

MERK® | RESEARCH

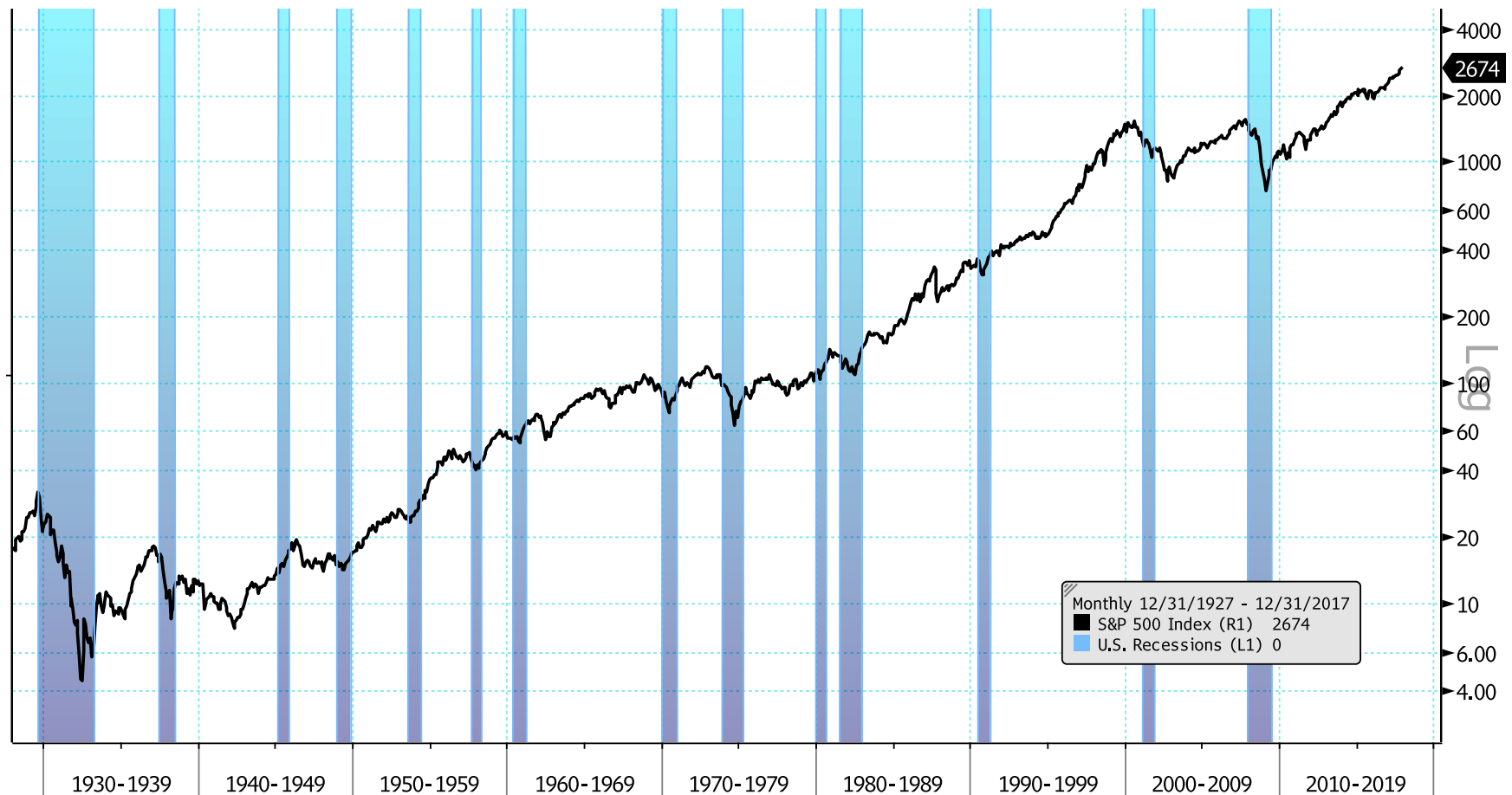
U.S. Business Cycle Chart Book

May 2018

Nick Reece, CFA
Senior Financial Analyst, Merk Investments LLC

Why is the Business Cycle Important?

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

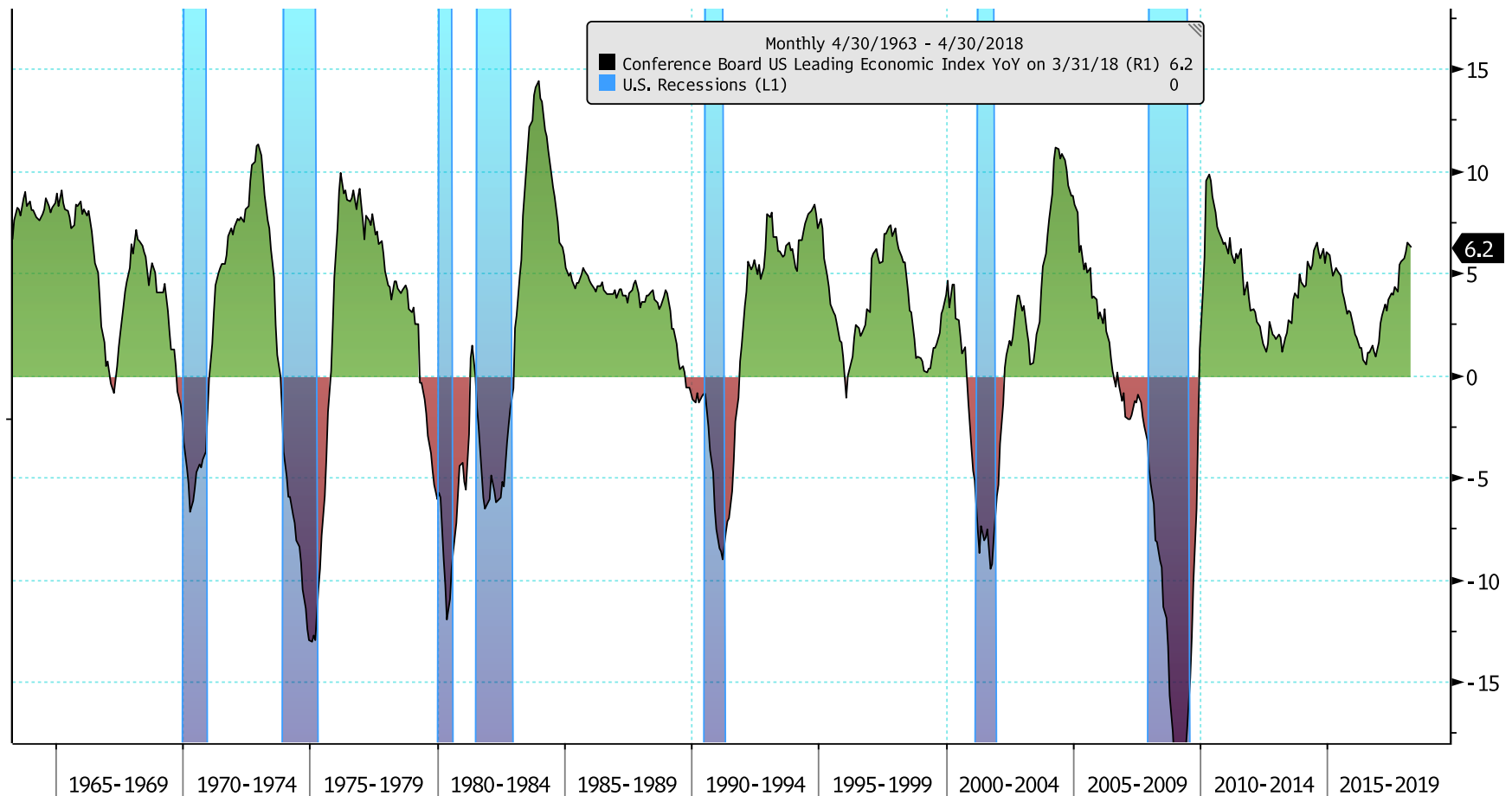


Source: Bloomberg, © Merk Investments LLC www.merkinvestments.com/research

*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). 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**

