

# Investment strategy insights

## Bull Market Monitor: Putting the pieces together

Chief Investment Office Americas, Wealth Management | 18 September 2018 7:24 pm BST

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- To investors asking how much longer the bull market will last, our answer is that it should continue a while longer. That's reflected in the [Bull Market Monitor \(BMM\)](#), with the assessment is that the US expansion is mid-to-late cycle.
- But economic and market conditions can change quickly. To provide guidance on how our assessment could evolve through year-end, we review the BMM indicators and factors we're watching most closely.
- The momentum in economic activity should keep growth and the labor market strong, while inflation only gradually rises slightly above 2%. The scope for additional tariffs, increased capex, wage growth, and inflation accelerating could change this outlook.
- There's more uncertainty about financial conditions. Monetary policy accommodation is ending, but how soon it gets to neutral or beyond in the US is unclear. This will affect the yield curve, but continued flattening isn't necessarily overly concerning. Credit conditions are supportive, but that could change quickly.
- The purpose of the BMM is to identify a cyclical turning point that brings about an end to the bull market, not to predict every 5-10% stock market correction. Monetary policy is the most likely reason why that will occur and warrants the closest scrutiny of all the factors.

**Fig. 1: The Bull Market Monitor**

**Overall: Mid-to-late cycle**



Source: UBS, as of 14 September 2018

The current US equity bull market is now the longest on record, adding to the total each day. This won't calm investors already anxious about how much longer it can last, nor cool the debate about the cycle's outlook. Our assessment, as reflected in the Bull Market Monitor (BMM), is that the US expansion is mid-to-late cycle, with the economy running warm not hot (Fig. 1). Consequently, the bull market should continue a while longer. Yet economic and market conditions can change quickly, and thus so can our assessment.

To provide guidance on how it could evolve, we review the BMM indicators and the factors that we're watching closely that could change our assessment. The indicators track whether the economy is overheating and if financial conditions are restricting growth, two criteria that almost always precede recessions. Though neither condition holds right now, the economy is on a path towards both.

Complicating this evaluation is that it's been far from a normal cycle. For instance, by next summer the current expansion will be the longest since WWII, but it will also be the slowest. The economy has had to deal with the aftermath of a global financial crisis and extraordinary and unprecedented monetary policies. Consequently, trying to get a read on the cycle by comparing typical indicators to their levels in prior cycles can result in misleading conclusions about the expansion's outlook, and thus the bull market too. Some of these issues were discussed in prior reports on the neutral state (see *The neutral state vs. the business cycle: Why does it matter?*, 12 June 2018) and the yield curve (see *US fixed income: US Yield Curve: Running flat*, 27 July 2018).

Looking ahead to the rest of the year and early 2019 there's more uncertainty about the status of financial conditions than the growth and inflation outlook. The strong momentum in economic activity should keep growth and the labor market strong, while inflation only gradually rises slightly above 2%. Escalating trade tensions and additional tariffs, which we expect, are a near-term risk to growth, but shouldn't derail the momentum if they are only temporary.

In contrast, financial conditions will likely stay accommodative, but a potential inflection point is near. Monetary policy could go from "accommodative" to "neutral" with two more rate hikes, while globally central bank quantitative easing (QE) is expected to turn into quantitative tightening (QT) by year-end. For now it's hard to see the expansion ending within a year, and it could easily last a few more—good news for the bull market continuing, but it doesn't guarantee a smooth ride while it lasts.

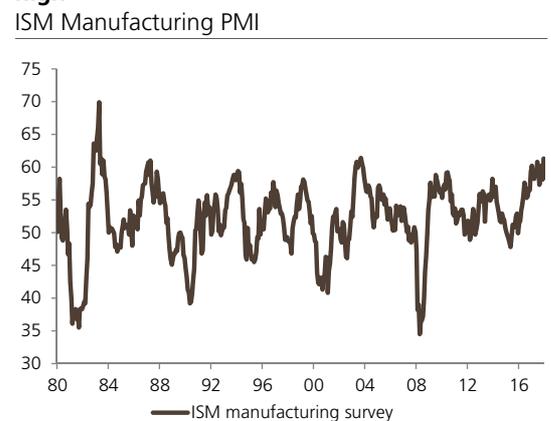
## Overheating Indicators

The US economy has pulled off a difficult feat this year: GDP growth is well above potential and the unemployment rate is near 50 year lows, yet inflation is rising only very gradually. Such ideal conditions won't persist indefinitely, as growth will eventually moderate and inflationary pressures are building due to limited slack. But there are few excesses in the economy that pose a serious risk to the expansion and many indicators are far from late-cycle levels, and that should hold steady for the time being.

