

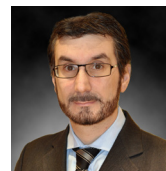
Half-fed

Economist Insights

Finally satisfied that the improvement in the labor market is "confirmed", the Fed has hiked rates. But that's only half their mandate –the question of inflation still remains. The Fed believes inflation will pick up faster, hence current policy is looser. The market, however, is not so sure, and who can blame it? Historically the Fed's headline inflation forecasts have been too high. But look more closely at the key components of core inflation and, just maybe, the Fed will be proved right.



Joshua McCallum
Head of Fixed Income Economics
UBS Asset Management
joshua.mccallum@ubs.com



Gianluca Moretti
Fixed Income Economist
UBS Asset Management
gianluca.moretti@ubs.com

Back in 2012 the Federal Reserve told us that it was all about the labor market. The Fed assured markets that rates were not going up until the unemployment rate fell below at least 6.5%. The US economy sailed through that barrier twenty months ago, but still the Fed did not raise rates. Now, the Fed tells us, the improvement in the labor market is "confirmed" (with unemployment at 5%) and it has finally hiked rates. So that is one half of their dual mandate sorted out, what about the second half?

Inflation has continually disappointed the Fed. Its forecasts for headline inflation have been too high, but that is largely because they, like almost everyone else, got their oil forecast wrong. But even their forecast for core inflation (excluding food and energy) has been too high by about 0.2–0.4 percentage points. Nonetheless, the Fed is still forecasting both headline and core inflation to rise back up steadily towards target over the next two years.

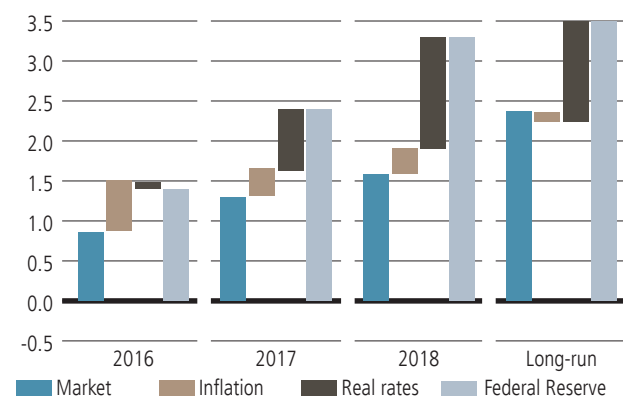
The market is less hopeful. Break-even inflation rates (implied by the difference between nominal and inflation-linked US Treasuries) suggest that headline inflation will remain below the Fed's forecast. But this inflation differential only explains part of the difference in nominal interest rate projections. The really big difference in views comes from the market's views on real rates (chart 1).

The comparison is somewhat complicated by the Fed's focus on the personal consumption expenditure (PCE) deflator, while inflation-linked bonds are tied to the traditional CPI inflation measure. Theoretically, the PCE deflator is much better because month-by-month it adjusts for how much people are spending.

For example, if oil prices fall people may drive more, so the downward effect is larger because more of their 'volume' of purchases is going to oil. The CPI only makes that adjustment once per year. Unfortunately, because there are so many moving parts it tends to get revised a lot. For example, PCE core deflator has been revised up by an average 0.4% in 2013. So it is something of a moving target. The more traditional CPI measure does not get revised much, but one could just argue that if the CPI measure is wrong it simply stays wrong.

Chart 1: Keeping it real

Market implied and Fed median nominal interest rates, with the differences explained by inflation and real rate components (%)



Source: Bloomberg Finance LP, Federal Reserve, UBS Asset Management
Note: Nominal rates are OIS implied 1m forward rates and Fed median projections; inflation is swaps breakeven and Fed PCE deflator; implied real rates are nominal rates less inflation.