Leading Economic Indicators (LEIs) Index

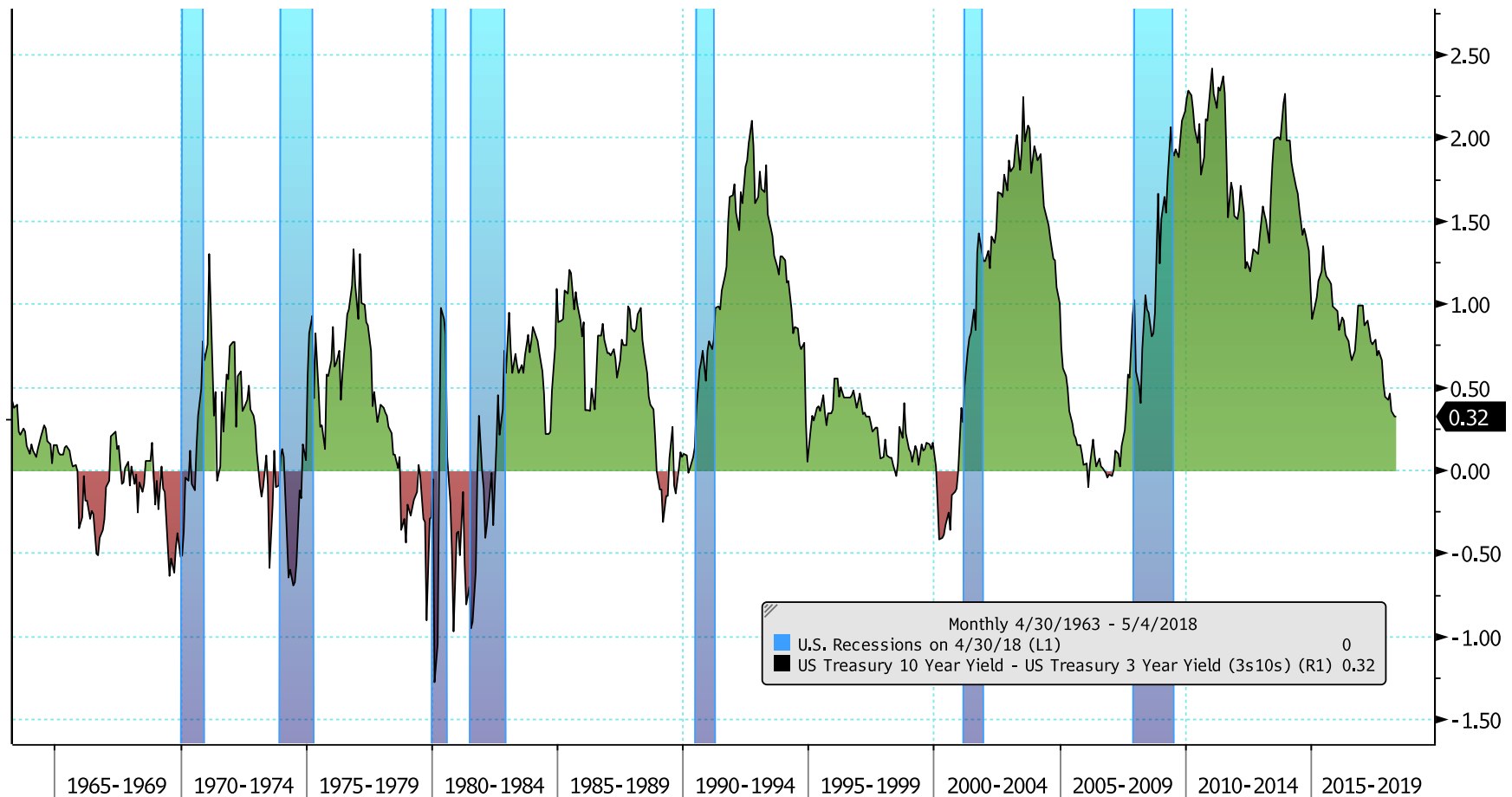
YoY rate of change of the Conference Board's LEI Index



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

*Analysis: LEIs have decelerated slightly from +6.5 to +6.2
History suggests recession unlikely in the next six months,
I'd get incrementally negative on the business cycle outlook if the LEIs went negative*

U.S. Yield Curve Steepness (10yr yield – 3yr yield)