### Growth

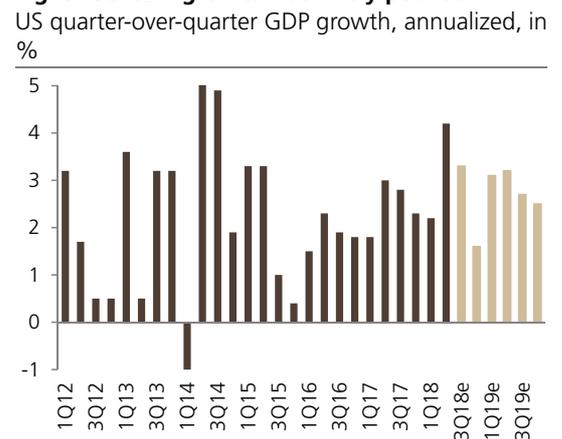
The US economy is growing solidly and may have even accelerated over the last month. But GDP growth has probably peaked this cycle, capped by the 4.2% rate in Q2 and the unsustainably high ISM manufacturing survey reading of 61.3 for August, above the 90th percentile since 1950 (Fig. 2). GDP growth is likely to be about 3% in Q3, dropping to 1.5% in Q4 if trade tensions escalate, as we expect, before bouncing back in Q1 of 2019 (Fig. 3). This is still good since potential growth is around 1.5–2%. Rather than worrying, moderating growth could help extend the cycle by reducing overheating risks now that the output gap has closed.

**Fig. 2: US cyclical growth is near a multi-decade high**



Source: Bloomberg, UBS, as of 14 September 2018

**Fig. 3: US GDP growth has likely peaked**



Source: Bloomberg, UBS, as of 14 September 2018

This combination of above-potential but moderating growth is why the BMM indicator is elevated, yet not extreme. While this path looks fairly certain in the next few quarters, three factors could alter the assessment in positive or negative ways.

First, there are few of the typical excesses in the economy this far into an expansion. Cyclical aspects of demand—e.g., housing purchases, durable goods consumption, and business investment—have been restrained, while households spent much of the cycle deleveraging. This could change if the economy continues to grow above 3% and consumer and business spending increases faster than that.

Second, escalating trade tensions are the biggest near-term growth risk. The tariffs already imposed have barely dented the economy, but the US won't be immune to USD 200bn or more of tariffs on imports from China. The chilling effect on investment and disruption to global supply chains would likely reduce growth by over 1% for a quarter or two if the tariffs persist.

Third, capital investment and productivity growth are perking up, and a continuation of recent trends would help extend the expansion by enabling higher non-inflationary growth. S&P 500 companies increased year-over-year capex by 21% and 26% in Q1 and Q2, respectively, on the back of tax reform and strong organic growth. Meanwhile, productivity growth surged 2.9% in Q2. The data series is volatile, but continued strong capex will almost certainly lift productivity growth sustainably above the meager 0.5% average the past five years.

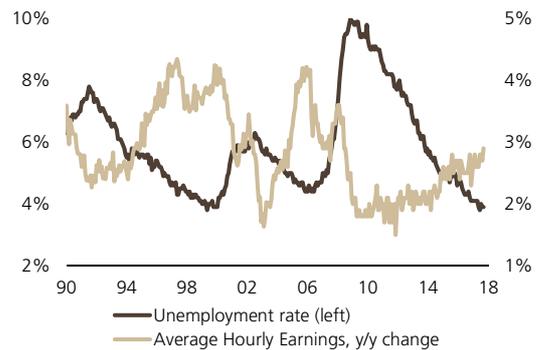
Looking beyond the next few quarters, GDP growth is likely to slow even more in 2020 as the fiscal stimulus completely dissipates. Peak stimulus should occur around year-end, which is why growth should be resilient to trade-related disruptions. But the expansionary fiscal policy has also pulled forward growth that would have likely occurred later, resulting in fewer growth risks today at the expense of more in two years.

