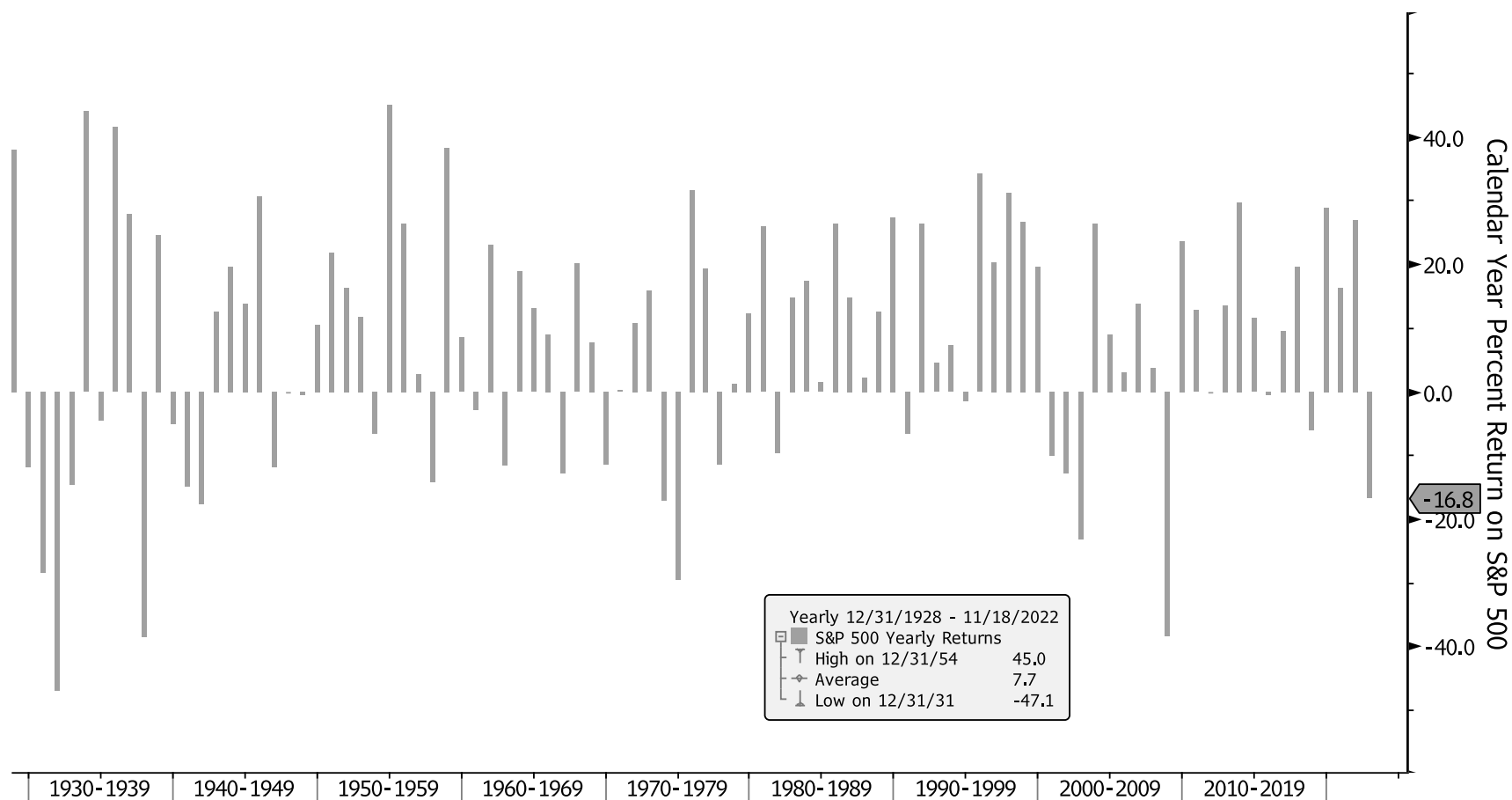
Source: © Merk Investments, Bloomberg

Analysis: If history is any guide, this chart suggests annualized S&P 500 returns (w/o dividends) might be near zero over the ten-year period starting 6/30/2022. The grey dotted line is the market value of US equity divided by the total market value of US equity and debt, which is used as a proxy for aggregate equity allocation. A 44.8% allocation is relatively high (as of 6/30/2022). The data comes from the quarterly Federal Reserve Z.1 report. Chart Framework: I'd get incrementally positive on the longer-term market outlook at an allocation level below 35%, which would likely only be after a substantial bear market.

Reference paper: <http://www.philosophicaleconomics.com/2013/12/the-single-greatest-predictor-of-future-stock-market-returns/>

## Calendar Year S&P 500 Returns

1928-to-Present Calendar Year Returns (dividends not included)



Source: © Merk Investments, Bloomberg

Analysis: As of 11/18/2022, the S&P 500 is -17% year-to-date. Coming into 2022, sell-side forecasts were for a 0% to 7% return for next year. Usually the consensus forecast is wrong (either too high or too low). For context: from 1928 through 2020 the S&P 500 average annual return was 7.7% (w/o dividends). The S&P 500 returned between 0-10% in only 16 of those 93 years (17% of the time). In other words, average years are actually rare. 52% of years had returns above 10%, and 31% of years had negative returns. It may be worth noting that the S&P 500 is up over 10% in most years.

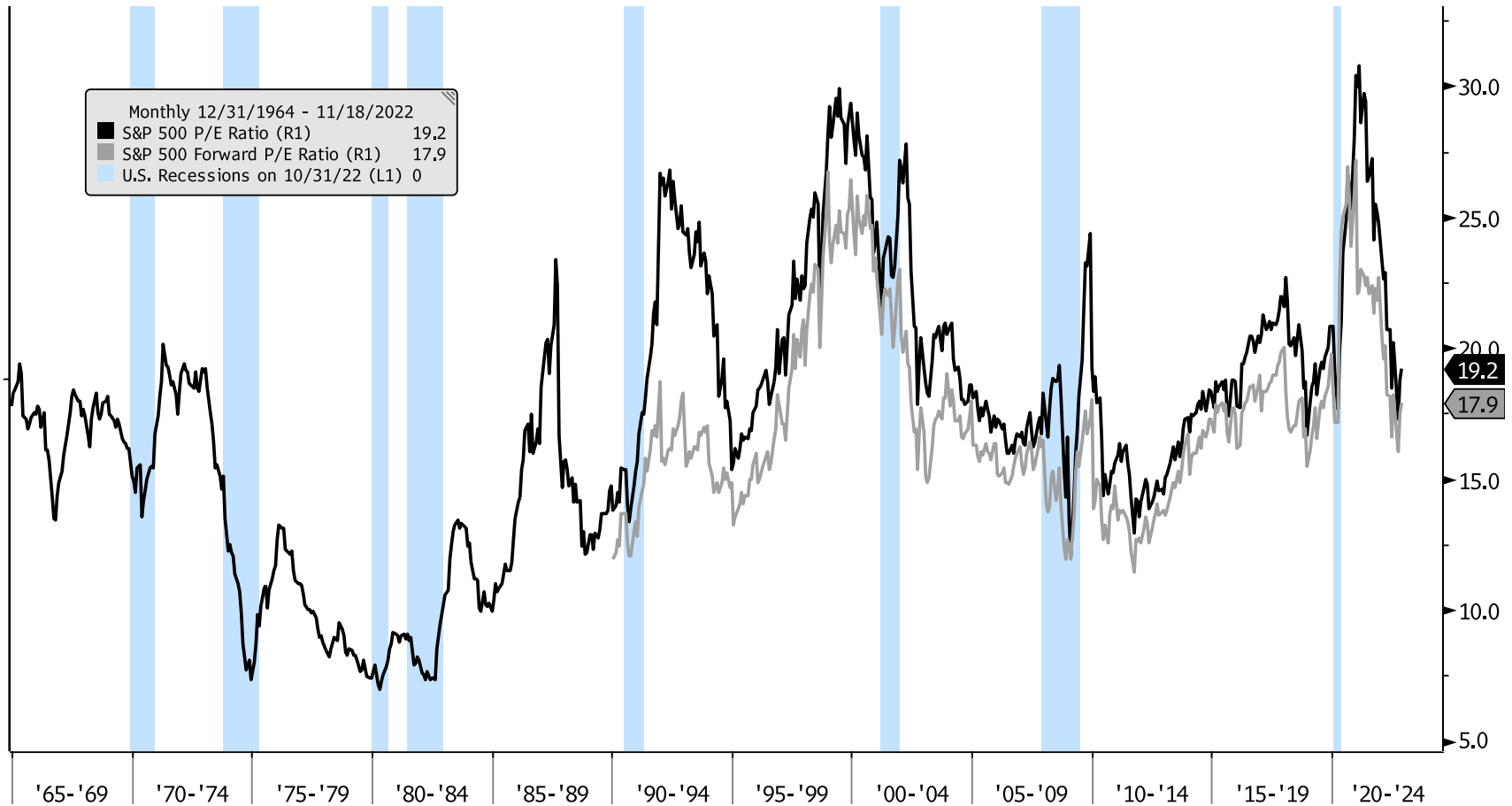
## Checklist

Chart	Time Horizon	Per Framework Characterization
Earnings	Short/Medium Term	Neutral/Negative
Business Cycle	Short/Medium Term	Negative
Global growth	Short/Medium Term	Negative
Financial Conditions	Short/Medium Term	Negative
Central Bank Support	Medium Term	Negative
Private Sector Balance	Medium Term	Neutral/Negative
Uncertainty*	Medium Term	Positive
Market Breadth	Medium/Longer Term	Neutral/Positive
Market Sentiment*	Short/Medium Term	Neutral
Margin Debt*	Medium/Longer Term	Positive
Correlation/Volatility*	Medium/Longer Term	Neutral
VIX Curve	Short Term	Positive
S&P 500 Technicals	Medium Term	Negative
Valuation	Longer Term	Negative
Time Horizon		Overall Characterization
	Short Term (<6 months)	Negative with high uncertainty
	Medium/Longer Term (6m - 2years)	Neutral/Negative with high uncertainty

\*contrarian indicators  
© Merk Investments LLC

## S&P 500 Trailing and Forward 12-month P/E Ratios

S&P 500 Index Trailing 12-month Price/Earnings Ratio (black) and S&P 500 Index Forward estimated 12-month Price/Earnings Ratio (grey)



Source: © Merk Investments, Bloomberg

Analysis: Both the forward and trailing P/E ratios have come down as S&P 500 earnings have grown following the Covid recession, and more recently, the market has come down. For context: P/E ratios (both forward and trailing) tend to spike coming out of recessions. Forward P/E spikes as forward 12-month earnings estimates drop and the market prices-in a recovery further out. And trailing ratios spike as realized trailing earnings drop. After post recession spikes, P/E ratios tend to come down as earnings grow faster than the market rises, lowering the multiple. This happened dramatically between 1992-1994: earnings increased by 92% and the market rose by only 12% (dividends excluded). Over that period, the trailing multiple (black) declined from 25x to 15x in a *rising* market.

