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U.S. Equity Market Chart Book

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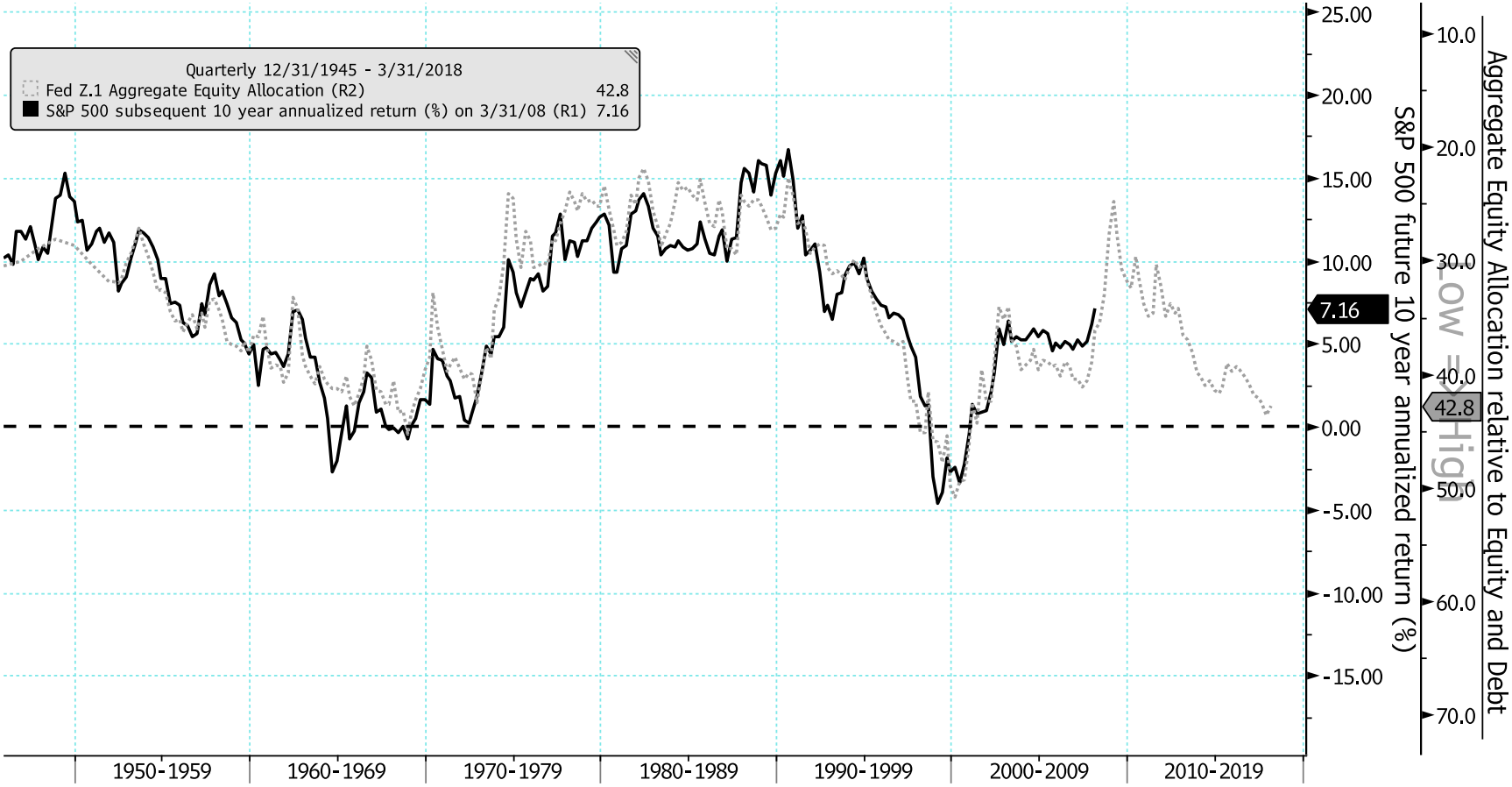
S&P 500 Valuation Indicator

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



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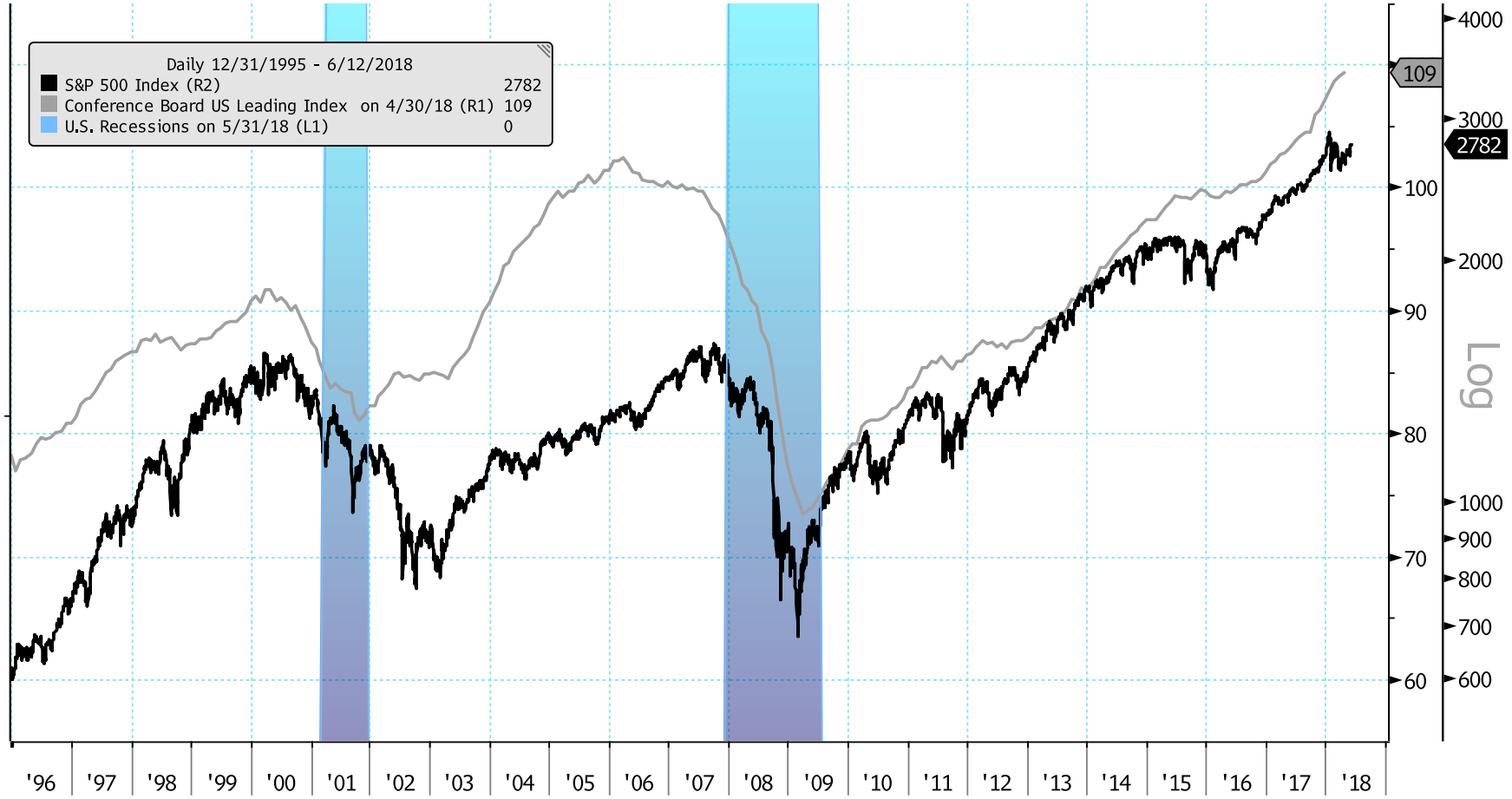
Analysis: If history is any guide, this chart suggests annualized S&P 500 returns (w/o dividends) might be close to 0% over the next ten years. The grey dotted line is the market value of US equity divided by the total market value of US equity and debt, which is used as a proxy for aggregate equity allocation. The data comes from the quarterly Federal Reserve Z.1 report. At 42.8% the equity allocation is relatively high right now. I'd likely get positive on the longer term outlook for the S&P at an allocation below 30%, which would likely only be after a substantial bear market in the index.