**Labor Market**

By almost every metric, the US labor market is strong and getting exceptionally tight, wage growth being the exception. Nonfarm payrolls grew 201,000 in August, but the three-month rolling average is back below 200,000 (Fig. 4). A dip in job growth is not unexpected or worrying because at 3.9% unemployment there's simply a diminishing supply of available workers. It's why there's a record number of job openings, and why job growth should be solid well into next year, likely driving the unemployment rate below 3.5%.

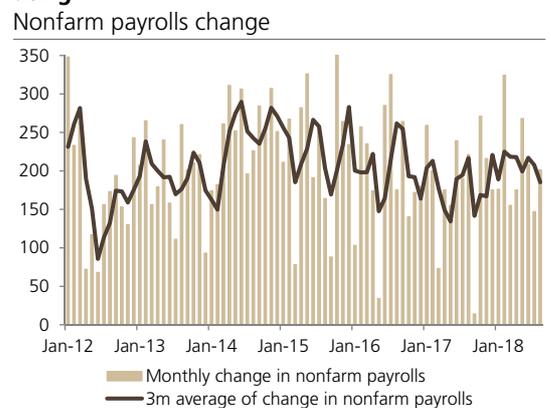
For the BMM indicator, our focus is on wage growth. It's well short of prior cycle levels at comparable unemployment (Fig. 5). Average hourly earnings growth did reach 2.9% in August, its highest level since April 2009, but the 3.06% 3-month annualized rate is basically flat to the 3.05% March level. In other words, wage growth hasn't yet accelerated sustainably. City-level evidence does suggest that wages rise faster at very low unemployment rates. But that threshold could be as low as 3.5%, meaning that worrying levels of wage growth may be a ways off.

**Fig. 4: Wage growth hasn't kept pace with the fall in unemployment**



Source: Bloomberg, UBS, as of 14 September 2018

**Fig. 5: Job growth is strong, but slowly decelerating**



Source: Bloomberg, UBS, as of 14 September 2018

## Inflation

Inflation has risen to the Fed's 2% target, with July core PCE inflation reaching 1.98% and CPI at 2.7% (Fig. 6). We expect both measures to keep gradually rising through year-end because of low base effects—UBS is forecasting core PCE of 2.0% by December—but then moderate in 2019. Thus, the indicator is at neutral, but it's likely to trend higher because inflation risks are skewed to the upside, with a 2.5% core PCE at some point in 2019 quite plausible.

The first factor that could cause an inflation overshoot is the tight labor market, also a proxy for spare capacity in the economy. Labor market overheating played a key role in core PCE exceeding 2.5% at times before the financial crisis, and is evident in US city-level data. Thus, the Phillips curve—the inverse relationship between unemployment and inflation—that appears to be non-existent in this expansion may still apply at very low unemployment rates. Consistently faster wage growth could presage higher inflation overall.

Additional tariffs would also boost core inflation, at least temporarily. Tariffs imposed thus far have already raised prices on targeted categories, such as washing machines. These effects will broaden if 10-25% tariffs are applied on another USD 200bn of Chinese goods. That could lift core PCE 5-15bps over the next year, due directly to the tariff and because disrupted supply chains raise production costs.

These inflationary effects could be temporary if the tariffs are in place only a couple of months or growth slows more quickly than expected. The key to sustained higher inflation is that inflation expectations also start to rise. For now they remain well anchored. Market-implied expected inflation in five years is about 2.2%, but only 2.1% in 30 years, while household surveys of long-term inflation expectations are similarly stable (Fig. 7).

## Financial Conditions Indicators

Financial conditions describe the availability and pricing of capital for businesses and consumers. For example, lower interest rates, tighter credit spreads, and higher stock prices all contribute to looser financial conditions, which make it easier for consumers to take out a mortgage to buy a new home or businesses to finance their expansion plans. Loose financial conditions tend to generate a positive growth impulse for the economy, and vice-versa for tightening conditions.