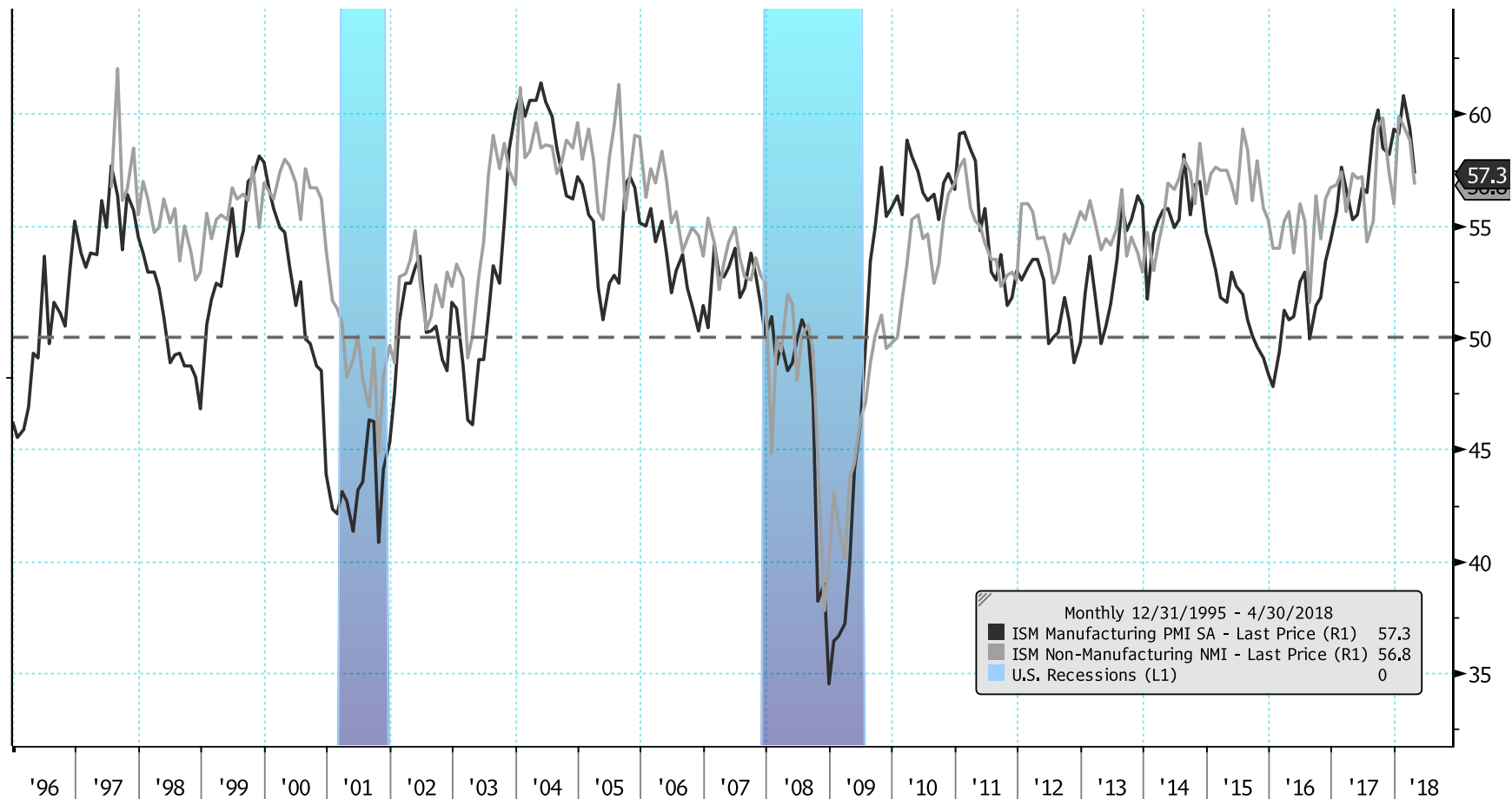


Source: Bloomberg, © Merk Investments LLC www.merkinvestments.com/research

*Analysis: Yield curve still positively sloped
I'd get incrementally negative on the business cycle outlook if the yield curve inverted (i.e., 3yr yield > 10yr yield)*

U.S. PMIs

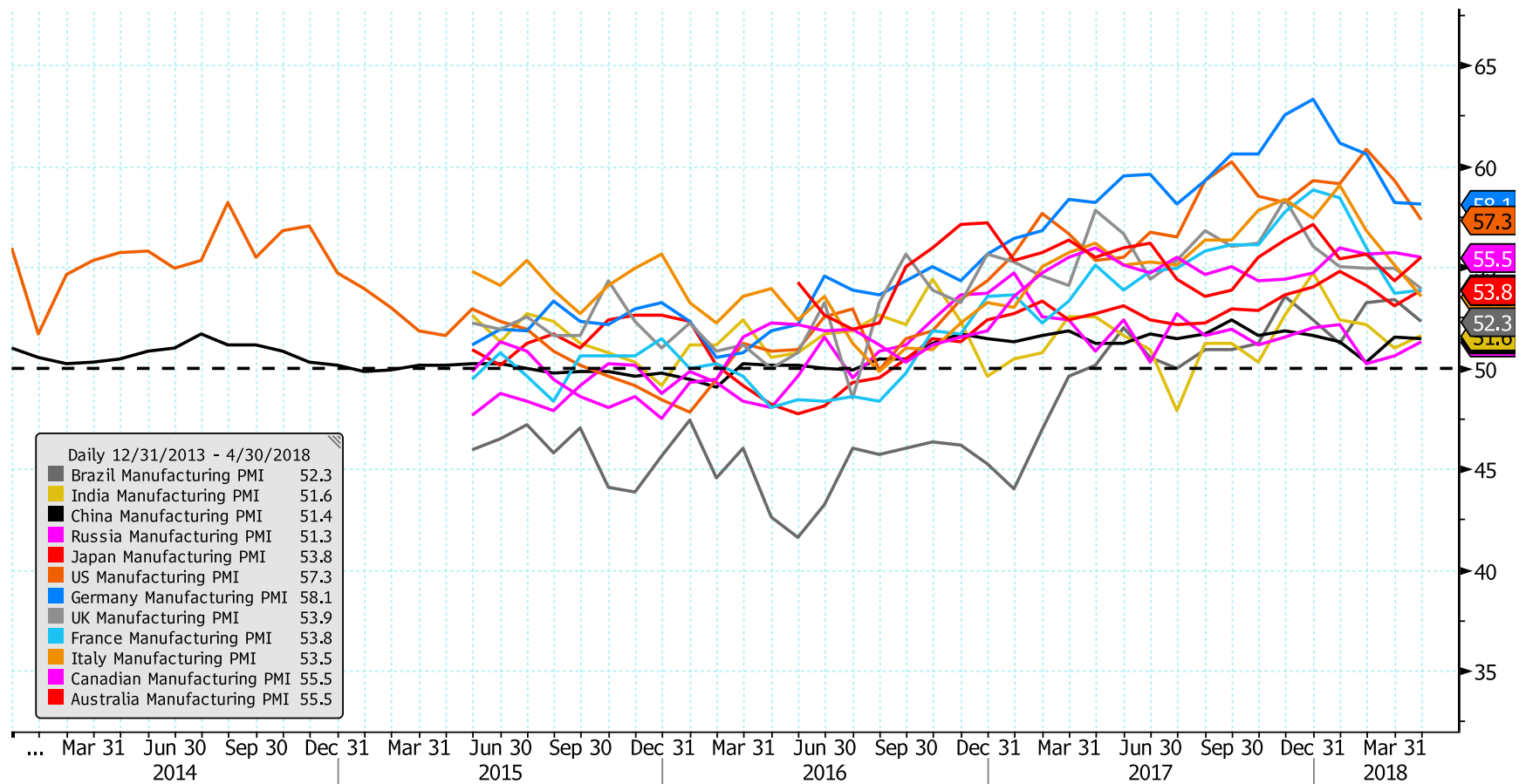
Manufacturing and Non-manufacturing (aka Services) PMIs (Purchasing Managers Index)

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

*Analysis: Both manufacturing and services PMIs have softened a bit but are still well above 50
I'd get incrementally negative on the business cycle outlook if manufacturing PMIs fell below 50*

Global PMIs

Largest global economies' Manufacturing PMIs (Purchasing Managers Index)

