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U.S. Business Cycle Report

August 2019

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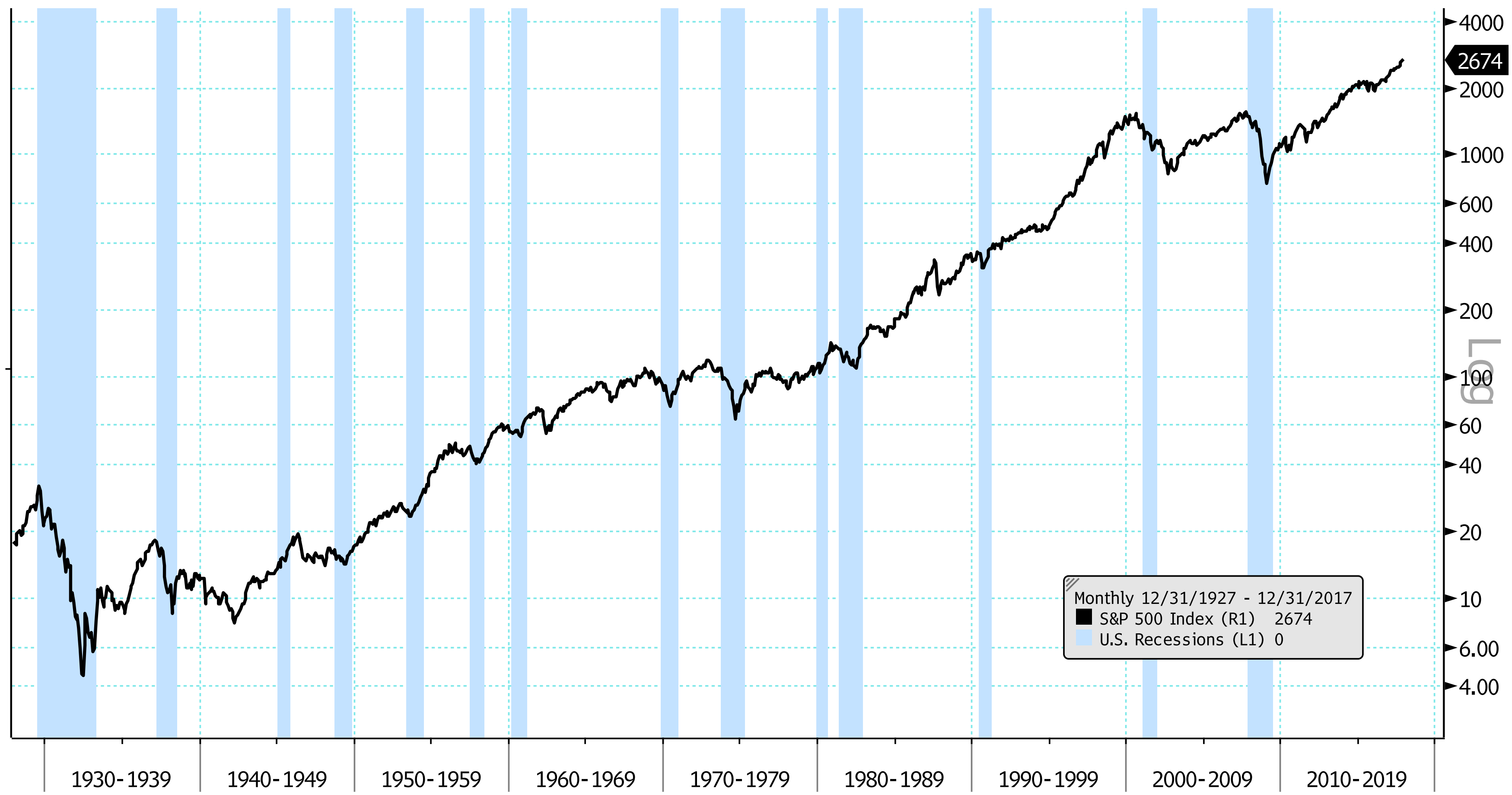
Why is the Business Cycle Important?

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



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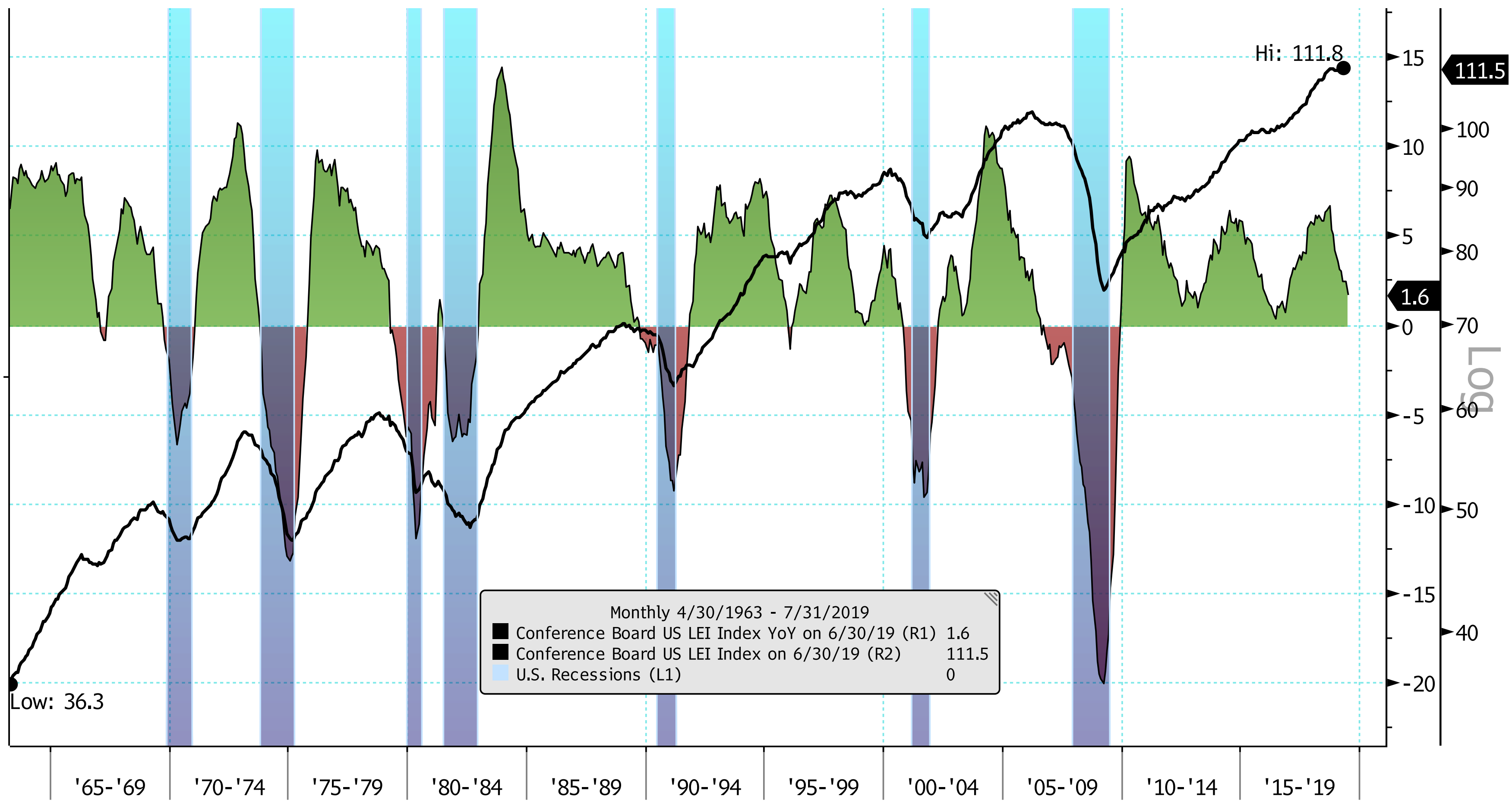
*Analysis: Over the 90 years between 1927 and 2017, the average S&P 500 monthly return during expansions was +0.89% (889 months), compared to an average S&P 500 monthly return during recessions of -0.71% (191 months). In terms of proportions of time: expansion months account for about 80% and recession 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



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Analysis: Since last month's report the LEI YoY rate of change decreased: from +2.5% to +1.6%. Over the past several months momentum has slowed, but given that the YoY rate of change remains positive, history suggests a recession is unlikely to start within the next six months. However, the index level is below its prior cycle highs. 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.

