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U.S. Business Cycle Report

February 2020

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Quote

Quotes or book excerpts that I find particularly insightful…

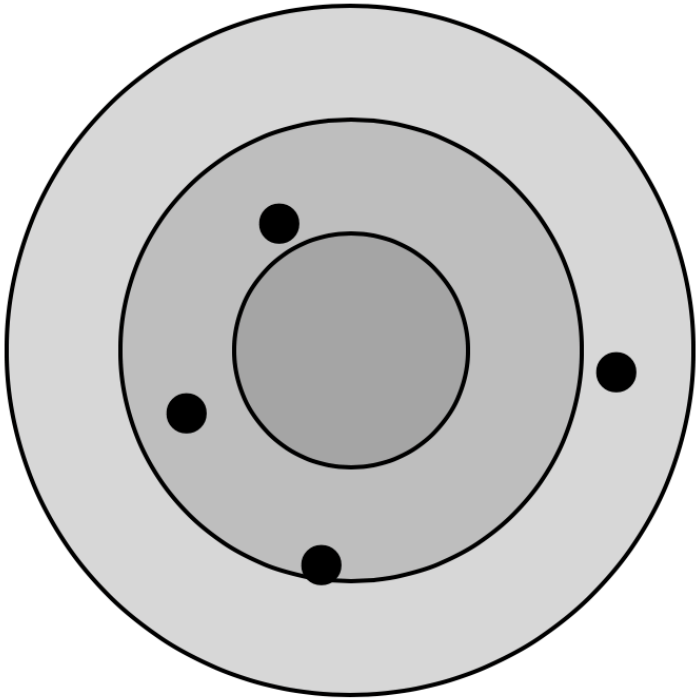
Accuracy vs. Precision

(Adapted from Nate Silver's *The Signal and The Noise)*

Better to be roughly right than precisely wrong

BAYESIAN APPROACH

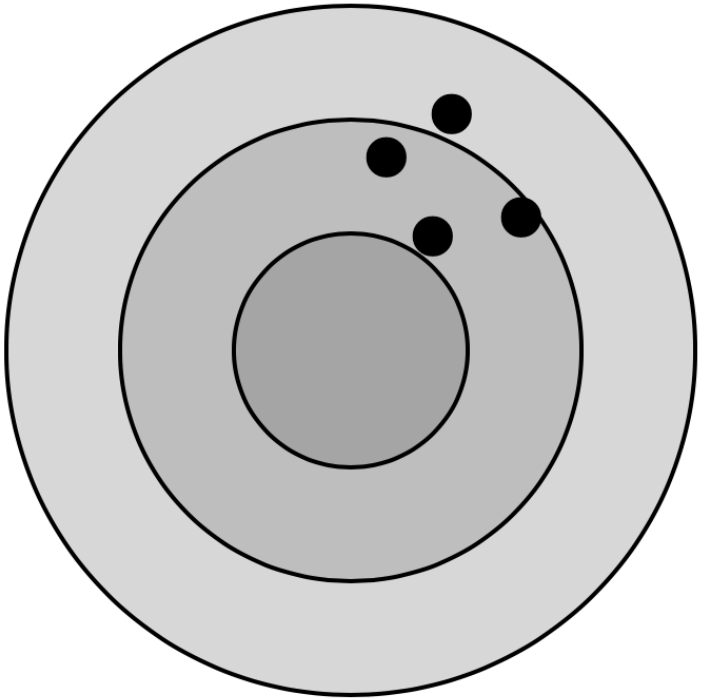
Accurate but not Precise
(Forecast will be in the bullseye with low confidence)



Often right but always in doubt

FREQUENTIST APPROACH

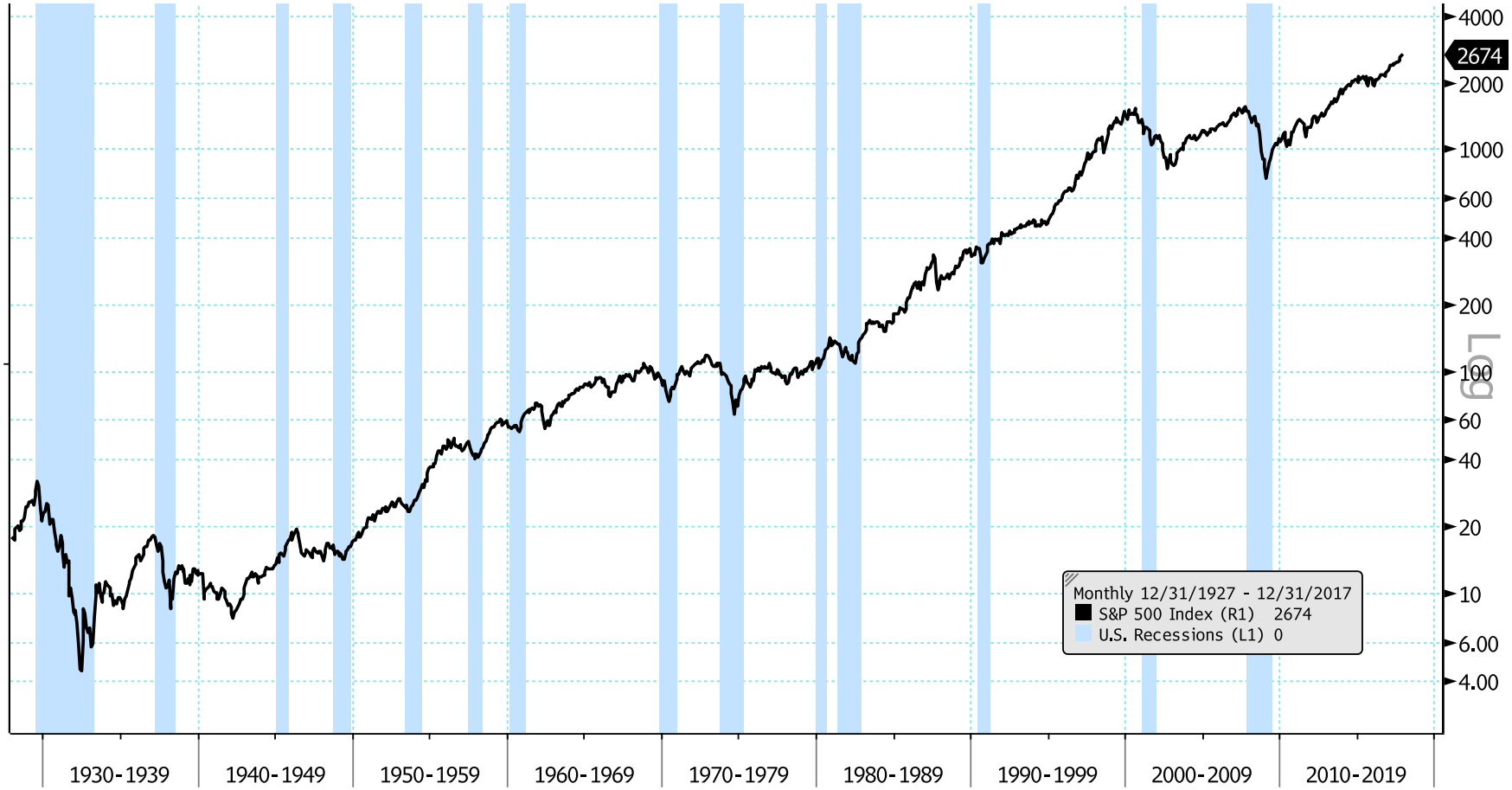
Precise but not Accurate
(Forecast will be outside the bullseye with high confidence)



Often wrong but never in doubt

Why is the Business Cycle Important?

S&P 500 (log scale) and official National Bureau of Economic Research (NBER) U.S. Recessions