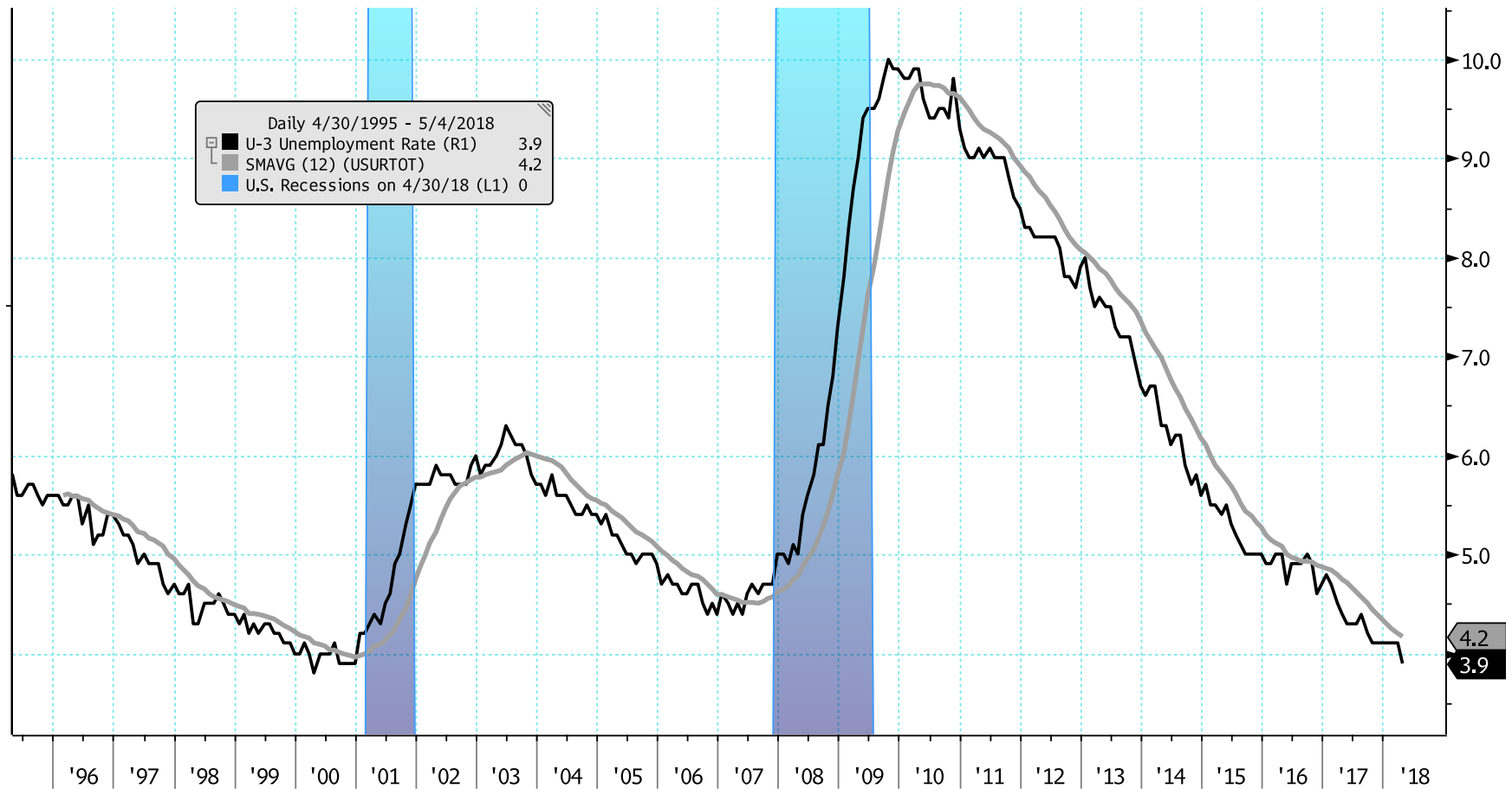


Source: Bloomberg, © Merk Investments LLC www.merkinvestments.com/research

*Analysis: All above 50 but momentum has slowed over the past few months
I'd get incrementally negative on the business cycle outlook if China, India, Germany or Japan manufacturing PMIs fell below 50*

U.S. Unemployment Momentum

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



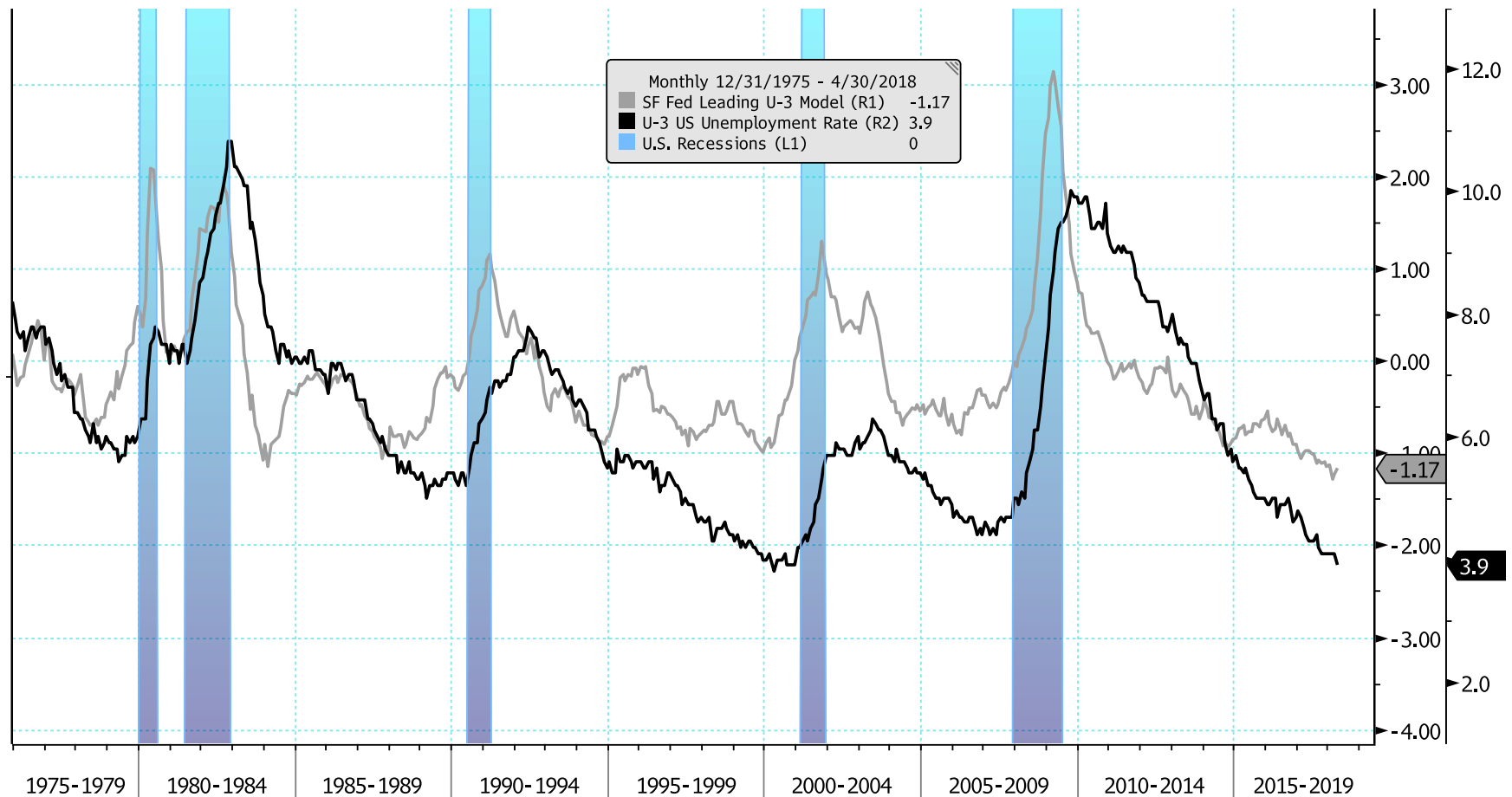
Source: Bloomberg, © Merk Investments LLC www.merkinvestments.com/research