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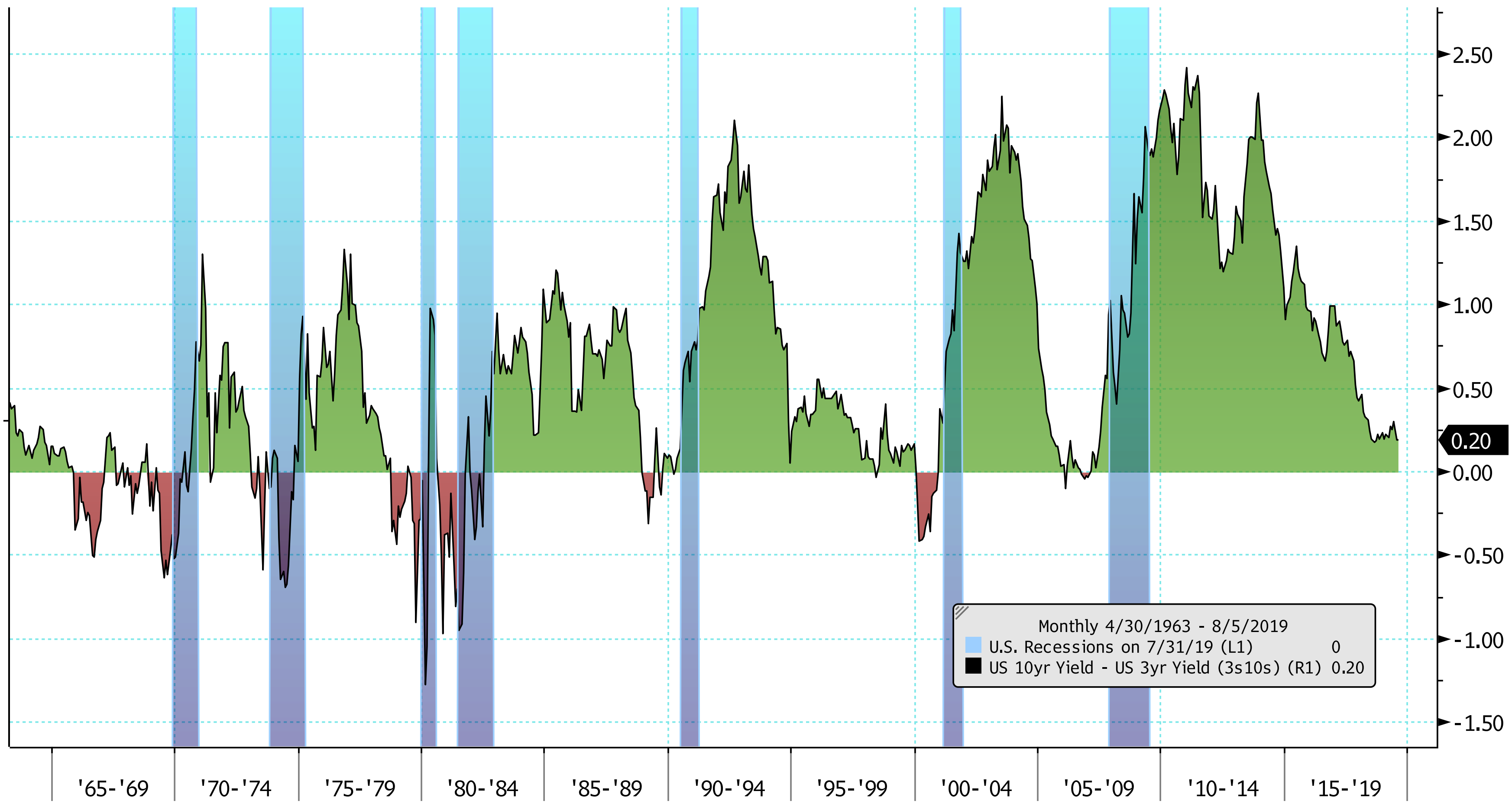
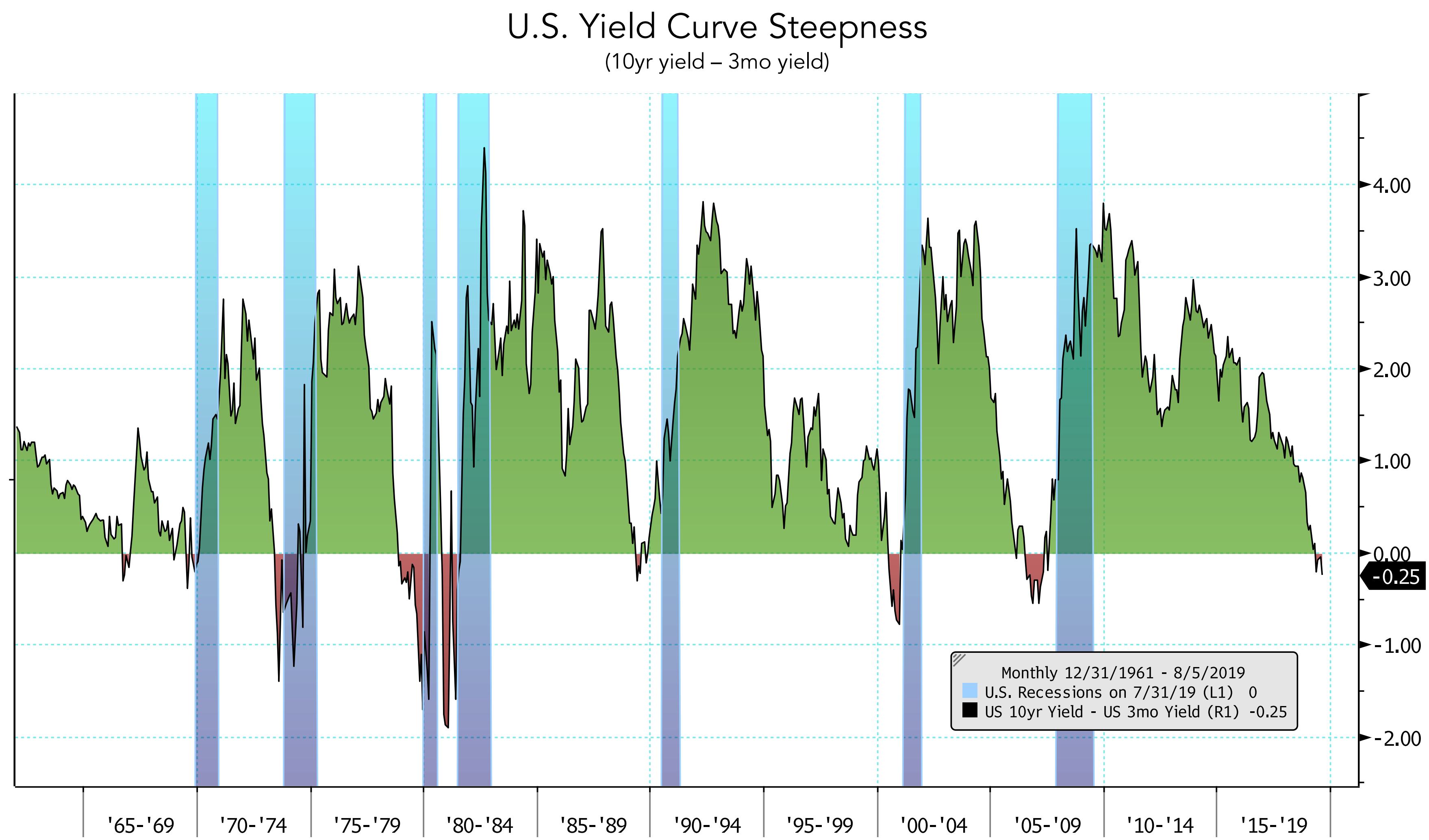
U.S. Yield Curve Steepness

(10yr yield – 3yr yield)



Source: © Merk Investments, Bloomberg

Analysis: The 10yr-3yr yield curve is still positively sloped, meaning the 10yr yield is higher than the 3yr yield. The yield curve steepness is slightly flatter since last month's report, and the bigger picture flattening trend appears to continue. 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).