## S&P 500 Price/Earnings Ratio vs U.S. 10yr Yield

U.S. Treasury 10yr Yield (inverted) and S&P 500 Price/Earnings Ratio

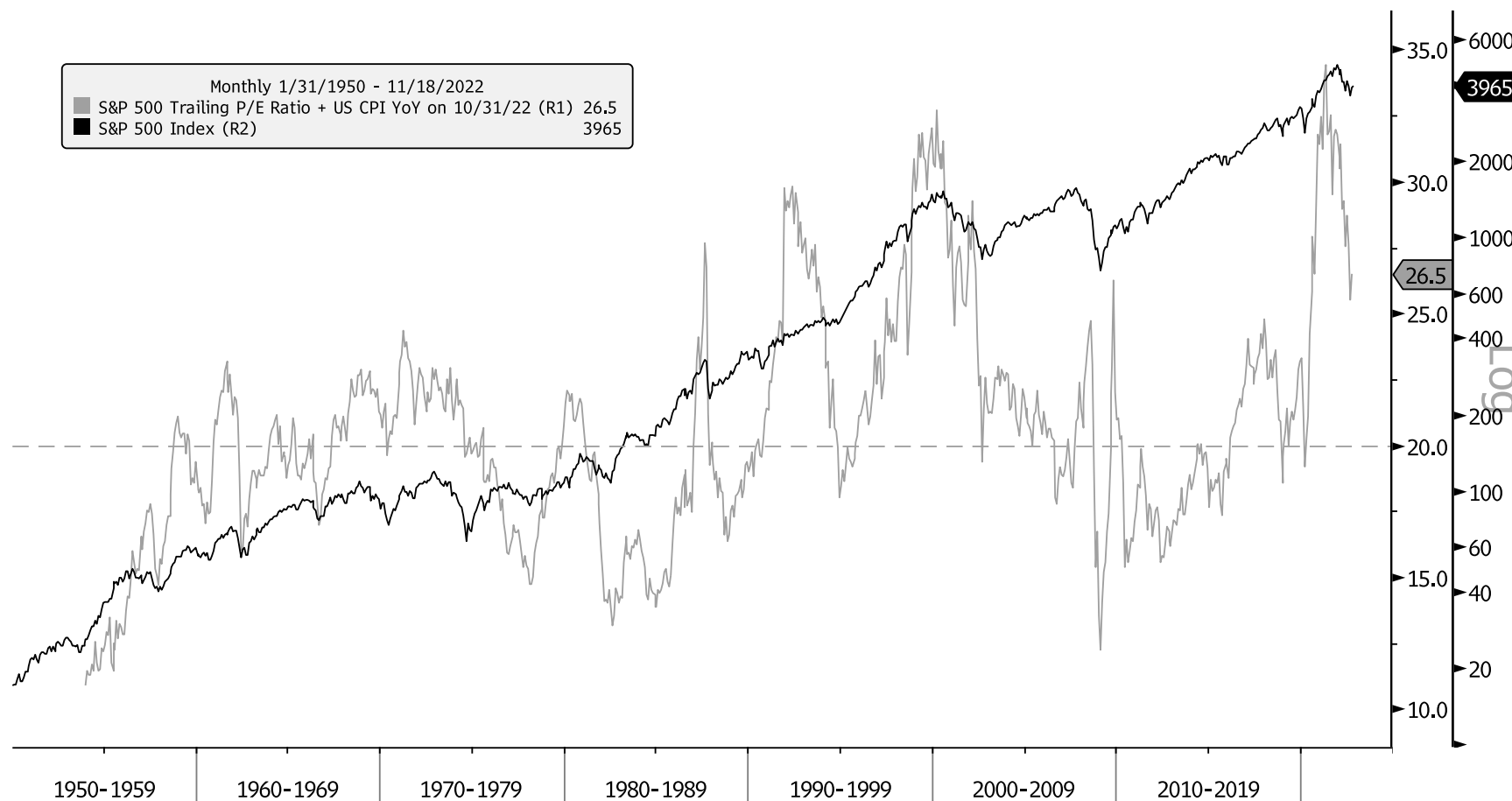


Source: © Merk Investments, Bloomberg

Analysis: A US 10yr yield at 3.82% corresponds to a forward multiple of 13.5x (based on a linear regression analysis), which is about 25% lower than the current multiple of 17.9x. Yields have increased dramatically in the past year, putting pressure on the forward multiple. Rising yields (and rising inflation expectations) generally warrant a decline in the P/E multiple. Of course, in a recession it is likely that the 10-year yield declines.

## “Rule of 20”

Valuation Framework for Bear Market Bottoms

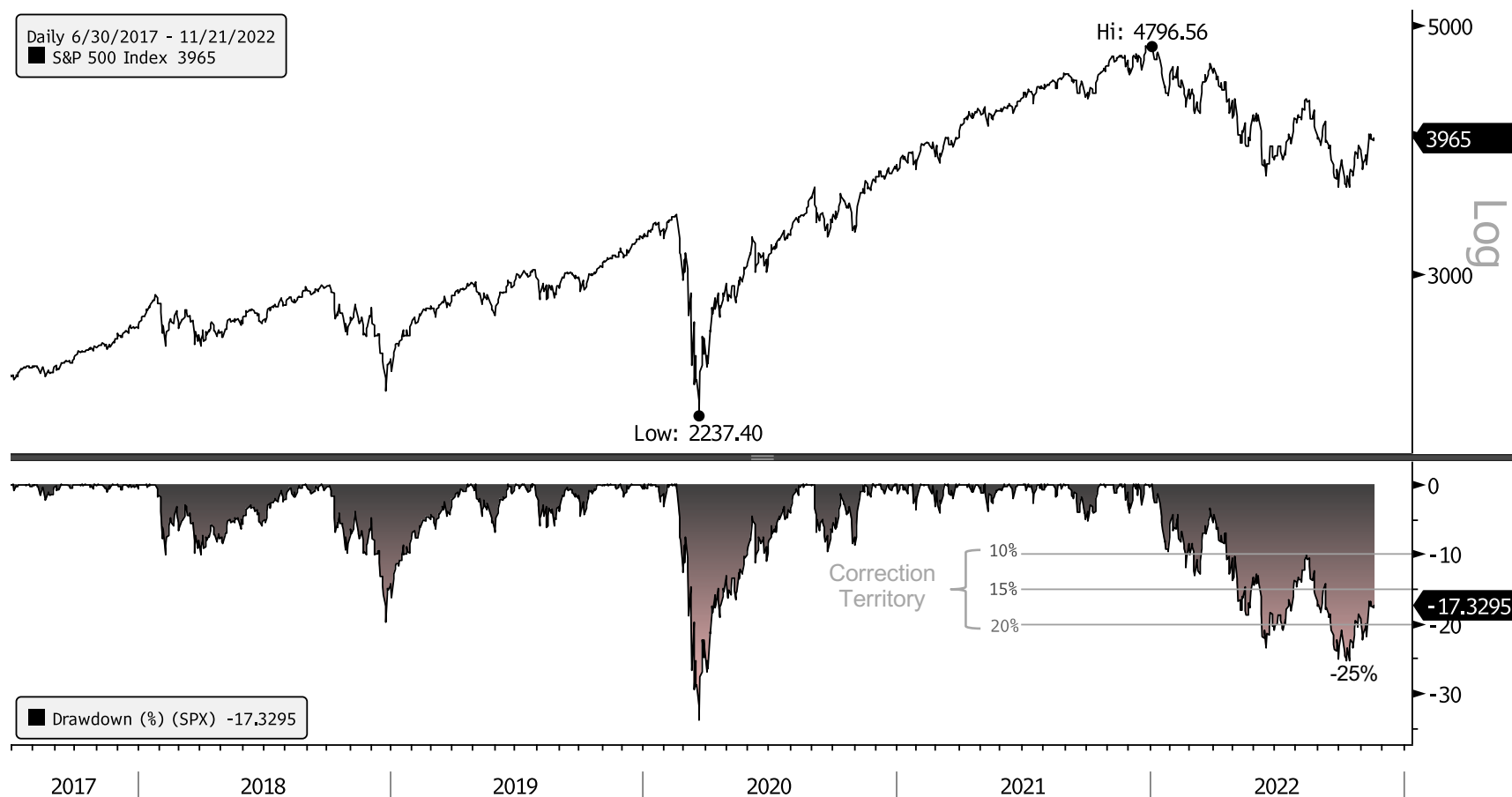


Source: © Merk Investments, Bloomberg

Analysis: For what it's worth, this framework suggests that all past bear market lows (since the early 1950s) have a trailing P/E multiple + CPI YoY inflation rate below 20. For example, if inflation comes down to 4%, the trailing P/E would need to fall to 16. The currently trailing multiple is 19.2x, so the market would need to fall about 15% with inflation coming down to 4%, plausible over the next 6-12 months.

