Under Pressure: Is Inflation Back?

This month we check the barometer on inflation. In our latest quarterly outlooks, we noted the global growth upswing is strong and synchronized, but inflation trends are still dispersed. Inflationary forces are gathering in the US, while in Europe and Japan the pressure is on policymakers, as prices have barely responded to heavy stimulus.

Moreover, recent data have raised fresh doubts about the outlook, and further complications for investors in the markets most exposed to global price pressures.

We consulted specialists across the GSAM investment platform on the range of factors driving inflation, from the temporary glitches that may be clouding the near-term outlook, to the secular drivers that should prevail in the longer term. On balance, we believe a gradual normalization of global price pressures is under way, but the process will remain uneven for the foreseeable future.

Inflation trends across the developed world are dispersed

Core Inflation % yoy

Source: Bloomberg, as of April 2017.
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**US: Green shoots of wage growth**

Wage growth hasn’t taken off as hoped but we believe the longer-term rising trend is still in place.

The US unemployment rate fell to 4.4% in April, further below the Fed’s estimate of 4.7% as the threshold for a pickup in inflation.

Average hourly earnings slid to 2.5%, below the consensus expectation for 2.7%.

However, the quarterly Employment Cost Index (ECI) was up 2.4% on the year, from 2.2% in December, and the wages and salaries component rose 2.5%.

**Europe: Unemployment is still too high**

Euro area unemployment is gradually declining, but the region still has a lot of labor market slack.

Unemployment across the Eurozone has fallen from a peak of 12% in 2013 to 9.3% in April. These data include a 3.9% rate in Germany, and 17.8% in Spain.

Youth unemployment was 18.7% in April 2017, including 39.3% in Spain.

Quarterly wage growth in the euro area was just 1.6% at the end of 2016.

**Japan: Labor supply surge**

Unemployment in Japan is just 2.8%, but hidden slack and structural shifts are limiting wage growth to around 1%.

Japan’s service sector businesses tend to stay open long hours and over-utilize workers, who accept lower wages in return for job security.

Much of the rise in employment is in part-time jobs and low-pay service sectors.

Since Prime Minister Shinzo Abe came to power, the labor pool has increased, with more participation from women and elderly workers.

**China: Services outpace broader inflation trend**

Rising inflation is a positive development for China’s highly indebted economy.

Services prices rose 2.9% on the year in April, outpacing the 2.1% increase in core consumer price inflation (CPI).

This stronger pressure in services reflects pricing power, in line with a longer-term trend across emerging markets toward more spending on human services and experiences, such as travel, rather than material goods.

We don’t see much impact on monetary policy, which is focused on regulatory issues for now. But inflation should help devalue China’s debt stock, which recently earned the country a downgrade to A1 by Moody’s Investor Service.
Focus: US Cuts the Slack

The US is shedding excess capacity at a faster rate than most of its developed world peers, which supports our outlook for inflation to strengthen, and sharpens our focus on the risk of rates volatility.

We believe the US is at the forefront of a long-anticipated but slow-moving trend of global reflation. Despite softness in recent price data, we believe the longer-term strengthening trend in US inflation is intact. Year-over-year CPI is twice what it was a year ago. Core CPI has been flatter, but has spent 17 of the last 20 months above the important 2% threshold. Sticky prices—which are slow moving and so considered more likely to incorporate inflation expectations—are on a reasonably steady upward trend. We have been positioned for rising inflation since the first half of last year, which has generally played out well.

This scenario puts the US well ahead of the other largest developed economies in its cycle. The euro area is struggling with inflation below 1% and still has sufficient spare capacity to avoid significant pressures this year and next.

So far the drivers of inflation have been concentrated, predominantly in energy and housing, but we expect more broad-based contributions in the future, due to a lack of spare capacity. This expansion of pressures fuels our concern about the potential for a rapid re-pricing in rates markets.

Housing and energy price rises have led

Oil price fluctuations have clearly played a part in higher headline CPI numbers via base effects in the year-over-year calculation. The combination of a recovery in oil markets, and prior weakness dropping out of the annual comparison, has led to a major reversal in energy’s impact on CPI. Energy exerted a -1.5% drag on the index in 2015, and contributed 0.7% in April 2017. That latest contribution ranks energy as the biggest driver of price increases after housing, which has been consistently strong over several years. Contrary to some reports, the contribution of healthcare costs has been by and large steady.