Business Cycle Backdrop

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



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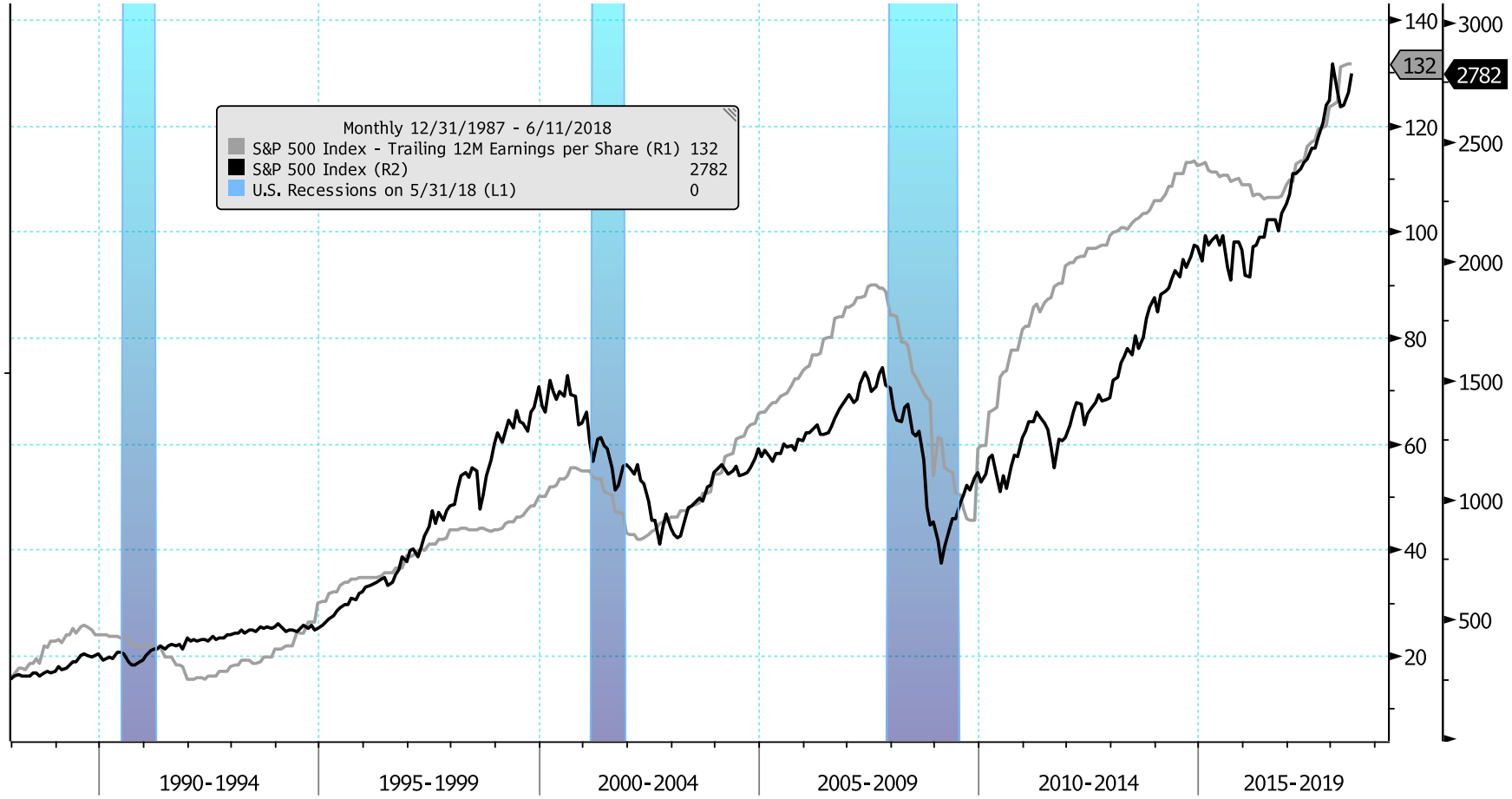
Analysis: LEIs continue to trend higher, historically a positive sign for stocks
I'd get incrementally negative on the outlook for the S&P if the LEI Index began trending down YoY
while the S&P was at or near bull market highs