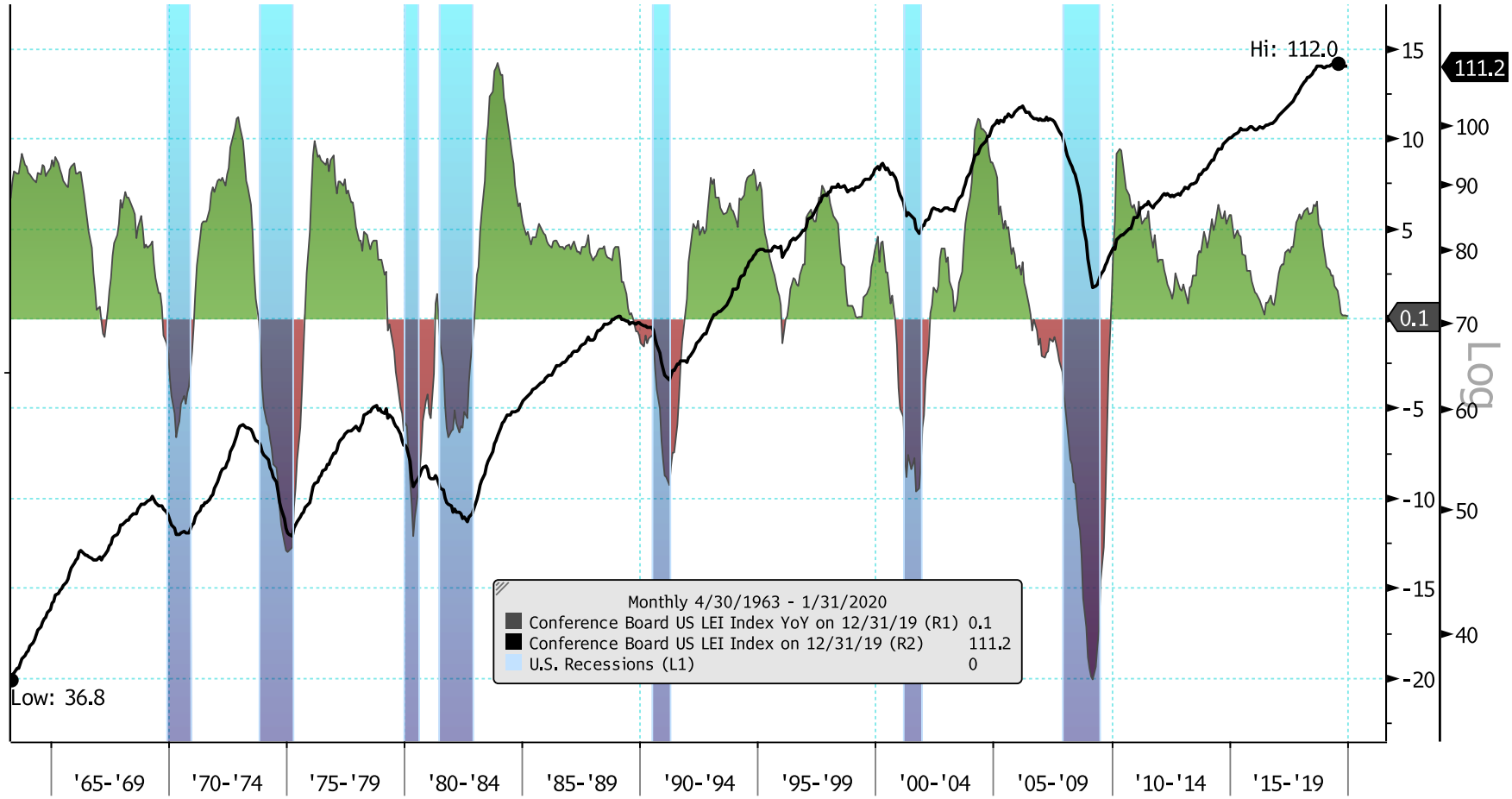


Source: © Merk Investments, Bloomberg

*Analysis: Over the 90 years between 1927 and 2017, the average S&P 500 monthly return during expansions was +0.89% (889 months), compared to an average S&P 500 monthly return during recessions of -0.71% (191 months). In terms of proportions of time: expansion months account for about 80% and recession months about 20%. The business cycle also has important implications for Fed policy. *Note that recessions are not announced by the NBER until well after their start dates**

U.S. Leading Economic Indicators (LEIs) Index

Conference Board's LEI Index and YoY Rate of Change

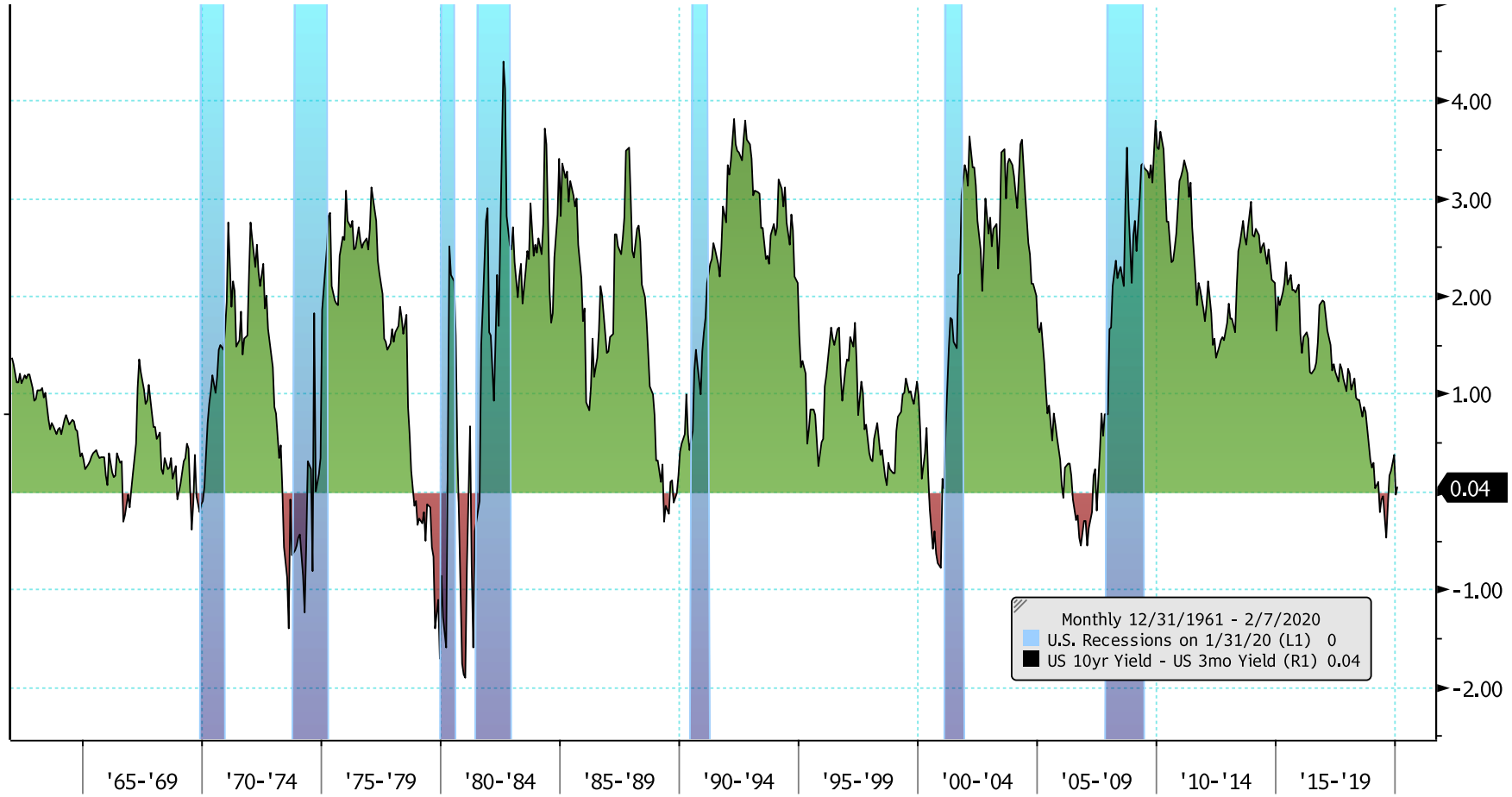


Source: © Merk Investments, Bloomberg

Analysis: Since last month's report, the LEI YoY rate of change remained stable at 0.1%. The index level remains slightly below its cycle high. Over the past several months positive momentum has slowed. But given the YoY rate of change remains positive, history suggests a recession is unlikely to start within the next six months. This picture keeps me generally positive on the outlook for the U.S. economy. Chart Framework: I'd get incrementally negative on the business cycle outlook if the LEI YoY went negative.

U.S. Yield Curve Steepness

(10yr yield – 3mo yield)

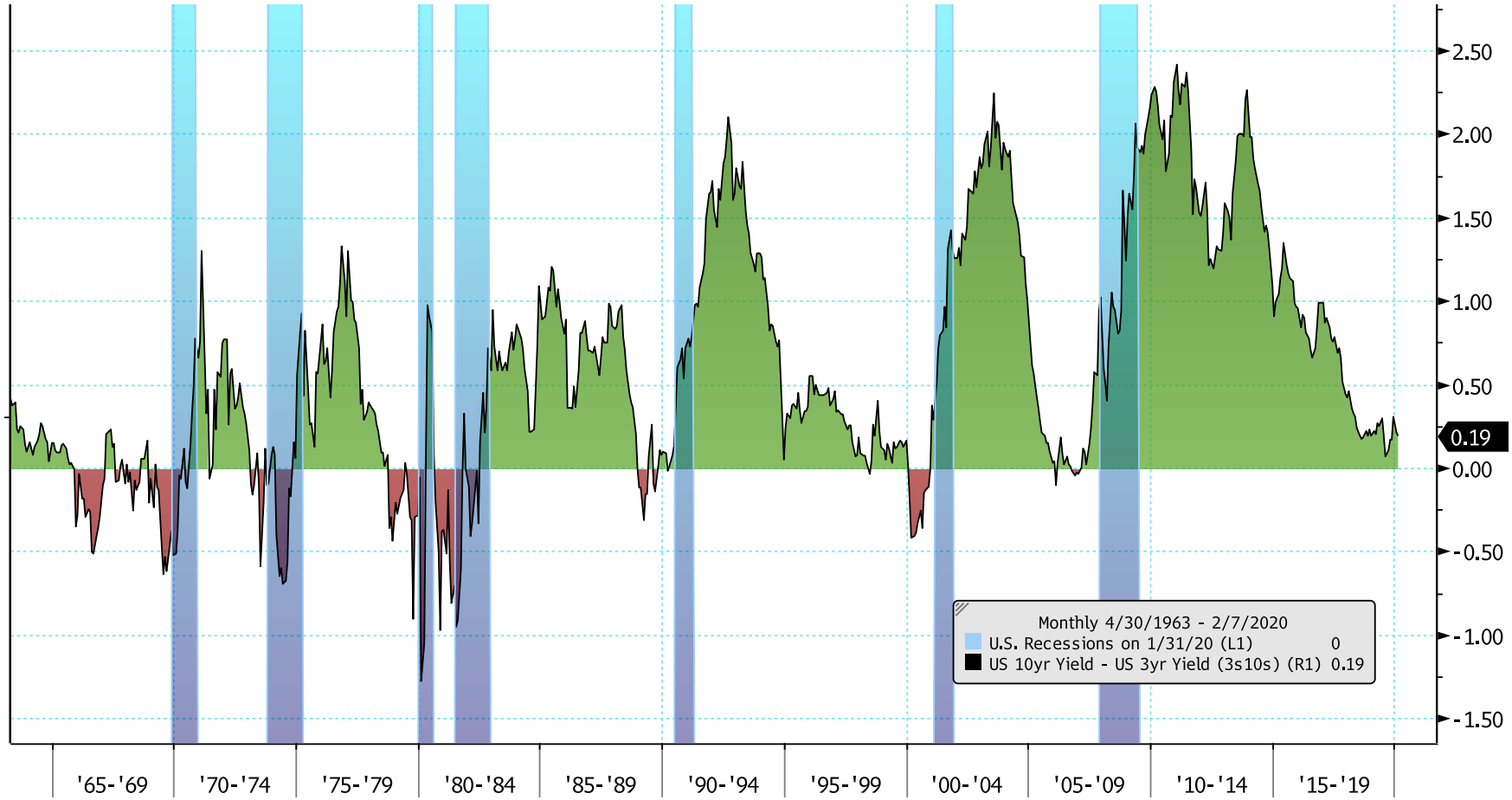


Source: © Merk Investments, Bloomberg

*Analysis: The 10yr-3m yield curve was inverted (meaning the 3-month yield was higher than the 10-year yield) from May to October 2019. 10yr-3m inversion has historically been a strong recession indicator (with recessions historically starting 6-18 months after initial inversion). I'm currently neutral/negative on this picture. Chart Framework: I'd get incrementally positive on this picture if the yield curve steepened while other macroeconomic data (e.g., U.S. Mfg PMI) also improved. *It may be worth noting that the 10yr-3yr (shown on the next page) has always inverted prior to recessions and still has not (yet) inverted.*