## S&P 500 Underwater Chart

S&P 500 Index (upper panel) and drawdowns (lower panel)



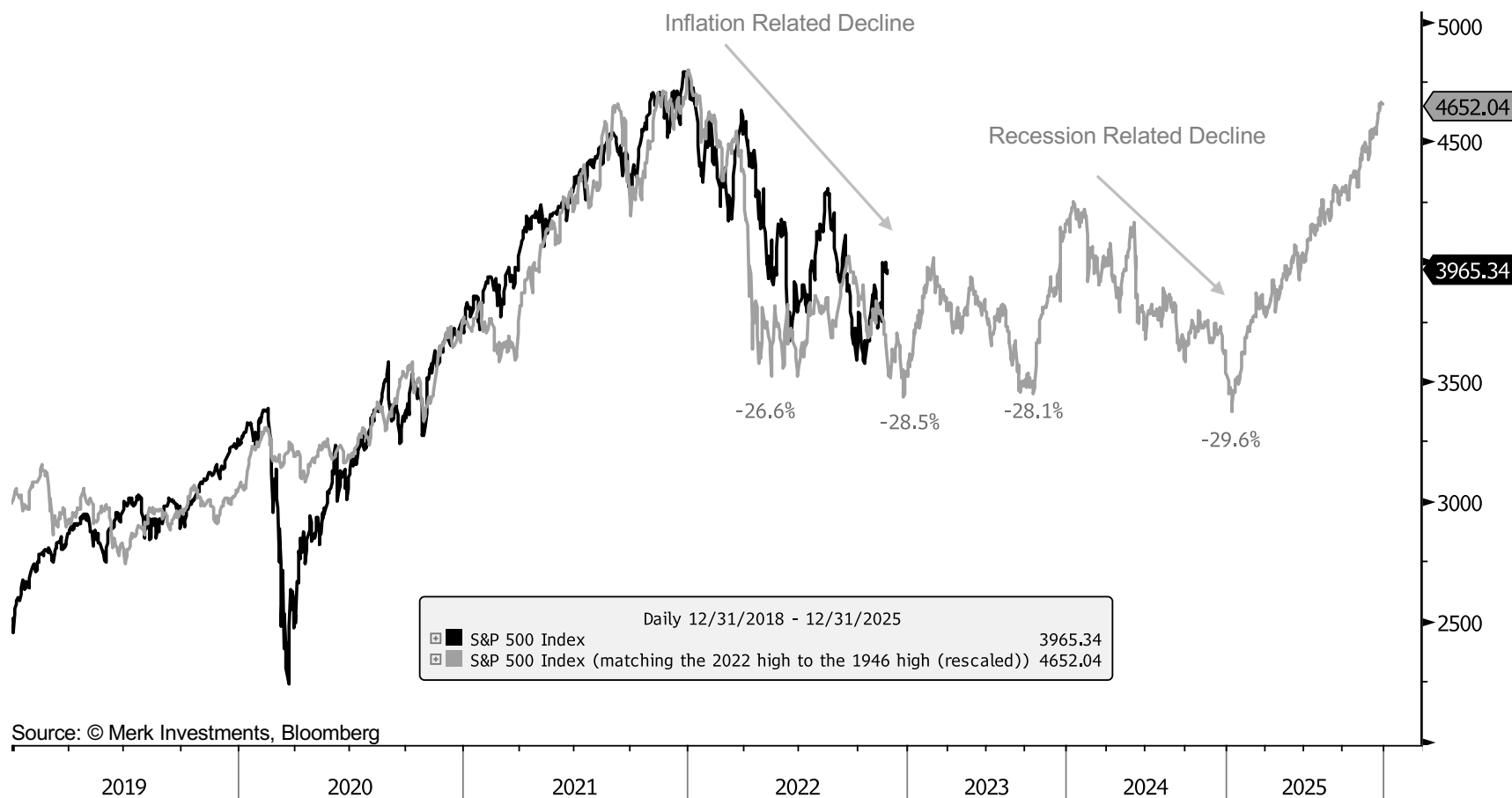
Source: © Merk Investments, Bloomberg

Analysis: The low so far, hit in mid-October, was down 25% from the peak at the beginning of the year. To review the history of S&P bear markets, the mean bear market duration is 17 months (with a massive range: 1-42 months), median is 13 months, and central tendency is 8-21 months. The mean decline is 39% (also with an extensive range), the median is 34%, and the central tendency is 27-49%.



## 1946-49 Analog

Matching the Current Market Decline to the 1946 Market Decline

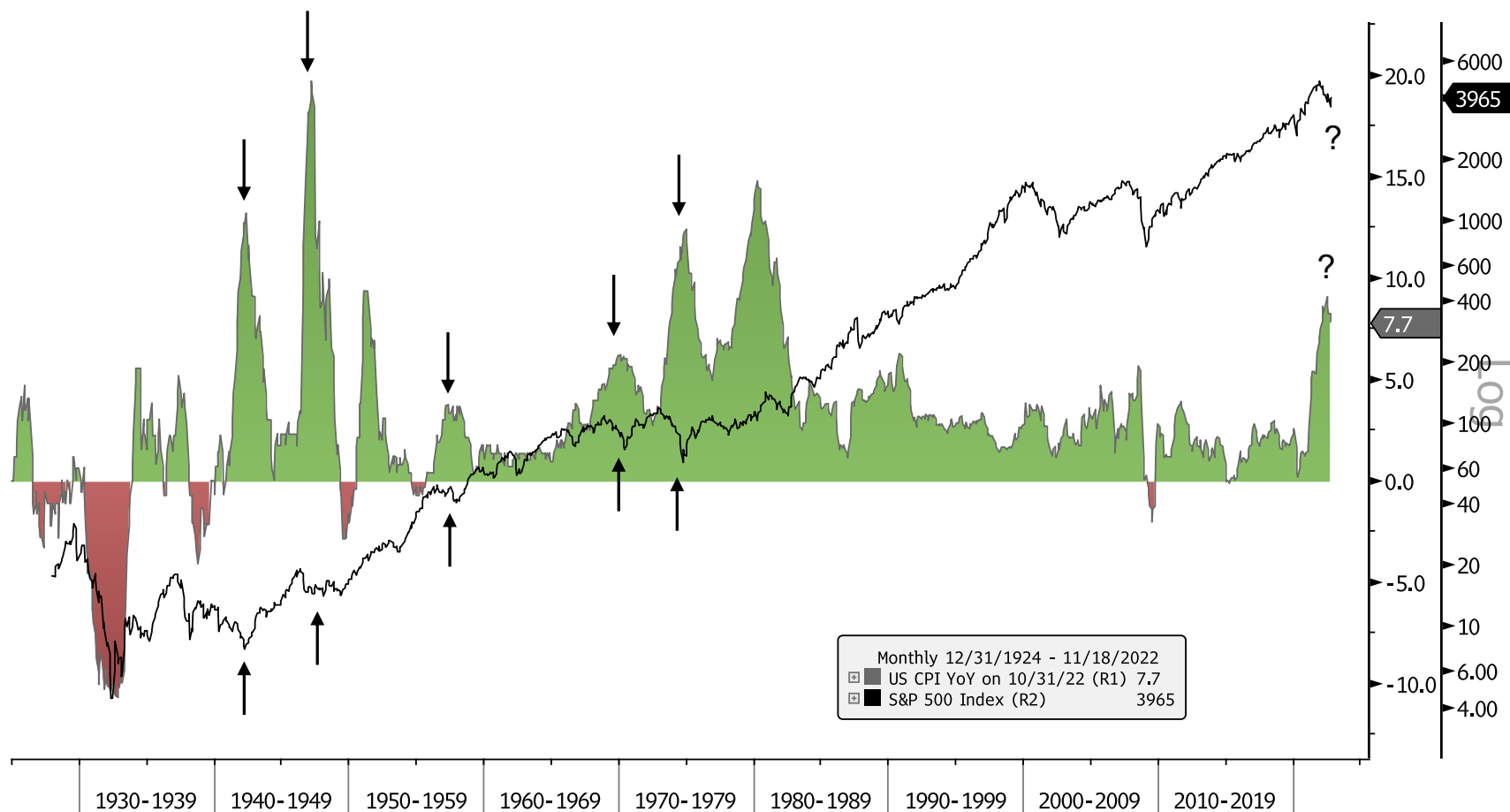


Analysis: The 1946-49 market decline might be an analog worth considering with regards to the current market and economic environment. It was a 20-30% decline that bounced along the bottom for a while, eventually through a mild recession. Not a great picture, but it might mean the ultimate low is not that far below the mid-October lows.  
(not a forecast or investment advice)

History of US inflations: [https://www.bls.gov/opub/mlr/2014/article/one-hundred-years-of-price-change-the-consumer-price-index-and-the-american-inflation-experience.htm#\\_ednref30](https://www.bls.gov/opub/mlr/2014/article/one-hundred-years-of-price-change-the-consumer-price-index-and-the-american-inflation-experience.htm#_ednref30)