We expect these dominant pressures to fade as oil prices have moderated and rental prices are likely to weaken as more supply comes online at this stage of the cycle. Looking ahead, we anticipate broader support from service sectors, catalyzed by upward momentum in wages.

Labor market tightness to drive inflation in the US

We expect that momentum to come from a lack of spare capacity in the economy. Unemployment in the US is around levels that typically herald meaningful wage growth, having moved decisively below the Fed’s estimate of the equilibrium rate of 4.7% to 4.4% in April. The employment cost index (ECI) is at its highest level since 2007. Despite a couple of weaker prints recently, average hourly earnings have been rising toward the 3%-4% range from the second half of the last cycle. That should not surprise: headline unemployment has been below 5% for a year, and the U-6 measure of underemployment has fallen by one percentage point in six months, a one standard deviation move.

Moreover, the number of people quitting jobs has risen in tandem with hiring rates. Both of these metrics are among the ‘labor market dashboard’ of data that Fed Chair Janet Yellen has flagged as significant, and their elevated levels are promising for wage growth. People tend to leave jobs when they are confident of finding new employment on more

Shelter is the strongest contributor and energy the most volatile

Core CPI Contributors (%)
favorable terms quickly. Further signs of a tightening labor market come from the Manpower Group Employment Outlook Survey, as employers’ hiring intentions resumed their long-term upward trend in the second quarter of this year.

Offsetting these positive labor market statistics somewhat is the drag from low productivity, which acts as a headwind to how quickly wages can rise.

But contrary to the common perception, spare labor market capacity in the US has wound up relatively rapidly in comparison with past recoveries. We think the speed of the adjustment may increase the risk of an overshoot in inflation, and we believe the Fed is behind the curve. This leads us to a discussion on the market pricing of these inflationary pressures, which is conspicuous mainly in its absence.

**US labor market slack has wound up relatively quickly**

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<td>Current Recovery</td>
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Not so fast—latest inflation data in perspective

Recent US price data appear to challenge our view that US inflation is on a sustainable upward trend. Consumer price data for March and April disappointed and the Fed’s preferred measure fell on the month for the first time since 2009, driving market expectations lower. We are paying close attention to upcoming readings, but we think this weakness is temporary, US inflation is closing in on the 2% target and the Fed’s projection for three hikes this year remains intact.

The latest wage data fell short of expectations, as average hourly earnings slipped for the second month in a row, to 2.5% on the year. But another measure on the Yellen labor market dashboard, the employment cost index (ECI), was up 2.4% on the year in the first quarter, accelerating from 2.2% at the end of 2016.

Diving into core personal consumption expenditures (PCE)—which is the Fed’s focus and shares many features of the consumer price index—we saw some unexpected contributors to the -0.2% month-on-month drop in March. We estimate half of the decline was technical, due to a change in calculations in the communications sector as cellular providers introduced unlimited data plans. Indeed, the index corrected in April with a 0.2% increase, though the prior month’s dip dragged the year-on-year reading to a 16-month low of 1.5%.

Other weak spots in recent data were in prices of new and used cars and apparel, which corrected sharply after three strong readings. The more surprising drop was in owners’ equivalent rent (OER).

The steep decline in housing costs, which is a large component of PCE, seems inconsistent with our outlook for higher inflation. However, we do expect some drop-off in pressure from OER, which has been a strong inflationary driver in the US for several years. Over the coming months we expect more upward pressure from services inflation, which covers discretionary costs such as recreation and so tends to respond more to wage growth and late-cycle dynamics. The wild card is goods inflation, which has been negative for the past year, and we don’t expect to contribute much in the foreseeable future.

At this stage we see core inflation around 1.7% at the end of 2017. Based on the latest data we think the Fed is likely to revise down its 1.9% forecast, but raise interest rates two more times this year. In our view the main risks to that outlook would be more pronounced weakness in inflation or labor market data.
Roundtable: Strategy in the Not-so-Great Reflate

The weak transmission of growth to inflation in the developed world creates challenges for policymakers, raising the risks of a policy misstep. We talked to our specialists in the markets most exposed to inflation developments about what investors should be watching.