U.S. Yield Curve Steepness

(10yr yield – 3yr yield)

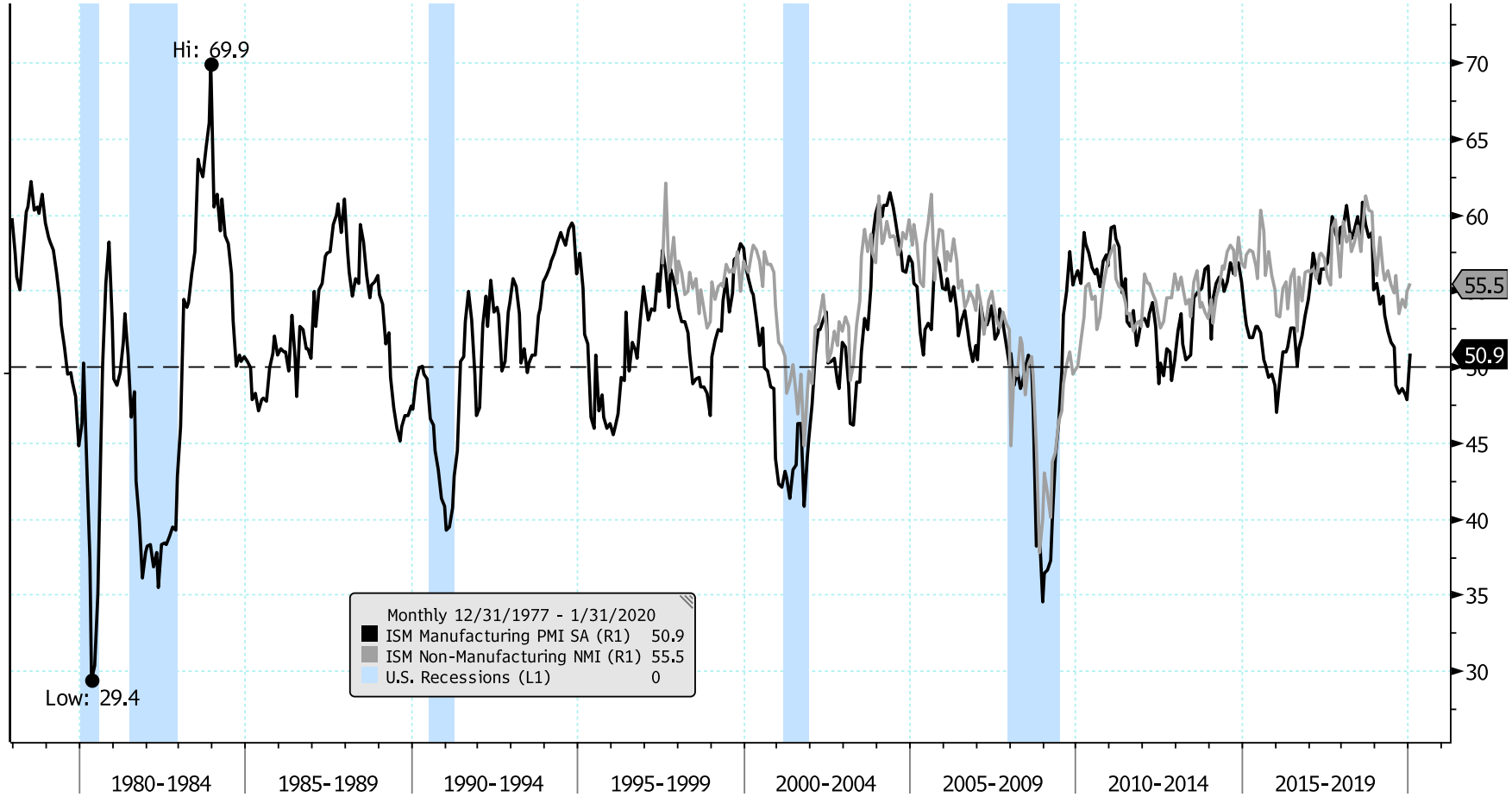


Source: © Merk Investments, Bloomberg

Analysis: A cross reference to the 10yr-3yr shows a yield curve that has remained positively sloped (meaning the 10yr yield is higher than the 3yr yield). The yield curve is slightly flatter since last month's report. The 10yr-3yr curve may invert in the coming quarters. Chart Framework: I'd get incrementally negative on the medium-term business cycle outlook if the yield curve inverted (i.e., 3yr yield > 10yr yield).

U.S. PMIs

Manufacturing and Non-manufacturing (aka Services) PMIs (Purchasing Managers Index)

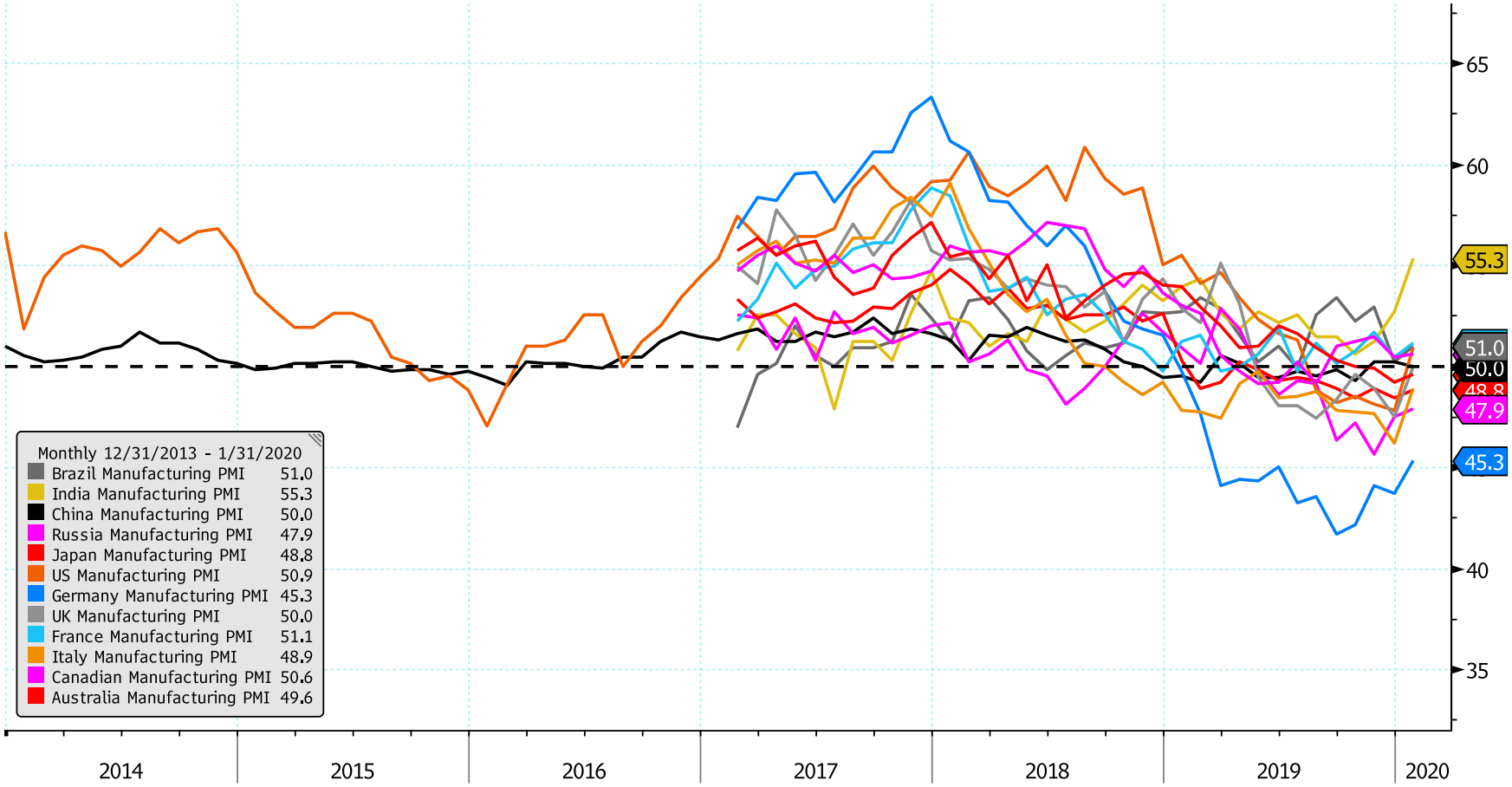


Source: © Merk Investments, Bloomberg

Analysis: Manufacturing PMI moved up over the past month, from 47.2 to 50.9, moving back above 50 and suggesting economic expansion. I'm currently positive on this picture. Chart Framework: I'd get incrementally negative on the business cycle outlook if the manufacturing PMI fell below 50.