## Inflation and the S&P 500

CPI YoY and S&P 500 Index

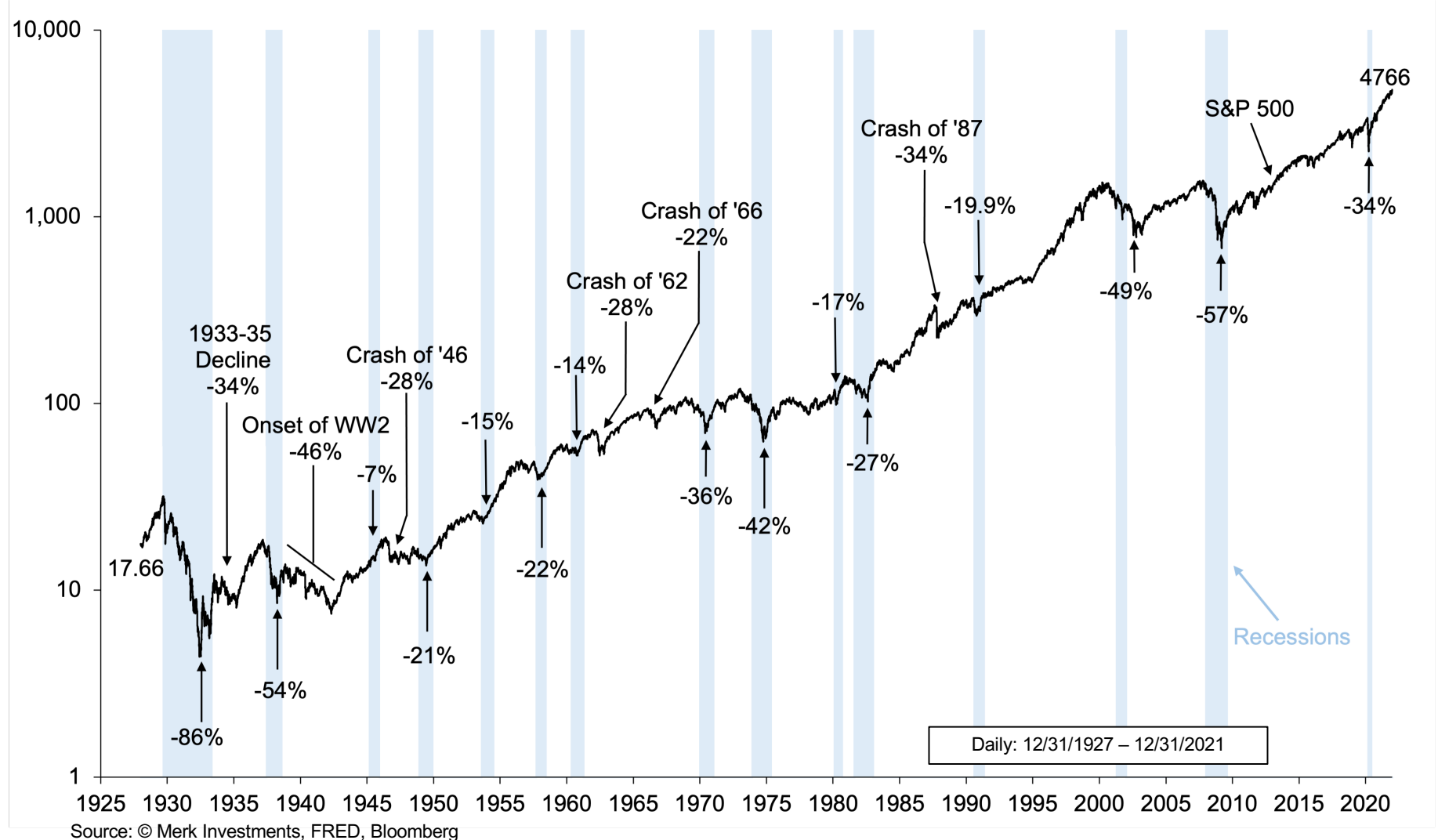


Source: © Merk Investments, Bloomberg

Analysis: In cases of inflation spikes coinciding with market declines, historically the market has bottomed (or been not far from the bottom) around the peak YoY rate of inflation. Headline CPI inflation very well may be (finally) falling.

## Recessions and S&P 500 Drawdowns

S&P 500 (black) and Recessions (blue)



Analysis: Over the past 94 years (to 12/31/2021), there have been 15 recessions, 16 bear markets (10 recession-bear-markets and 6 non-recession bear markets), and 5 recessions without bear markets. In the above chart, numbers below the index line represent recession-bear-markets. Numbers above the index line represent recessions without bear markets (i.e., max drawdowns less than 20%) or bear markets without recessions, which are all specifically labeled (e.g., "Crash of '62" etc.). The details of the categories and dates are presented on the next page.

## Recessions and S&P 500 Drawdowns

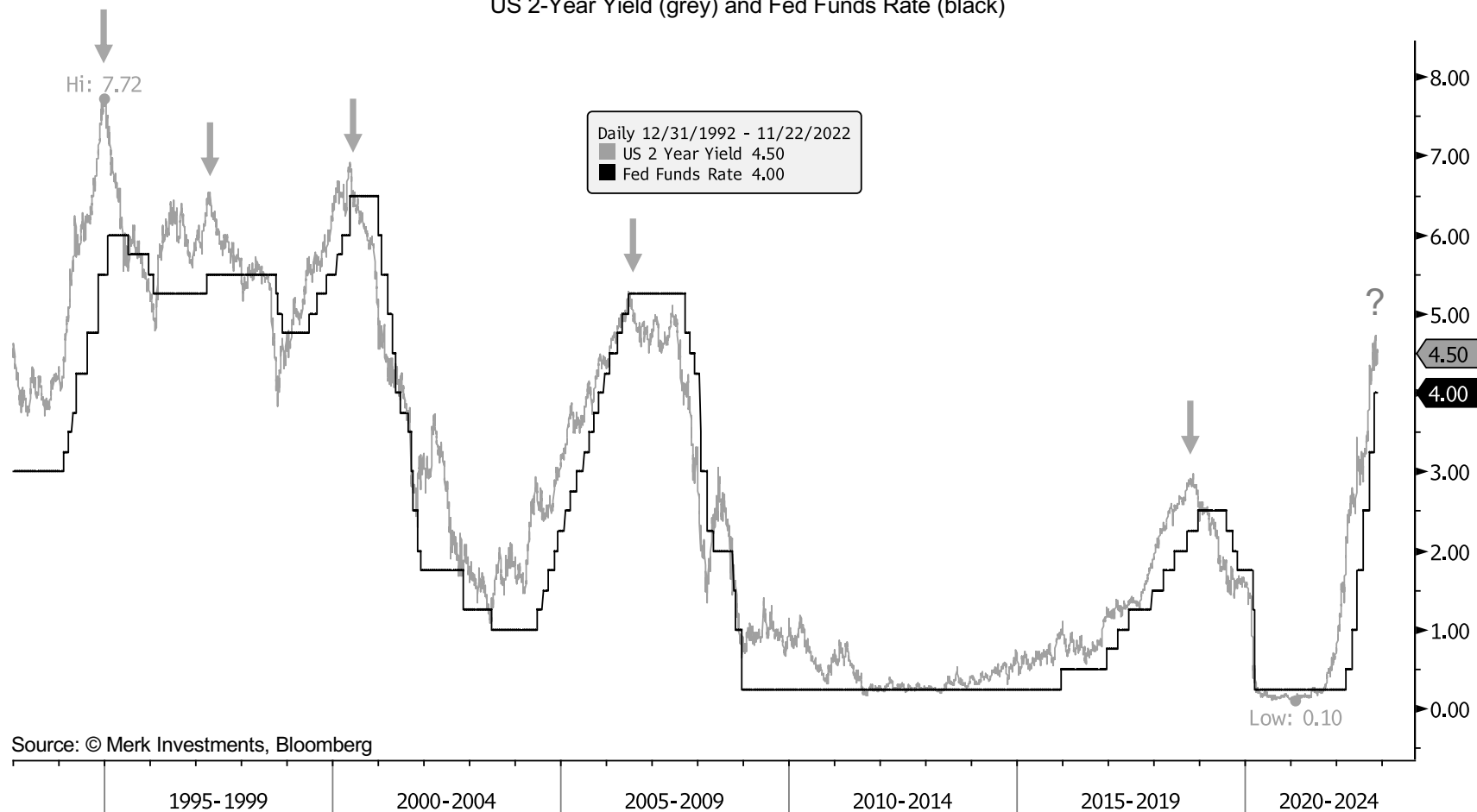
		Recession Dates			Rec. Duration (months)	Index Dates		Index Levels		Duration (months)	Decline (percent)
Event		Years	Peak*	Trough		Mkt. Peak	Mkt. Trough	Mkt. Peak	Mkt. Trough		
Recession	Bear Market	1929-33	Aug-29	Mar-33	43	9/16/29	6/1/32	31.86	4.40	32.5	-86.2%
	Bear Market	1933-35				7/18/33	3/14/35	12.20	8.06	19.8	-33.9%
Recession	Bear Market	1937-38	May-37	Jun-38	13	3/10/37	3/31/38	18.67	8.50	12.7	-54.5%
	Bear Market	1938-42				11/9/38	4/28/42	13.79	7.47	41.6	-45.8%
Recession		1945	Feb-45	Oct-45	8	3/7/45	3/26/45	14.38	13.39	0.6	-6.9%
	Bear Market	1946-47				5/29/46	5/19/47	19.25	13.77	11.7	-28.5%
Recession	Bear Market	1948-49	Nov-48	Oct-49	11	6/15/48	6/13/49	17.06	13.55	11.9	-20.6%
Recession		1953-54	Jul-53	May-54	10	1/5/53	9/14/53	26.66	22.71	8.3	-14.8%
Recession	Bear Market	1957-58	Aug-57	Apr-58	8	8/2/56	10/22/57	49.74	38.98	14.7	-21.6%
Recession		1960-61	Apr-60	Feb-61	10	8/3/59	10/25/60	60.71	52.30	14.8	-13.9%
	Bear Market	1961-62				12/12/61	6/26/62	72.64	52.32	6.4	-28.0%
	Bear Market	1966				2/9/66	10/7/66	94.06	73.20	7.9	-22.2%
Recession	Bear Market	1968-70	Dec-69	Nov-70	11	11/29/68	5/26/70	108.37	69.29	17.8	-36.1%
Recession	Bear Market	1973-75	Nov-73	Mar-75	16	1/11/73	10/3/74	120.24	62.28	20.7	-48.2%
Recession		1980	Jan-80	Jul-80	6	2/13/80	3/27/80	118.44	98.22	1.4	-17.1%
Recession	Bear Market	1981-82	Jul-81	Nov-82	16	11/28/80	8/12/82	140.52	102.42	20.4	-27.1%
	Bear Market	1987				8/25/87	12/4/87	336.77	223.92	3.3	-33.5%
Recession		1990-91	Jul-90	Mar-91	8	7/16/90	10/11/90	368.95	295.46	2.9	-19.9%
Recession	Bear Market	2000-02	Mar-01	Nov-01	8	3/24/00	10/9/02	1527.46	776.76	30.5	-49.1%
Recession	Bear Market	2007-09	Dec-07	Jun-09	18	10/9/07	3/9/09	1565.15	676.53	17.0	-56.8%
Recession	Bear Market	2020	Feb-20	Apr-20	2	2/19/20	3/23/20	3386.15	2237.40	1.1	-33.9%
Honorable Mentions											
Big Correction		1976-78				9/21/76	3/6/78	107.83	86.90	17.4	-19.4%
Big Correction		1998				7/17/98	8/31/98	1186.75	957.28	1.5	-19.3%
Big Correction		2011				4/29/11	10/3/11	1363.61	1099.23	5.2	-19.4%
Big Correction		2018				9/20/18	12/24/18	2930.75	2351.10	3.1	-19.8%

\*the peak month is the last month of the expansion, the recession starts the following month