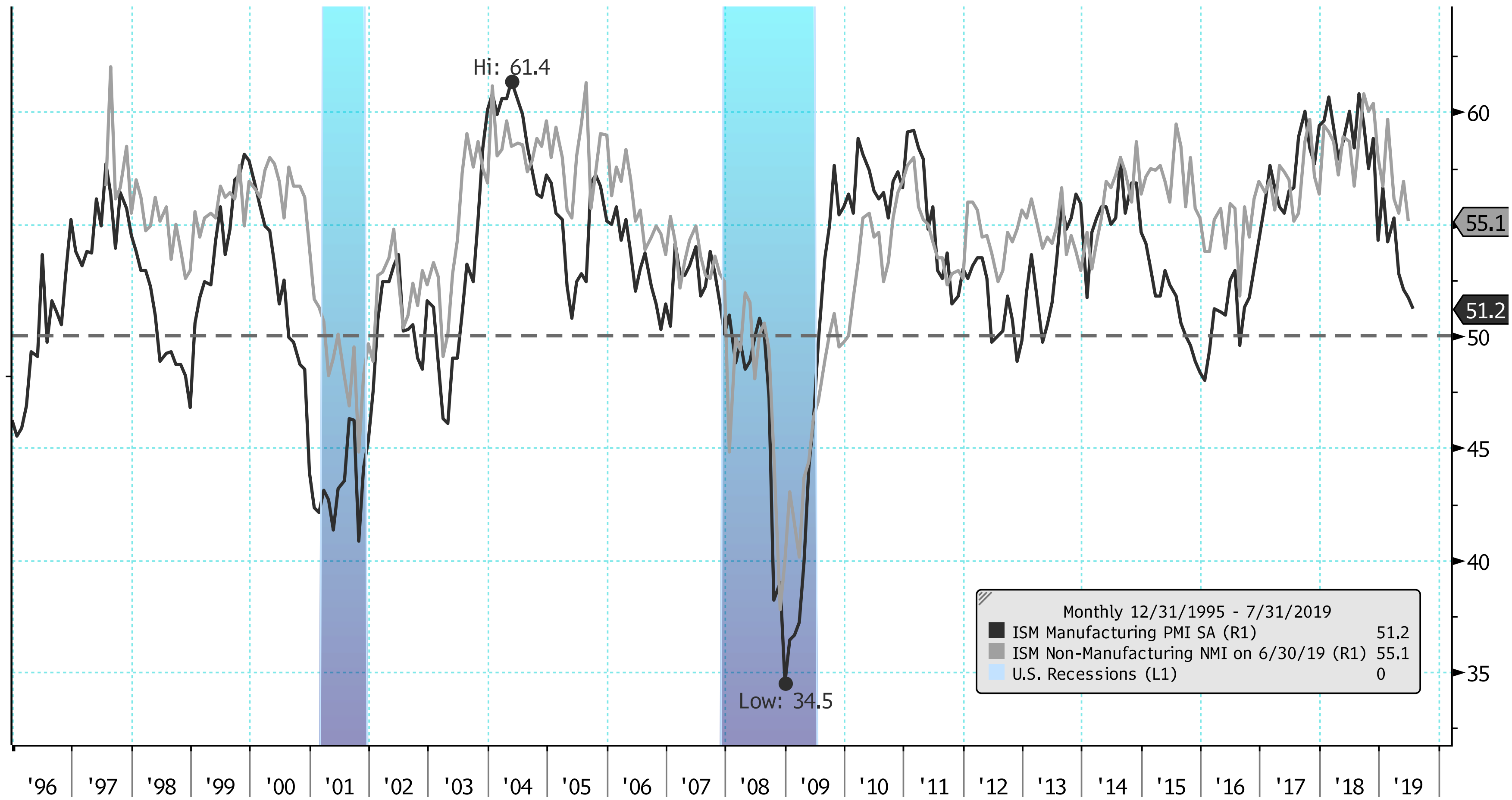


Source: © Merk Investments, Bloomberg

Analysis: A cross reference to the 10yr-3m yield curve shows a more concerning picture, inverted at -25bps. As with the 10yr-3yr, 10yr-3m inversion has been a strong recession warning signal— however, it is worth noting that the 10yr-3yr (shown on the previous page) has always inverted prior to recessions and still has not (yet) inverted.

U.S. PMIs

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

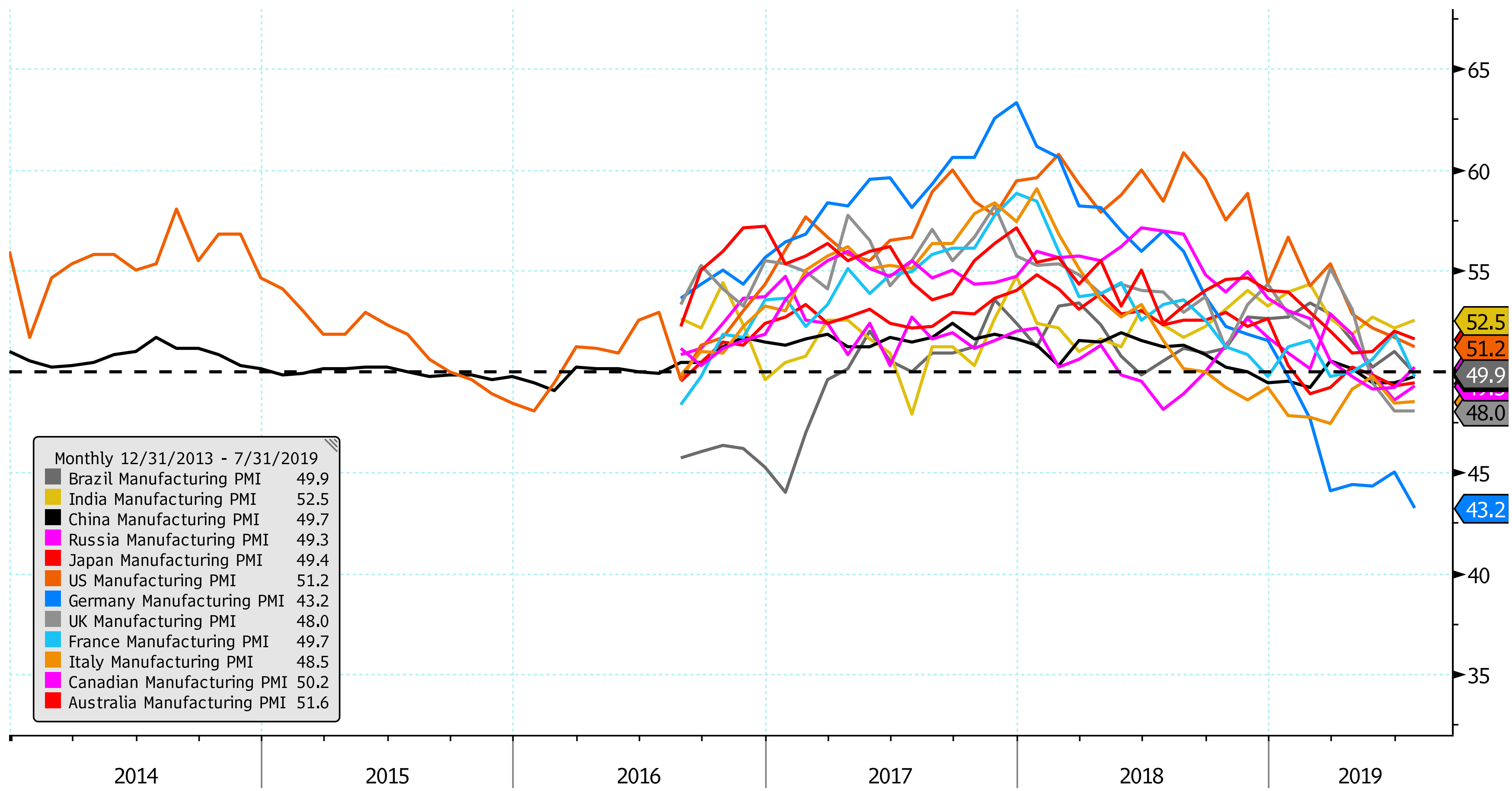


Source: © Merk Investments, Bloomberg

Analysis: Manufacturing PMI ticked down over the past month, from 51.7 to 51.2, but is still generally at a level consistent with a growing economy. 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)