In the quarterly investment meetings you noted a contrast between synchronized global growth and dispersed inflation. How did this disconnect arise and why do we care?

Bayliss: Despite the momentum in this coordinated global growth upswing, its transmission to inflation has been weak. Output gaps vary across the developed world, and even where labor markets are tightest in the US, Japan and Germany, wages have been slow to respond.

Van Wyk: This disconnect is important because the lack of momentum in inflation could lead markets to underestimate the strength in the global economy. For the first time in a while, global growth is benefitting from a coordinated positive impulser in the major economies. This synchronized expansion could lead to more convergence of monetary policy and materially higher rates.

Moreover, if global inflation is more synchronized than it currently appears—if excess capacity is coming down and price pressures are trending higher globally—yields have a lot of room to rise. We think the most likely scenario is a gradual increase in risk premia in government bond markets, starting with the US, but we see a tail risk of volatility in rates that could spill over to broader markets.

What is your outlook for inflation across core developed markets?

Van Wyk: In short, we believe inflation is a long way from normalizing in Europe and Japan, but will reach its target in the US next year. The outlier is the UK, where the Bank of England (BoE) has resolved to look through a significant inflation overshoot in the near term, on the basis that currency effects have been the main driver and the economic impact of Brexit remains highly uncertain.

Does this dispersion in inflation mean we are likely to see further divergence between monetary policy in the US and in other major developed economies?

Dangoor: Policy divergence has peaked. The US is the only major central bank tightening but Japan and Europe are getting closer to tapering quantitative easing (see “The Quiet Exit,” in our quarterly Fixed Income Outlook), and the UK’s next step is probably more likely to be a hike than a cut. That said, we don’t see the ECB or Bank of Japan (BoJ) removing monetary accommodation any time soon—we don’t expect a rate hike in Europe before 2019.

How does your inflation and policy outlook inform your strategy?

Bayliss: Inflation is a critical development for the rates markets, and our expectation for continued dispersion drives our global relative value strategies. Our below-consensus forecast for European inflation is our highest conviction view, and one of the main reasons we are positioned for core European rates to outperform both the US and UK markets.

We see little value in directional trades in markets where inflation is weakest. Rates are already so low in Europe, and in Japan the BoJ’s yield curve control policy has removed volatility from the government bond market. In the US we are positioned for yields to rise, based on the view that markets are underpricing the likely trajectory of Fed hikes. We believe inflation is currently the most important input to Fed policy as the dual mandate of maximum employment and inflation is only half-fulfilled.

Dangoor: In inflation markets, we look for discrepancies between the inflation expectations and the policy response implied in real and nominal markets, respectively. For instance, euro real yields suggest inflation won’t come close to target in the next couple of years, but nominal rates suggest the ECB will tighten next year. We think this creates relative value opportunity. We see the reverse in UK markets, which suggest inflation will remain high well into the future—even beyond the impact of last year’s currency depreciation—and yet monetary policy is priced to stay very easy for many years.

In the US our positioning in Treasury Inflation Protected Securities (TIPS) is smaller than it has been, as valuations have improved. However, these securities do still offer reasonable long-term value, with much of the breakeven curve priced below the prevailing trend in core CPI and significantly below the Fed’s implied inflation target.

US inflation has showed signs of slowing recently. What would change your view that the market is underpricing the Fed rather than the Fed overestimating its trajectory?

Bayliss: As long as growth remains strong we believe inflation will come. We are focusing on the transmission of labor market tightness to wages, and from wages to core inflation. If we believe any part of that process from tight labor to higher inflation is not working, then we’ll revisit our view. With two downside surprises on the consumer price index we’re thinking particularly about the relationship of wages to core inflation. We aren’t setting specific levels.
to signal dysfunction in that relationship, but we’re scrutinizing the drivers item by item, and we still feel the weakness is transitory and the transmission is intact over the medium term.

Has this long period of below-target inflation made it more difficult to predict central banks’ reactions in an environment of rising pressures?