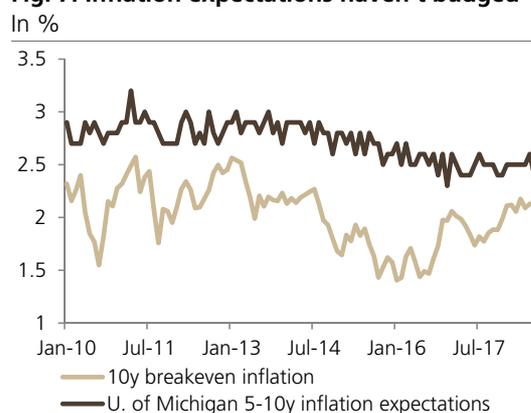
Current US financial conditions are relatively loose (Fig. 8). The Fed is set to keep hiking rates and shrink its balance sheet, while other major central banks should stop or slow bond purchases by year-end. The result will be a shift in global monetary policy—going from quantitative easing (QE) to quantitative tightening (QT). But while global central banks in aggregate will begin scaling back the aggressive stimulus they deployed to combat the financial crisis, monetary policy will not be "tight". Still, financial conditions can change quickly and unexpectedly—especially in credit markets—so we will be watching this area closely.

**Fig. 6: Core inflation is right at the Fed's 2% target**



Source: Bloomberg, UBS, as of 14 September 2018

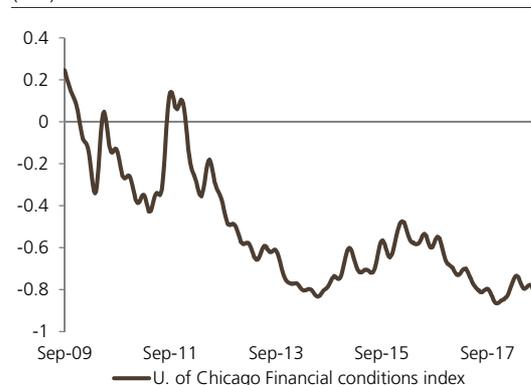
**Fig. 7: Inflation expectations haven't budged**



Source: Bloomberg, UBS, as of 14 September 2018

**Fig. 8: US financial conditions remain accommodative**

University of Chicago Financial Conditions Index (FCI)



Note: Lower FCI implies looser financial conditions

Source: Bloomberg, UBS, as of 14 September 2018

## Monetary policy

With a September Fed rate hike all but certain—the market-implied probability is 95%—the question is what comes next. The Federal Open Market Committee (FOMC) forecasts five hikes by December 2019, whereas the market is pricing about three and a half.

The Fed is aiming for a middle-of-the-road approach, balancing the risk of hiking too quickly (and thus risking an earlier recession) versus the risk of falling behind the curve by not hiking fast enough with inflation at the 2% target. For now, strong job and income growth justifies further rate hikes, but a number of factors will influence how many and how soon.

First is the neutral rate of interest ( $r^*$ ) and the non-inflation accelerating rate of unemployment (NAIRU). These values are the economy's long-run sustainable equilibrium interest and unemployment rates, while inflation remains stable. While it's safe to assume that the Fed funds rate is currently below  $r^*$ , there's far more uncertainty just how much below (Fig. 9). The FOMC's median forecast for  $r^*$  is 2.875%, but other estimates range from 2.25% to 3.5%. Consequently, the Fed would like to deemphasize  $r^*$  in its guidance, but that doesn't negate the need to evaluate monetary policy relative to the neutral state.

Inflation is another critical factor, although Fed Chairman Powell has cautioned against placing too much weight on inflation as an overheating signal. The Fed would view core PCE rising to 2.3% as relatively benign, but breaching 2.5% would likely force it to be more aggressive than its currently laid out path, especially if long-term inflation expectations start to rise as inflation overshoots.

As long as the US economy is strong, the Fed is committed to gradually removing policy accommodation. A stronger US dollar and the risk of contagion across emerging markets—both of which are amplified by additional tariffs—are unlikely to alter the Fed's hiking plans unless it raises the risk of a slowdown in the US.