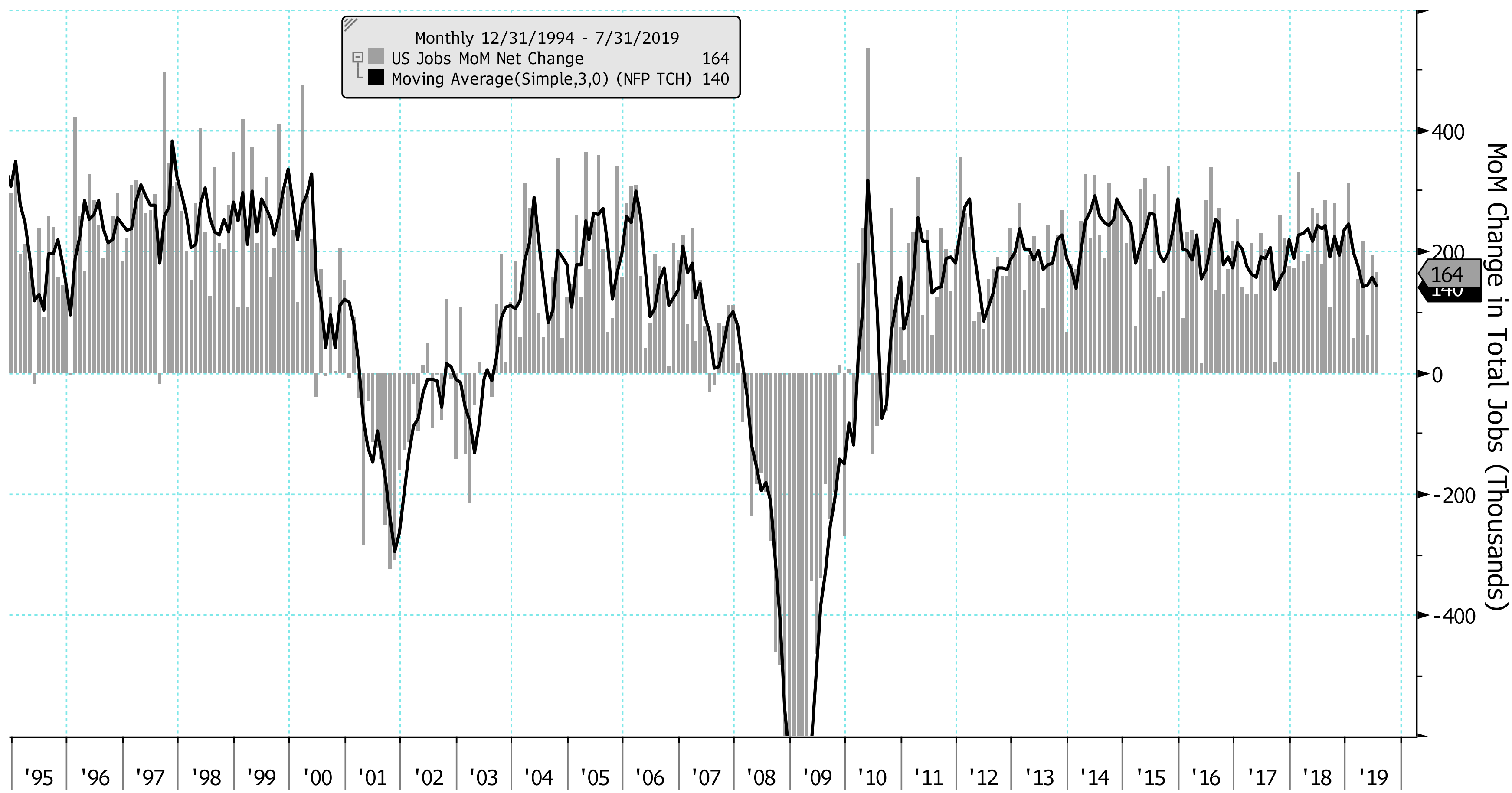


Source: © Merk Investments, Bloomberg

Analysis: Global economic momentum was again mostly negative over the past month. Notably, eight out of the twelve readings are below 50, i.e., in contractionary territory. Given my framework I'm negative on this picture. Chart Framework: to get positive on this picture all PMIs would have to be above 50.

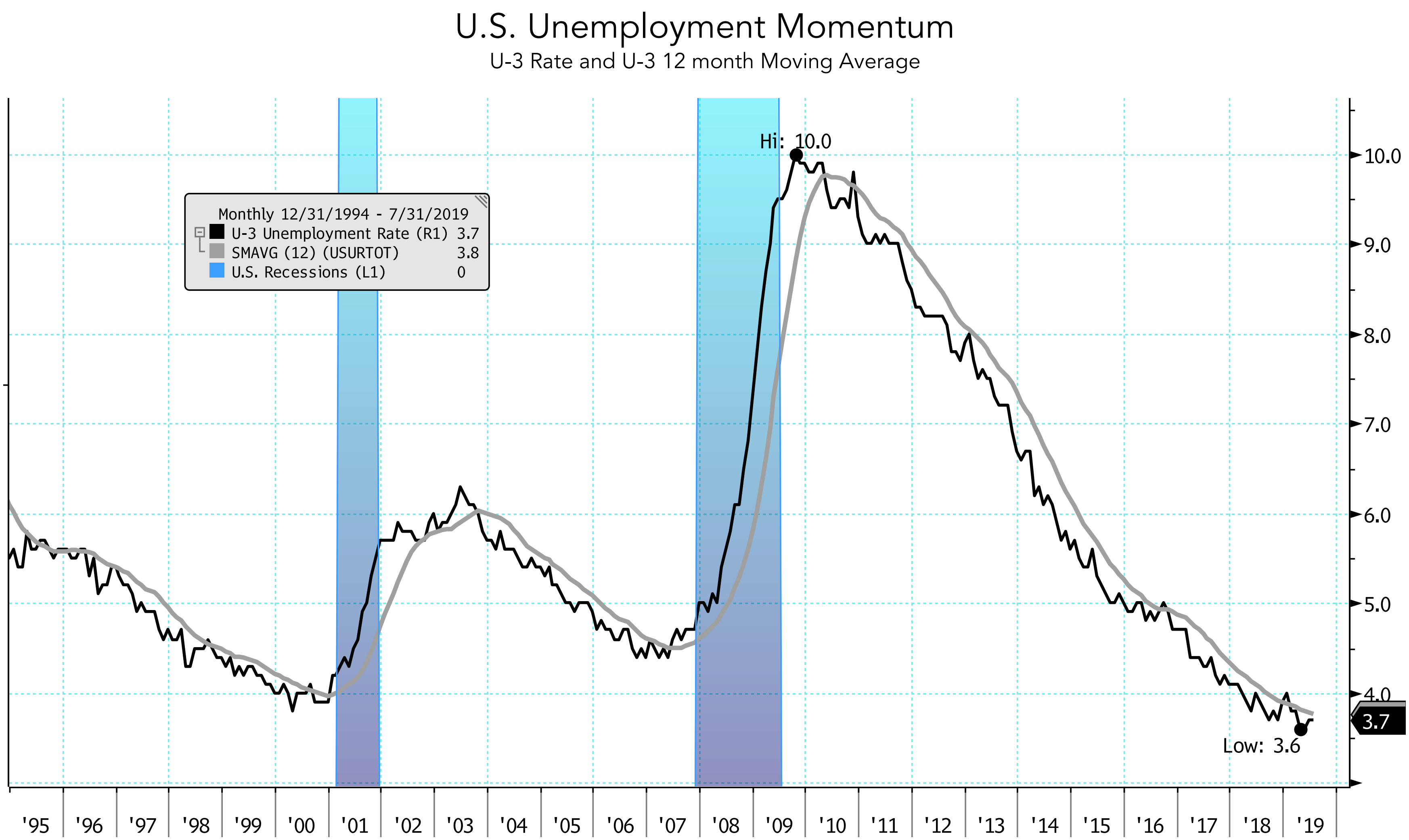
Job Gains

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



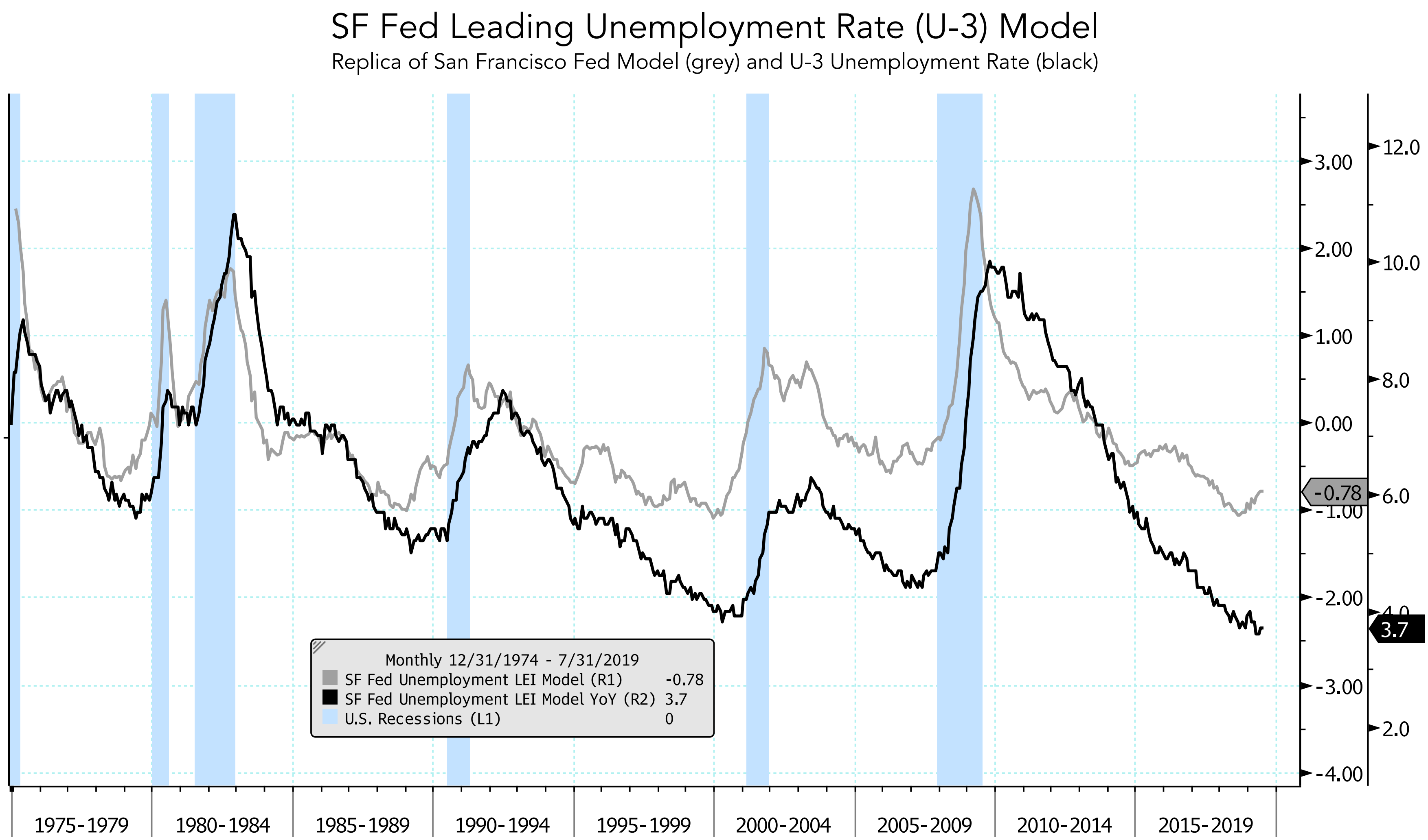
Source: Bloomberg, © Merk Investments LLC

Analysis: The 3-month moving average of job gains has fallen to 140k, very near multi-year lows. Framework: I'd get incrementally negative on this picture if the 3-month average for job gains fell below 135k.



