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A tale of tighter conditions



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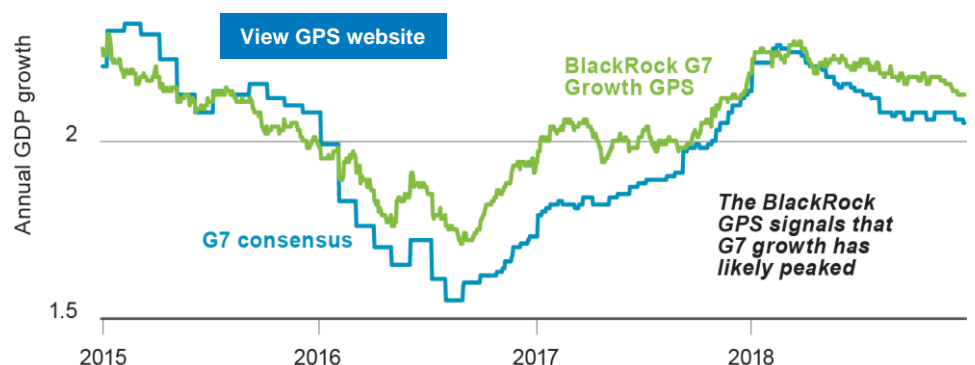
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Financial conditions – which have tightened significantly since the summer – describe the changes in financial asset prices and the impact they have on economic growth. The more financial conditions tighten, the more they weigh on economic growth. The more they ease, the more they boost growth. Many existing measures of financial conditions are misleading, in our view – so we have created our own financial conditions indicator (FCI). It provides a measure of the impact that financial conditions are exerting on the growth outlook, as indicated by our BlackRock Growth GPS. Highlights:

- The sell-off in financial markets since September has led to much tighter financial conditions. This – along with other factors such as slowing fiscal stimulus and trade concerns – impacts growth.
- Our FCI suggests that the median Federal Reserve projection of four more rate hikes by the end of 2019 would tighten financial conditions enough to arrive at a sustainable level of growth – *without the expected effects of other factors on growth*.
- The fading boost to GDP from fiscal stimulus and trade tensions will together likely weigh on growth and reduce the requirement for Fed hikes, we believe. And another financial market sell-off would further tighten financial conditions.
- Existing FCIs can be misleading, we believe. This is because unadjusted financial asset prices tend both to *reflect* growth news as well as *drive* growth news. After we apply our adjustments to rates and yields the FCI reaction is more as one would expect – an unexpected rise in rates and yields reduces growth expectations.
- Our FCI also provides a more intuitive depiction of past financial episodes – it does a better job of picking up the tightening in conditions well before the financial crisis. But it is just one aspect affecting the monetary policy outlook.

Economic snapshot

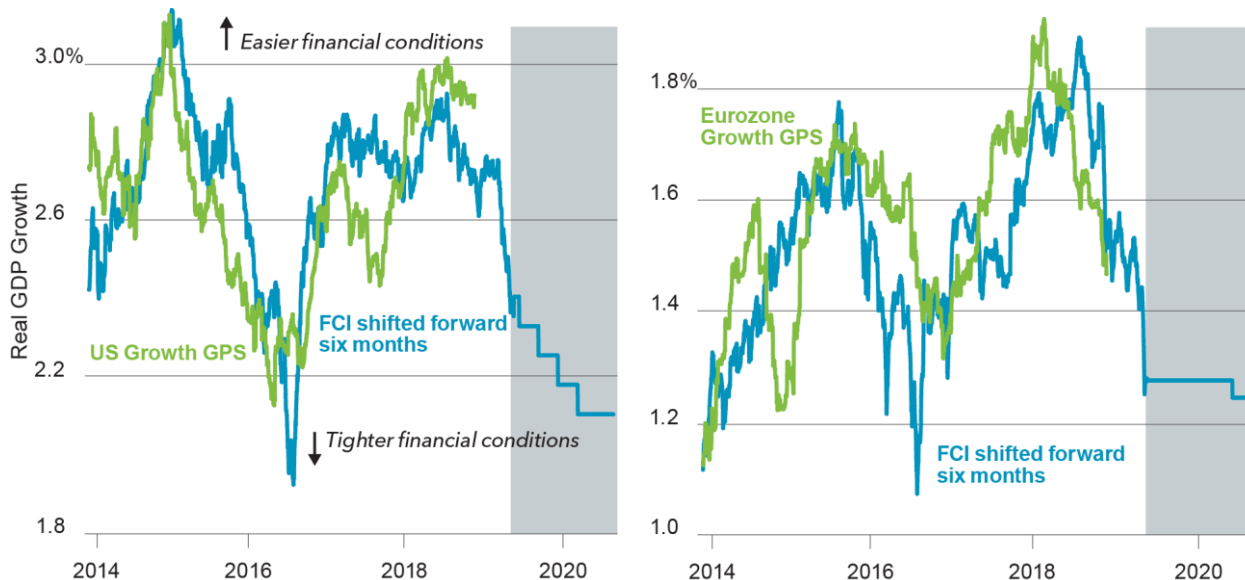
BlackRock Growth GPS vs. G7 consensus, 2015-2018
2.5%



There is no guarantee any forecasts made will come to pass. Sources: BlackRock Investment Institute, with data from Bloomberg and Consensus Economics, December 2018. Notes: The GPS in green shows where the 12-month consensus forecast may stand in three months' time for G7 economies. The blue line shows the current 12-month economic consensus forecast as measured by Consensus Economics.