*Analysis: Unemployment rate continues to trend down and stay below its 12-month moving average
(with labor force participation stable to rising – not shown)*

*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)

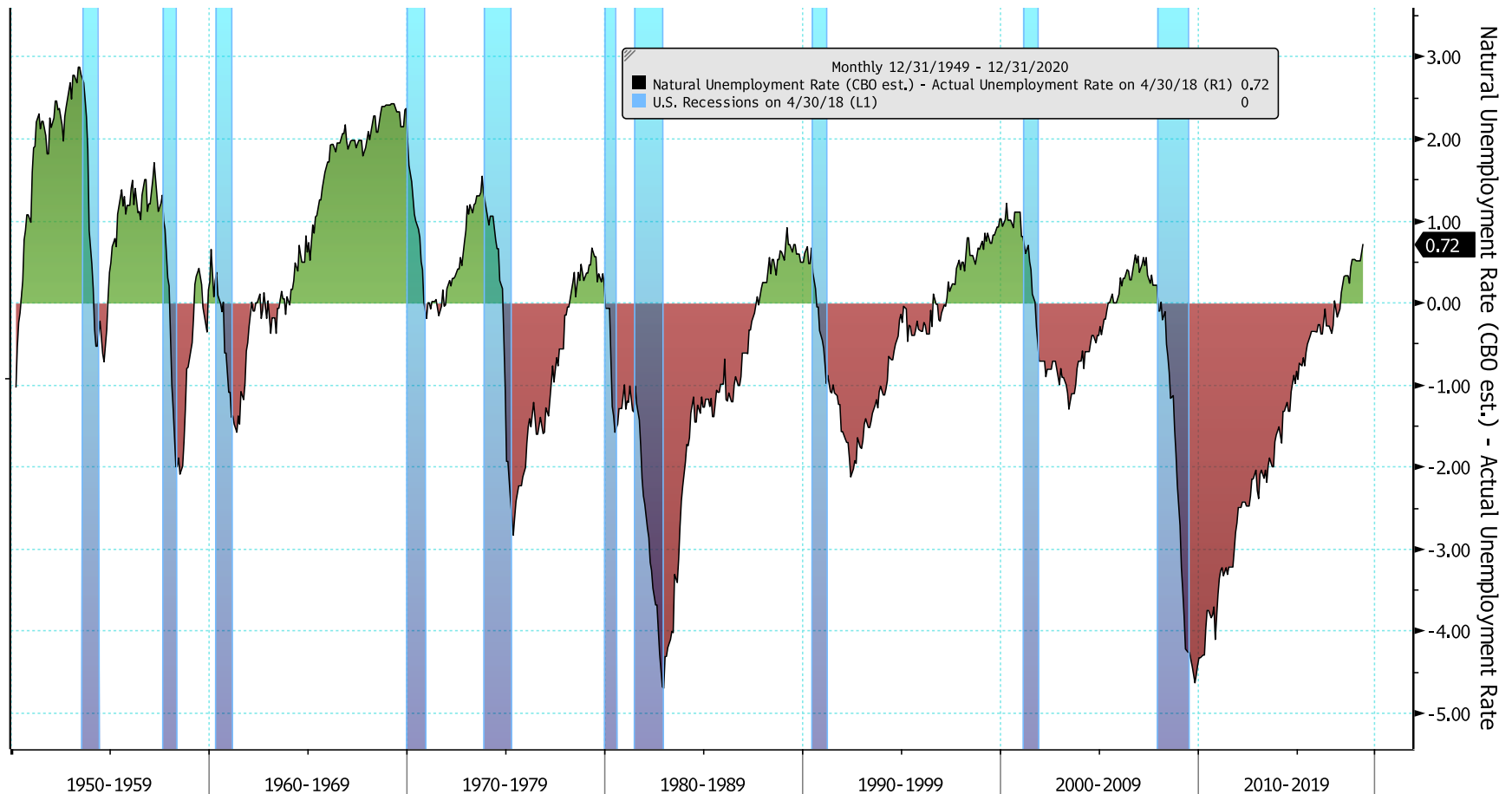


Source: Bloomberg, © Merk Investments LLC www.merkinvestments.com/research

*Analysis: The SF Fed model does not currently suggest cause for concern on the unemployment rate
 I'd get incrementally negative on the business cycle outlook if the SF Fed model line trends higher on a YoY basis*