Source: © Merk Investments, Bloomberg

Analysis: The unemployment rate remained stable at 3.7, and is still below the 12-month moving average (labor force participation rate also ticked higher– not shown). 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.

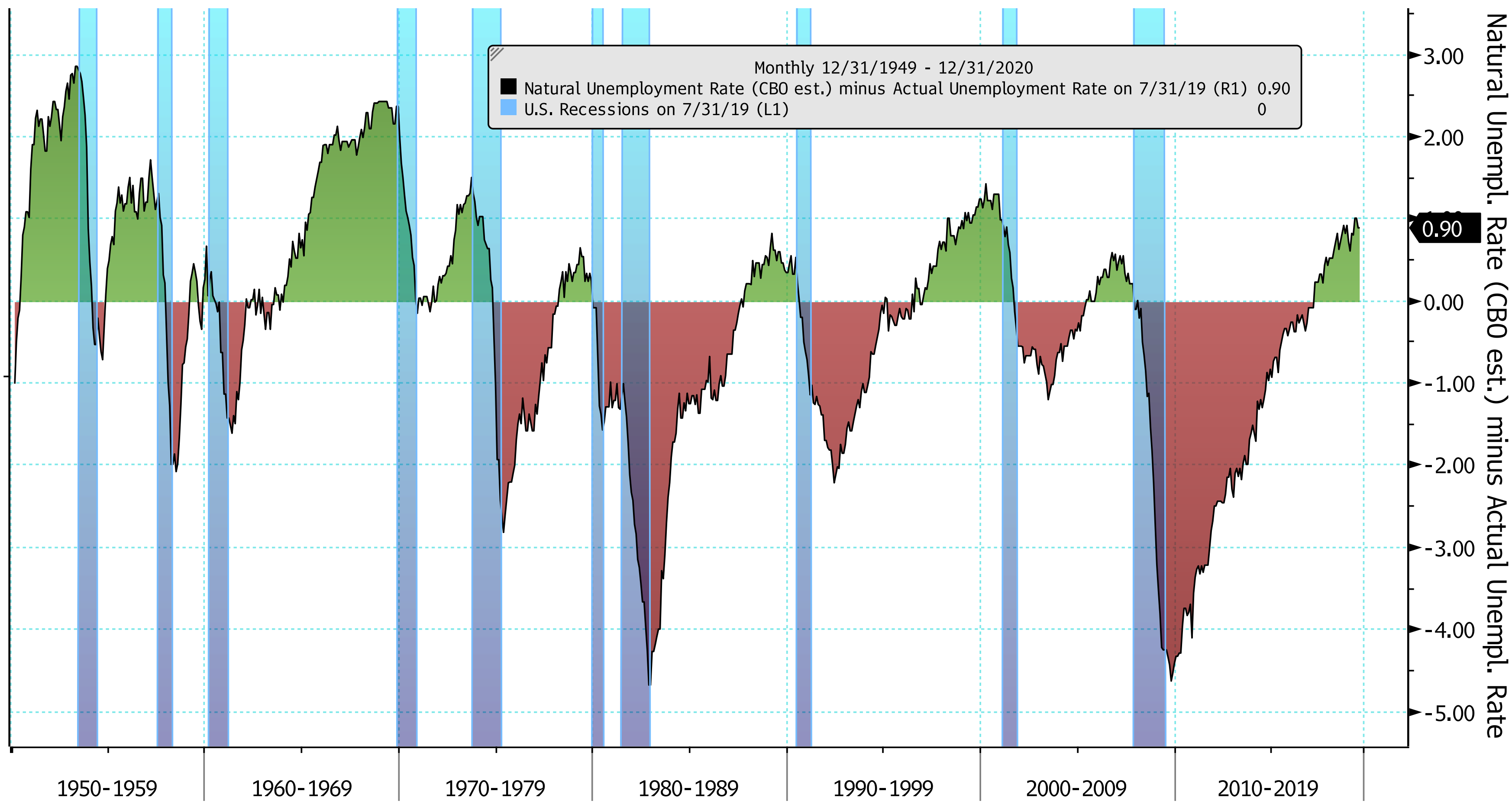


Source: © Merk Investments, Bloomberg

Analysis: The SF Fed unemployment rate model (grey line) has continued to move higher in recent months, which warrants caution as it might signal that a cyclical turning point in the labor market is coming. 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

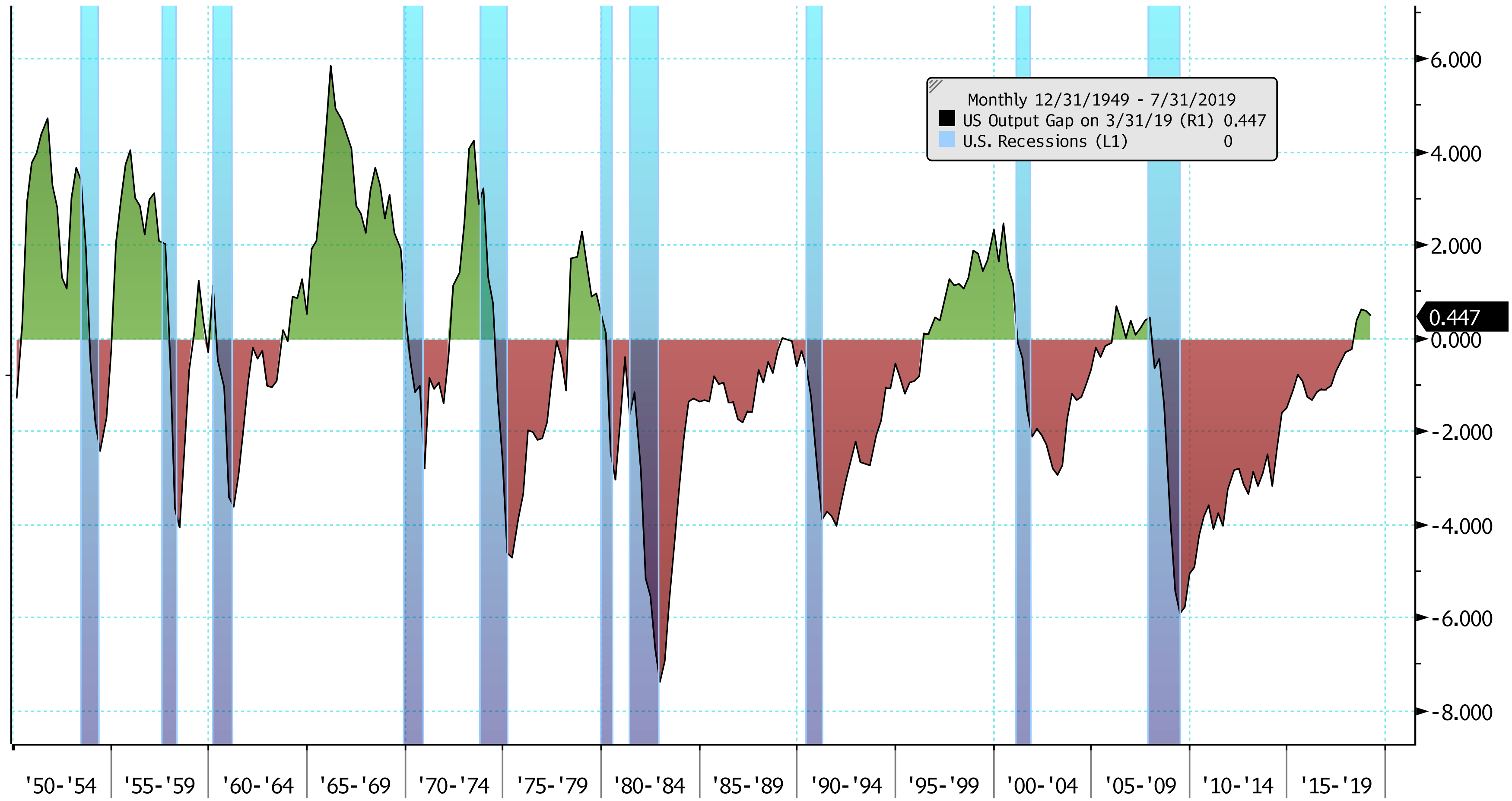


Source: © Merk Investments, Bloomberg

Analysis: The estimated natural rate of unemployment is higher than the current unemployment rate (4.6% estimate – 3.7% 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.

