

Global Perspective

Inflation risks rise as US economic slack erodes

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Key points

- There is more slack in the US economy than unemployment figures suggest.
- Although this explains the lack of wage growth to date, spare capacity is now almost used up.
- Misreading unemployment data has lulled many investors into a false sense of security regarding inflation, after years of expecting a pick up.
- Our analysis suggests that we should start to see an increase in inflationary pressure in 2018H2.
- An acceleration in price changes is likely to lead to faster-than-expected rate hikes and higher yields, in our view, with major implications across asset classes.

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In recent years, policymakers in many countries have been puzzled that inflation and wage growth have remained weak despite low unemployment. This unusual situation is particularly evident in the US, where the jobless rate is very low by historical standards and widely considered to be under the “NAIRU” – the “non-accelerating inflation rate of unemployment,” below which price and wage rises would be expected to pick up speed.

Many investors now seem to think that the Phillips curve, which plots the relationship between the unemployment rate and wage growth, no longer works. We believe this view is wrong – and, moreover, that inflation remains one of the key risks to the US economy and could lead to a faster withdrawal of policy stimulus (see our “**2018 Outlook: Big Bang or Steady State?**”).

The source of misunderstanding, in our view, is that the unemployment rate is not the right way to measure of the level of slack in the US labour market. This matters: if the old inflation-model still applies – where inflation rises non-linearly as capacity constraints increase – policymakers could find themselves having to hike rates more rapidly than the consensus (something the New York Fed President has alluded to recently) with a significant impact on asset prices.

Problems with the unemployment rate

So why can't we rely on unemployment as a measure of spare capacity? The primary reason is that the magnitude and length of the recession following the financial crisis, coupled with the subdued growth in the first phase of the recovery, have structurally altered the US labour market and changed the behaviour of workers. In turn, this has distorted the metrics used to calculate the jobless rate: namely, the number of people in work, the number actively seeking work, and the total labour force, which is the sum of the first two.

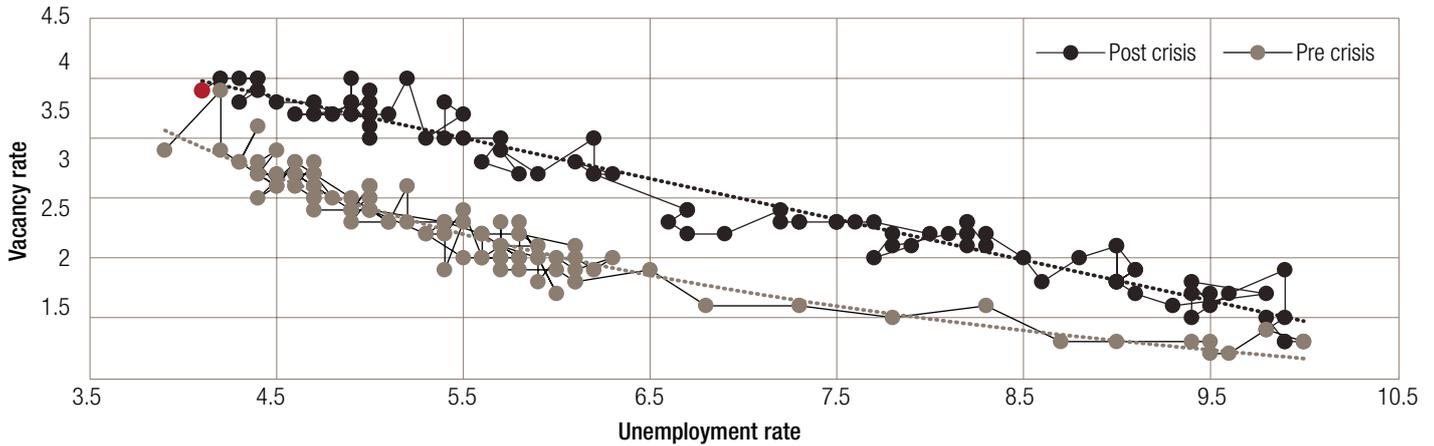
In particular, three obfuscating influences on the jobless rate have all been exacerbated in the post-crisis economy. First, unemployment figures usually omit “discouraged workers,” who have stopped looking for a job but could return to employment if an opportunity arose. Second, employment data does not take account of the underemployed: those working part-time who want to work full-time.