U.S. Labor Market Capacity Utilization

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

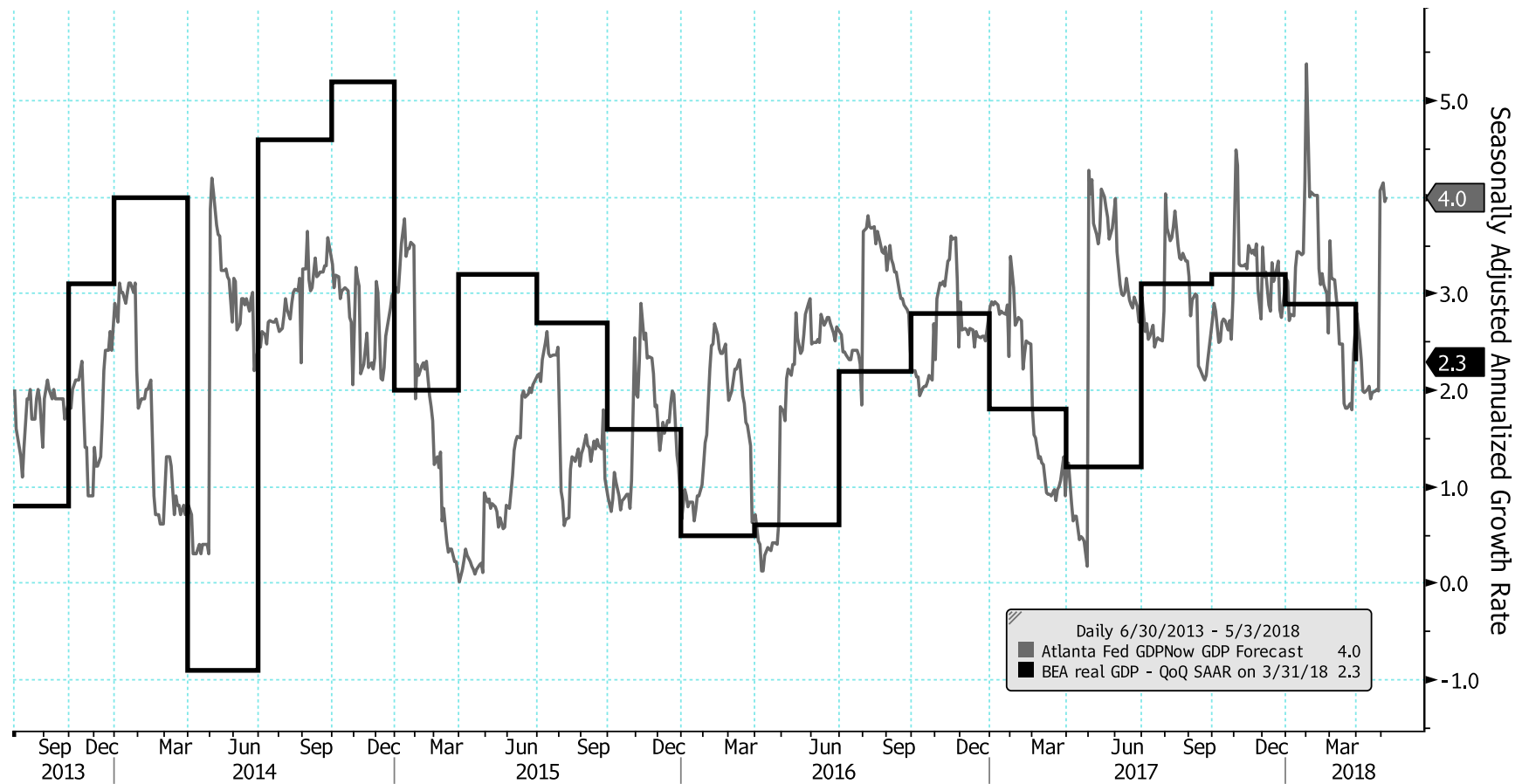


Source: Bloomberg, © Merk Investments LLC www.merkinvestments.com/research

Analysis: The current unemployment rate is less than the estimated natural rate, meaning the U.S. economy is potentially running above capacity, which likely increases the risk of a recession 1-5 years out. I'm currently incrementally negative on the business cycle outlook (longer term) based on this chart

Atlanta Fed GDPNow GDP Forecast

GDPNow Forecast and the official QoQ SAAR from BEA

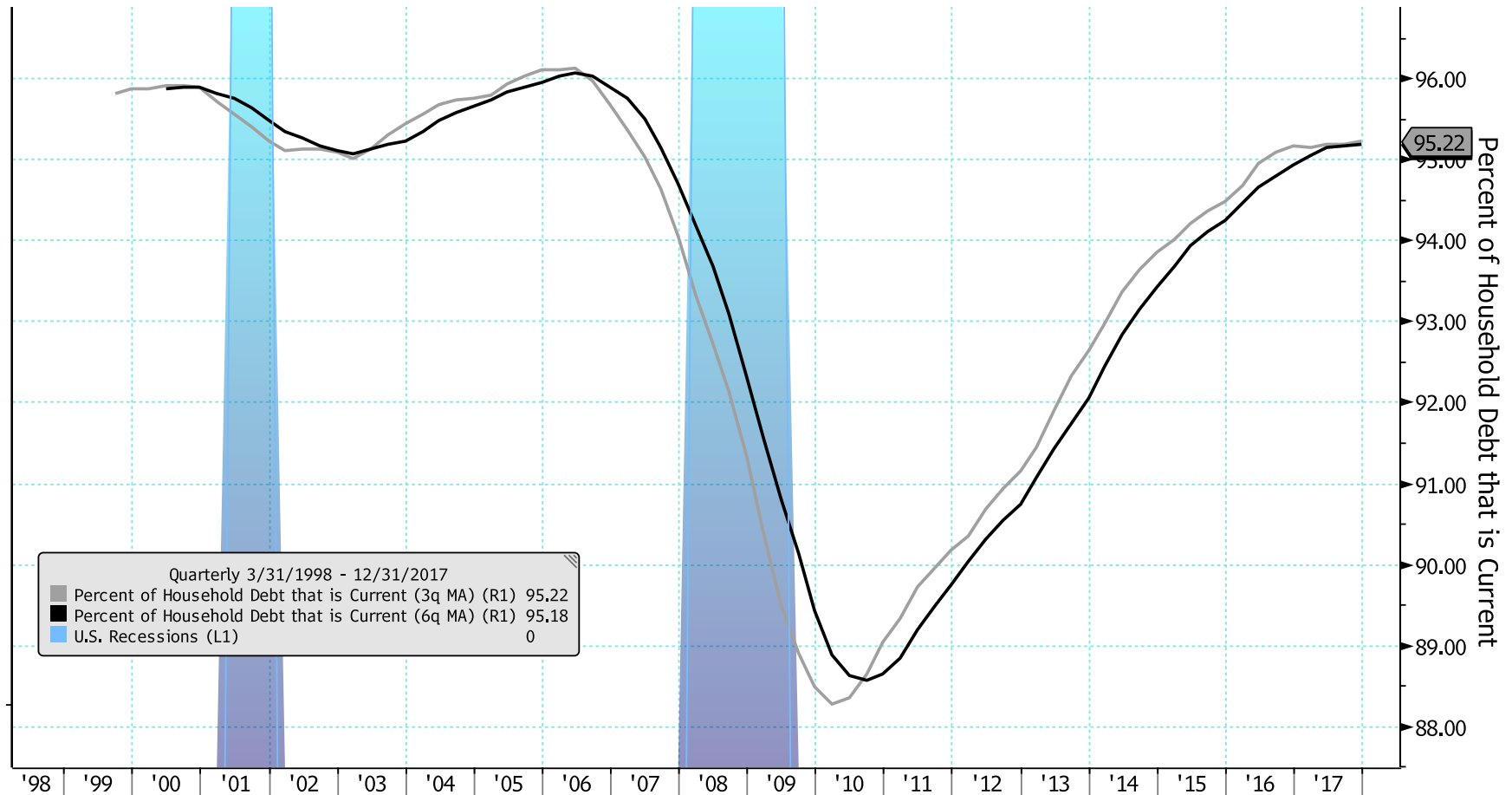


Source: Bloomberg, © Merk Investments LLC www.merkinvestments.com/research

Analysis: 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 Current (3 quarter and 6 quarter moving averages), debt that is "current" means not in delinquency