Earnings Backdrop

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



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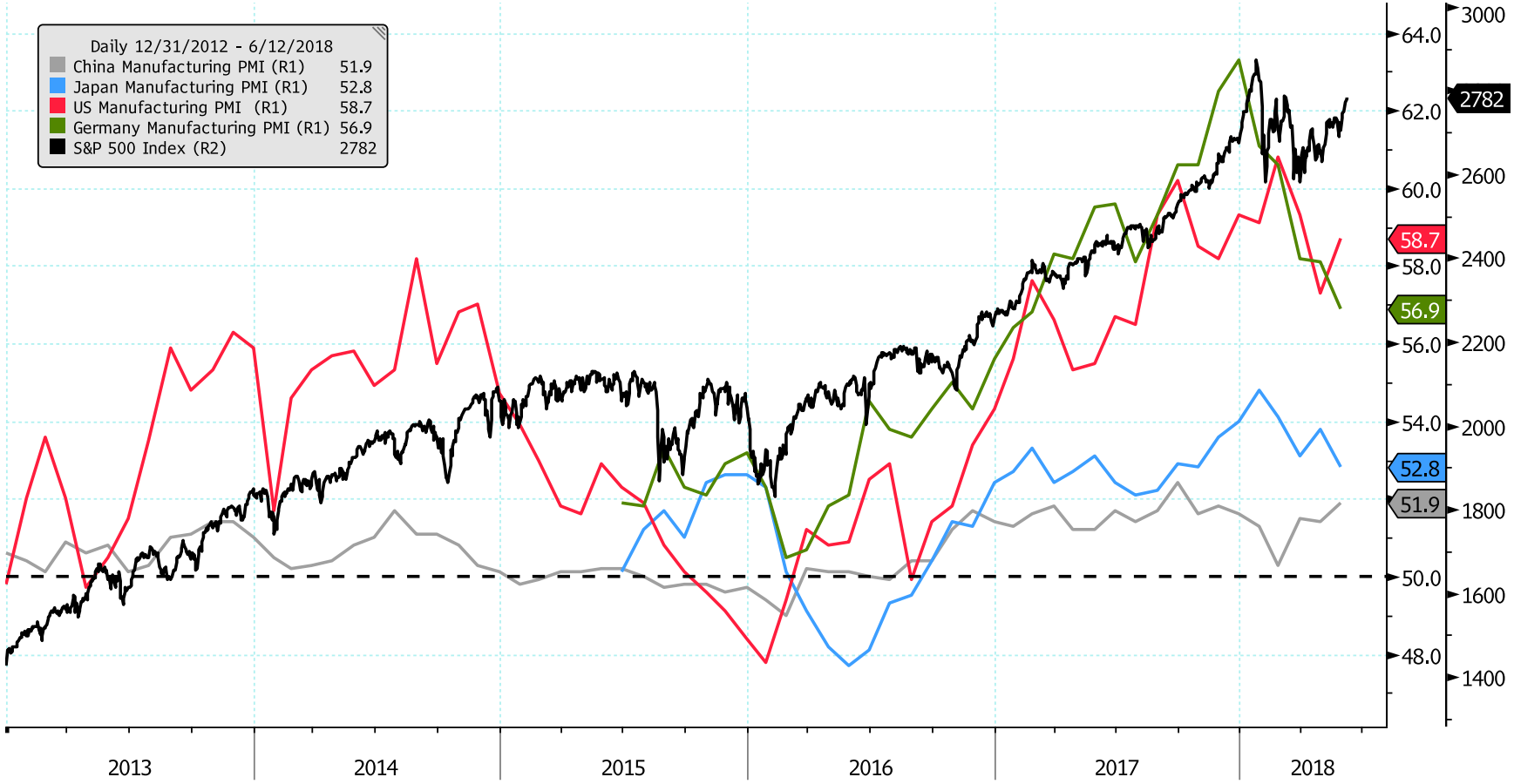
Analysis: S&P 500 earnings continue to grow. Factset's latest forecast for 2018 earnings growth is 19.7%, higher than the forecast at the time of the last high in the index (1/26/18) and up from last months 19.2%. On one hand: reported and expected earnings continue to climb, on the other hand: recent earnings growth may be due in part to one-off factors like the recent tax cuts. Also, as expectations climb there is an increased chance that earnings disappoint in the quarters ahead. I'd get incrementally negative if the trailing 12-month earnings move sideways/down. It's worth noting that this framework may be more of a coincident or confirmatory rather than a leading indicator with respect to a major market top.

Global Growth Backdrop

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



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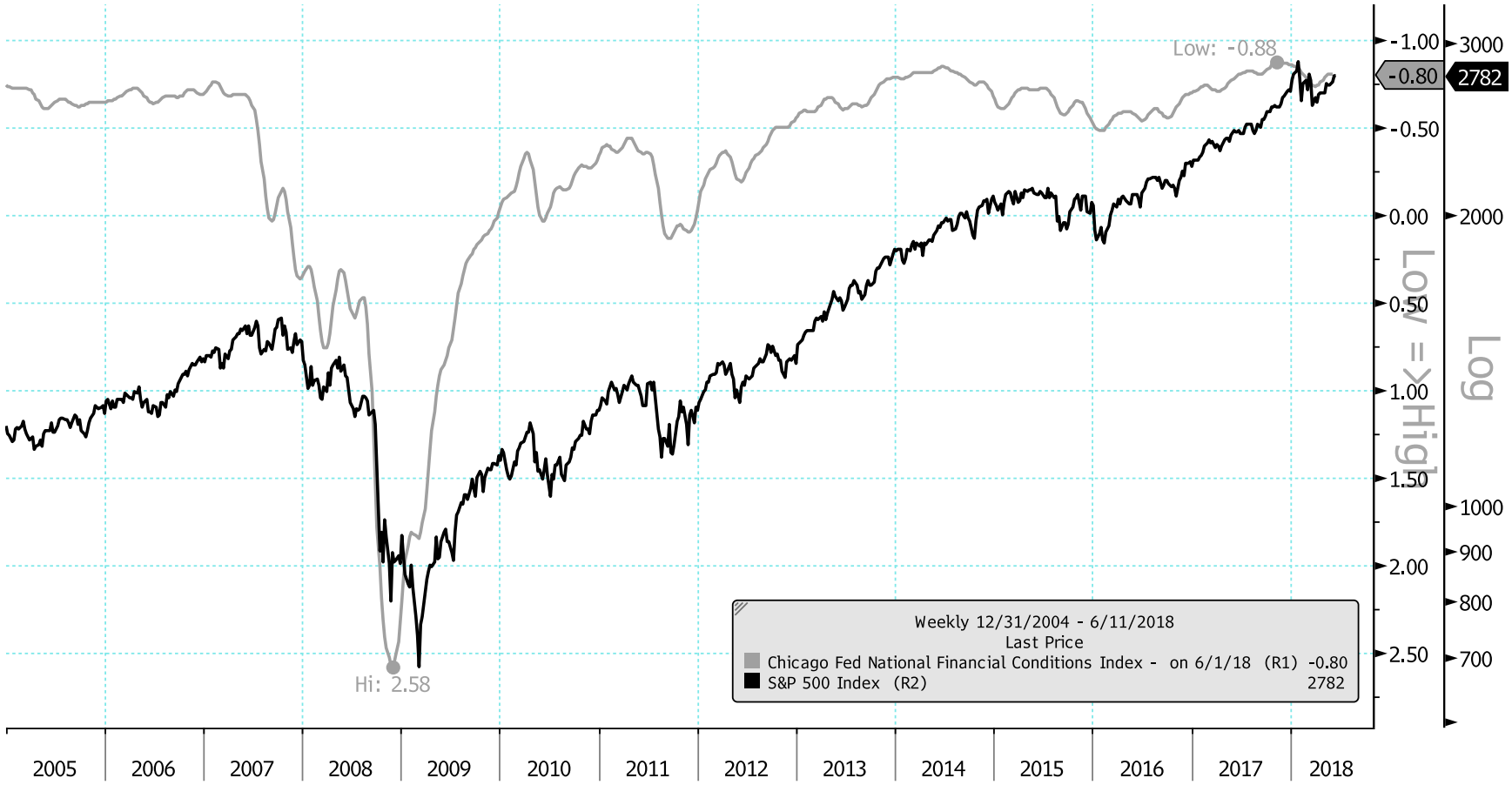
Analysis: German and Japanese manufacturing PMIs ticked lower. US and Chinese PMIs ticked up. I'd get incrementally negative on the S&P outlook if any of these PMIs fell below 50