Global Manufacturing PMIs

Largest twelve global economies' Manufacturing PMIs (Purchasing Managers Index)

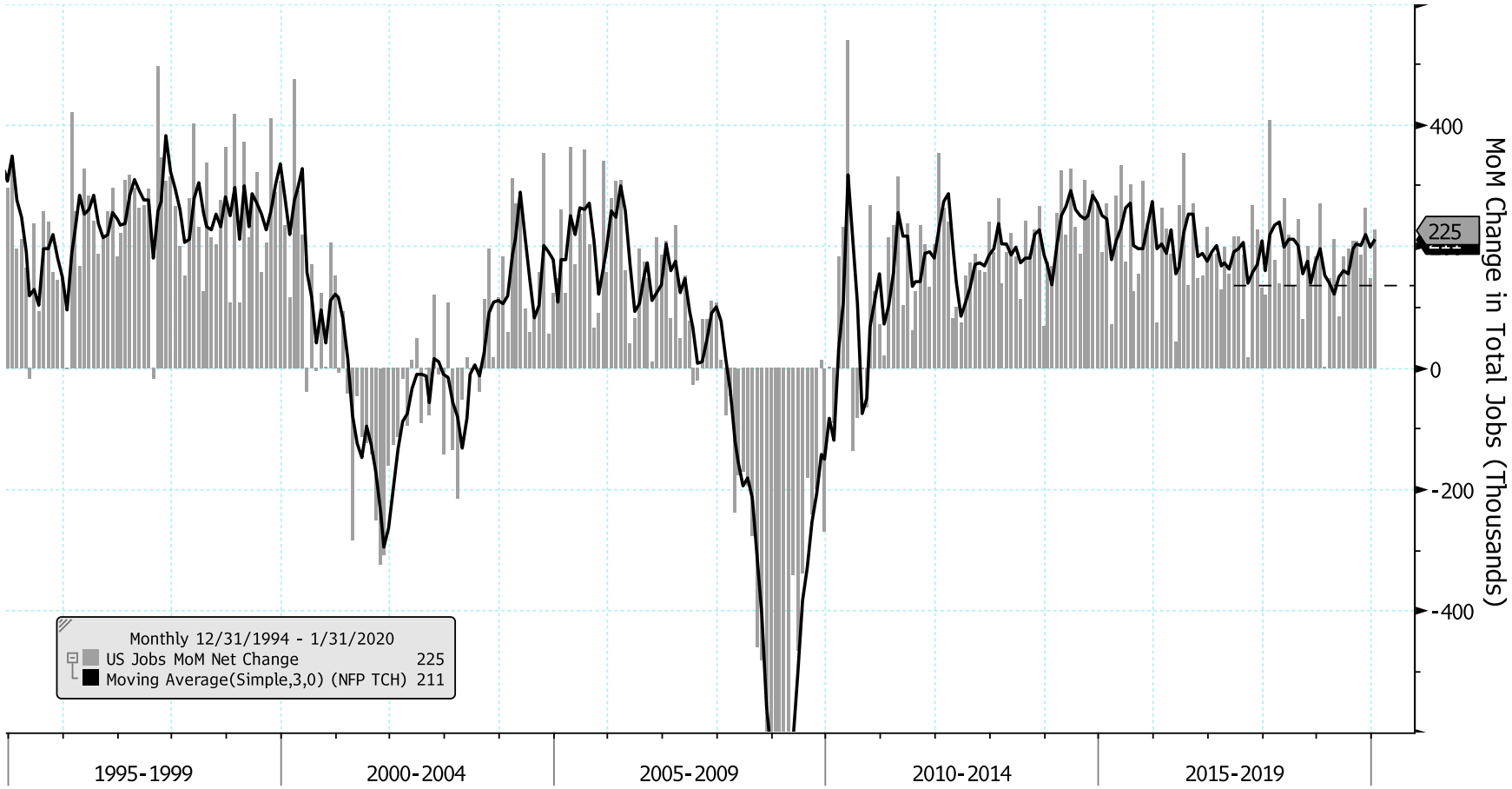


Source: © Merk Investments, Bloomberg

Analysis: Global economic momentum as measured by manufacturing PMIs was positive over the past month. Seven out of the twelve readings are now above 50, i.e., in expansionary territory. Given my framework I'm positive on this picture.
Chart Framework: I'd get negative on this picture if the majority of Mfg PMIs were below 50.

Job Gains

The Net Monthly Change in Non-farm Payrolls (grey) with 3-month Moving Average (black)

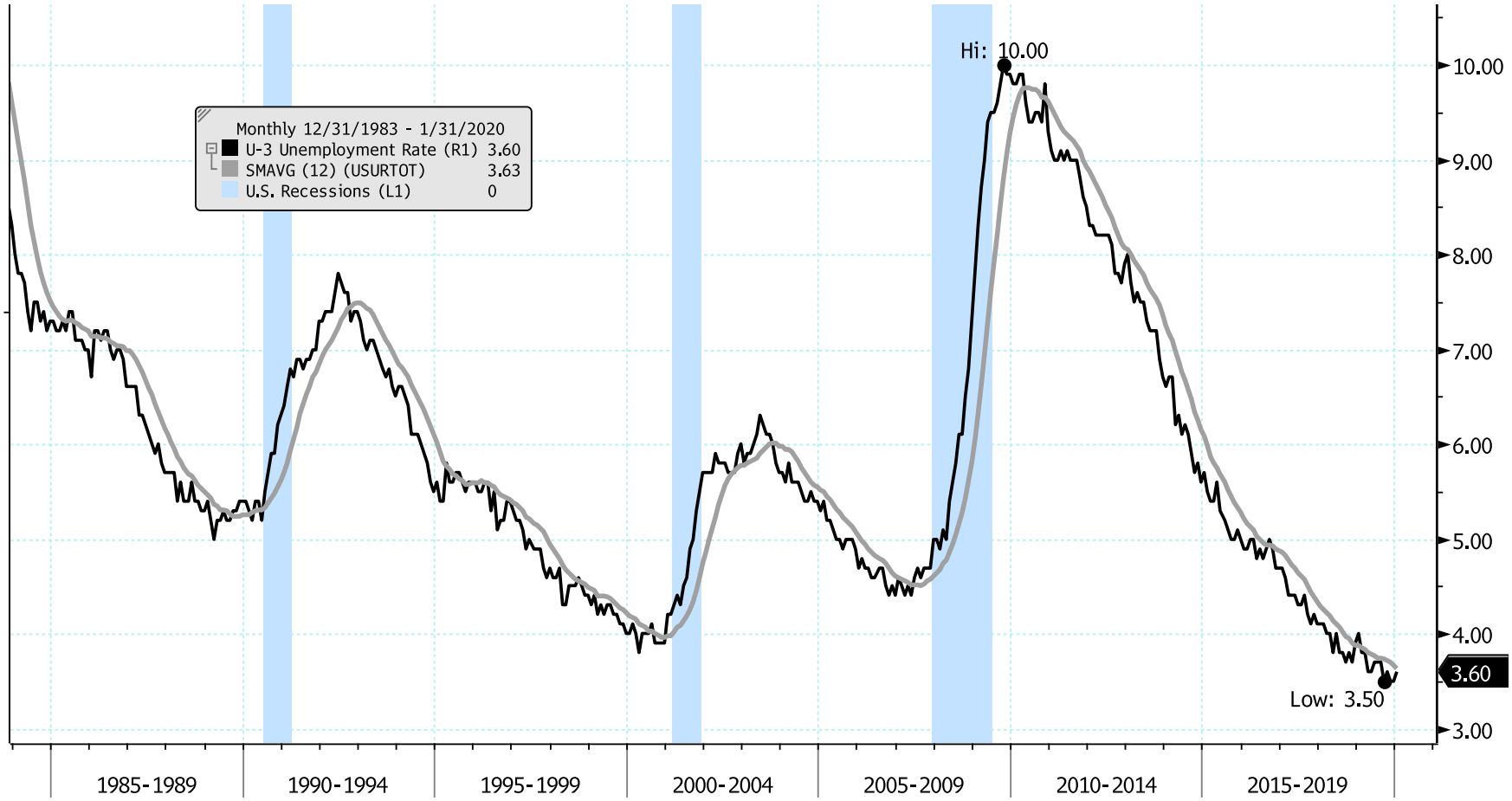


Source: Bloomberg, © Merk Investments LLC

Analysis: The 3-month moving average of job gains is 211k, overall a strong level.
Framework: I'd get incrementally negative on this picture if the 3-month average for job gains fell below 135k.