Tighter times

The BlackRock FCI and the BlackRock Growth GPS, for the US and the eurozone, 2014-2020



There is no guarantee any forecasts made will come to pass. Sources: BlackRock Investment Institute, with data from Bloomberg, December 2018. Notes: The BlackRock Growth GPS (green line) shows where the 12-month forward consensus GDP forecast may stand in three months' time. The blue line shows the rate of GDP growth implied by our financial conditions indicator (FCI), based on its historical relationship with our Growth GPS. The FCI inputs include policy rates, bond yields, corporate bond spreads, equity market valuations and exchange rates. The FCI is moved forward six months, as it has historically led changes in the Growth GPS. In the grey area, we project our FCI out to the end of 2019. We assume that the FCI inputs remain unchanged with the exception of the Fed policy rate which moves up four times from now until the end of 2019 in line with the median Fed projection, and the ECB's short-term policy rate which moves up once at the end of 2019 in line with ECB staff assumptions.

The implications of tighter conditions

The recent correction in risk asset markets has caused a noticeable tightening in financial conditions. This means financial conditions are providing less of a boost to economic growth – and could potentially cause the Federal Reserve to alter its policy decision making, we believe.

We only want to capture the impact of financial conditions on the outlook for growth – and not the impact of the current growth outlook on financial conditions. While most existing financial conditions indices (FCIs) measure the impact of the business cycle on financial conditions, they do not account for the fact that current economic expectations also affect today's financial conditions. This forward looking factor has also been removed from our new FCI. Once this is done the FCI then behaves more closely in line with economic theory: For instance an increase in interest rates and yields following better growth news does not lead to an assessment that financial conditions have tightened. The differences between our FCI and existing indices is explained in detail on page 3.

The aim of our FCI is to provide a measure of the impact that financial conditions are exerting on the growth outlook – as proxied by the BlackRock Growth GPS. Tighter financial conditions suggest that growth in the US and Europe will likely decelerate in the coming twelve months. See the *Tighter times* chart.

The sell-off in financial markets since the summer and ongoing Fed policy tightening would be consistent with US GDP growth slowing to just under 2.5% next year from almost 3% now. The market sell-off since September has alone caused a tightening in financial conditions equivalent to a 35 basis point decline in the US Growth GPS.

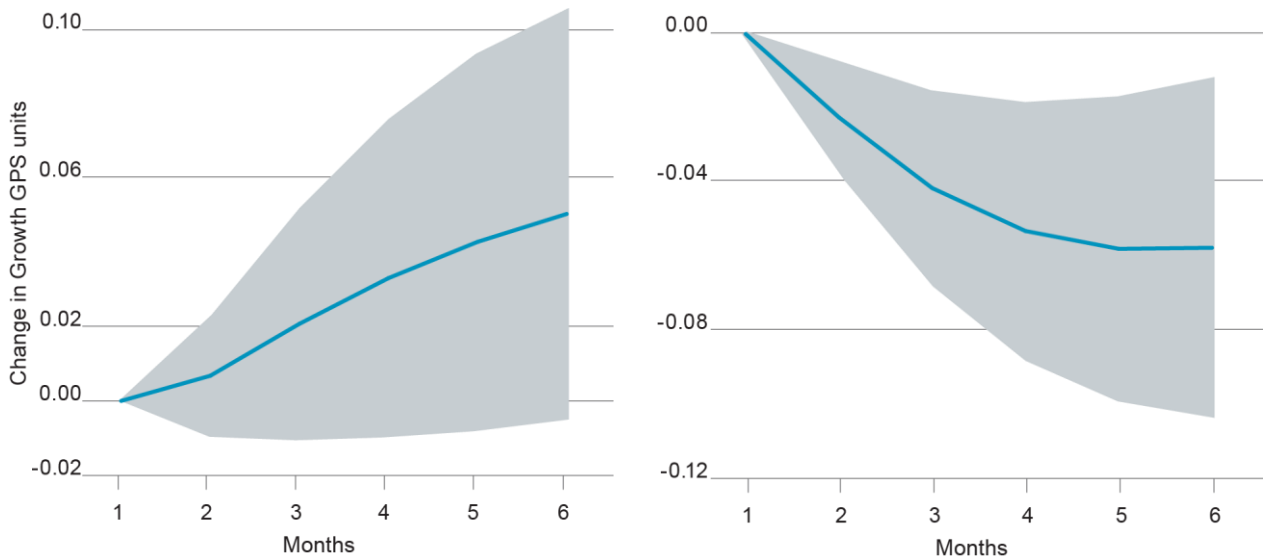
What does our FCI say about monetary policy? The median Fed projection from September is for four more rate hikes by the end of 2019. Our FCI suggests this would tighten financial conditions enough to arrive at 2% growth by 2020 – *without the expected effects of other factors on growth*. But the fading boost to GDP from fiscal stimulus – which alone could lower US GDP growth by 25-75 basis points, according to our estimates – and trade tensions will together likely weigh on growth and reduce the requirement for Fed hikes, we believe. And another financial market sell-off would further tighten financial conditions.