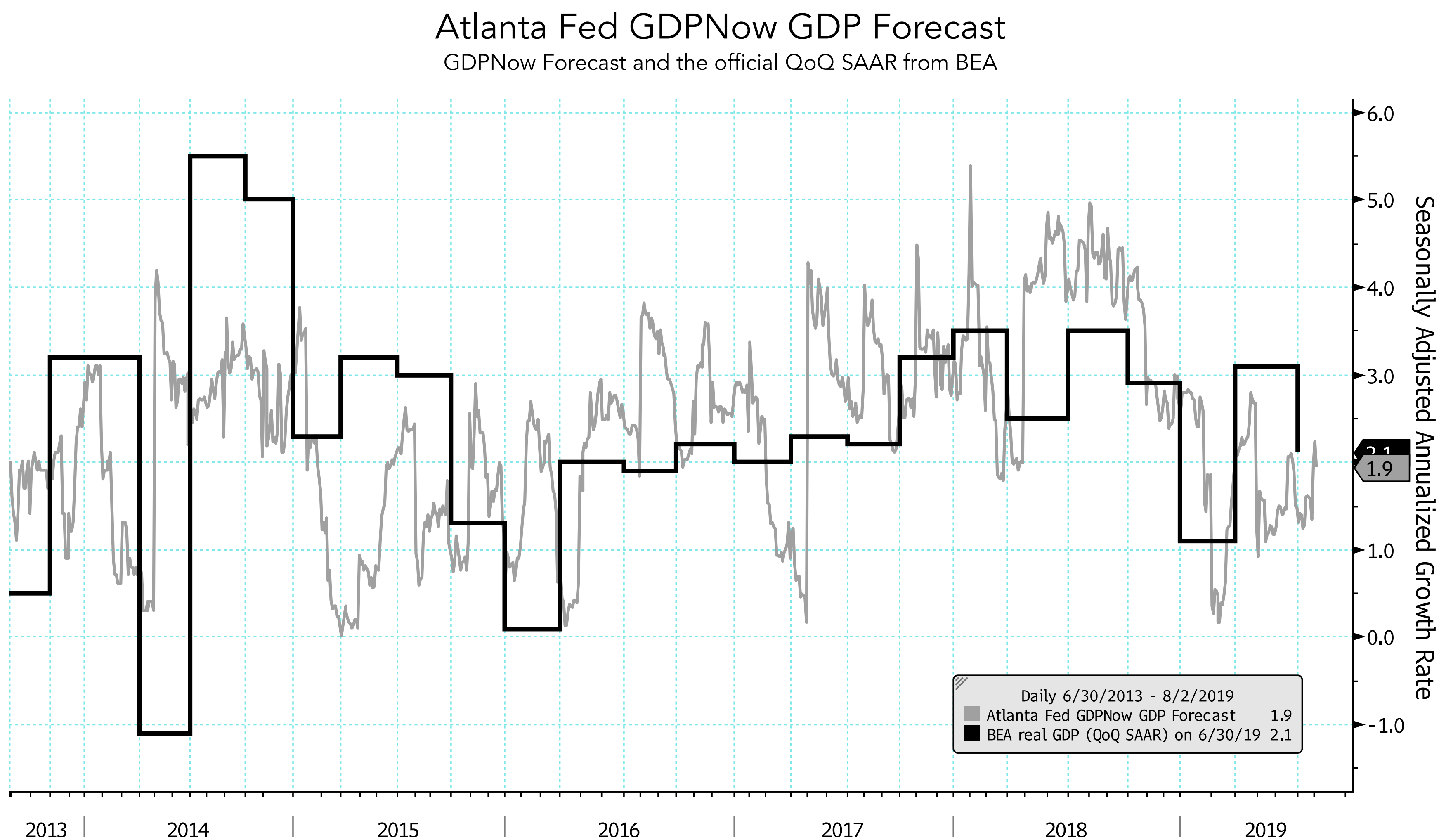
U.S. GDP Output Gap

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 final 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.

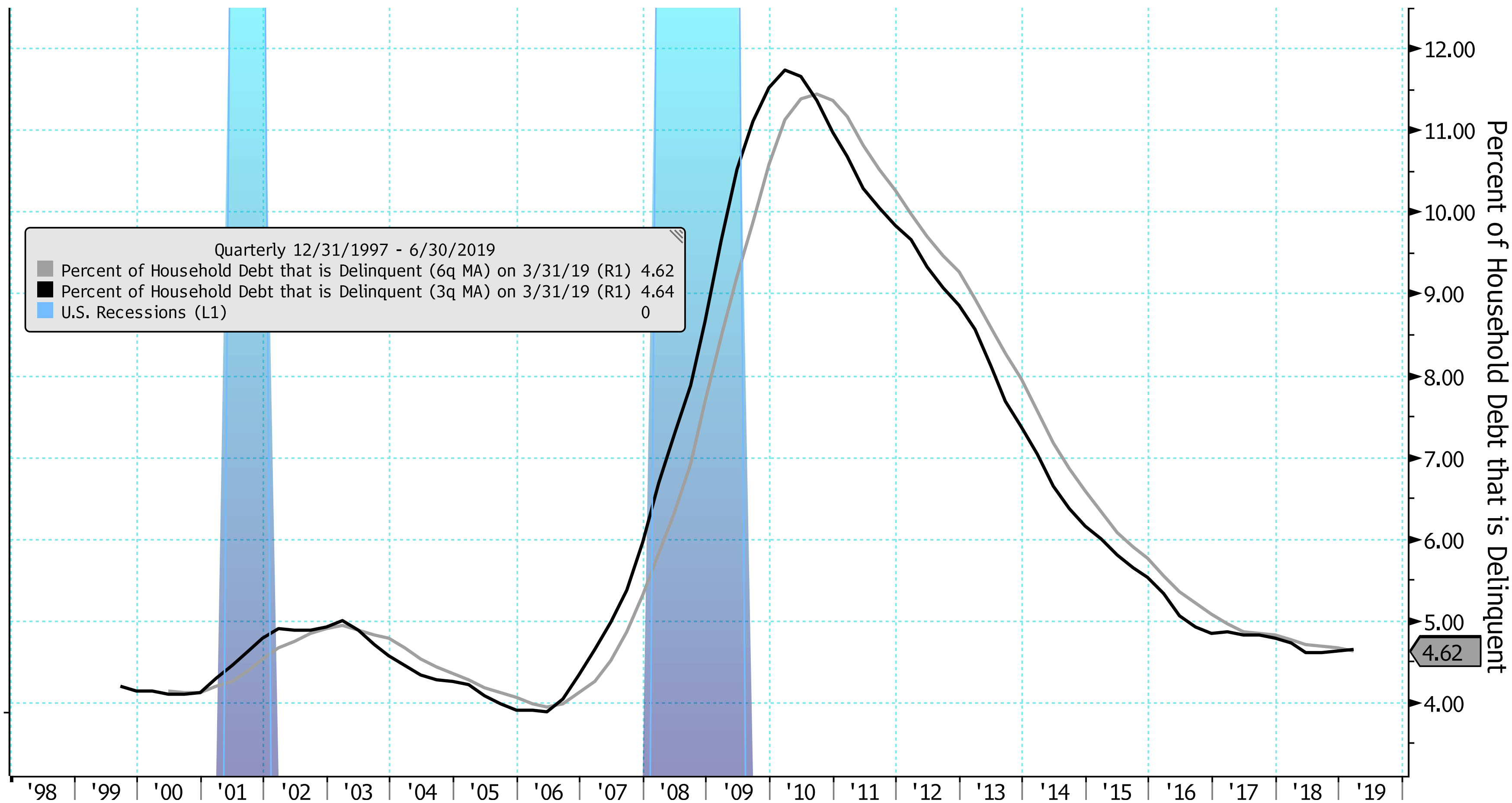


Source: © Merk Investments, Bloomberg

Analysis: The preliminary Q2 2019 GDP reading (black line) came in at 2.1%, the current forecast for Q3 2019 GDP is around 1.9%. 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)