Third, the size of the labour force can be shaped by demographic changes; for instance, an increase in retirements and younger generations studying longer would both shrink the labour force, and consequently cause the unemployment rate to fall. In addition to these factors, the opioid epidemic sweeping the US may also have reduced the official labour force.

US Beveridge curve

The impact of these distortions can be seen in the Beveridge curve, which plots the negative relationship between the job vacancy rate and the unemployment rate. Looking at the curve in the US from 2001 (Figure 1), there has been a distinct outward shift since the 2008 financial crisis.

FIG. 1 US BEVERIDGE CURVE, PRE- AND POST-CRISIS



Sources: BLS, LOIM.

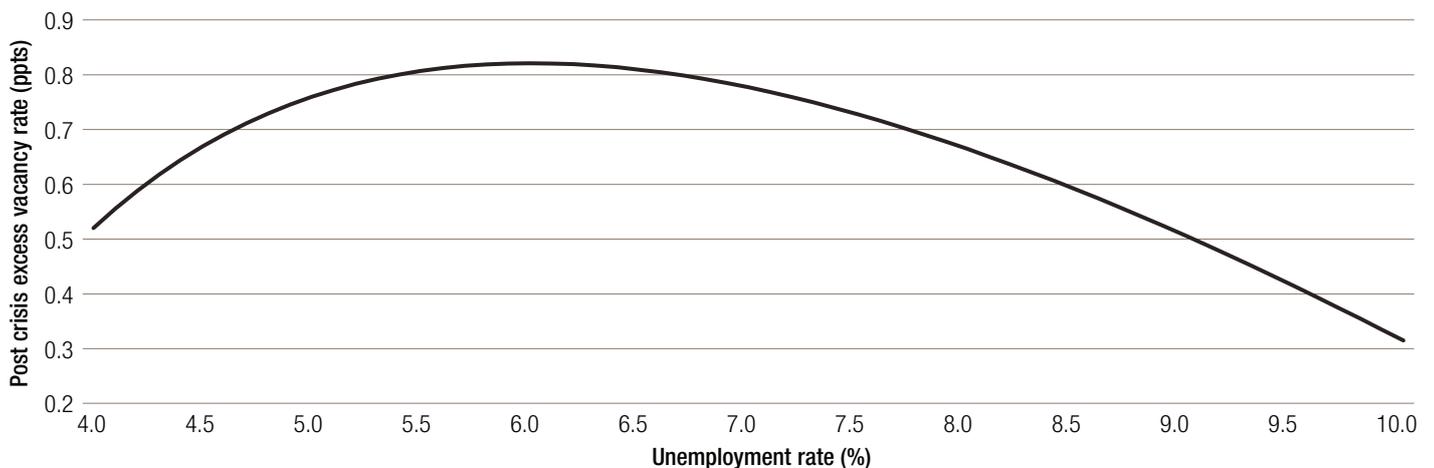
Outward shifts in the Beveridge curve are commonly attributed to structural changes in the labour market resulting from a growing mismatch between labour demand and supply. Put simply, the people looking for jobs have become less able to fill the available vacancies; put another way, since 2008, the US economy has had to create more jobs to achieve a given fall in unemployment.

at around +0.5 percentage, meaning that unemployment would be 0.5pp higher in the post-crisis world for the same level of job vacancies.

The scale of the mismatch can be gauged by measuring the gap between the pre- and post-crisis Beveridge curves, a differential that might be termed the “excess” vacancy rate (Figure 2). This rate currently stands

Although the gap is beginning to close and we appear to be reverting to the previous market curve, this analysis indicates there is still more slack in the labour market than the official unemployment statistics suggest. Consequently, it is important not to focus on only one labour-market indicator, but to consider a variety of measurements, including those that are less susceptible to distortions.