U.S. Unemployment Momentum

U-3 Rate and U-3 12 month Moving Average

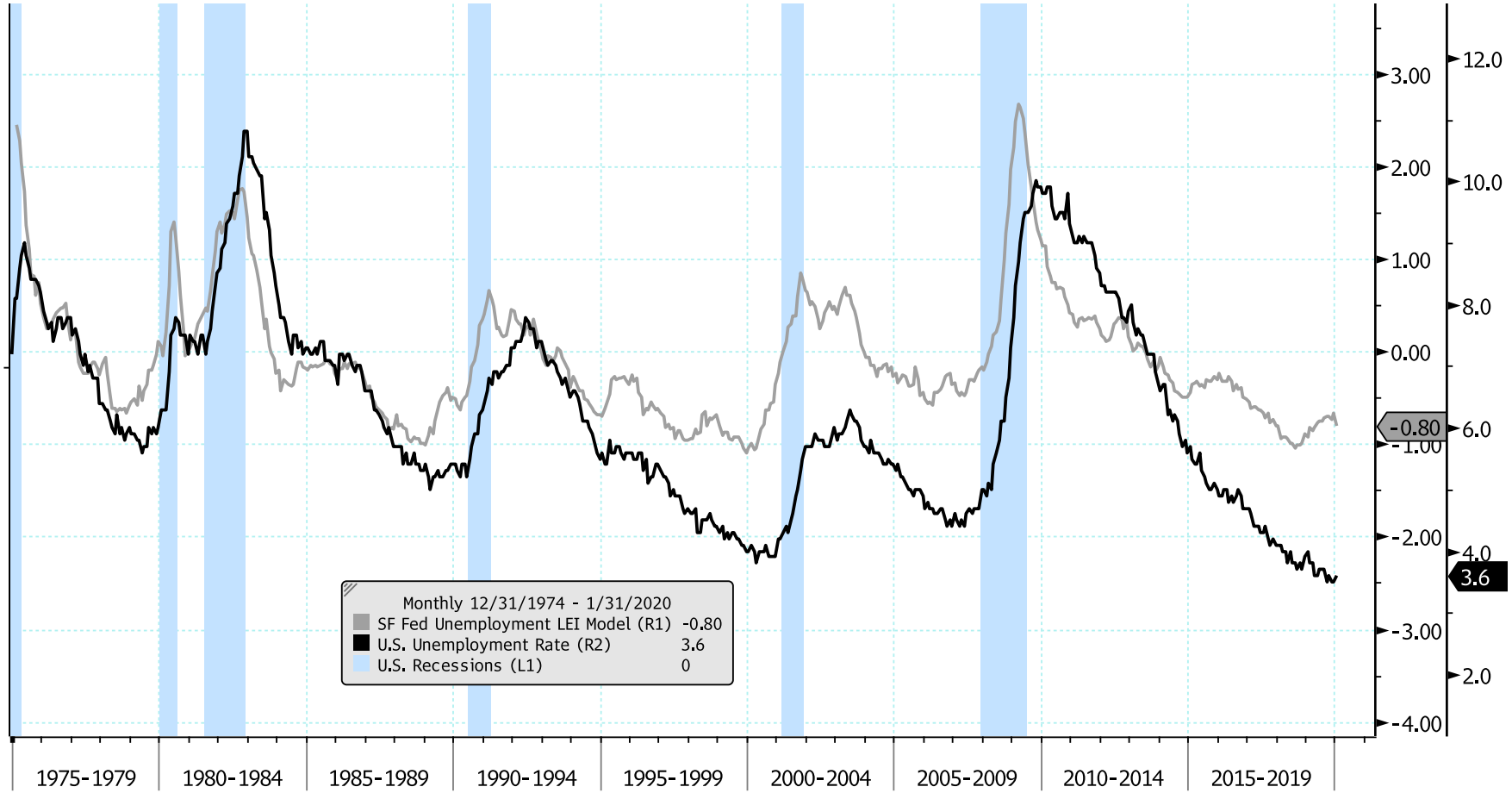


Source: © Merk Investments, Bloomberg

Analysis: The unemployment rate ticked up to 3.6%, but on the back of higher labor force participation (generally a healthy sign). Unemployment remains below its 12-month moving average. Chart Framework: I'd get incrementally negative on the business cycle outlook if the unemployment rate moved above its 12m MA while the labor force participation rate trended lower.

SF Fed Leading Unemployment Rate (U-3) Model

Replica of San Francisco Fed Model (grey) and U-3 Unemployment Rate (black)

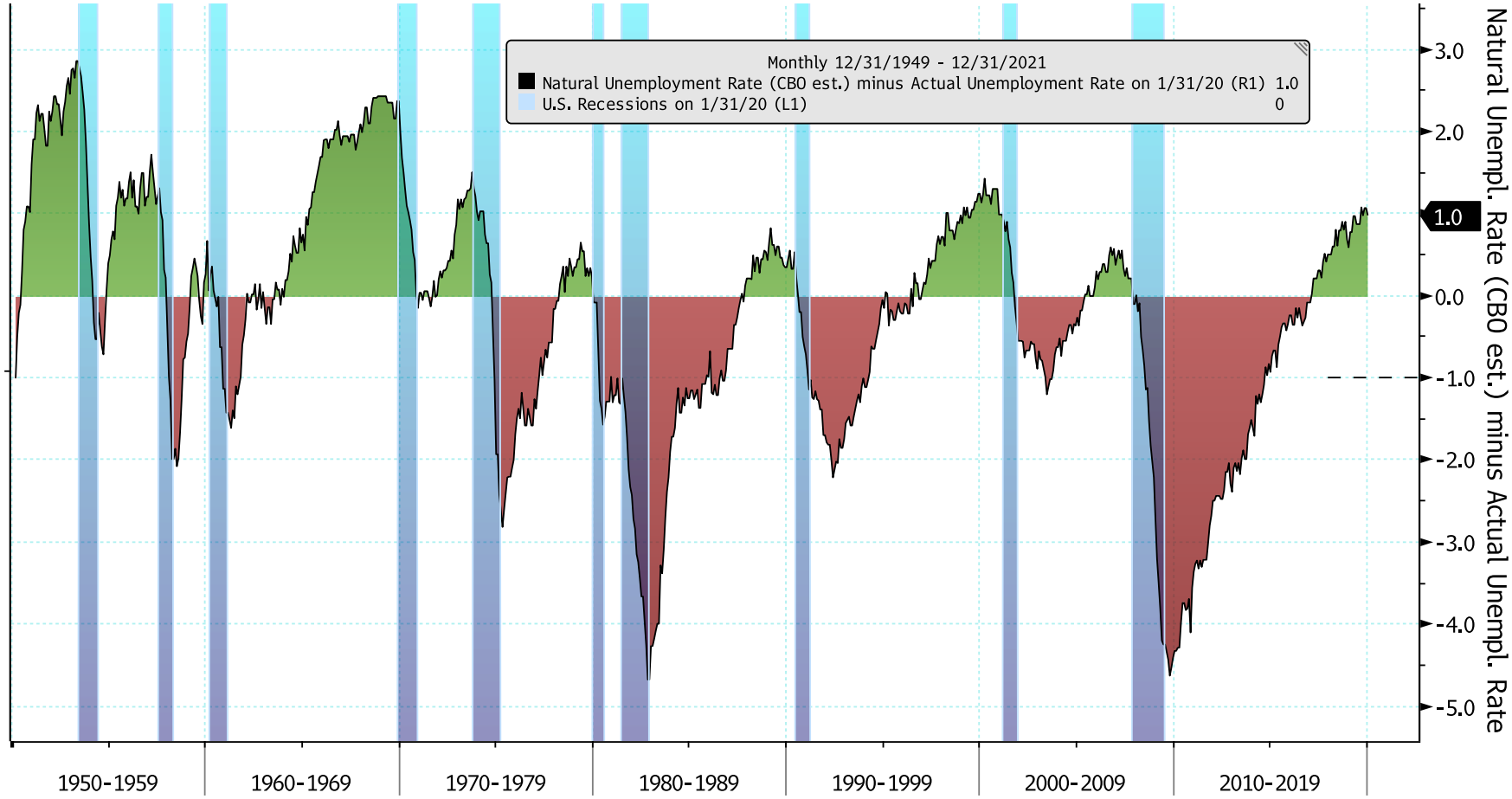


Source: © Merk Investments, Bloomberg

Analysis: The SF Fed unemployment rate model (grey line) has turned down again in recent months, but is still trending higher YoY. Given my chart framework I'm currently negative on this picture. Chart Framework: I'd get incrementally positive on the business cycle outlook if the SF Fed model line started trending lower again on a YoY basis. For reference: the San Francisco Fed Paper

U.S. Labor Market Capacity Utilization

Natural Rate of Unemployment (CBO est.) – Actual Rate of Unemployment

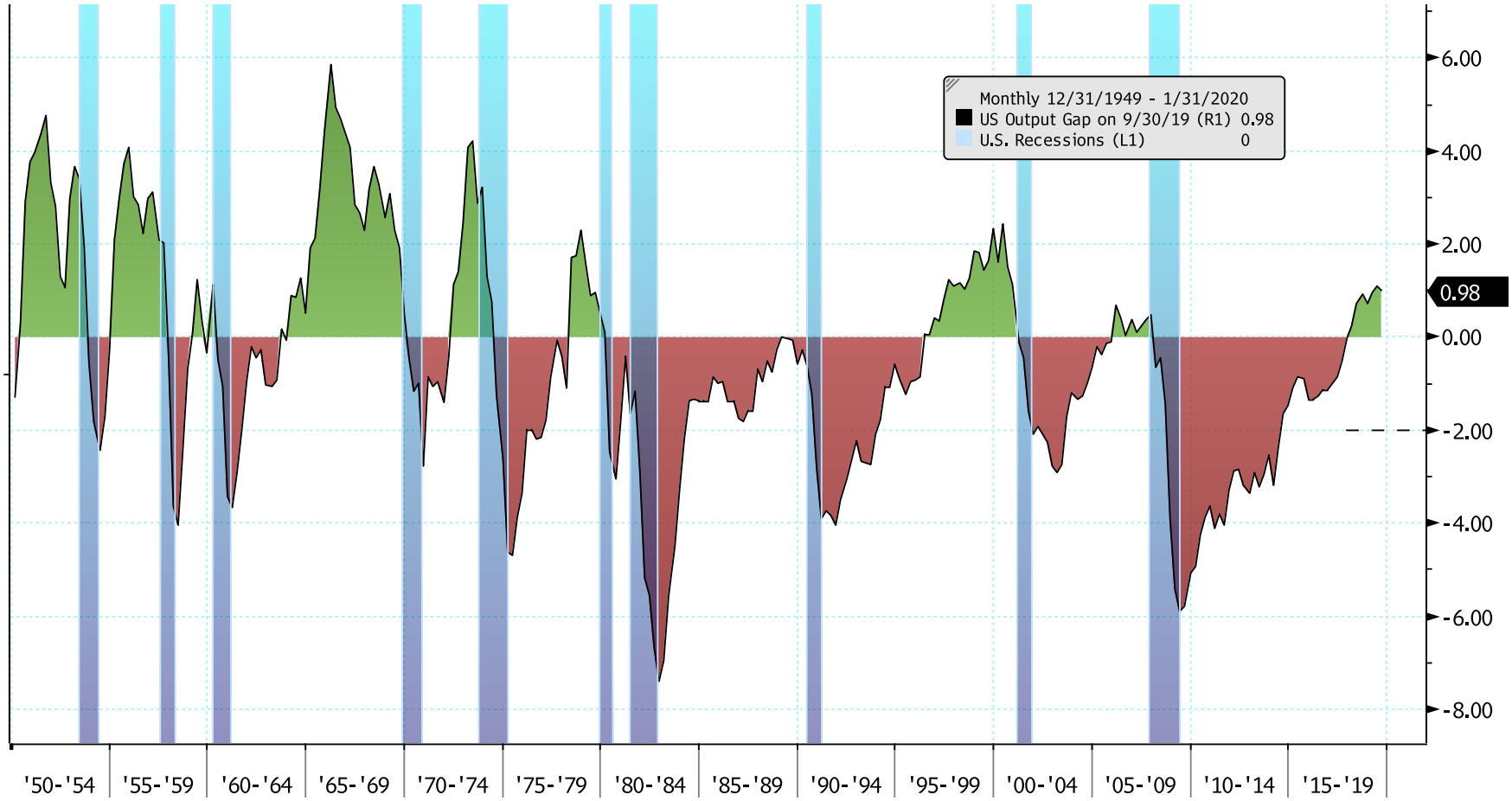


Source: © Merk Investments, Bloomberg

Analysis: The estimated natural rate of unemployment is higher than the current unemployment rate by 1.0% (4.6% estimate – 3.6% current reading), meaning the U.S. economy is potentially running above capacity, which likely increases the risk of a recession roughly 1-5 years out. It is worth noting that the estimate of the natural rate of unemployment is debated, and some think it is lower than the 4.6% estimated by the CBO. Chart Framework: I'm currently incrementally negative on the business cycle outlook medium/longer term based on this picture, I'd get incrementally positive medium/longer term around -1.00 on the chart, which would likely only be during or after a recession. It's worth noting that despite the current picture above many other metrics seem to indicate that some slack remains in the labor market.