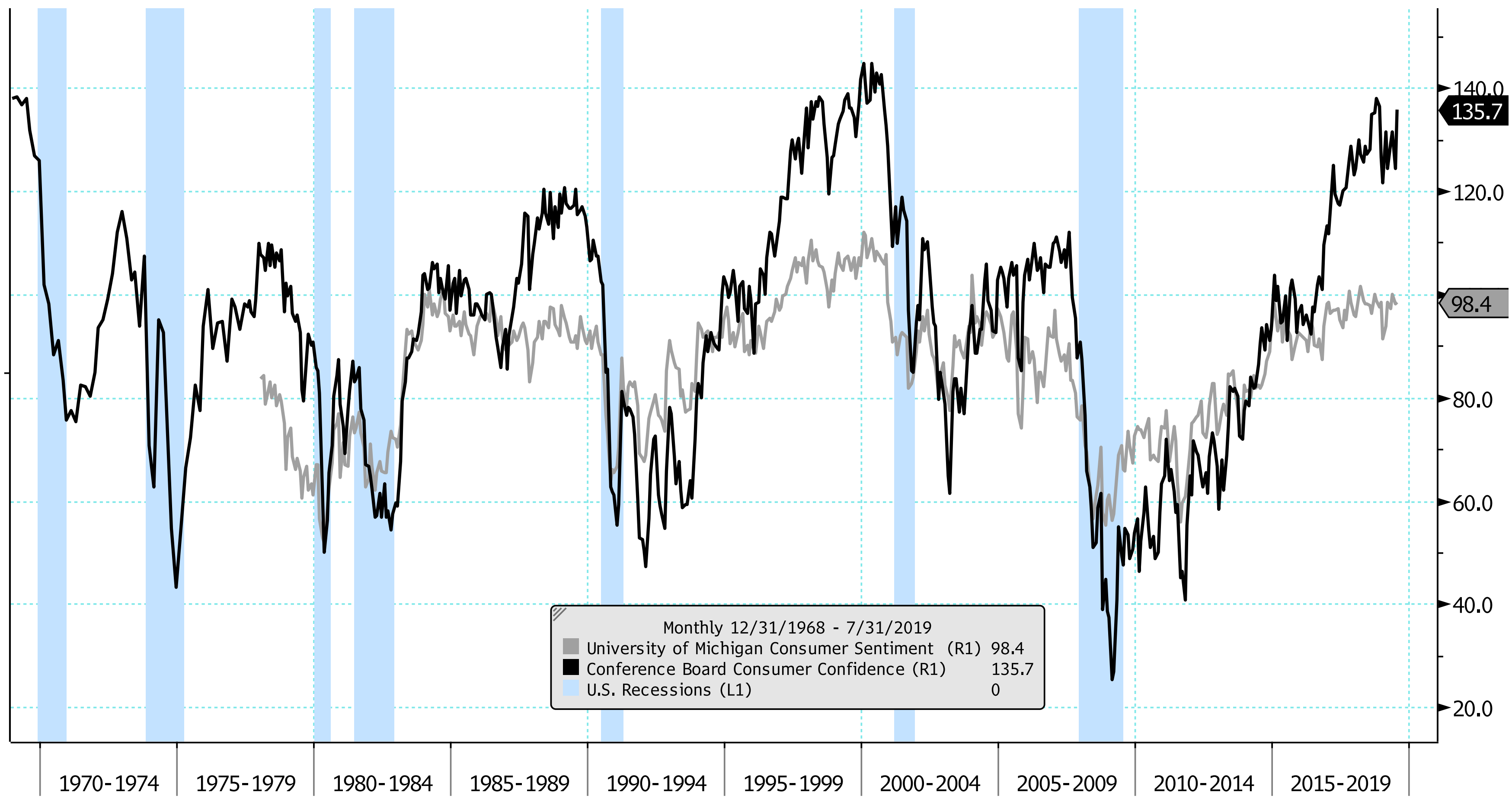


Source: © Merk Investments, Bloomberg

Analysis: The Q1 2019 data showed another downtick in the household delinquency rate (generally a positive sign for the economy); however, the 3-quarter moving average (black) moved just above the 6-quarter moving average (grey), which warrants concern and potentially signals the end of the credit cycle. Given my chart framework I'm currently neutral/negative on this picture. Chart Framework: I'd get incrementally positive if the 3q MA fell back below the 6q MA. The Q2 2019 data comes out in late August.

U.S. Consumer Confidence

Michigan Consumer Sentiment and Conference Board Consumer Confidence



Source: © Merk Investments, Bloomberg

Analysis: Both measures of consumer confidence are currently trending sideways-to-higher; however, they are both at elevated levels, which can be a longer term contrarian indicator. Given my framework, I'm currently neutral/positive on this picture. Chart Framework: I'd get incrementally positive if both measures are trending negative on a YoY basis.

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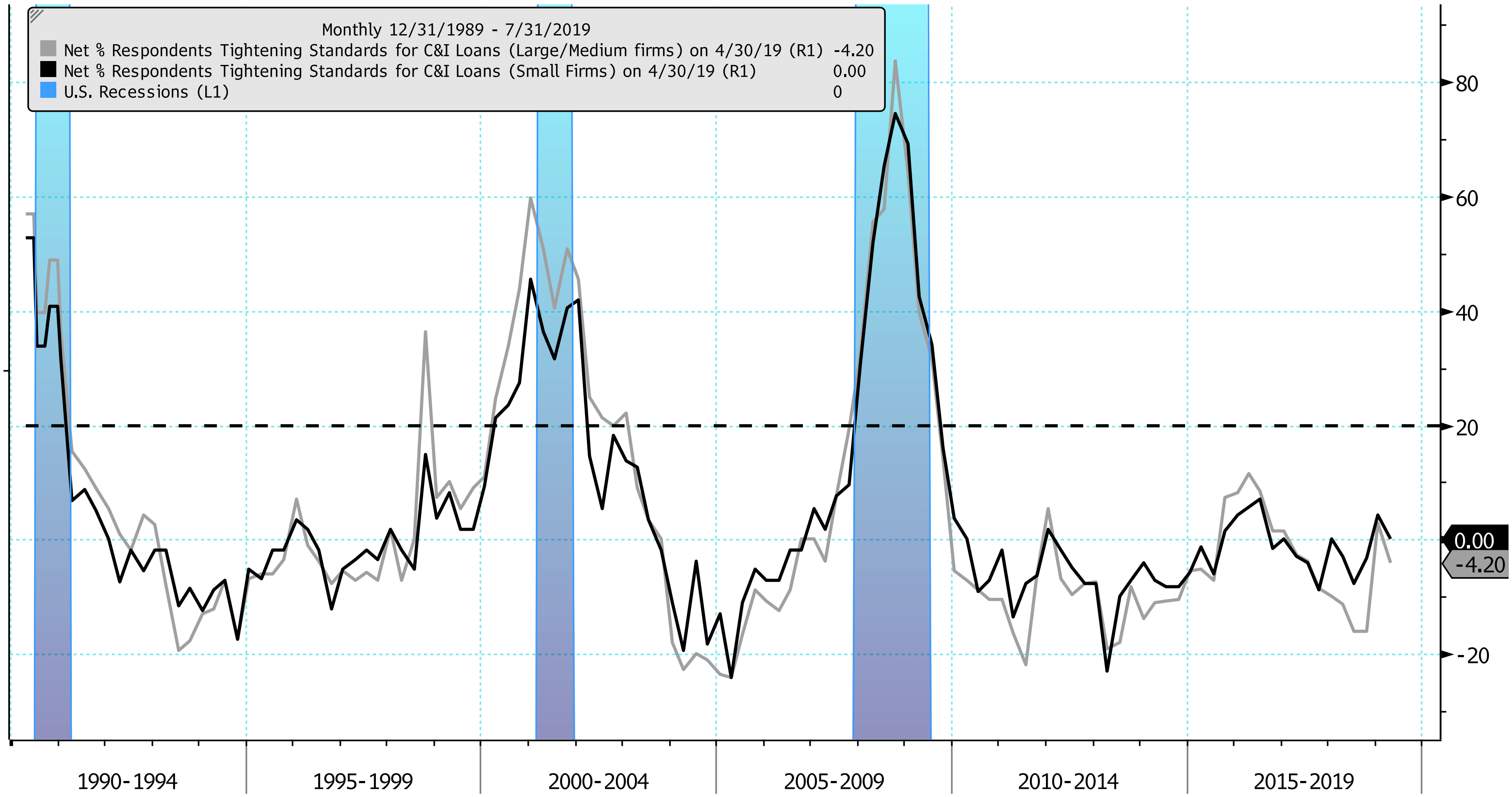
Bank Lending Standards