FIG. 2 POST-CRISIS “EXCESS” VACANCY RATE



Sources: BLS, LOIM.

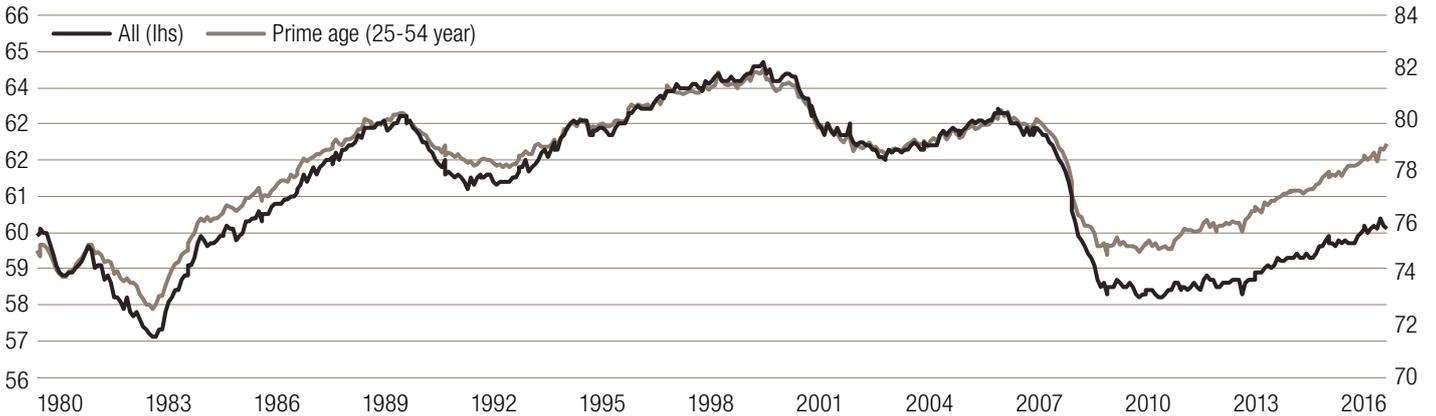
Employment rate

The employment rate – the share of the population that is employed – suffers less from the measurement issues that affect the unemployment rate. The “population” part of the calculation is straightforward, while the “employment” component is relatively robust, despite not taking account of underemployment (which we will examine more closely later).

The employment rate (Figure 3) declined significantly during the financial crisis to reach 58.2%, its lowest level since the early 1980s. Even

after the strong job gains in the recovery, it remains at just 60.1%, well below its pre-crisis level. To address the demographic influences referred to earlier, we isolate the employment rate of the prime-age population (25-54 year olds). This measure has increased steadily from a low of 74.8% in the aftermath of the financial crisis and currently lies at 79.1%, which is still lower than its pre-crisis high and well below the peak of 81.9% reached in the early 2000s. However, it suggests that most of the slack in the labour market may have been absorbed.

FIG. 3 US EMPLOYMENT RATE (%)