U.S. Financial Conditions

Chicago Fed National Financial Conditions Index and the S&P 500



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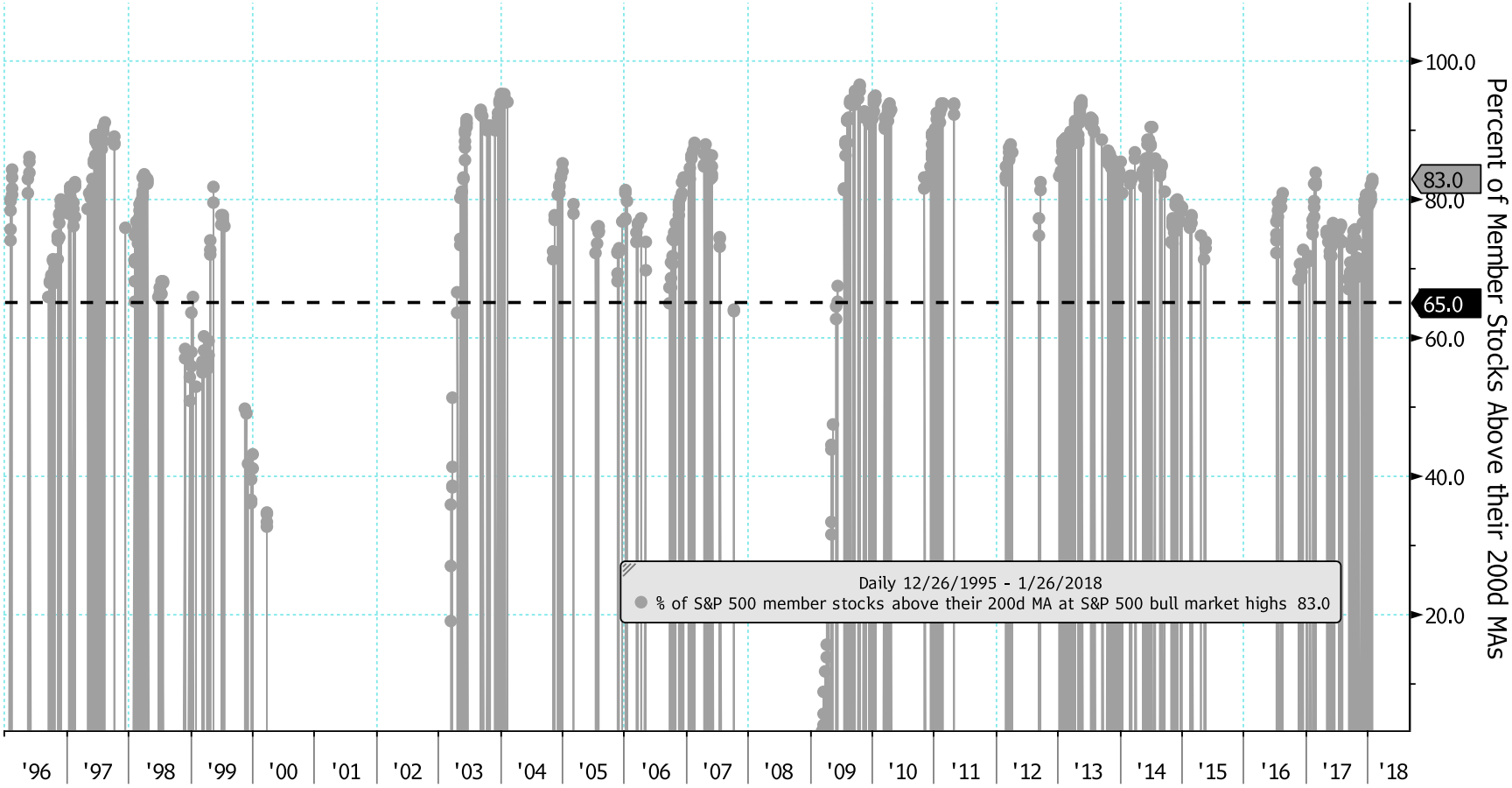
Analysis: Financial conditions have eased slightly since last month's report
I'd get incrementally negative on the outlook for the S&P if conditions moved through the -0.50 level

Market Breadth

Percent of S&P 500 member stocks above their 200d Moving Averages at New Bull Market Highs



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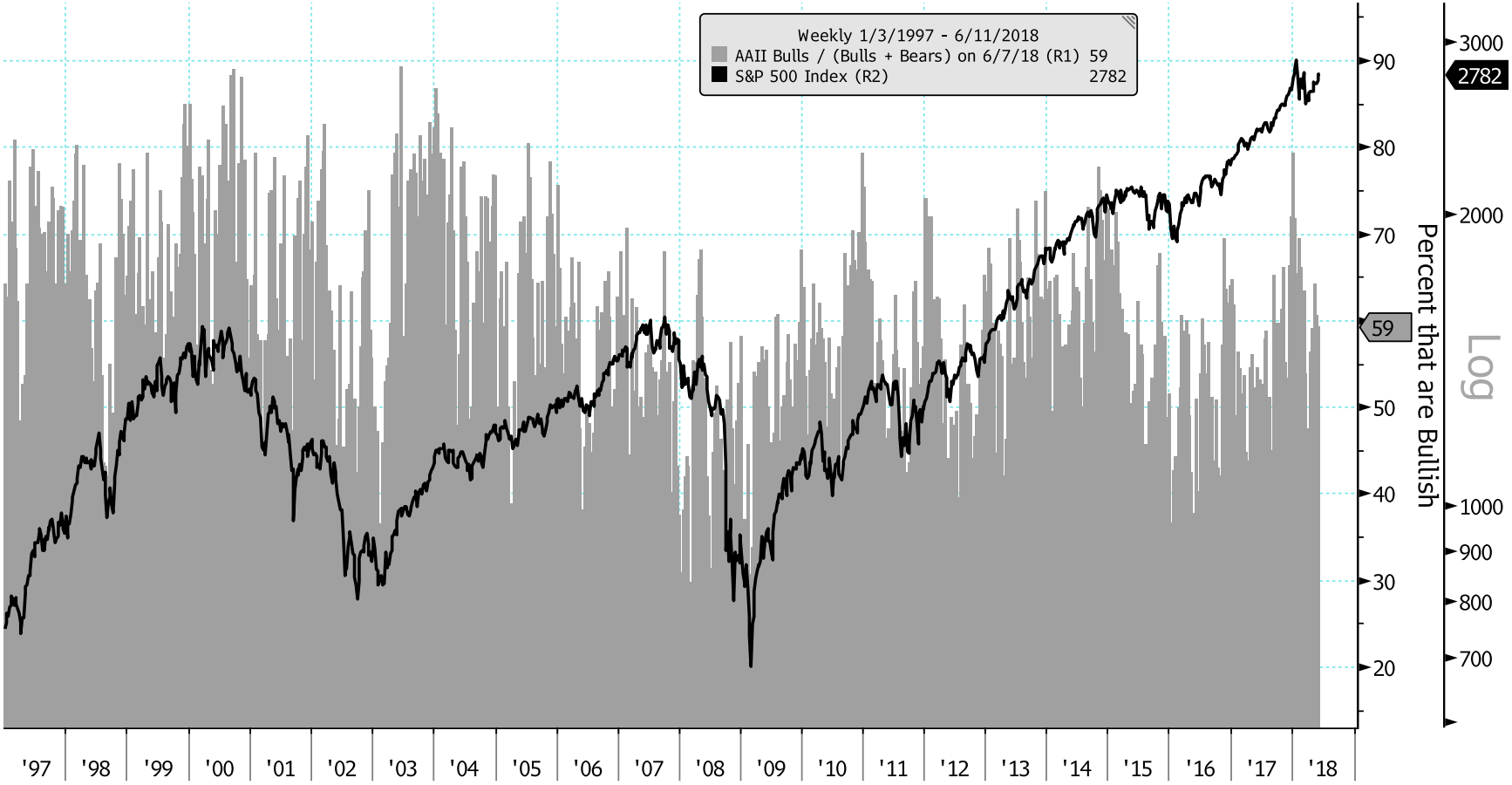
Analysis: Breadth at the previous high (1/26/2018) was at 83%, historically breadth has been weaker at major market tops. Said differently, the breadth on 1/26/18 was not indicative of a major market top
I'd get incrementally negative on the outlook for the S&P if the S&P made new bull market highs with breadth below 65%