Source: Merk Investments, FRED, Bloomberg

## 2-Year Yield and Fed Cycles

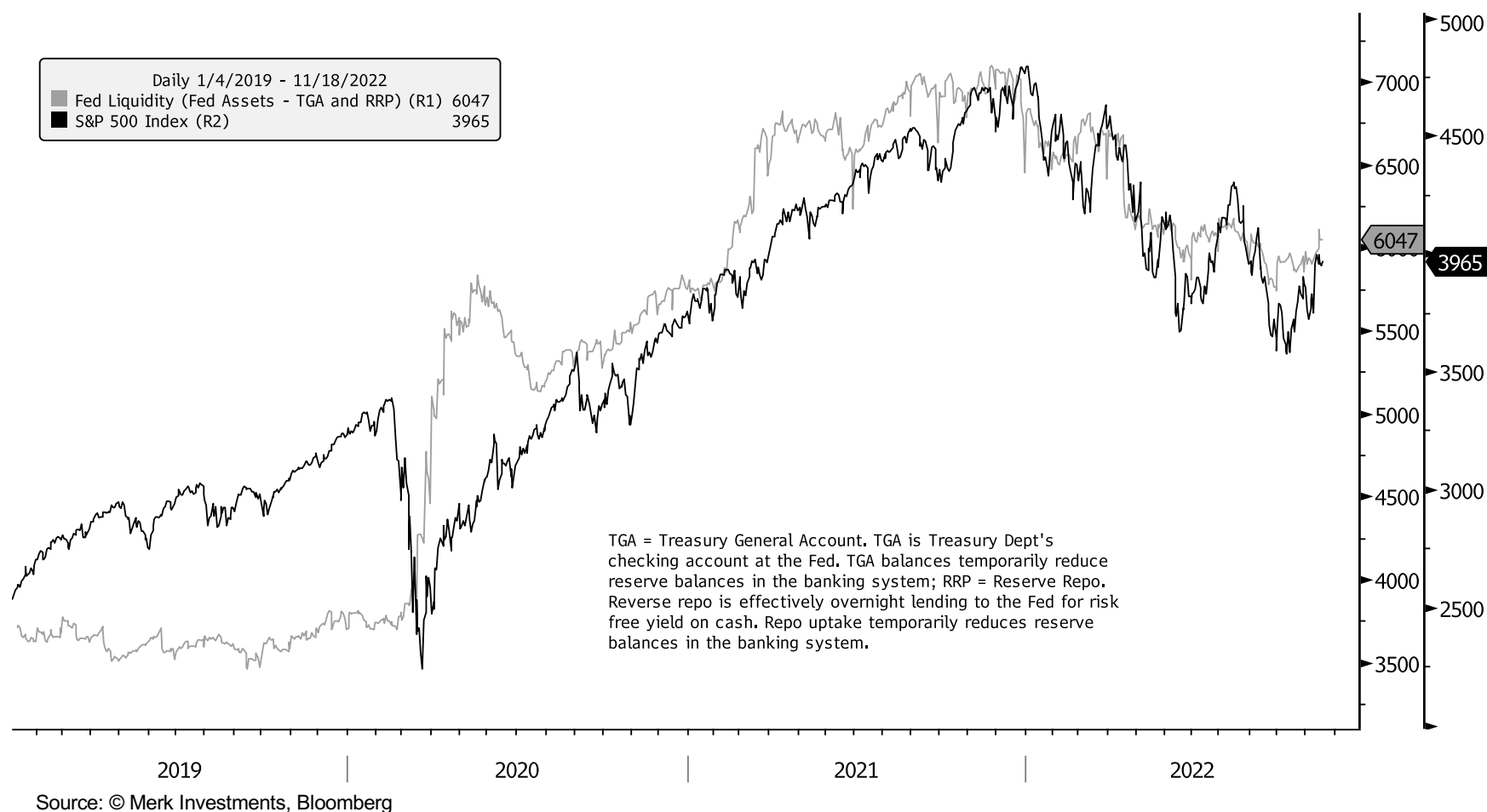
US 2-Year Yield (grey) and Fed Funds Rate (black)



Analysis: The 2-year yield typically peaks at or before Fed rate hiking cycle peaks and *above* rate hiking cycle peaks (shown above with arrows). In other words, hiking cycles don't last as long or get as far as the market thinks but inflection points in the 2-year yield can be viewed as a real-time proxy for Fed pivots. At the time of the December 2018 Fed meeting (which turned out to be the last hike of the cycle), the market was pricing the cycle to peak about a year later (in Nov 2019). Soft-landing pivots are bullish for the market (e.g., 1994, 1997, and 2018), recession pivots are not (e.g., 2000 and 2006).

## Fed Net Liquidity

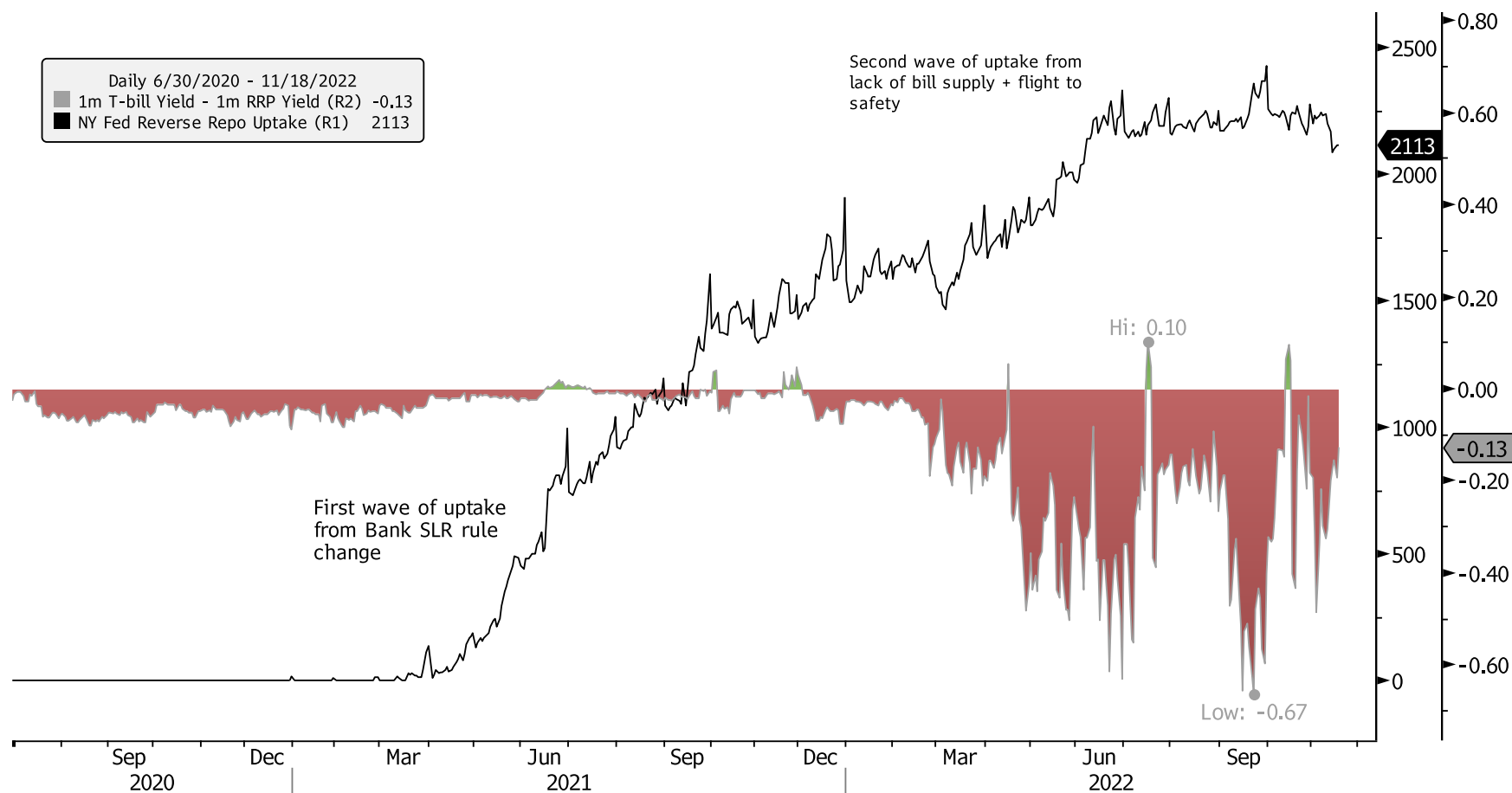
Fed Assets – (TGA + RRP)



Analysis: Fed net liquidity is not just impacted by the Fed's balance sheet size (and QT), but also by the Treasury General Account and the Reverse Repo Facility, which drain reserves from the banking system. Any drawdown in TGA and RRP are net additive to market liquidity.