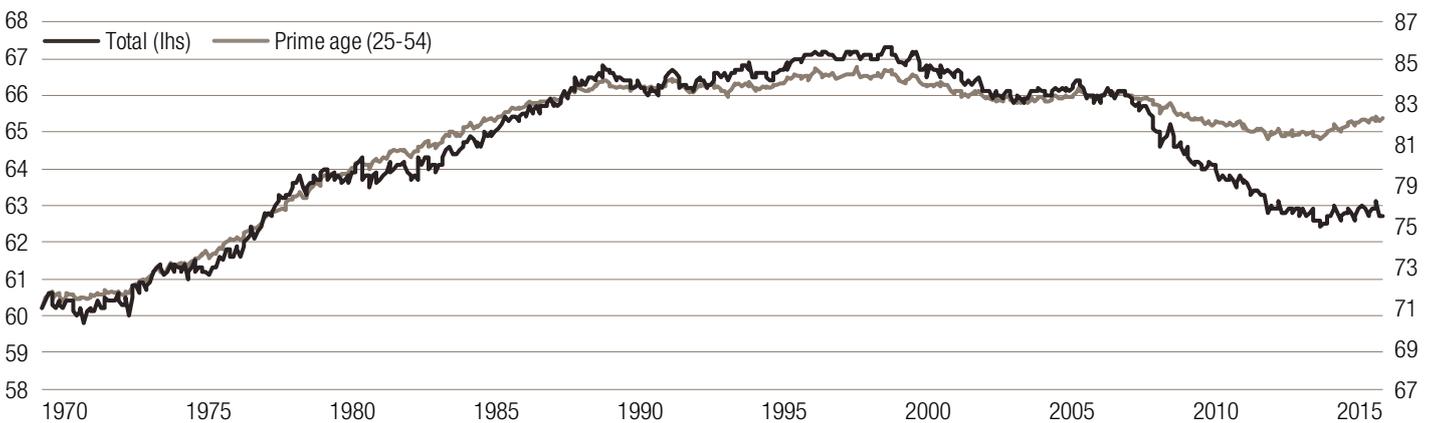
Sources: BLS, LOIM.

Participation rate

The US participation rate – a measure of the labour force as a share of the population – declined sharply during the crisis to 62.3%, a level not seen since the early 1970s (Figure 4). This followed a long upward trend as women entered the job market. Despite the strong employment gains in recent years, the participation rate has recovered only slowly and remains

at 62.7%. For the prime-working-age cohort, the current rate of 81.9% remains well below the pre-crisis level of just over 82.5%. Some of the decline can be attributed to the factors mentioned earlier: the aging of the population and the resulting increase in the number of retirees, the rise in the student rate, discouraged workers dropping out of the labour force, and the opioid epidemic.¹

FIG. 4 US PARTICIPATION RATE (%)



Sources: BLS, LOIM.

¹ The role of the opioid crisis has been examined by Alan Krueger of the Brookings Institute (see <https://www.brookings.edu/bpea-articles/where-have-all-the-workers-gone-an-inquiry-into-the-decline-of-the-u-s-labor-force-participation-rate/>)

Adjusted unemployment rate

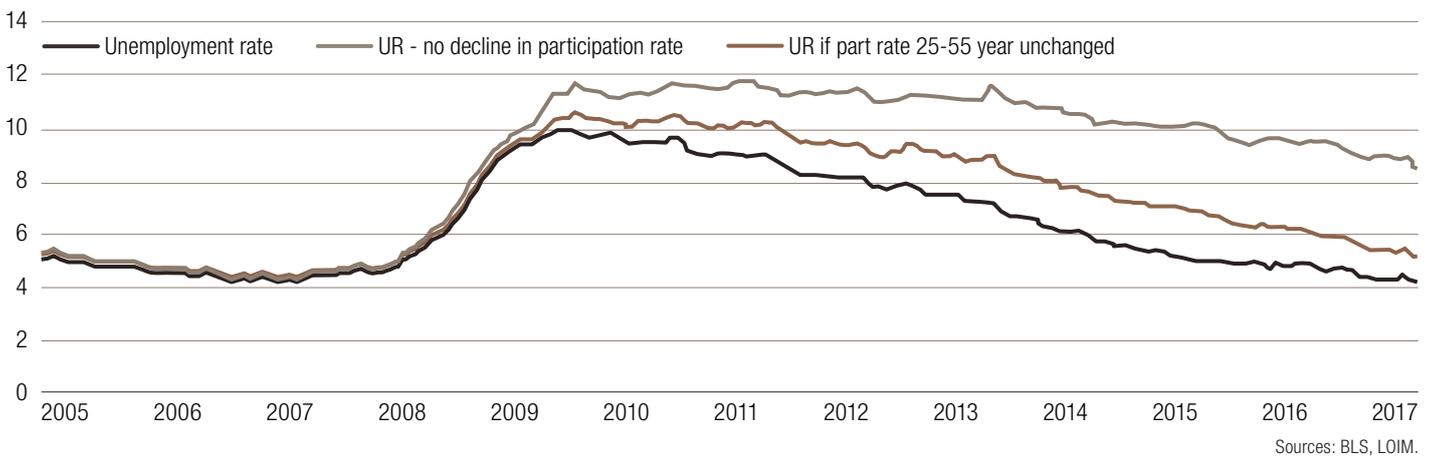
The previous two indicators suggest the official measure of unemployment may be underestimating the amount of slack in the US labour market. This view is shared by incoming Federal Reserve Chair Jerome Powell, who argued during his Senate confirmation hearing that the unemployment rate was not the best measure for the labour market and that there could still be some way to go before the US reaches full employment.