Market Sentiment

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



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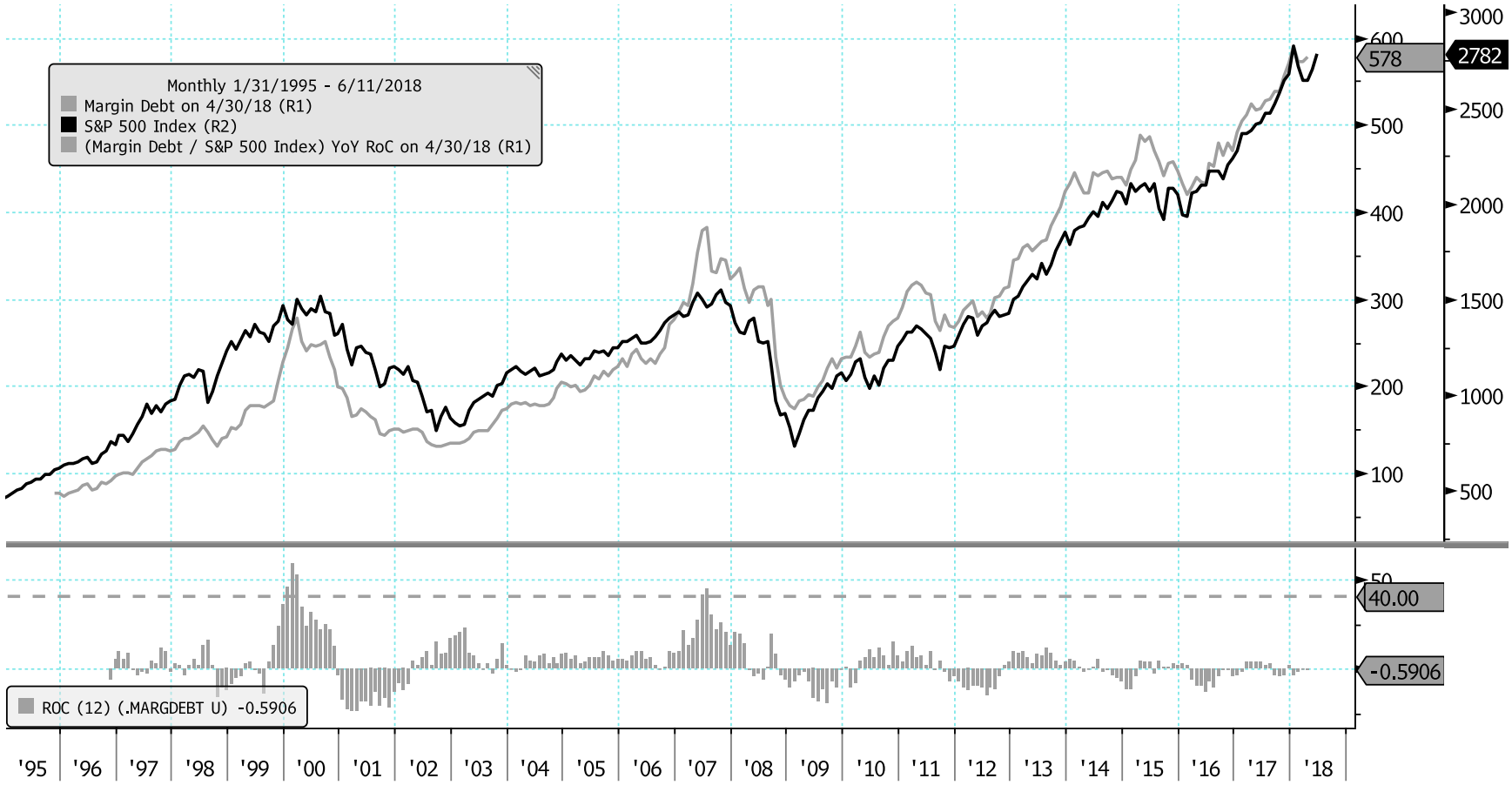
Analysis: Bullishness is currently near the long term average,
In my view this chart should be looked at from a contrarian perspective,
Given that sentiment is near the average my current interpretation of this chart is neutral
I'd get incrementally negative with sentiment above 70