## Reverse Repo (RRP)

RRP uptake in \$ Billions

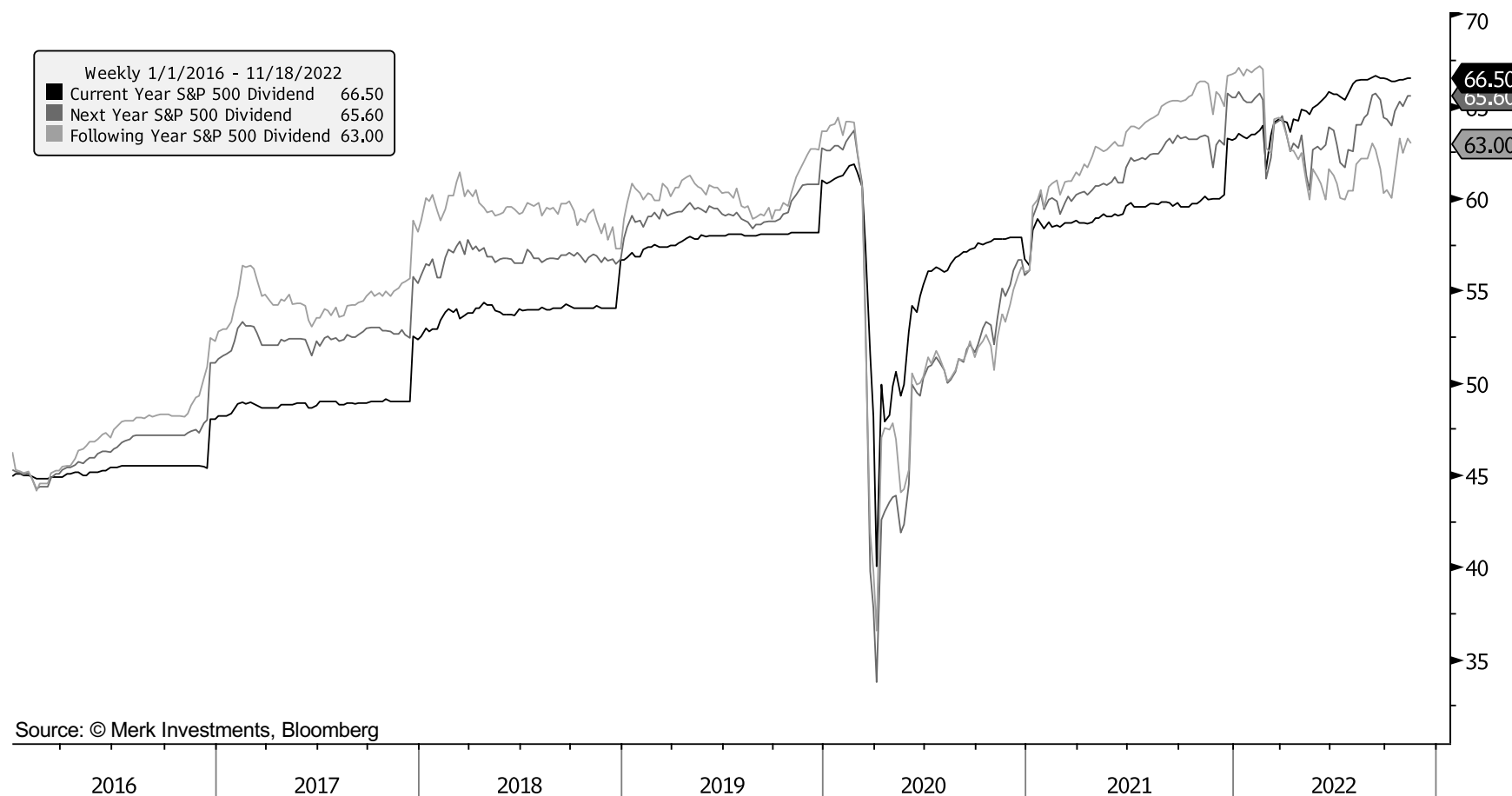


Source: © Merk Investments, Bloomberg

Analysis: Reverse Repo (RRP) represents market participants lending to the Fed on an overnight basis. Uptake is affected by bank regulation, net T-bill supply from US government issuance, and demand for safe haven assets. Lack of T-bill supply continues to be a problem and is supporting demand for RRP.

## S&P 500 Dividend Futures

Current Year, Next Year, and Following Year



Analysis: S&P 500 dividend futures are pricing in dividend cuts for 2023 and 2024, at the very least implying that the market is pricing in some probability of recession. Dividends are typically only cut in a bona fide recession (not in a mere earnings recession). If and when a recession does materialize, we would likely still see downside volatility in the equity market.



## Sector Performance

Jan 3, 2022 – Jun 16, 2022 (initial S&P 500 decline)

<b>S&amp;P 500</b>	<b>-23.6%</b>
Consumer Staples	-11.2%
Utilities	-8.3%
Real Estate	-24.9%
Health Care	-14.4%
Info Tech	-30.2%
Telecom/Comm Serv.	-32.7%
Consumer Disc.	-36.4%
Industrials	-18.6%
Materials	-16.5%
Financials	-22.4%
Energy	35.0%

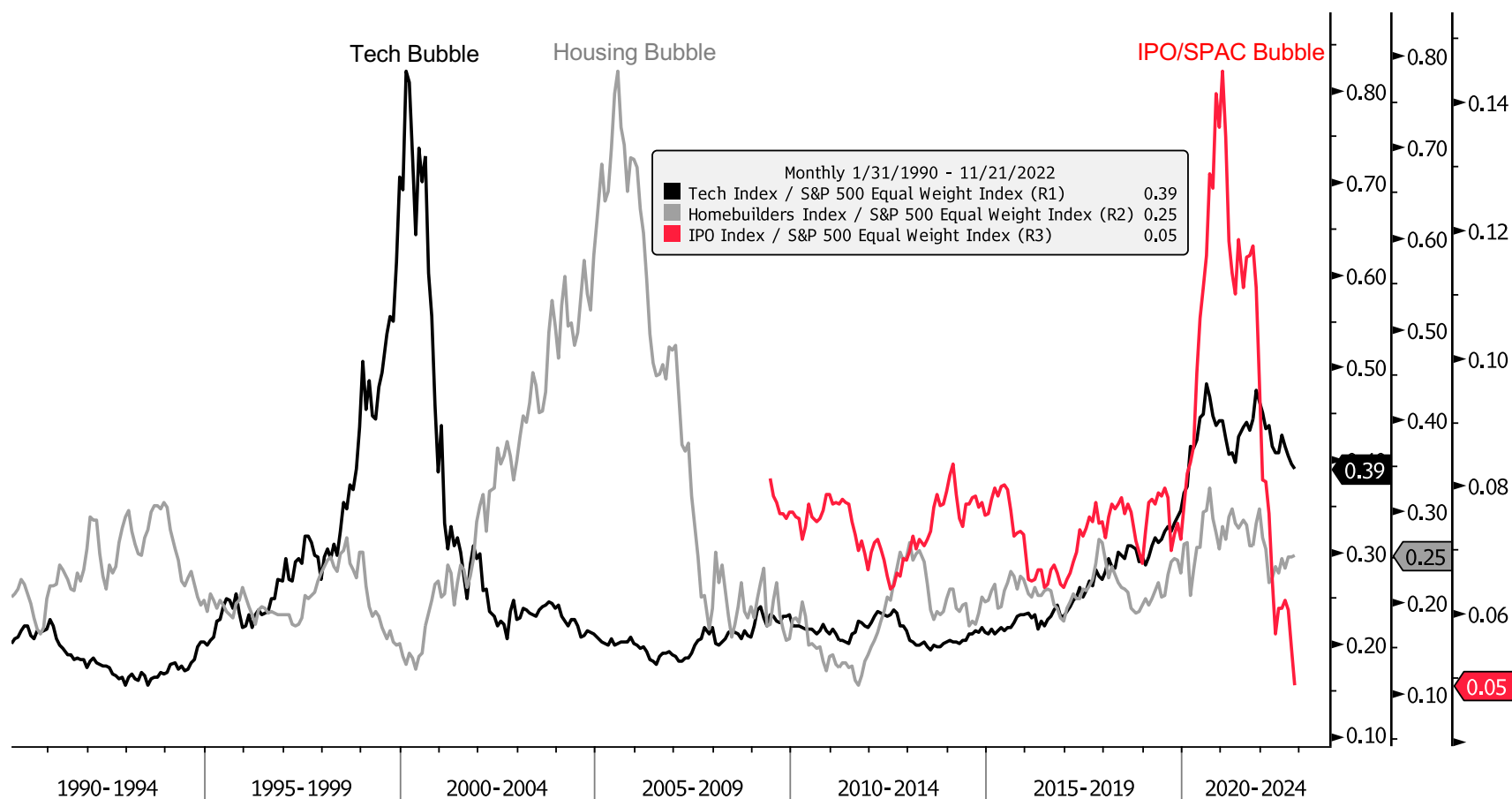
Aug 16, 2022 – Sep 16, 2022 (recent S&P 500 decline)

<b>S&amp;P 500</b>	<b>-10.0%</b>
Consumer Staples	-7.6%
Utilities	-4.3%
Real Estate	-11.8%
Health Care	-5.0%
Info Tech	-14.8%
Telecom/Comm Serv.	-13.9%
Consumer Disc.	-9.2%
Industrials	-11.4%
Materials	-10.9%
Financials	-7.9%
Energy	2.1%

Source: © Merk Investments, Bloomberg

## Bubbles

Tech Relative Performance (black), Homebuilders Relative Performance (grey), and IPO Index Relative Performance (red)

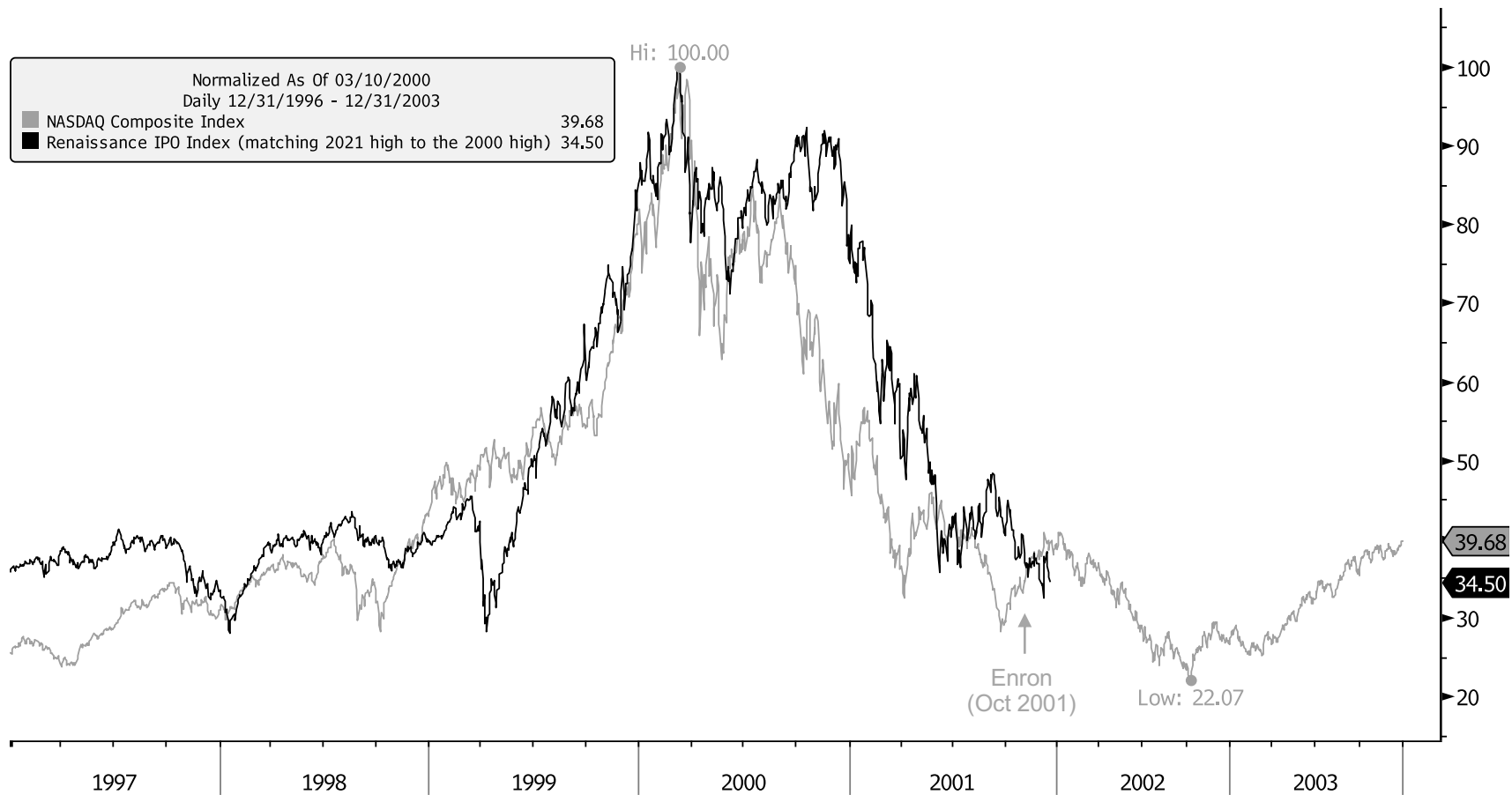


Source: © Merk Investments, Bloomberg

Analysis: The IPO/SPAC boom has turned into a bust for similar proportions to early 2000s dotcom bust.