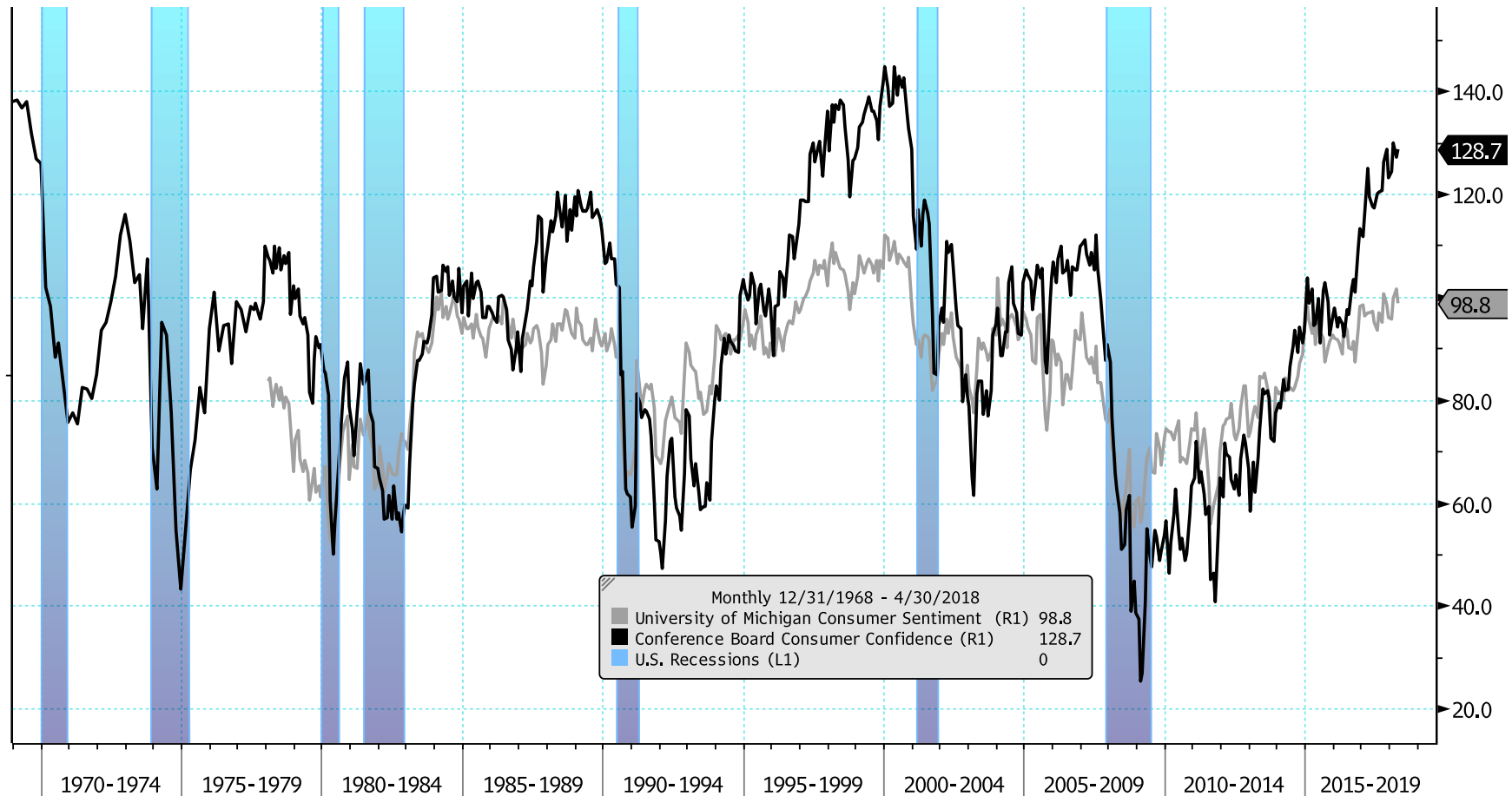


Source: Bloomberg, © Merk Investments LLC www.merkinvestments.com/research

*Analysis: The Q4 2017 data came out strongly, household credit cycle still going: 3q MA > 6q MA
 I'd get incrementally negative on the business cycle outlook if the 3q MA fell below the 6q MA
 The Q1 2018 data comes out in late May*

U.S. Consumer Confidence

Michigan Consumer Sentiment and Conference Board Consumer Confidence

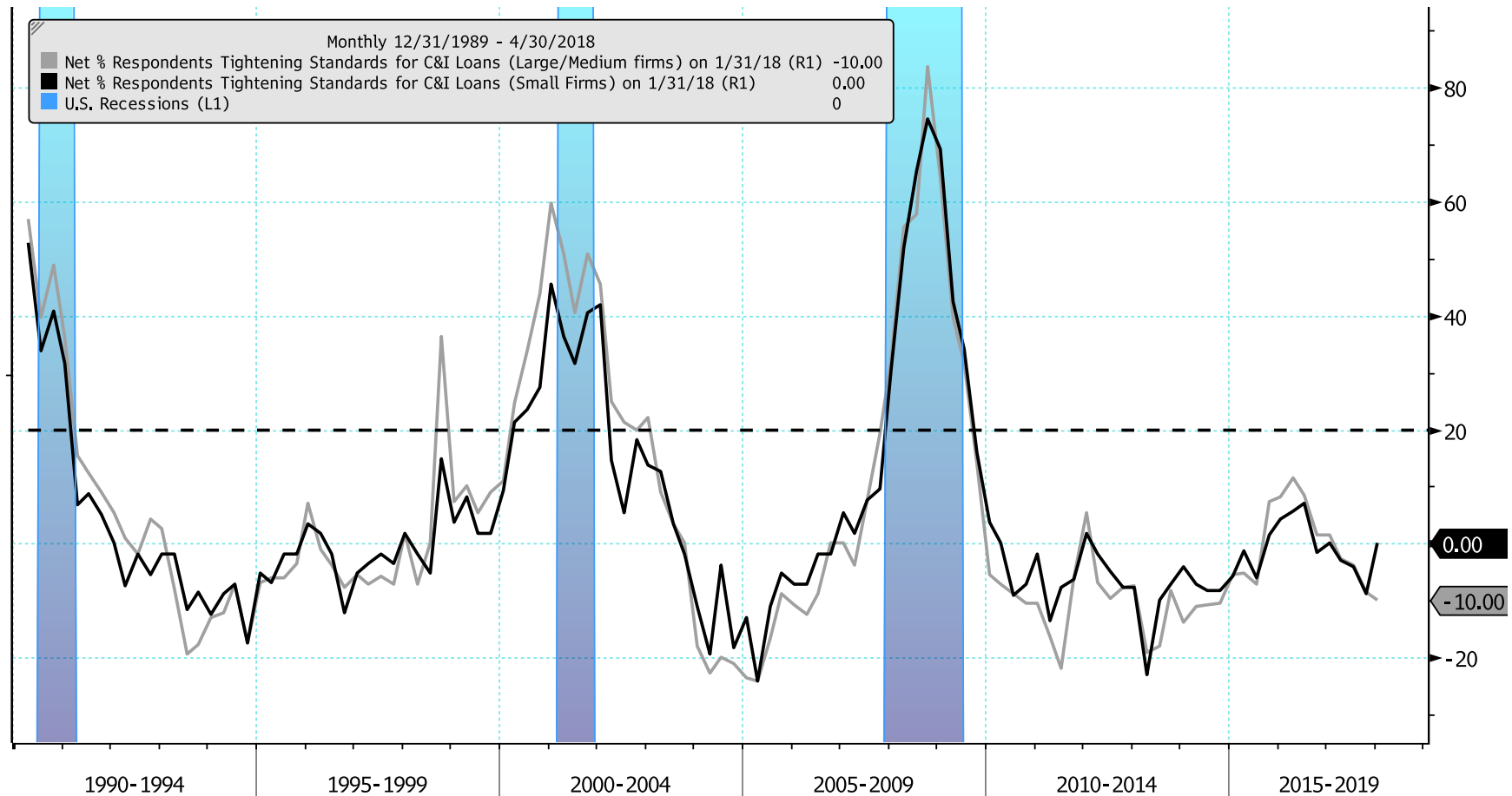


Source: Bloomberg, © Merk Investments LLC www.merkinvestments.com/research

*Analysis: Both measures trending higher, but at elevated levels can act as a contrarian indicator
I'd get incrementally negative on the business cycle outlook if both measures started trending lower on a YoY basis*