Margin Debt

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



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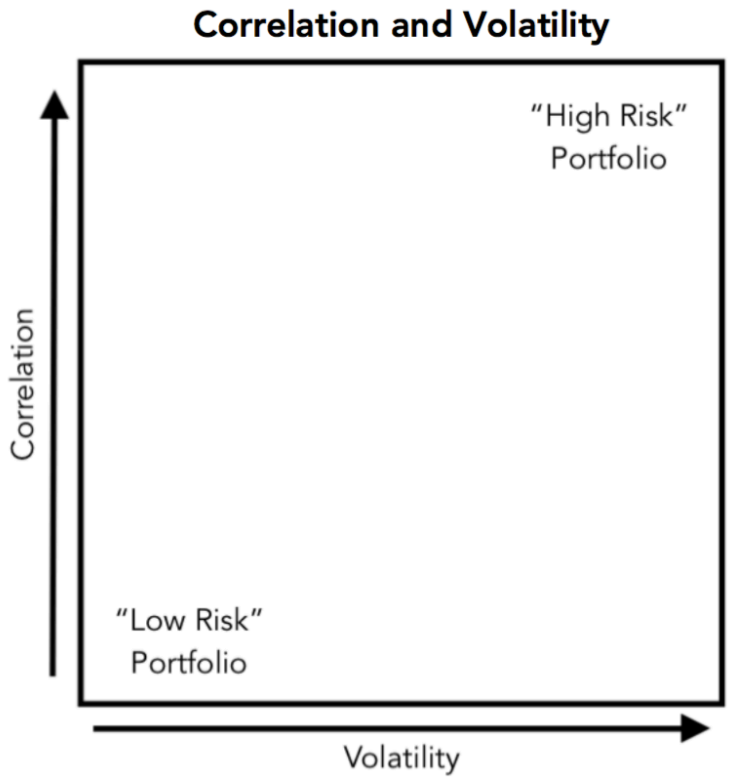
Analysis: Margin debt is not rising relative to the stock market (bottom panel), perhaps supportive of the idea that the bull market has further to go. I'd get incrementally negative on the outlook for the S&P if YoY rate of change of the ratio (bottom panel) moved above 40.

Correlation and Volatility Framework

On the blow diagram Correlation rises along the y-axis from bottom to top, and Volatility rises on the x-axis from left to right

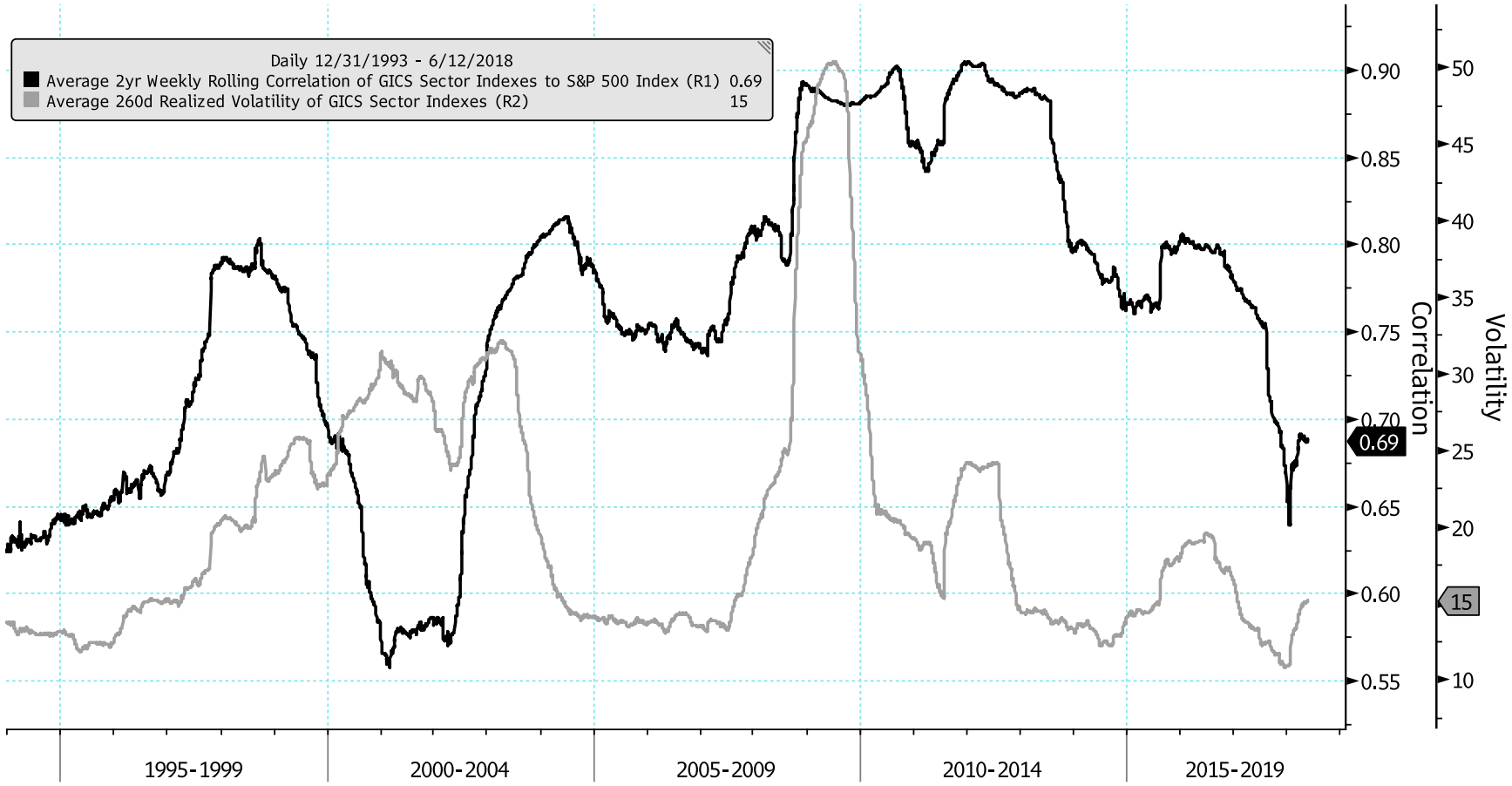


Source: © Merk Investments LLC www.merkinvestments.com/research

Analysis: This is a very simple diagram to help visualize how volatility and correlation relate to the conventional concept of portfolio risk. Modern Portfolio Theory (of which I am somewhat skeptical) defines portfolio risk based on the historical volatility of portfolio components and the historical correlation between portfolio components. Generally speaking: volatility measures the variability of returns of a given portfolio component compared to its own average over time, and correlation measures the degree to which two portfolio components move together over time. Higher volatility means higher variability of returns, and higher correlation means a stronger relationship between returns of one component and another. When both correlations and volatilities are low, measured portfolio risk is low and equity portfolios appear to be relatively "low risk." In practice this tends to be a myopic backward looking risk measure. Counter-intuitively I would argue that longer-term investors might actually want to think the opposite way—in other words, become cautious when the stock market appears low risk and consider becoming optimistic when the stock market appears high risk. As Warren Buffett said: it's better to be fearful when others are greedy and greedy when others are fearful.