U.S. GDP Output Gap

Actual GDP minus Potential GDP (CBO est.)

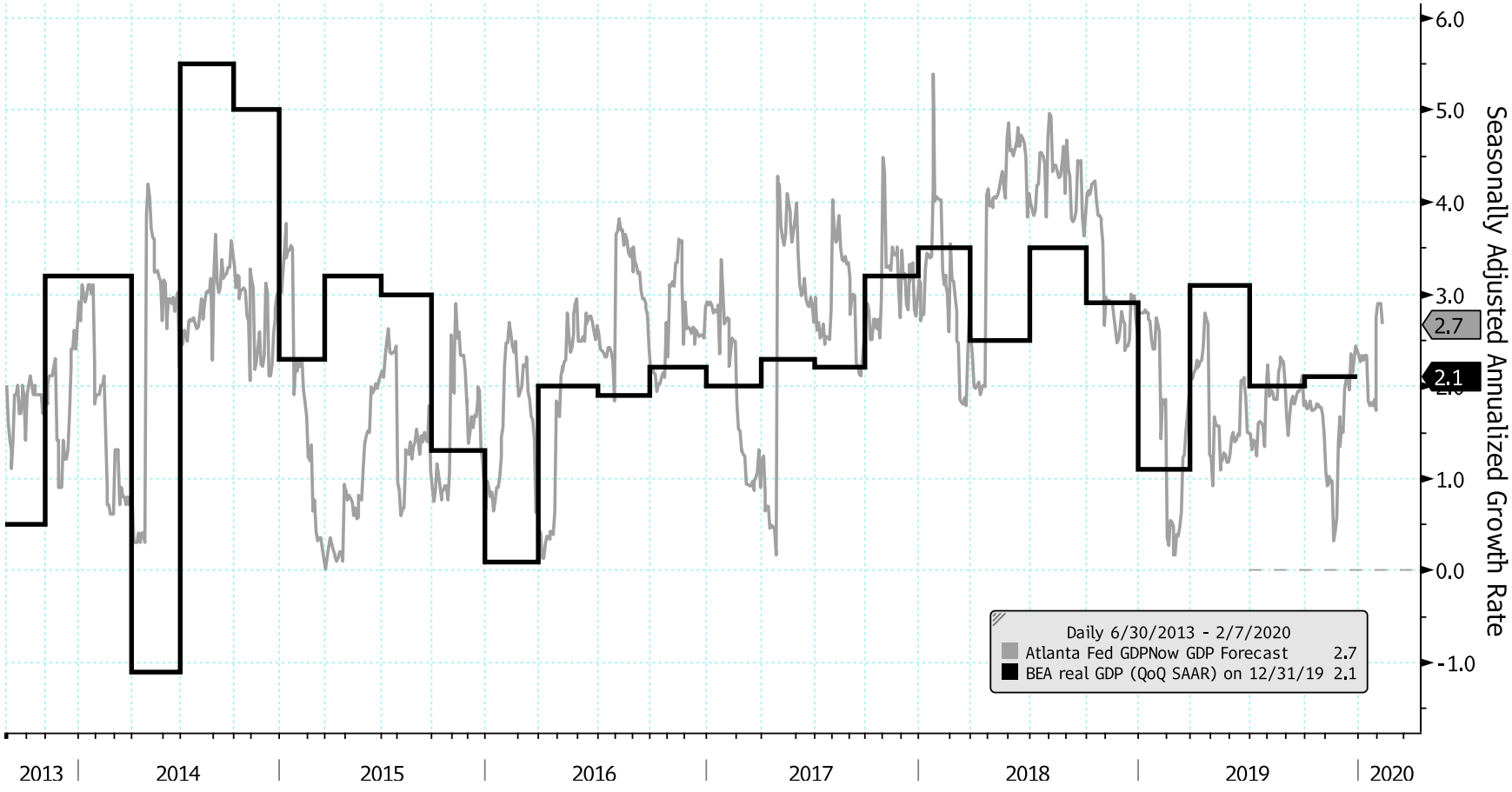


Source: © Merk Investments, Bloomberg

Analysis: Actual GDP is more than potential GDP (as estimated by the CBO), which suggests the expansion may be in its late stages. As with the unemployment rate on the previous page, there is debate about what potential GDP should be. I'm currently incrementally negative on the business cycle outlook medium/longer term based on this picture. Chart Framework: I'd get incrementally positive medium/longer term around -2.0 on the chart, which would likely only be during or after a recession.

Atlanta Fed GDPNow GDP Forecast

GDPNow Forecast and the official QoQ SAAR from BEA

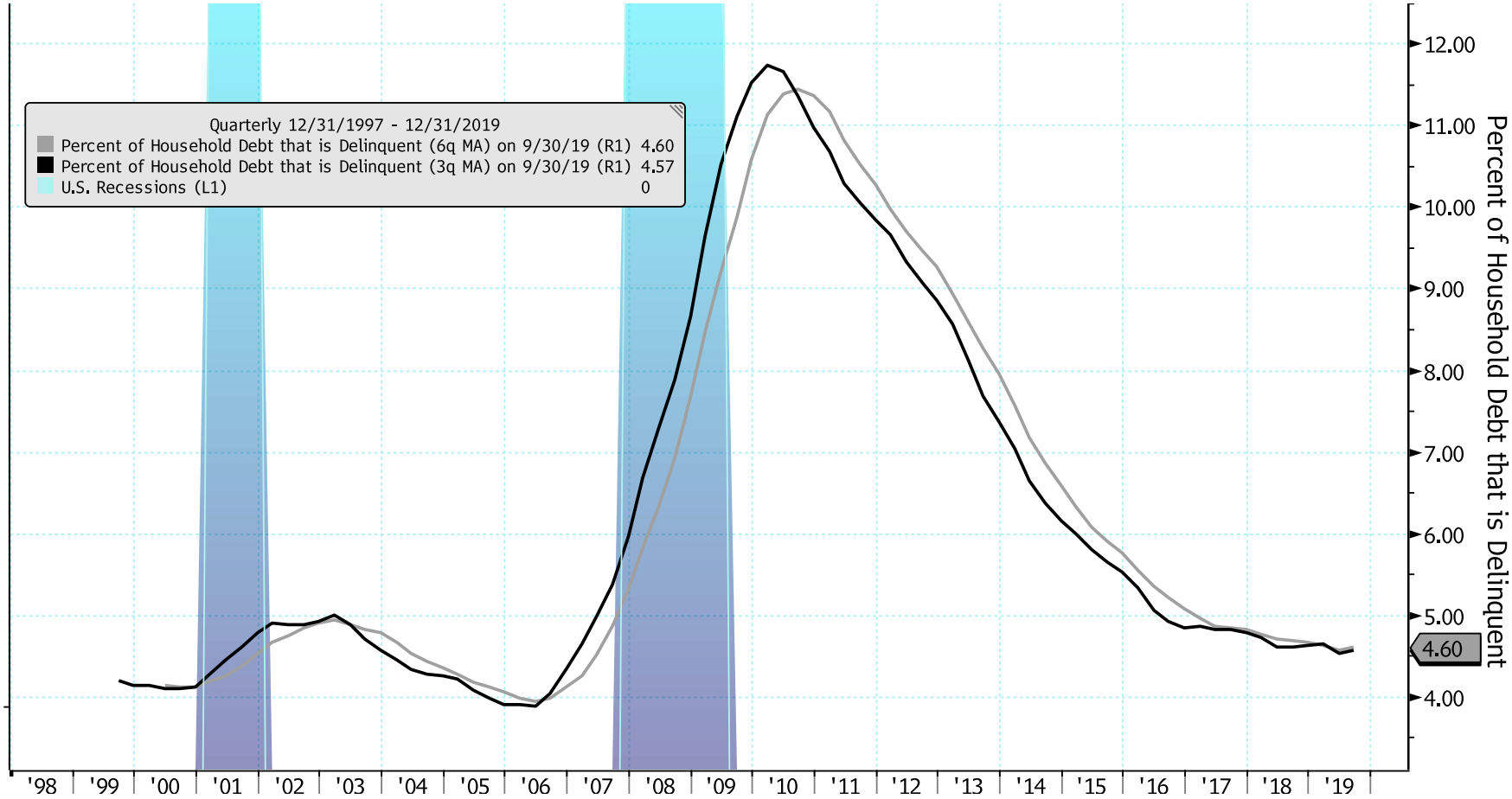


Source: © Merk Investments, Bloomberg

Analysis: The Q4 2019 GDP final reading (black line) came in at 2.1%. The current forecast for Q1 2020 GDP is around 2.5%. Chart Framework: I'd get incrementally negative on the business cycle outlook if the Atlanta Fed GDP indicator fell below zero.