One way to adjust for this is to assume that the participation rate had remained at its pre-crisis level of 66%. This approach increases the unemployment rate to about 8.9%, or 4.8pp above its current level

(Figure 5). However, an important caveat is that this does not factor in the natural decline in the participation rate from population aging and swelling student numbers.

To take account of these trends, we look at the pre-crisis participation rate for prime-age workers only, assuming it had stayed at its pre-crisis level of 83%. Under this assumption, the unemployment rate would be around 5.0%, still almost 1pp higher than today – again suggesting more slack than many people think – but only marginally above most estimates of the NAIRU.²

FIG. 5 ADJUSTED US UNEMPLOYMENT RATE



Does the adjusted unemployment rate improve the Phillips curve, re-establishing the link between unemployment and inflation? As expected, we find a significant relationship between adjusted unemployment and wage growth. However, as with the traditional Phillips Curve, the influence of adjusted unemployment on wage growth has diminished in recent years. This suggests that the unemployment rate alone may not capture the full extent of the slack in the labour market, following a deep and prolonged recession that has had an important structural economic impact.

The shadow labour supply

A key question regarding the participation rate is whether the workers who have dropped out of the labour force are likely to return. If so, they would represent a “shadow” labour supply, unacknowledged in the unemployment data but potentially creating sufficient slack to keep wage growth low. The recent gradual increase in the participation rate of prime-age workers indicates that this is indeed what is happening.

One way to capture the shadow labour supply is to look at the underemployment rate, also referred to as U6. This measure improves on the official unemployment rate by taking into account people marginally attached to the labor force – those who are currently neither working nor looking for work, but who indicate that they want to work, are available and have looked for work in the past 12 months; and those who have had to settle for a part-time position instead of full-time work for economic reasons.

The underemployment rate currently stands at 8.1%, more than double the official rate of unemployment, after reaching an all-time high of 10.0% in 2009 (Figure 6). Underemployment will always be higher than unemployment, simply because of its broader construction. Nevertheless, the sharp rise in underemployment following the financial crisis – on an absolute basis and relative to unemployment – shows how profoundly the labour market has been affected. The difference between unemployment and underemployment rates reached a peak of 7.4pp in 2012, well above the longer-term average of 4.7pp and the pre-crisis average of 3.8pp (Figure 7).

² The CBO estimates the NAIRU at 4.7%; the OECD estimates it at 4.9%. In their December 2017 projections, FOMC participants' estimates of the longer-run normal rate of unemployment ranged from 4.3% to 5.0%.