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



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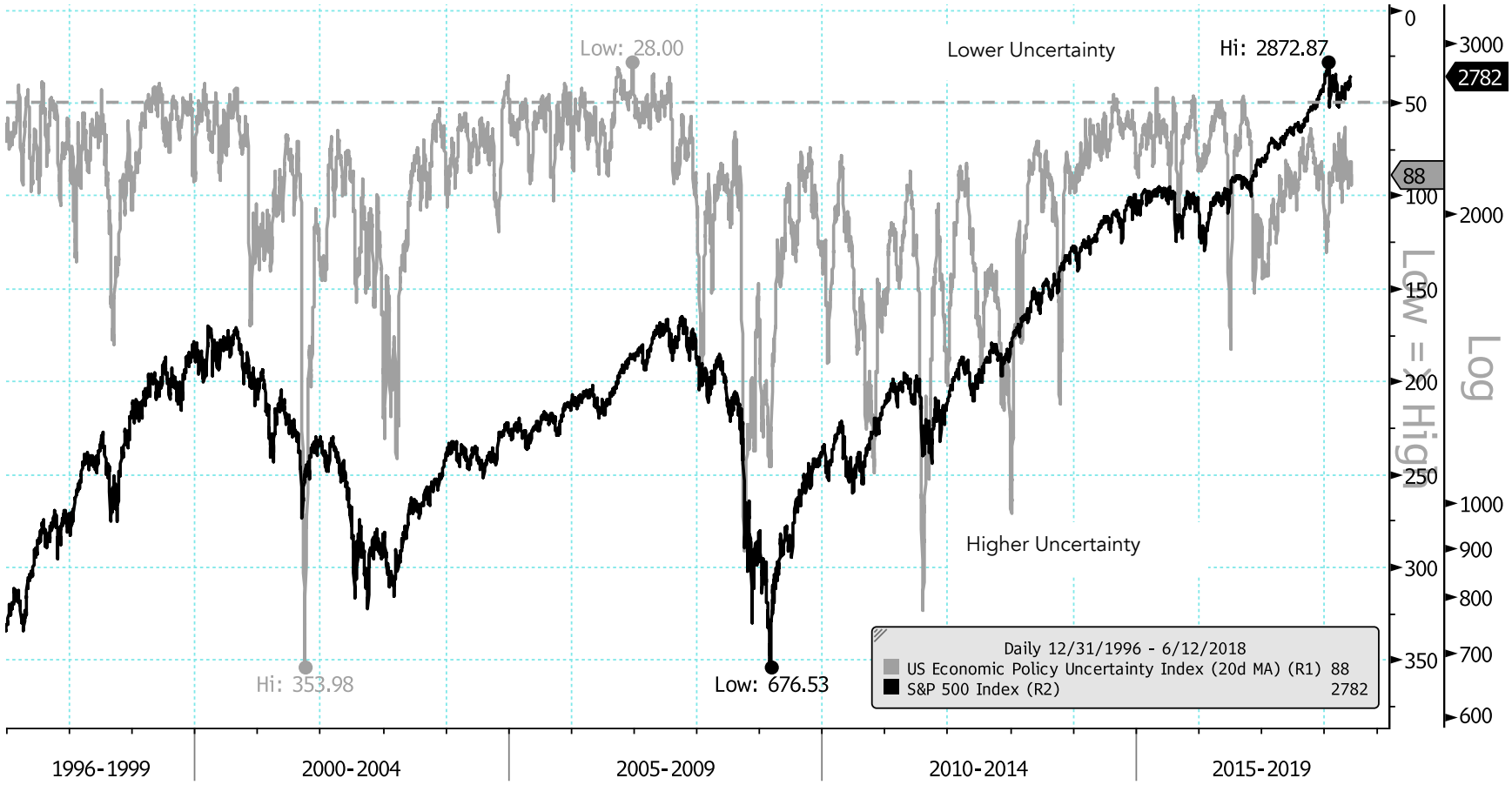
Analysis: Both correlation and volatility are relatively low in a longer-term context. In my view this chart should be looked at from a contrarian perspective, and suggests a negative outlook medium-term. S&P 500 subsequent medium-term returns are likely to be most attractive when both correlation and volatility are high, for example in 2009.

**GICS = Global Industry Classification Standards. The 10 sectors used for this analysis are: Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Telecommunication Services, and Utilities. In 2016 Real Estate was added as an 11th 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)*

Uncertainty

U.S. Economic Policy Uncertainty Index and S&P 500



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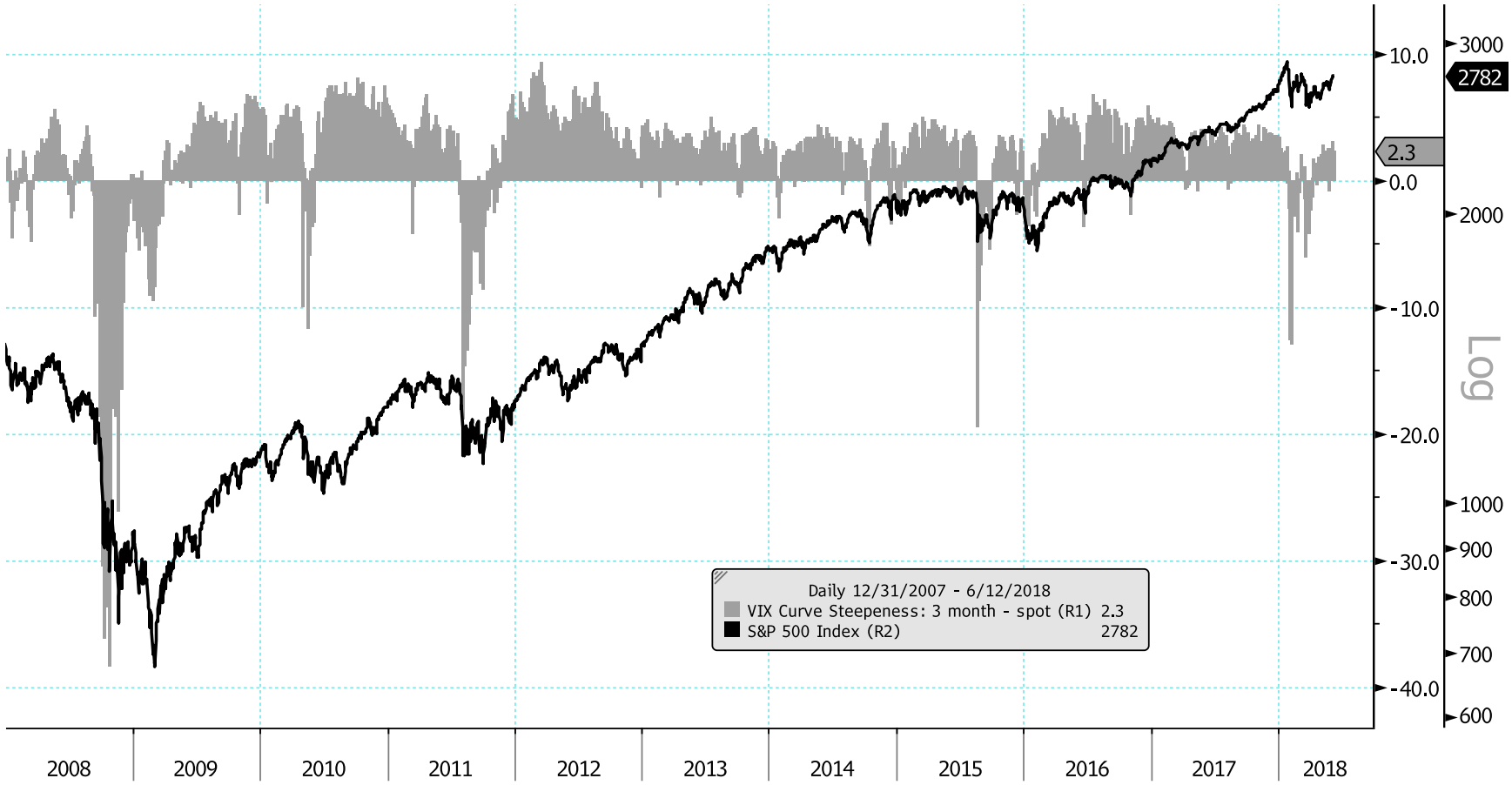
Analysis: There may still be some "wall-of-worry" left to climb.
I'd get incrementally negative on the outlook for the S&P around the 50 level on policy uncertainty