U.S. Household Credit Cycle

Percent of Household Debt that is Delinquent (3 quarter and 6 quarter moving averages)

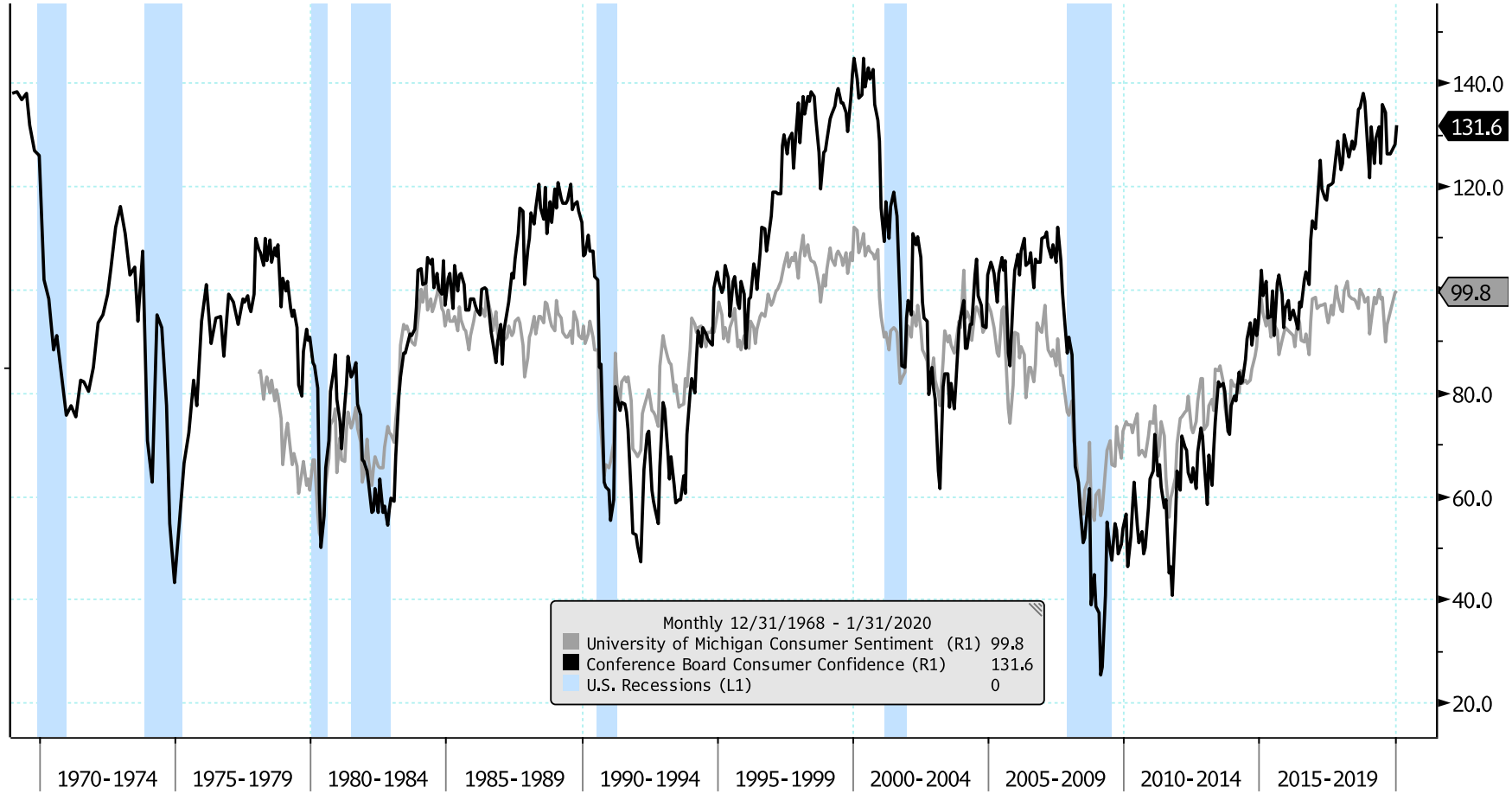


Source: © Merk Investments, Bloomberg

Analysis: The Q3 2019 data showed a notable uptick in the household delinquency rate (generally a negative sign for the economy). But the 3-quarter moving average (black) remains below the 6-quarter moving average (grey). Given my chart framework I'm currently positive on this picture. Chart Framework: I'd get incrementally negative if the 3q MA rose above the 6q MA. The Q4 2019 data comes out in late February.

U.S. Consumer Confidence

Michigan Consumer Sentiment and Conference Board Consumer Confidence

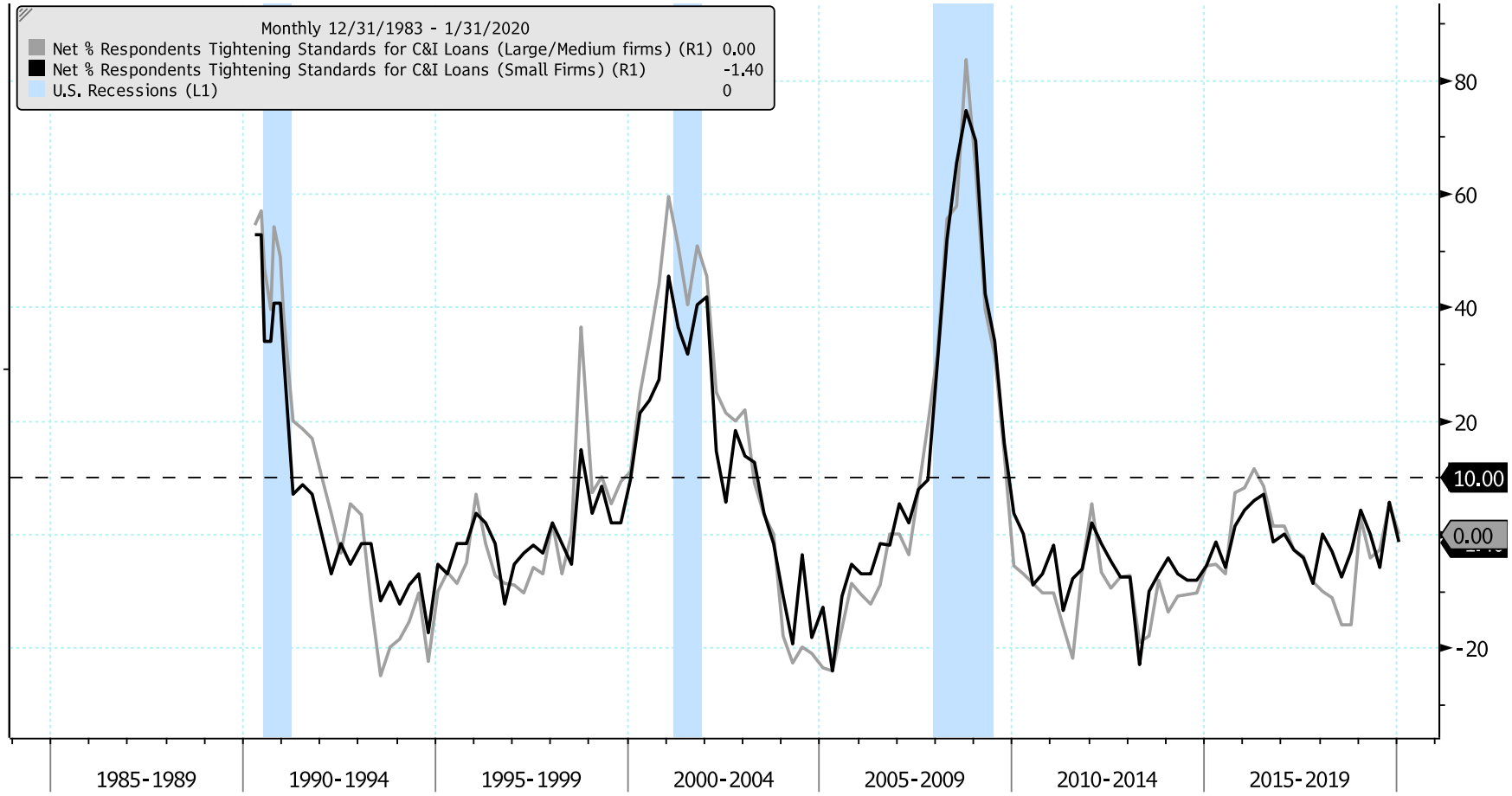


Source: © Merk Investments, Bloomberg

Analysis: The consumer confidence indexes are generally trending sideways to higher (at elevated levels). Given my framework, I'm currently positive on this picture. Chart Framework: I'd get incrementally negative if both measures trended lower on a YoY basis.

Bank Lending Standards

Senior Loan Officer Opinion Survey (SLOOS): Net % of Respondents that are Tightening Lending Standards for Commercial and Industrial (C&I) Loans