FIG. 6 US UNDEREMPLOYMENT VERSUS UNEMPLOYMENT

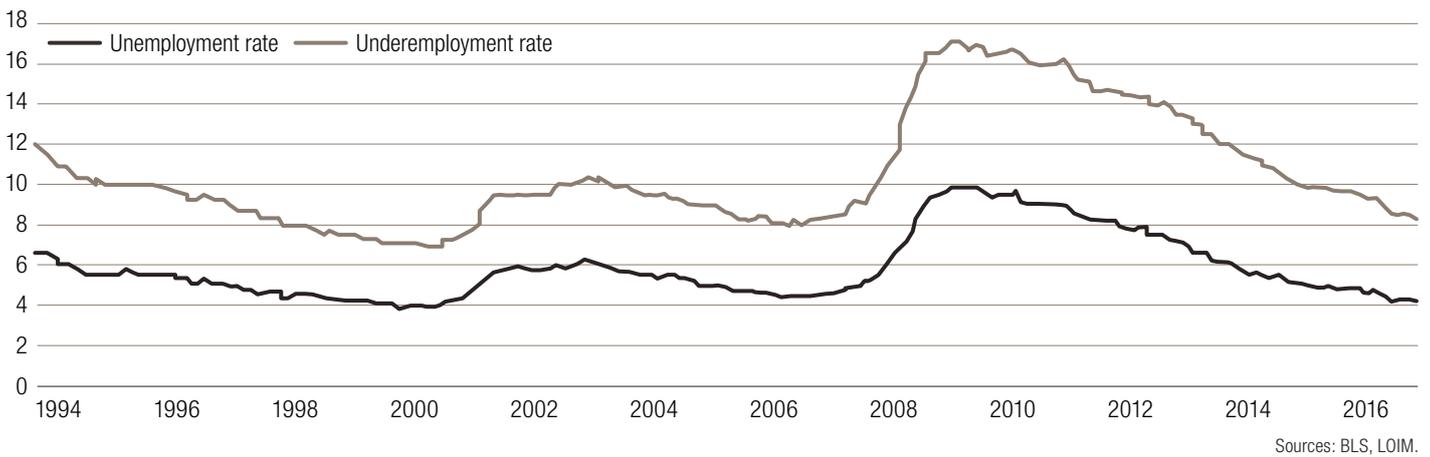
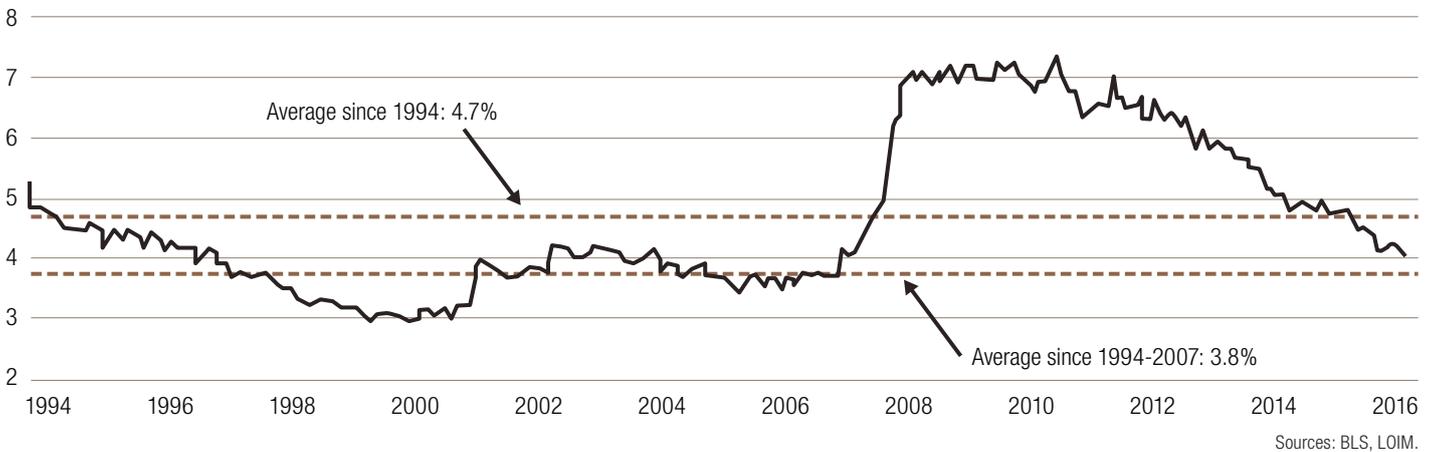


FIG. 7 DIFFERENTIAL BETWEEN US UNDEREMPLOYMENT AND UNEMPLOYMENT



Wage implications of the shadow labour supply

The answer, then, to policymakers’ puzzlement – why very low unemployment has not resulted in wage pressures and, by extension, inflation – is that, since the financial crisis, the unemployment rate has not fully captured the slack in the labour market.