VIX Curve

(3m futures implied VIX – spot VIX) and S&P 500



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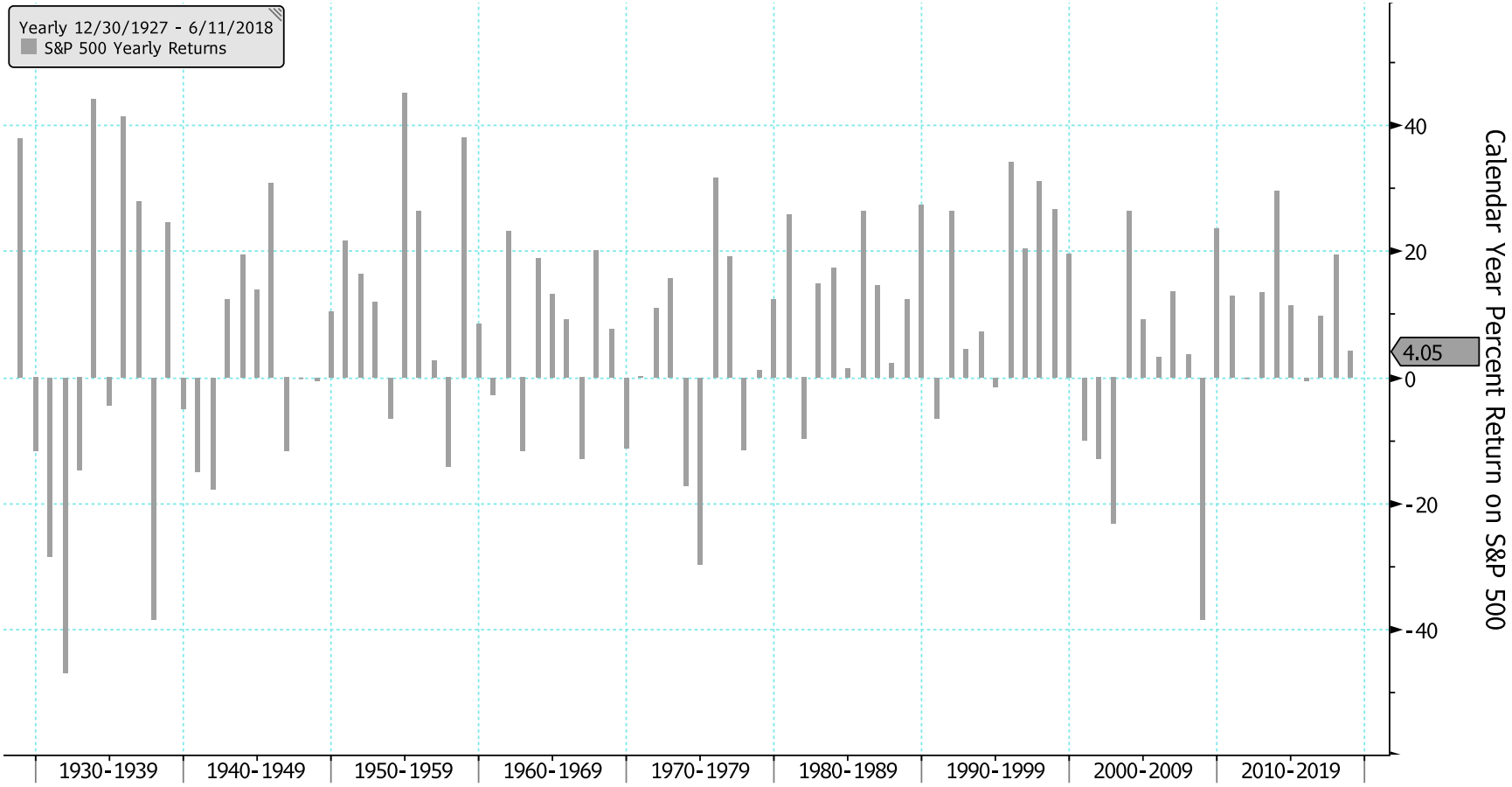
Analysis: The VIX curve is normally sloped (meaning future expected VIX is higher than current VIX), historically a positive sign for stocks
(The VIX represents an estimate of the 30 day implied volatility of the S&P 500)

Calendar Year S&P 500 Returns

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



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Analysis: As of 6/11/2018 the S&P 500 is about +4% YTD. Coming into 2018 sell-side forecasts were for a 0-10% return this year. From 1928-2017 the S&P 500 returned between 0-10% only 17% of years. 51% of years had returns above 10%, and 32% of years had negative returns.

Scorecard

Page	Chart	Time Horizon	Characterization
2	Valuation	Long Term	Negative
3	LEIs	Short/Medium Term	Positive
4	Earnings	Short/Medium Term	Neutral/Positive
5	Global growth	Short/Medium Term	Neutral/Positive
6	Financial Conditions	Short/Medium Term	Neutral/Positive
7	Market Breadth	Medium/Longer Term	Positive
8	Market Sentiment	Short/Medium Term	Neutral
9	Margin Debt	Medium/Longer Term	Neutral/Positive
10	Correlations/Volatility	Medium/Longer Term	Negative
11	Uncertainty	Medium/Longer Term	Neutral/Positive
12	VIX Curve	Short Term	Positive

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Conclusion/Thoughts

Short to medium term I'm positive on the major stock market indexes in the U.S.— my base case scenario remains that the S&P 500 makes new all time highs, getting above 2,873, before the next bear market, which for the purpose of clarity I'll define as a 25%+ drawdown over a six-month+ period. However, I'm cautious over the medium to longer term.

Specifically, financial conditions still look relatively supportive. Also, the normally sloped VIX curve is a positive sign for the S&P 500 to head higher. In terms of breadth, the cumulative advance-decline line for the S&P 500 continues to make new all time highs, which suggests strong breadth and may signal a rally to new highs in the S&P 500 in the coming weeks. In terms of fundamentals, realized and forecast earnings continue to rise.

What keeps me cautious on the medium to longer-term (roughly 5-10 years) outlook is the low volatility and correlation picture and the relatively high overall equity allocation, which is a proxy for valuation and for expected returns over the subsequent ten years.

-Nick Reece, CFA

Disclosure

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