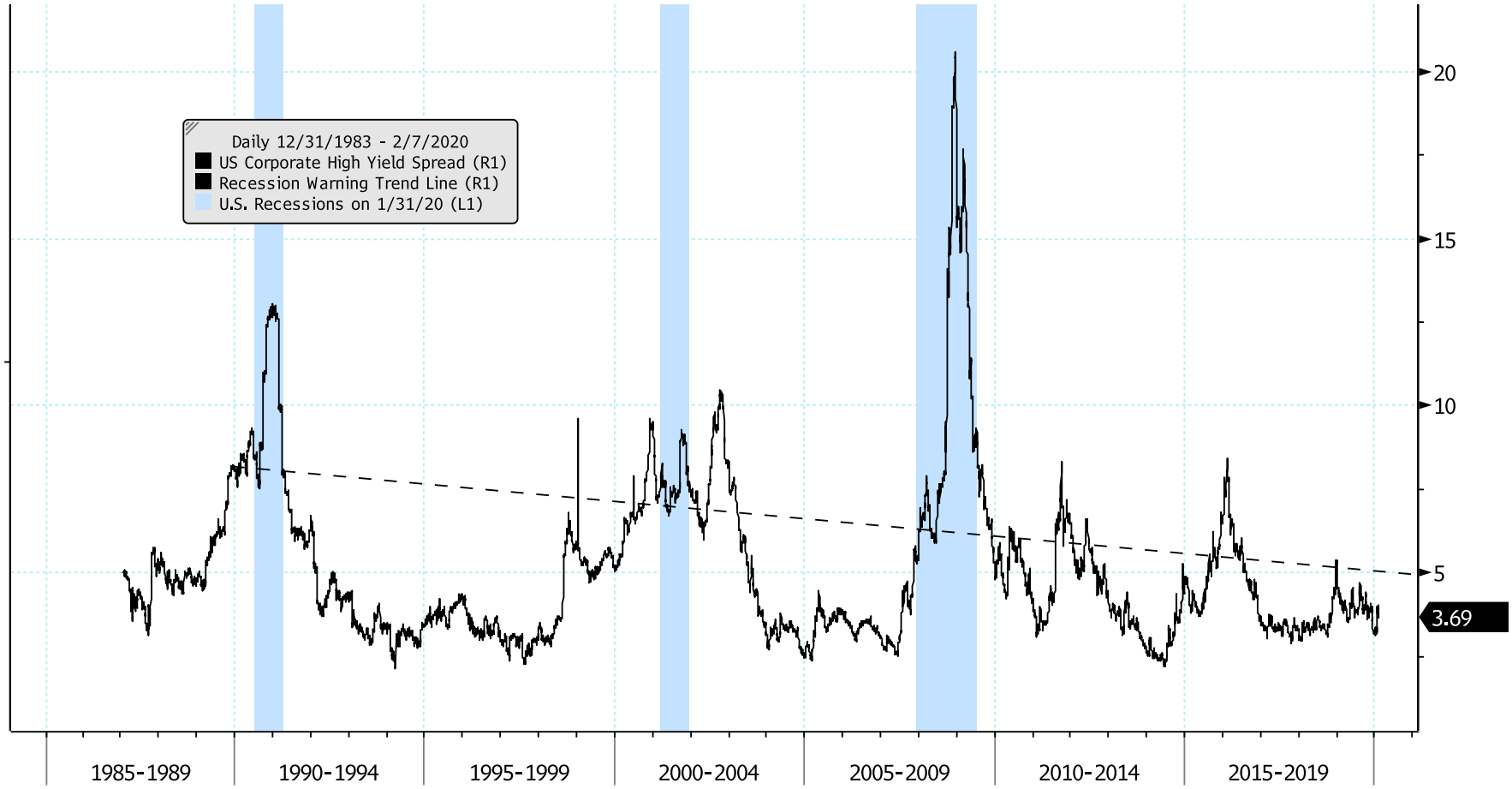


Source: © Merk Investments, Bloomberg

Analysis: Data from the Fed's Senior Loan Officer Opinion Survey suggest bank lending standards generally continue to be supportive of economic activity. Chart Framework: I'd get incrementally negative on the business cycle outlook if 10% of respondents report tightening lending standards. It's worth noting that this data only comes out quarterly.

High Yield Spread

U.S. High Yield Spread with Trend Line

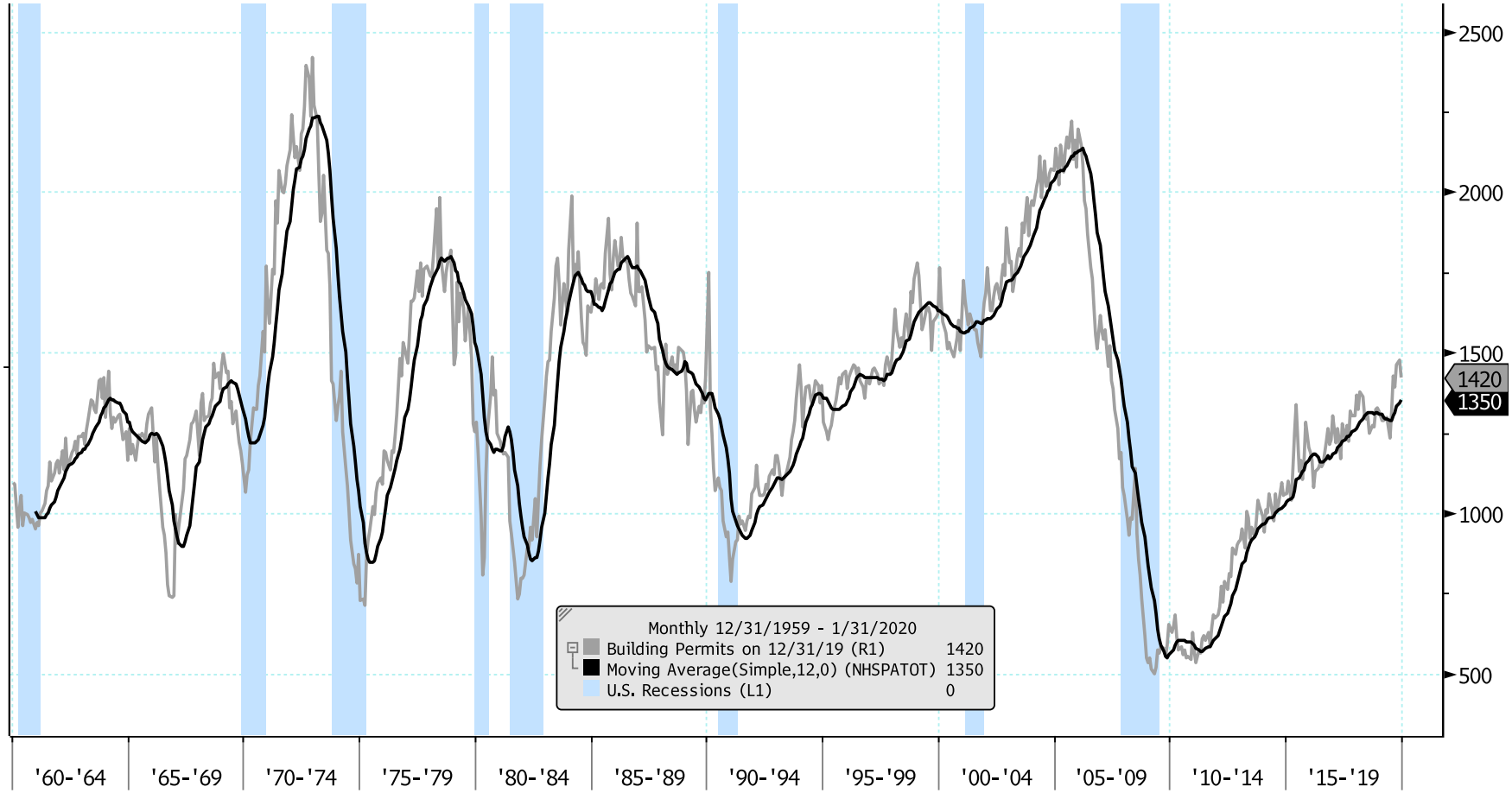


Source: © Merk Investments, Bloomberg

Analysis: The high yield credit spread is higher by about 40 bps since last month's report, but remains below what I consider the warning level. Chart Framework: I'd get incrementally negative on the business cycle outlook if the spread moves above 5.

U.S. Building Permits

U.S. Building Permits and 12-month Moving Average



Source: © Merk Investments, Bloomberg

Analysis: Building permits, historically a long leading indicator, are near cycle highs. I'm currently positive on this picture. Framework: I would get negative if the 12-month moving average started trending lower again.

Checklist

Chart	Time Horizon	Per Framework Outlook on Business Cycle
LEIs	Short/Medium Term	Positive
Yield Curve	Medium Term	Neutral/Negative
U.S. PMIs	Short/Medium Term	Positive
Global PMIs	Short/Medium Term	Positive
Job Gains	Medium Term	Positive
U-3 v 12m MA	Medium Term	Positive
SF Fed U-3	Medium Term	Negative
Labor Force Capacity Util.	Medium/Longer Term	Neutral/Negative
Output Gap	Medium/Longer Term	Neutral/Negative
GDP Forecast	Short Term	Positive
Household Credit	Medium Term	Neutral/Positive
U.S. Consumer Confidence	Short/Medium Term	Positive
Lending Standards	Medium Term	Positive
High Yield Spread	Short/Medium Term	Positive
U.S. Building Permits	Medium/Longer Term	Positive
	Time Horizon	Overall Outlook on Business Cycle
	Short Term (<6 months)	Neutral/Positive with medium uncertainty
	Medium/Longer Term (6m - 5 years)	Neutral/Negative with high uncertainty

Conclusion/Thoughts

Economic data has continued to improve. I'd currently estimate recession probability over the next six months to be low: around 5-15%.

Incoming information supports the view that we are in the process of coming out of a mid-cycle slowdown. But it will be important to see the LEI Index start to trend higher again, and for U.S. and international yields to continue moving higher relative to their 2019 lows.

Friday's report showed strong job gains. The unemployment rate ticked up but on the back of increasing labor force participation, which is a healthy sign. Labor force participation is now at a 7-year high. Manufacturing PMIs have moved up in the U.S. and internationally, as have Services PMIs. Notably, the manufacturers new order subindex in the ISM report was strong. Consumer sentiment has continued to improve. And the Fed's Senior Loan Officer Opinion Survey showed that lending standards recently eased and remain supportive of growth.

Given the size of China's economy and the measures put in place to contain the coronavirus, I expect a near-term negative impact on the global economy. Historically, events like SARS, Ebola, and Fukushima tend to have a negative economic impact but are not dominant factors behind business cycles.

Market and media focus is likely to increasingly move to the 2020 election. Currently, it appears highly likely that Congress will remain split. With a split Congress economic policy changes would likely be minimal. The Presidential race betting markets currently marginally favor a Trump re-election, with a 55% probability as of writing.

Based on my checklist approach, the U.S. business cycle picture near-term is more positive than negative. On balance, based on the data and frameworks presented (which inevitably may not capture all possible risk factors in real-time), it seems more likely than not that the expansion continues in the coming several months. The longer-term outlook remains neutral/negative as we are likely in the later part of this cycle. All the presented charts and concepts are somewhat inter-related, as is the economy in general. The idea is to have some different data points to cross-reference. No one indicator should be looked at in isolation.

-Nick Reece, CFA

About the Author

Nick Reece, CFA: Nick is a Senior Analyst & Portfolio Manager at Merk Investments. He focuses on macroeconomic research and private wealth management, regularly publishing reports on the U.S. business cycle and equity market. Prior to joining Merk in 2012, Nick gained experience working on capital markets deals with Paul Hastings in Hong Kong, and with Atlantis Investment Management. Mr. Reece holds a B.A. in Economics from Trinity College and is a Chartered Financial Analyst (CFA) charterholder. Nick lives in New York City. Outside of work, he is an avid reader and volunteer high school math tutor. You can follow Nick on Twitter @nicholastreece.

Disclosure

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