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

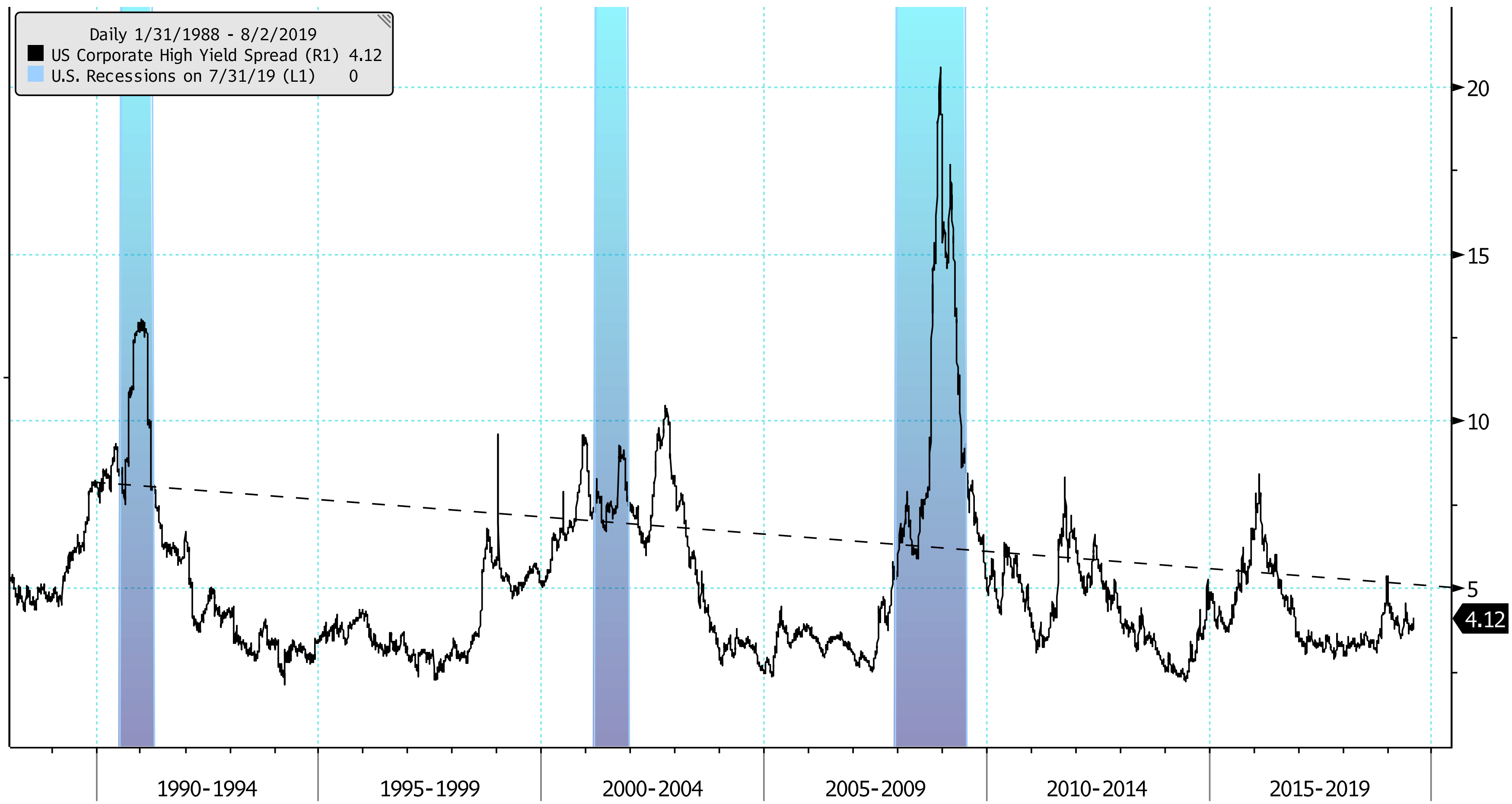


Source: © Merk Investments, Bloomberg

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 20% of respondents report tightening lending standards.

High Yield Spread

US High Yield Spread with Trend Line

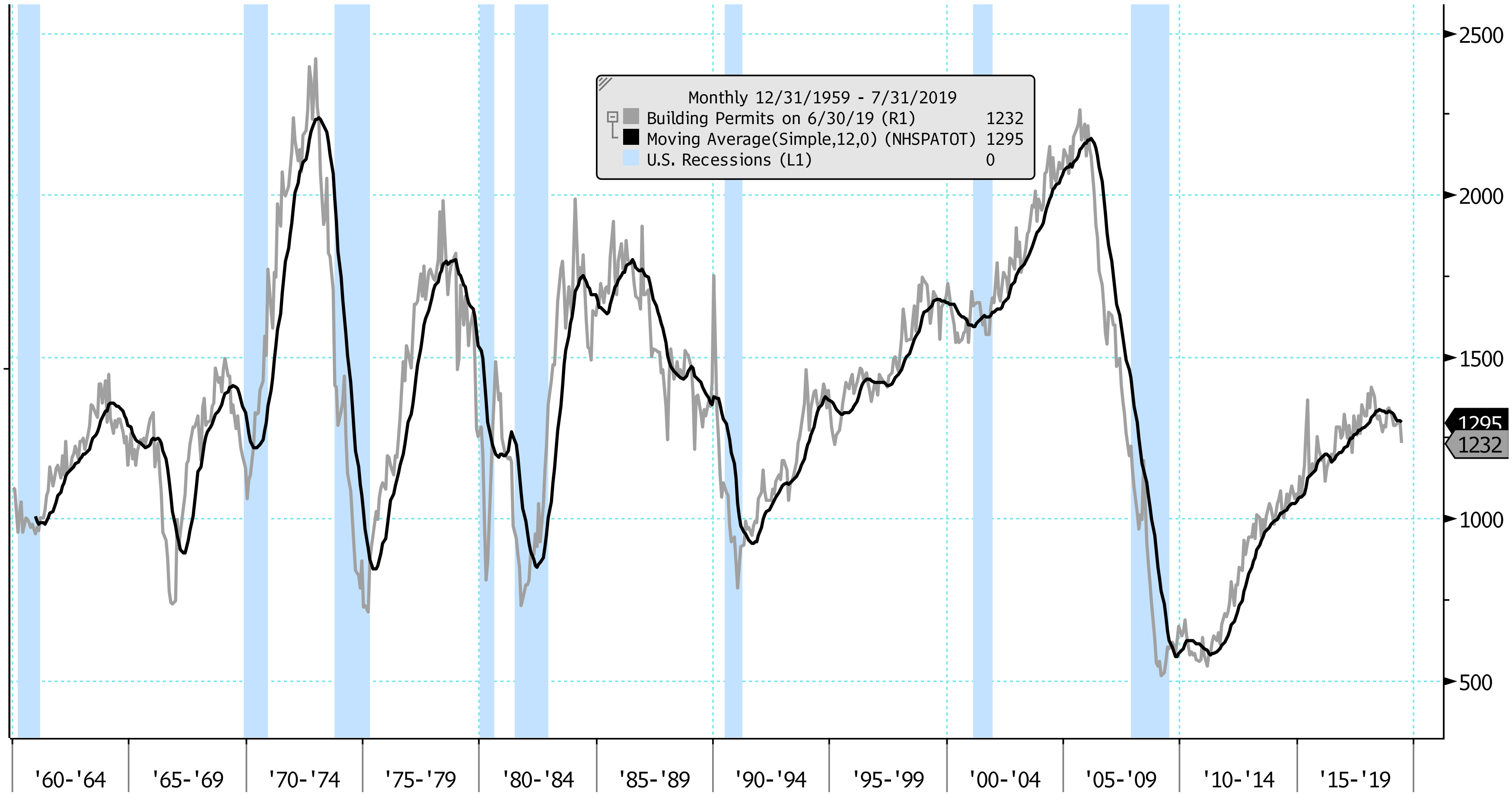


Source: © Merk Investments, Bloomberg

Analysis: The high yield credit spread remains below what I consider to be 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 starting to look like they may have topped for the cycle- another potential late cycle indicator if they begin to trend lower in earnest. Framework: I would get negative if the 12-month moving average is trending down for several consecutive months.

Checklist

Chart	Time Horizon	Per Framework Outlook on Business Cycle
LEIs	Short/Medium Term	Positive
Yield Curve	Medium Term	Neutral/Negative (conflicting signals)
U.S. PMIs	Short/Medium Term	Positive
Global PMIs	Short/Medium Term	Negative
Job Gains	Medium Term	Neutral/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/Negative
U.S. Consumer	Short/Medium Term	Neutral/Positive
Lending Standards	Medium Term	Positive
High Yield Spread	Short/Medium Term	Positive
U.S. Building Permits	Medium/Longer Term	Neutral/Negative
	Time Horizon	Overall Outlook on Business Cycle
	Short Term (<6 months)	Neutral/Positive with high uncertainty
	Medium/Longer Term (6m - 5 years)	Neutral/Negative with high uncertainty

Conclusion/Thoughts

This continues to be a challenging economic environment to analyze, with mixed signals.

I would estimate the probability of a recession starting in the coming six months to be around 25-40%. Nevertheless, my base-case view—meaning on balance more likely than not—remains that the U.S. economic expansion will likely continue over the next several months, and in general until further notice.

Of greatest concern remains the inversion of the 10yr-3m yield curve. Overall, the yield curve analysis shows conflicting signals: the 10yr-3m is inverted, but the 10yr-3yr is not. As far as the data goes back there has not been a recession without prior 10yr-3yr inversion, however false signals from 10yr-3m inversion have been very rare. Also concerning, and likely related, is the continued downtrend in global manufacturing, as illustrated in the global manufacturing PMI picture. Despite the weakness in manufacturing, the services sectors seem to be holding up relatively well around the world.

On the positive side: the LEI index continues to trend higher YoY, financial conditions continue to be supportive of the expansion, and the labor market continues to be relatively strong. Even given some of the late cycle indications, some slack seems to remain in the labor market, which may further suggest that the economic cycle can continue for a while longer. Also, historically U.S. business cycles have ended with an "overheating" and an overshoot of inflation, the U.S. economy has not (yet) "overheated" and there seems to be an absence of obvious excesses.

With regards to the yield curve, the recent Fed rate cut did not uninvert the curve and the market is expecting another rate cut at the September meeting. There are several elements of the current economic environment that share attributes to the late 1990s. The rate cut(s) may be somewhat analogous to the 1998 rate cuts, which were followed by continued economic expansion and rate hikes, into the cycle peak in 2000.

Much of the weakness in global manufacturing is likely attributable to uncertainty over global trade policy, an issue that the current U.S. administration seems to have a fair amount of unilateral influence over. In my view the administration will likely make an effort to move toward resolution as the re-election campaign approaches, which my be the catalyst for a global economic rerbound.

While uncertainty around the outlook has increased greatly, based on my checklist approach I think the U.S. business cycle picture near-term is overall still slightly more positive than negative. On balance, based on the charts and frameworks presented (which inevitably may not capture all possible risk factors in real-time), it seems more likely than not that the U.S. economic expansion continues in the coming several months. The longer term outlook remains negative as we are likely in the late part of this economic expansion. All of the presented charts and concepts are somewhat inter-related, as is the economy in general, so the idea is to have some different data points to cross-reference. In my view no one indicator can be looked at in isolation.

-Nick Reece, CFA

About the Author

Nick Reece, CFA: Nick is a Senior Analyst and 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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