Bank Lending Standards

Net % of Domestic Respondents that are Tightening Lending Standards for Commercial and Industrial (C&I) Loans

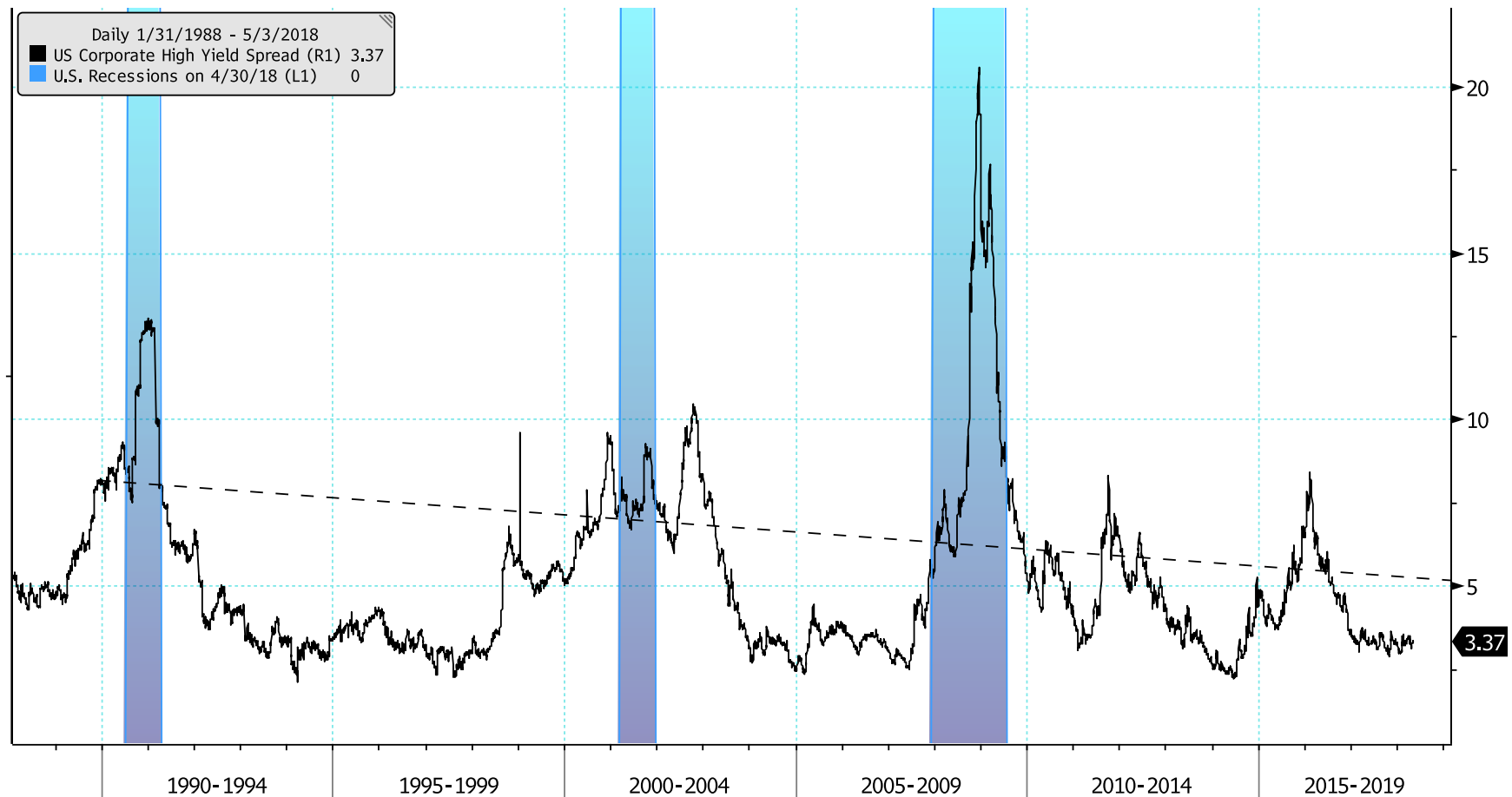


Source: Bloomberg, © Merk Investments LLC www.merkinvestments.com/research

*Analysis: Bank lending standards still neutral to supportive of economic activity
I'd get incrementally negative on the business cycle outlook if 20% of respondents report tightening lending standards,
which might signal an impending recession*

High Yield Spread

US High Yield Spread with Trend Line



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

*Analysis: Credit spreads are still relatively contained,
I'd get incrementally negative on the business cycle outlook if spreads widened above 5%*

Scorecard

Page	Chart	Time Horizon	Incremental Outlook on Business Cycle
3	LEIs	Short/Medium Term	Positive
4	Yield Curve	Medium Term	Positive
5	U.S. PMIs	Short/Medium Term	Positive
6	Global PMIs	Short/Medium Term	Positive
7	U-3 v 12m MA	Medium Term	Positive
8	SF Fed U-3	Medium Term	Positive
9	Labor Force Capacity Util.	Medium/Longer Term	Negative
10	GDP Now Forecast	Short Term	Positive
11	Household Credit	Medium Term	Positive
12	US Consumer	Short/Medium Term	Neutral/Positive
13	Lending Standards	Medium Term	Positive
14	High Yield Spread	Short/Medium Term	Positive

Conclusion/Thoughts

While there has been some deceleration at the margin in some of the macro data (e.g., LEIs), overall the economic expansion looks set to continue over the next few months, and in general until further notice. All of these charts or concepts are somewhat inter-related, as is the economy in general, so the idea is to have some different data points to cross-reference. That being said, almost all indicators are positive.

In terms of general trend, the unemployment rate continues to decline and the U.S. yield curve continues to flatten, both positive signs for the continuation of the cycle. The overseas growth backdrop stabilized a bit after a couple months of deterioration (all PMIs still above 50).

The household credit situation is still positive: consumer confidence is trending higher. The corporate credit situation, as shown by lending standards and high yield spreads, still looks supportive of the business cycle.

The fact that some measures suggest the economy is potentially operating above capacity probably increases recession risk over the 1-5 year period. Operating above capacity can persist for some time but is generally thought to be unsustainable over the longer term. However, for the time being, there seems to be slack remaining in the labor market ([see Fed Chart Book](#)), which suggests that the economic cycle can continue for a while longer. Also, that the consumer confidence measures are at elevated levels I take as an indication the turn in the cycle may not be too many years away.

To reiterate, taken together, I think the U.S. business cycle picture is still positive. On balance, based on the charts and framework presented (which inevitably may not capture all possible risk factors in real-time), it seems likely the U.S. economic expansion continues until further notice.

For more charts and analysis please visit www.merkinvestments.com/research

-Nick Reece, CFA

Disclosure

This report was prepared by Merk Investments LLC, and reflects the current opinion of the authors. It is based upon sources and data believed to be accurate and reliable. Merk Investments LLC makes no representation regarding the advisability of investing in the products herein. 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. 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.

* * *

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

© 2018 Merk Investments LLC