We believe monetary policy tightening – beyond that priced by the market – would only be required by the Fed to engineer a “soft landing” if other factors do not bring growth down to around 2%. Growth at 2% is the level that we and the Fed believe to be sustainable because it is in line with the pace of growth of potential output.

In the eurozone, our FCI suggests a slowdown in GDP growth to substantially less than 1.5% next year – financial conditions are already tight enough for growth to moderate to a level close to potential. We believe this implies that the ECB may decide to keep interest rates at record lows for most of 2019. But fiscal stimulus among member states could also support eurozone growth, changing the picture for the ECB.

That's more like it

Response of US Growth GPS to a shock in the Fed policy rate (left) and to the real policy rate-neutral rate spread



There is no guarantee any forecasts made will come to pass. Sources: BlackRock Investment Institute, December 2018. Notes: We show the estimated response of our US Growth GPS following an unexpected rise in the Fed policy rate (chart on the left) and following an unexpected change to the spread between the real Fed policy rate and the neutral rate of interest (chart on the right). The estimates are performed via a standard vector autoregression using data at a monthly frequency. The shaded area denotes the 95% confidence interval around our estimates.

Growth drivers and growth reflectors

We think many of the existing FCIs give misleading pictures of financial conditions. This is because unadjusted financial asset prices tend both to *reflect* growth news as well as *drive* growth news. For an FCI to accurately measure the financial impact on the near-term macro outlook, both past cyclical dynamics and expectations about future growth need to be stripped from the underlying components – a range of asset markets including government bonds, corporate credit, equity markets and the exchange rate.

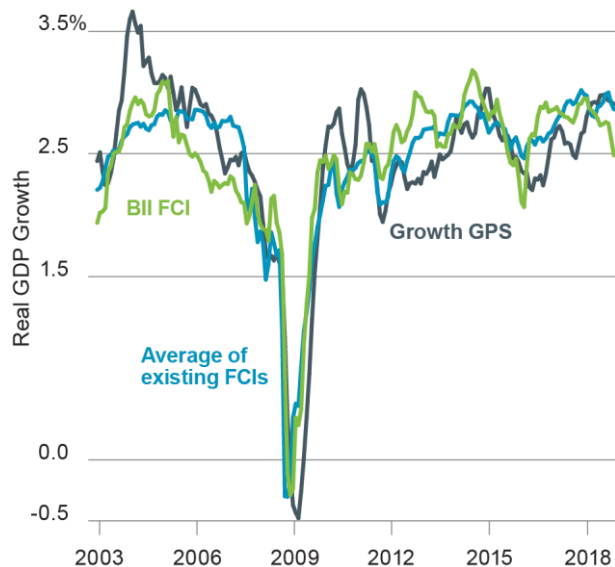
We believe an unexpected increase in the Fed policy rate and the US 10-year bond yield would hit sentiment and borrowing – and therefore growth. This would represent a genuine tightening of financial conditions. But better growth news has also historically driven up yields and rates. Many FCIs that take rates and yields as inputs without adjustment interpret such moves as a tightening in financial conditions that cuts the growth outlook. We want to keep only the part of the Fed policy rate and the 10-year yield that is doing the autonomous driving of the growth outlook, and discard the part that reflects expectations of the growth outlook.

We do this by taking only the spread between the real (inflation adjusted) Fed policy rate and the neutral rate of interest (the rate at which monetary policy neither stimulates nor restricts growth), and by taking only the real risk premium part of the 10-year yield. Existing FCIs pick up the fact that yields and rates historically rise with better growth news. After we apply our adjustments to rates and yields we believe the outcome is more as one would expect – an unexpected rise in rates and yields reduces growth expectations. See the *That's more like it* chart. We also make adjustments for equity prices and the exchange rate. Our FCI seeks to provide a more intuitive depiction of past financial episodes – note how it picks up the tightening in conditions well before the financial crisis. See the *Let history be the judge* chart.

Our FCI – like other daily FCIs – is currently based on a small set of financial market variables so it can be updated on a daily basis. But financial conditions are also represented by other information that includes surveys of credit conditions, interest rates charged and paid by banks, and the amount of financing that is being made available to the private sector. This paves the way for future extensions of our FCI.

Let history be the judge

BlackRock FCI vs. existing FCIs, 2003-2018



Sources: BlackRock Investment Institute, with data from Bloomberg, December 2018. Notes: Our FCI is shown against the simple average of two commonly used existing FCIs (from Bloomberg and the Chicago Fed). These other FCIs have been rescaled so that they can be expressed on the same scale as our own FCI and GPS.

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