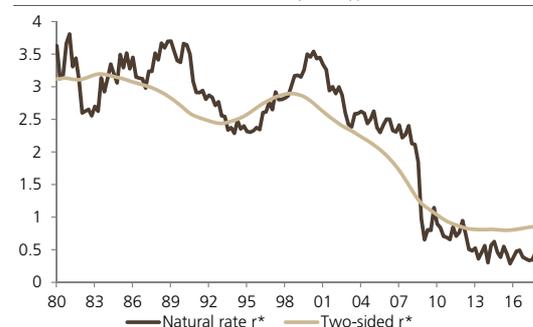
Thus, the BMM monetary policy indicator should continue its gradual shift towards neutral and likely into the restrictive range—the FOMC forecasts a Fed funds rate 50bps above  $r^*$ —by the end of 2020.

## Yield curve

Concern about the Treasury yield curve shape has grown as it has gotten flatter, for good reason. The curve has inverted prior to the last seven recessions. While it has given a few false signals, overall the curve seems to be a good early warning sign. Yet not all curve-flattening is equal, either in number or in interpretation, and that complicates our assessment of this indicator.

**Fig. 9:  $r^*$  is rising, but its value is uncertain**

The neutral rate of interest (" $r^*$ "), in %



Source: Bloomberg, UBS, as of 14 September 2018

To start with, there are many ways to measure curve steepness: the difference between 2- and 10-year yields; the gap between 3-month and 10-year yields; or the slope of the short-term forward curve for Treasury yields. Each of these measures has inverted before prior recessions, but a recent Fed study comparing them found that the forward rate curve and the "3m–10y" curve was as effective as the "2y–10y" curve. That's good news since the 3m–10y curve has flattened far less than the 2y–10y curve (Fig. 10).

Another challenge of deciphering the yield curve's signal is determining what's causing the inversion.

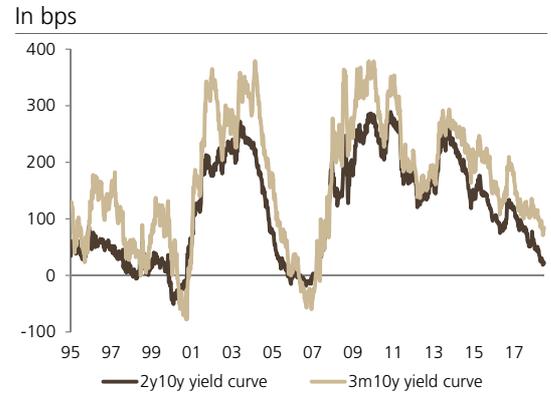
Treasury yields reflect a risk or term premium and expectations for future Fed funds rate hikes or cuts. The term premium is compensation for taking on the duration risk in long-term bonds. Typically, the premium for 10-year Treasuries has been about 100bps at this stage of the hiking cycle. But QE and other market developments have driven this lower—100-150bps by some estimates—resulting in a low or negative term premium (Fig. 11). In this case, a flat yield curve would still imply that the market is pricing additional rate hikes, which is a positive sign about the economy.

These measurement and interpretation considerations are why the BMM indicator is still in the accommodative range, despite the 2y10y curve being just over 20bps. They're also why the indicator may not go far into the restrictive range even as the curve gets completely flat, provided monetary policy is still about neutral.

### Credit conditions

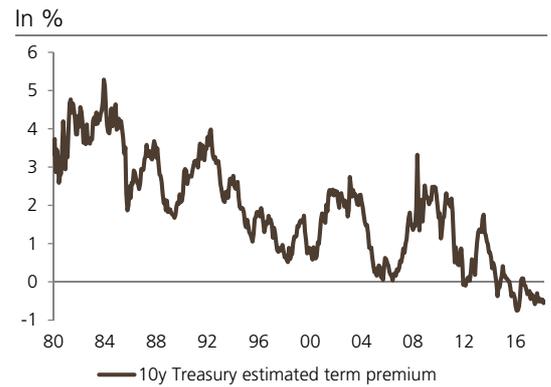
By many measures credit conditions are currently loose and supportive for growth, but elevated leverage for subsets of borrowers will pose risks as rates keep rising. For the economy overall the rate of change in credit growth—i.e., the credit impulse—is positive, while the Fed's Senior Loan Officer Survey shows that bank lending standards on net have been getting easier, improving access to credit (Fig. 12). Both are good leading indicators for GDP growth because credit is the fuel that drives the business cycle, which bodes well for the expansion over the next year.