Dangoor: Broadly speaking we would expect major central banks not to be anchored to specific interpretations of inflation index readings. To the extent that inflation is driven higher or lower by non-domestic factors, we think policymakers are willing to look through fluctuations. But central banks now have limited tools to react to negative economic shocks, so the process to resolve low inflation may be slower than the process to correct an overshoot. If the tools are better to tackle an upside surprise, then central banks may be more inclined to look through above-target readings. Moreover, there may be a rationale for compensating periods of low inflation with periods of high inflation to help boost expectations.

What underpins your conviction that European rates will continue to outperform?

Bayliss: Europe’s economy is clearly improving. The ECB’s summary of growth as broad-based and resilient is probably fair, but the translation to higher inflation could be protracted for several reasons. First, the output gap is still wide. Unemployment in the periphery is still in double-digits, and we think labor market slack may be greater than the headline rate suggests. Second, we expect structural reform in France under President Emmanuel Macron, and possibly also in the periphery over the next few years. Such reforms are likely to be deflationary. And third, inflation expectations are depressed after a long period of weak price pressures.

Germany is surrounded by disinflationary wage pressures

Average Annual Wage (% of Germany)

Source: OECD. Average annual wage in 2015 constant prices at 2015 EUR PPPs, estimated using 2015 USD PPPs and average 2015 EURUSD spot rate.

Why is wage growth still so slow in Germany?

Bayliss: German wage growth remains sluggish despite unemployment having fallen to a post-reunification low. This weakness is a function of both demographics and geography. First, companies in more-affluent parts of northern Europe can still find cost advantages in relocating to the peripheries, and this proximity of cheaper labor weighs on organized wage negotiations. But more importantly, cheaper labor is coming to Germany, which has embraced immigration as a solution to its aging demographics.

Germany is an attractive destination as the strongest economy in Europe, and workers in neighboring low-wage countries—where unemployment rates may be up to three times higher—have easy access to Germany’s job market. As a result, 57% of new jobs added in Germany over the past five years have gone to foreigners, who tend to have very little bargaining power on wages.

The flow of refugees into Europe from the Middle East is also adding to the prospective pool of labor in Germany and other countries where unemployment is lowest, such as Sweden. However, we believe this migration probably peaked 18 months ago, and labor capacity will be absorbed into the workforce over the next few years.

What are the risks to this view?

Van Wyk: We could see a faster pickup of inflation in Europe now that the rest of the world is comparatively healthy. Europe’s path from a tight labor market to wage growth to inflation may not be as prolonged as it was for the US, which started this transition when global growth was weak. It’s hard to steal growth from countries that have no growth to give, and there’s no magic that brings inflation about even as unemployment reaches the threshold.
The Longer-Term View—Secular Reflation

We believe the balance of secular drivers over the next several years is inflationary, as a range of factors that have suppressed prices over the past decade are reaching inflection points. However, Portfolio Managers Alex Stiles and Steve Becker see two exceptions that are relevant to our investment strategies: deflationary pressure will linger as the workforce in services expands and as technological disruptions spur competition.

Which structural factors do you see transitioning from deflationary to inflationary drivers?

Stiles: Several factors that have helped contain price pressures over the past decade or longer may be starting to reverse, in our view. We would highlight three that are at, or getting closer to, inflection points: labor supply, income distribution between capital and labor, and globalization.

What are the catalysts for transition?

Stiles: Full employment is a key inflection point. As labor oversupply is absorbed, workers have more bargaining power and wages should rise, boosting inflation. The current slow evolution of wage growth in tight labor markets challenges this view (see Focus, p.4-5), but we believe the relationship is intact and will assert itself first in the US. In turn, rising wages should start to correct the skew of income distribution from holders of capital—investors and savers—in favor of workers, who have a higher propensity to spend.

As for globalization, we believe this trend has already peaked. The global spread of supply chains over recent decades has been a powerful deflationary force, but companies are no longer pushing as aggressively offshore to rationalize costs. The rise of protectionism in the US could catalyze onshoring, and drive up production costs and prices of imported goods.

How are labor markets reinforcing your expectation for continued policy easing and low rates in Europe?

Stiles: One of the biggest long-term drags on wage growth is the skew in job creation from manufacturing to the lower-paid services sector. The momentum behind the expansion of the services sector may be past its peak, but the deflationary effects will persist as manufacturing workers retire over the next decade. These effects are particularly pronounced in the euro area where unemployment remains high, but even in Germany’s tight labor markets we see headwinds to wage growth (see Roundtable, p.7).