## Nasdaq Dotcom Bust and IPO Index Decline

Matching the 2021 IPO Index high to the 2000 Nasdaq High

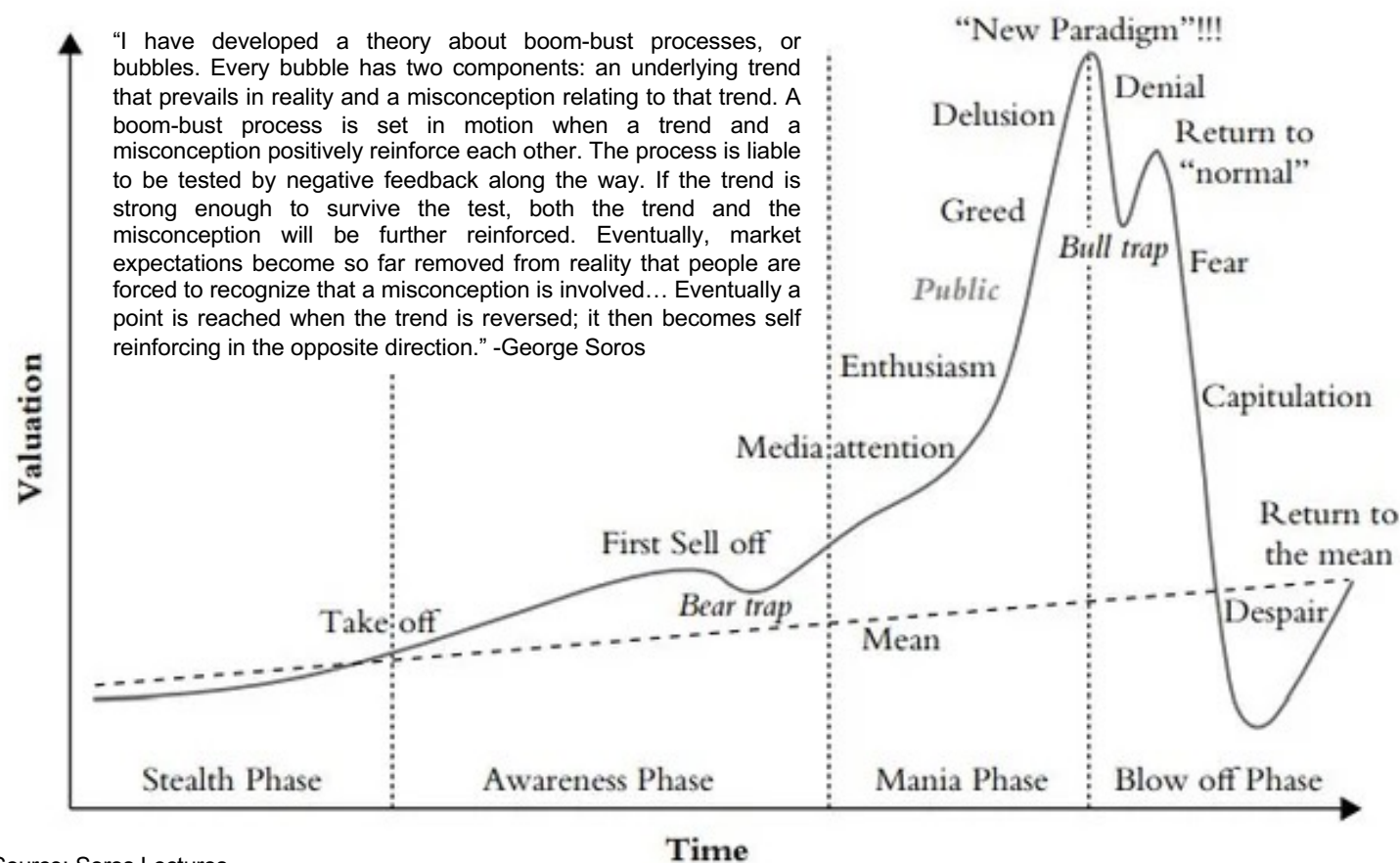


Source: © Merk Investments, Bloomberg

Analysis: The boom-bust in the IPO/SPAC/VC segment of the market seems to be following the late 90s, early 2000s tech sector boom-bust. The analog would suggest another 11 months and another 35% of downside from current levels on the IPO Index. If FTX is like Enron (as Larry Summers suggests), that would fit well with where we are now on the early 2000s market analog. The Enron scandal broke in October 2001, about a year before the ultimate low in the dotcom bust.

(not a forecast or investment advice)

## Anatomy of a Speculative Boom-Bust Process



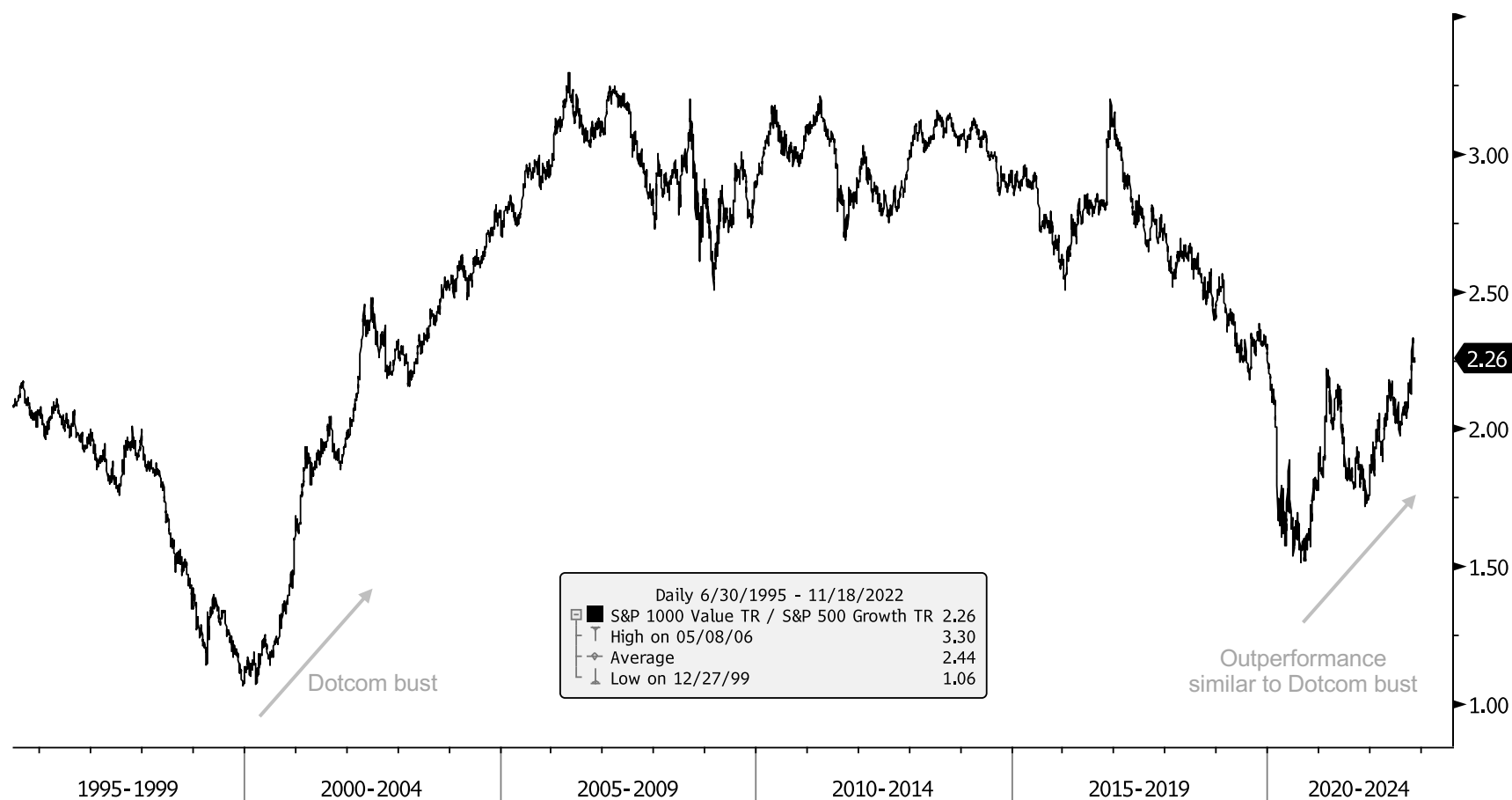
Source: Soros Lectures

Analysis: Here is a helpful diagram for the speculative boom-bust process with an excerpt from the Soros Lectures on the topic. The peak of the IPO Index was in February 2021—as I noted in April 2021: “On a cautionary note, some medium-term anecdotal contrarian warning signs have cropped up lately. I’ve noticed that some long-time bears have switched to being bullish (with contorted rationalizations)—a contrarian warning sign... Similarly, some long-time bulls are now talking in terms that sound a lot like “new paradigm” and “this time is different”—also a contrarian warning sign.”

(not a forecast or investment advice)

## Small-Cap Value vs. Large-Cap Growth

S&P 1000 Value TR Index / S&P 500 Growth TR Index



Source: © Merk Investments, Bloomberg

Analysis: Small-cap value has been outperforming large-cap growth since late 2020. The picture is similar to the early 2000s. Even though small-caps and value stocks are thought to underperform in bear markets, that was not the case in the 2000-2002 bear market and has not been the case so far this year.