**Fig. 10: The 3mo–10yr Treasury yield curve still far from inverted**



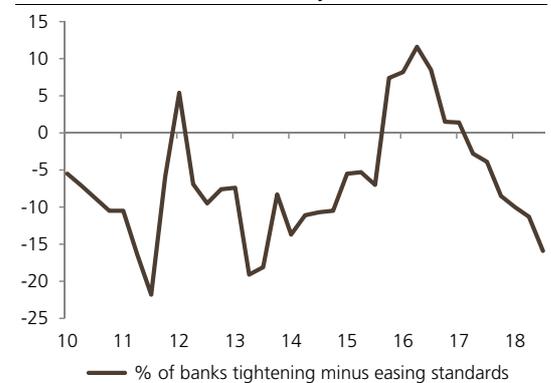
Source: Bloomberg, UBS, as of 14 September 2018

**Fig. 11: The 10-year Treasury term premium is much lower today than during past yield-curve inversions**



Source: Bloomberg, UBS, as of 6 June 2018

**Fig. 12: Access to credit is getting easier**  
Fed Senior Loan Officer Survey



Source: Bloomberg, UBS, as of 6 June 2018

Corporate credit market conditions are similarly favorable for growth. Spreads are tight, though not at their cycle lows or at the lows of prior cycles (Fig. 13). Demand for new supply is strong, while net issuance for high-yield corporate bonds has fallen by 20% this year. Default rates are below long-term averages and they're forecasted to stay low. The one blemish is that corporate leverage has become elevated for segments of issuers.

In addition to higher leverage, the primary risk to credit conditions is the potential lack of liquidity, which could take two forms. The first is the withdrawal of funding liquidity because of QT, as central banks are no longer net buyers of financial securities. The consequences of reversing, albeit very slowly, the unprecedented expansions of central bank balance sheets are unknown, but are sure to create pockets of volatility. The second and related form is diminished trading activity in credit markets, a result of post-financial crisis regulatory changes. The implication is that credit conditions, while currently favorable, could change quickly and unpredictably.

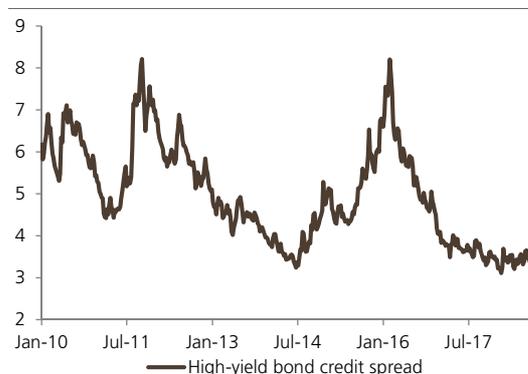
## Final thoughts

Despite its age, the US business cycle remains healthy, with a fairly low risk of a recession over the next one to two years. But this assessment of the BMM indicators reveals the many factors that could alter this outlook. That matters not only for the cycle, but even more so for financial markets that respond to changing expectations about the economy more than the actual levels of economic activity.

It's also important to note that the BMM is designed to identify major cyclical turning points that would cause the bull market to turn into a sustained bear market (a 20+% drop in the S&P 500). It is not designed to predict every 5-10% stock market correction.

Tighter financial conditions, led by monetary policy—which drives a slowdown in economic growth—remain the most likely reason why that will occur. We currently assign a low (10-20%) probability that this takes place over the next year. Given the likely policy path in the next few quarters, this warrants the closest scrutiny of all the factors that could lead to a major inflection point in the expansion, and thus the bull market. We track this risk—and others that are important short-term risks but less likely to cause a bear market—in our Global Risk Radar series.

**Fig. 13: Credit spreads are tight, near cycle lows**  
ln %



Source: Bloomberg, UBS, as of 6 June 2018

## Appendix

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