German job creation is skewed to services

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<th>Number of workers (1991=100)</th>
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Steve Becker Large-Cap Growth Equity Strategies

Alex Stiles Fixed Income Duration and Country Strategies

Turning to Steve, how do you see technological disruption exerting deflationary pressure over the longer term?

Becker: Today’s technological advances are putting power in the hands of consumers. A key component of pricing power is price transparency, and shoppers can now compare prices of just about any goods and services in real time. Stores are incentivized to price competitively because they know their consumers are not only price-conscious, but price-aware. Moreover, more brands are using technology to sell directly to consumers, which takes out a layer of mark-ups.

Which sectors do you think are most exposed to technological disruption?

Becker: The power of the online model and the risks posed by insurgent companies are most obvious in the retail and media sectors. For instance, the rise of online shaving clubs has forced the world’s largest consumer product company to cut prices on some of its products by more than 10%. Meanwhile, cord cutting poses a threat to the cable giants, as media companies can assemble a good portfolio of channels in over-the-top bundles at substantial discounts.

The next frontier for disruption is food. Retailers are vying with internet giants to create ‘smart’ grocery stores, allowing customers to buy online or simply ‘grab and go’ in stores, bypassing the checkout. This technology could drive grocery prices down, and would be a major advantage in the competition for share of a huge market.

How does this evolution affect your investment strategy?

Becker: We take a two-sided approach. On the defensive side, we avoid exposure to legacy players who may be targets for emerging disruptors. Ultimately we expect the retail sector will navigate this transition as business models will adapt, but some attrition and consolidation is likely—this year has already seen nine retail bankruptcies in the US.

On the offense, we see more dispersion of performance as business models and supply chains will have to change, increasing the range of outcomes. This is a stock picker’s environment. We look for companies that are leading in or adapting quickly to the online space, as marketing directly to consumers can enhance margins. The disruptors themselves can thrive in this deflationary habitat, as online companies with lower overheads are proving their ability to undercut more-established brands and capture market share.
Quant Call: United States of Wage Growth

Time-series and cross-sectional analysis support our expectation for US wage growth to pick up in the near future.

Phillips Curve: Does it Still Hold?
More than 70 years ago, economist A. W. H. Phillips found evidence to support a consistent inverse relationship between unemployment and wage inflation. This concept is intuitive—when demand for workers is strong, employers are willing to pay more to compete for labor. So as unemployment declines, workers are employed at higher wage levels and wage inflation accelerates.

However, though unemployment in the US has fallen closer to pre-financial crisis levels, wage inflation still has ample room to rebound. This slow response in wages has raised doubts about whether the inverse relationship still holds.

Wages Are Sticky
We believe the relationship between unemployment and wage inflation is still well-founded, albeit exhibiting a time-lag. Relative to unemployment, wages are sticky and take time to adjust. Unemployment in the US hit its peak in 2010, and has decreased in a linear fashion ever since. Wages troughed two years later (see p. 3), and we expect their upward momentum to continue in the next few years.

State-by-state and over time the relationship is clearer
Unemployment vs Wage by State (2004-2016)
Wage growth (% yoy)

For instance, the Midwest has some of the tightest labor markets and strongest wage growth. In May 2016, South Dakota’s unemployment rate was the lowest in the country at 2.8%, reflecting its robust industrial sector and the spread of the shale oil boom from the north. We see a clearer dynamic in Michigan, where wage growth has improved markedly as unemployment has receded. Illinois appears to be the sole exception in this region. While wage inflation seems similar to that of neighboring states, the delayed housing recovery in the Chicago metropolitan area and the decline of Illinois’ market share in the auto industry has hurt its construction and manufacturing sectors, and hindered job growth.

Focusing at the state level across various labor market regimes, our analysis suggests the inverse relationship between unemployment and wage inflation is intact. As a result, we believe the declining trend in the national unemployment rate supports an outlook of strengthening wage growth.

The relationship holds in the latest downturn and recovery

Cross-sectional Analysis: Trends across US States
While wages may not appear to be responding typically at a national level, the relationship with declining unemployment is more apparent at the state level. The cross-sectional analysis in the chart above plots the trends in unemployment and wage inflation across the 50 US states and the District of Columbia from 2004 to 2016. As shown, states with lower levels of unemployment tend to achieve higher wage growth.