Our analysis suggests a significant relationship between falling *underemployment* – whether expressed as the underemployment rate itself or the difference between underemployment and unemployment – and wage growth, with a delay of about 12 months.

An interesting aspect of this relationship is that, while the link between underemployment and wages is strong across the whole sample period from 1994 to 2017, it grows much stronger after the financial crisis. This may partly be because our timeframe is relatively

short and includes only two recessions: the financial crisis and the relatively mild post-dotcom-bubble downturn. As an addendum to the analysis presented here, it might be interesting to see how the relationship evolved during the stronger recessions of the early 1980s and 1990s, if the data was to become available.

Regardless, with growth and the jobs market remaining strong in the US, the levels of underemployment and slack in the US economy are likely to continue diminishing. The difference between the underemployment and unemployment rates has now fallen below its long-term average, and we have started to see tentative signs of a pick-up in wage growth. Our analysis suggests that these signs may become more definite by mid-2018.

Conclusion and investment implications

In our view, the underemployment rate is a much better measure than the unemployment rate of the amount of slack in the US economy, which is currently larger than many people seem to think. This goes a long way to explaining why very low unemployment has had little effect on wage growth thus far.

However, our analysis of underemployment indicates that the level of excess capacity in the US labour market has diminished significantly in recent years, and that the market is now close to equilibrium – a hypothesis supported by changes in other indicators, such as the employment rate for prime-age workers. This has important implications as it suggests that further job gains should start to generate wage pressures, likely by mid-2018.

A pick-up in wage growth would impact the inflation at a time where higher input costs may start to feed into core inflation (see **Commodity prices and inflation – Trends and implications**) and financial markets. First, rising wages and inflation are likely to lead to more aggressive tightening by the US Federal Reserve next year, in our view. We believe the central bank is likely to hike at least three this year, raising rates significantly more than the 55 basis points currently priced into the curve. Second, greater inflationary pressures could increase inflation expectations, pushing up the longer end of the yield curve. Third, the combination of a more aggressive Federal Reserve and higher yields could drive the US Dollar higher.

Higher inflation may not be the only factor pushing US yields higher this year. With the passage of tax reforms by Congress, it is estimated that the supply of US Treasuries will almost double to USD 1 trillion in 2018. At the same time, the Federal Reserve will turn from being a net buyer of US Treasuries to a net seller, as a result of its balance-sheet reduction, or quantitative tightening. This expansion in the supply of US Treasuries will also push bond yields higher.

Higher US yields are likely to spillover, albeit to a lesser extent, to sovereign bonds elsewhere, driving up yields in other developed economies.

From an investment perspective, rising inflationary dynamics and the resulting shifts in central bank policy, against a backdrop of high and rising equity valuations, are a potential source of vulnerability for financial markets, in our view. With this in mind, we believe that deploying ex ante drawdown management whilst accessing a variety of risk premia may be an important avenue to use, especially as the likelihood of a recession remains low. Moreover, within the fixed income market, we continue to recommend a more balanced exposure to credit and duration risk, which we think still exists in the BBB-BB segment. However, we prefer to avoid both sovereign bonds and high grade credit from an asset allocation perspective (see **Rethink your approach to Corporate Credit**). Finally, we believe convertible bonds (see **Rethink your toolbox for uncertain times with Convertible Bonds**) offer a more balanced exposure to both fixed income and equity risks whilst having long exposure to the increase in volatility that is likely to arise in this environment.

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