## Market Performance

Dow Jones Industrial Average Percent Gain/Loss relative to its 10-Year Moving Average (black) and Average with +/- 1 and 2 Standard Deviations (grey)

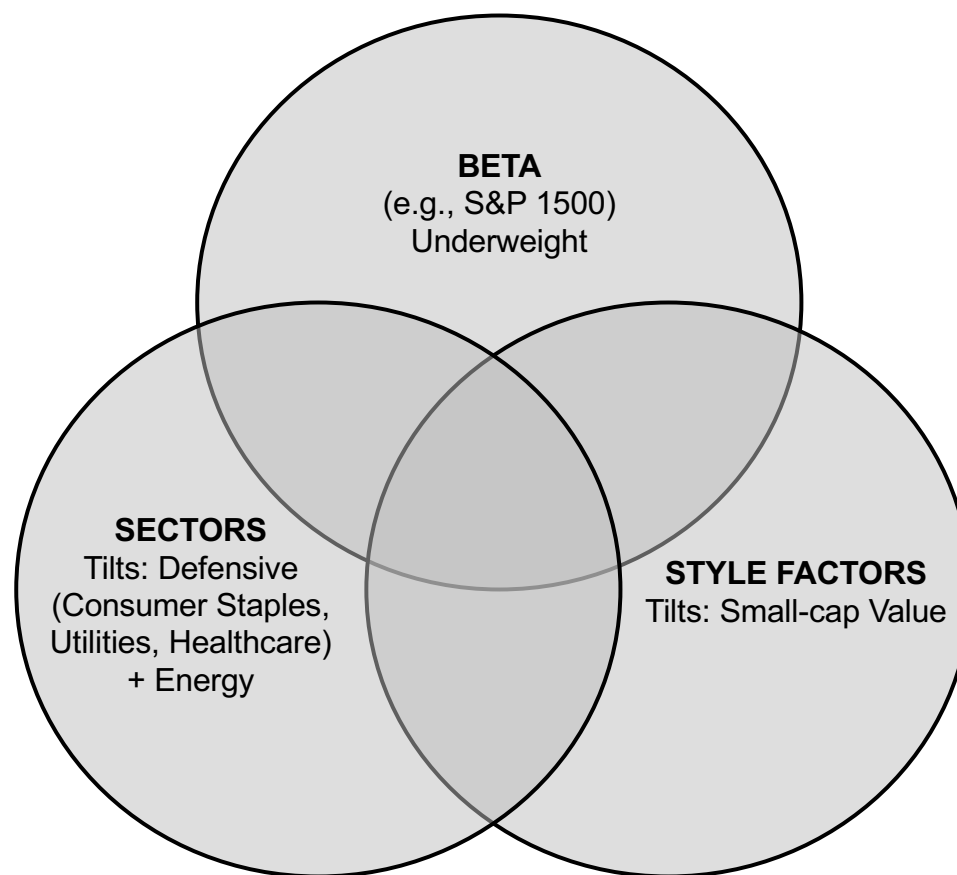


Source: © Merk Investments, Bloomberg

Analysis: While the IPO/SPAC segment of the market was in a bubble, I don't think the overall market was in a bubble. As you can see above, the Dow was not at performance levels consistent with 1929, 1987, or 1999/2000. The Dow Jones Industrial Average is the only market index that provides data for the run-up to the 1929 market top. At the peak, the market was over 150% above its 10-year moving average. Since the bull market started in 2009, the peak in market performance was 79% above its 10-year moving average, which was right before the Q4 2018 correction. In other words, the bull market that started in 2009 never reached the performance levels of the 1920s, the 1980s, or 1990s.

## TOP-DOWN ACTIVE TACTICAL ALLOCATION TILTS

Ven Diagram of Overall Beta, Sector Tilts, and Style Factor Tilts within US Equities



## Emerging Markets Long-Term Trend

MSCI Emerging Markets Index – log scale trend channel



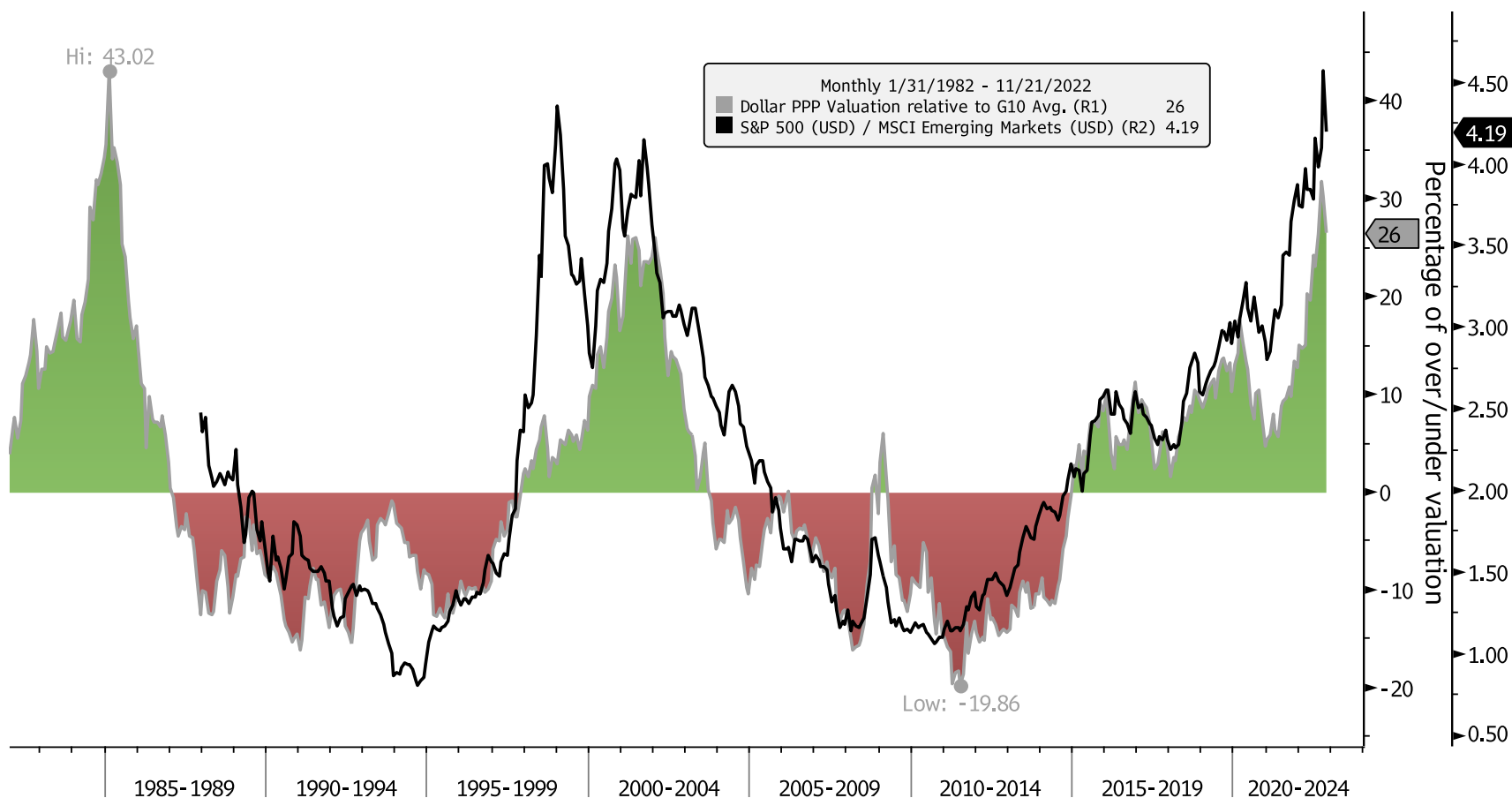
Source: © Merk Investments, Bloomberg

Analysis: While the path of least resistance might be low into a global recession, EM looks attractive from a long-term contrarian perspective, particularly if/when the US dollar enters a new secular dollar bear market.



## U.S./Emerging Markets and U.S. Dollar Valuation

S&P 500/EM Ratio and U.S. Dollar G10 Average Relative Purchasing Power Parity (PPP\*) Valuation



Source: © Merk Investments, Bloomberg

Analysis: The dollar bull market since 2011 was a headwind for Emerging Markets. I think the dollar cycle has turned, which should provide a tailwind for Emerging Markets. EM has dramatically underperformed and represents attractive long-term value in my view. As a side note, the U.S. dollar probably would have strengthened more than it did in March had it not been for the Fed swap lines alleviating dollar funding stress internationally.

\*PPP Framework: Nominal exchange rates tend to gravitate toward their long-run purchasing power parity (PPP) equilibrium values. The foundation for PPP is the so-called “law of one price,” which suggests that identical goods should trade at the same price across countries when valued in terms of a common currency. Relative PPP extends the law of one price to a broad range of goods and services and takes into account trade impediments.

**Disclosure**

This report was prepared by Merk Investments LLC (“Merk Investments”), and reflects the current opinion of the authors. It is based upon sources and data believed to be accurate and reliable. Merk Investments makes no representation regarding the advisability of investing in the products herein. The information contained herein reflects Merk Investments’ current views and opinions with respect to, among other things, future events and financial performance. Charts, graphs, and tables are provided for illustrative purposes only. Any forward-looking statements contained herein are based on current estimates and expectations. Opinions and forward-looking statements expressed are subject to change without notice. This information does not constitute investment advice and is not intended as an endorsement of any specific investment. The information contained herein is general in nature and is provided solely for educational and informational purposes. Some believe predicting recessions is either impossible or very difficult. The information provided does not constitute legal, financial or tax advice. You should obtain advice specific to your circumstances from your own legal, financial and tax advisors. Past performance is no guarantee of future results.

References to any indices are for informational and general comparative purposes only. There are significant differences between such indices and the investment program of Merk. Merk may not invest in all or necessarily any significant portion of the securities, industries, or strategies represented by such indices. References to indices do not suggest that Merk will, or is likely to, achieve returns, volatility, or other results similar to such indices. No representation is made hereby with respect to the accuracy or completeness of such data. The performance data of various indices mentioned in this update are updated and released on a periodic basis before finalization. The performance data of various indices presented herein was current as of the date of the presentation. Please refer to data returns of the separate indices if you desire additional or updated information. Indices are unmanaged, and their performance results do not reflect the impact of fees, expenses, or taxes that may be incurred through an investment with Merk. Returns for indices assume dividend reinvestment. An investment cannot be made directly in an index. Accordingly, comparing results shown to those of such indices may be of limited use.

\* \* \*

Explicit permission must be obtained from Merk Investments LLC in order to replicate, copy, distribute or quote from this document or any portion thereof.

Published by Merk Investments LLC

© 2022 Merk Investments LLC