Looking at the recovery from 2010, the heat maps suggest this relationship held in a period of deficient labor demand, as well as when unemployment is in line with the long-term expectations.
Asset Allocation: Get Dynamic

The saying ‘sell in May and go away’ refuses itself to go away.

In our 2017 Investment Outlook, we talked of broadening global expansion and a fading secular stagnation narrative as inflation firms. We also posed the question: is it time to de-risk? The question is worth revisiting now as macro conditions have surprised to the upside in 2017, and risk assets have priced these developments.

This is no time to fully de-risk, in our view. However, the potential for summer volatility and some moderation in data warrant a particularly nimble approach to managing portfolios over the coming months, and we are moderating our equity exposures temporarily. We expect growth to remain robust, but given the run-up in prices we emphasize the need for dynamism in equities and credit. The risks around our view have shifted too. European political risk has faded. Inflation and its effect on rates remains a key focus, as discussed.

We do not expect this low volatility to persist

![Graph showing Global Economic Policy Uncertainty Index and VIX Index](source: www.policyuncertainty.com, Bloomberg, as of May 2017.)

The global expansion is broadening

From the highest altitude, the number of countries contributing to growth is increasing. We expect macro data to remain supportive in developed markets, and to continue accelerating in emerging markets. For risk assets, strong earnings data and upward revisions to earnings expectations in emerging markets are encouraging. We don’t foresee a hard landing in China, but near-term risks to output are to the downside as policy support has faded. Ultimately, we would expect support to resume if growth continues to weaken, as policy makers continue to balance the trade-off between rising imbalances and the risk of undershooting their growth target.

Less momentum warrants more flexibility

We do not expect this low volatility environment to persist. That said, it is hard to pinpoint what will bring change. The dense European election calendar has faded as a risk. We are sanguine on the forthcoming UK and German general elections. Geopolitical risk seems centered on the US administration, but serious escalation remains a tail risk. We see risks stemming from imbalances in Europe, Japan and China, but these longer-term concerns are not impacting our positioning for now.

While we are constructive on growth for the year, sustained momentum at these levels would be a significant upside surprise. We expect a natural moderation in macro data. Similarly, while we think equities are still somewhat cheap for the prevailing macro conditions (see March Macro Insights), and this is not a time to fully de-risk, valuations are high on many measures. These elevated valuations present something of a cap on return potential, despite this year’s solid earnings growth. In our view, the combination of less macro momentum and full valuations as we enter a typically more volatile seasonal period warrants a dynamic approach in portfolios, across equities, credit and commodities.

Less directional risk, more diversity

Over the summer we expect markets to be choppier and range bound, with limited compensation for taking risk. As such we are taking down some directional equity risk in our portfolios. We favor relative value country trades, credit trades or commodity positions. We are also adding to carry in portfolios, increasing our yield by selling options in equity and commodity markets, going long in higher-yielding currencies and allocating to dividend futures. We are diversifying our exposure to higher rates in the US with positive-carry positions in US banks and breakeven inflation. We believe this range of positions can help weather summer storms.

GPS asset allocation views on a one-year horizon*

![Graph showing asset allocation views](source: GSAM Global Portfolio Solutions (GPS). As of June 2017. * Note that this does not account for liability-driven investment.)
Appendix: GSAM Growth Forecasts and Asset Valuation

GDP Growth Forecasts: GSAM vs Consensus

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Source: GSAM and Bloomberg, as of June 2017.

Equity Valuation Across Advanced and Growth Markets

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<tr>
<th>CAPE*</th>
<th>FY1 PE</th>
<th>Price/Book</th>
<th>Dividend Yield</th>
<th>Earnings Momentum**</th>
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<td></td>
<td>Level</td>
<td>% time cheaper***</td>
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* Cyclically-adjusted PE ratio (5-yr rolling window). ** % change in 1-yr fwd EPS over last 3 months. *** Current percentile relative to full history As of May 2017. All data based on MSCI country indices. Source: Datastream, GSAM calculations

US Equity Risk Premium

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Source: GSAM calculations

Equity Risk Premium for the BRICs

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Source: GSAM calculations
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