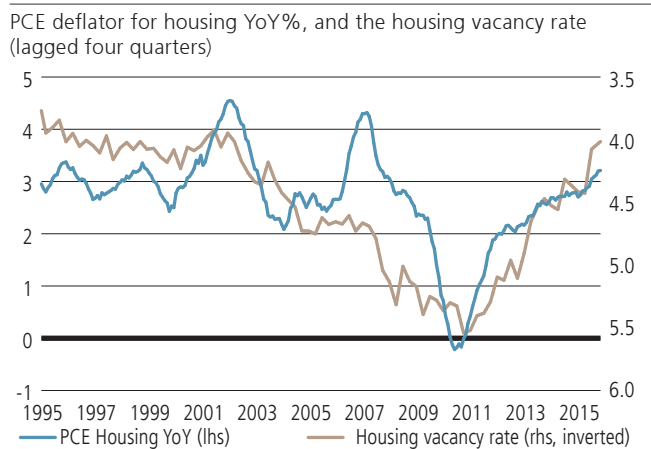
Even though the divergence is primarily in real rates, this is not independent of the views on inflation. The Fed believes that the neutral rate (the rate that is consistent with stable inflation when the economy is growing at trend) is higher, which makes current policy looser. Hence inflation will pick up faster. The market disagrees, but inflation developments will tell us who has a better estimate of the neutral rate.

Price-data-dependent

The Fed has insisted it will be data dependent. So whether the market or the Fed is right on the path of interest rates is going to depend on the path for inflation. Could the Fed start getting it right this time? Or is the Fed just forced to always forecast inflation getting back up to target because to do otherwise would be admitting failure?

Since the oil impacts fall out after 12 months, it is worth concentrating on core inflation. Within core inflation, one of the biggest components is the cost of housing (rents and utilities), making up about a fifth of the core PCE basket. Following the financial and housing crash in 2008, PCE housing inflation nose-dived and even turned negative. Low job prospects and limited access to credit encouraged many young people to continue living at home with their parents. Low household formation combined with an oversupply of housing pushed down rents. But now, seven years later, household formation is rising, and rising much faster than new construction. So the ratio of empty homes (for rent or for sale) is very low (chart 2). When demand exceeds supply, prices rise.

Chart 2: Moving out (and up)



Source: BEA, Census Bureau, UBS Asset Management

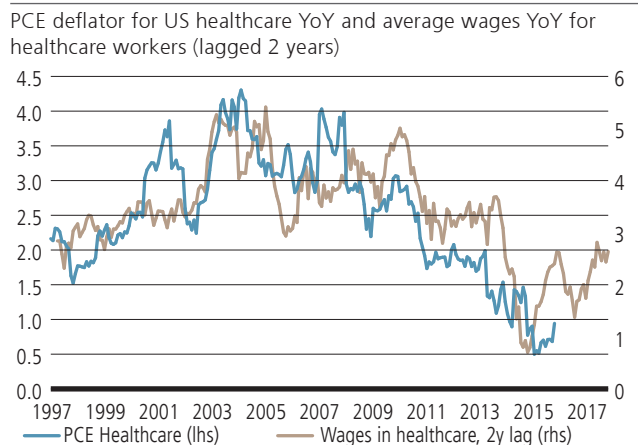
Occasionally rents can get out of proportion with fundamentals, as in 2006-2008, but eventually supply and demand dominates. Right now it is pointing to accelerating rental inflation.

Another large component of core inflation is healthcare. Because US healthcare is private at point of delivery, it is included in consumer prices. With an ageing population this

is becoming an ever more important part of the consumer basket. In fact, virtually all of the increase in US consumption as a share of GDP since 1960 has been due to medical care. It turns out the much-vaunted increase in US consumerism was actually an increase in US concerns about health.

Healthcare is one of the few areas where technological change seems to increase rather than decrease costs. Certainly there are some cost-saving technologies, but there are also new and increasingly expensive forms of treatment. Wages are important as well, and healthcare is a service industry requiring skilled workers. Shortages of workers can quickly drive up wages. Higher wages tend to feed through to higher healthcare costs over the next two years (chart 3).

Chart 3: Recovering health



Source: BLS, BEA

There have been upsets to the calculation of healthcare inflation as a result of changes introduced to the state health system ("Obamacare"). One such upset occurred in the first quarter of last year, but weakness a year earlier creates positive base effects the following year, so this should provide a boost to healthcare inflation in the first few months of next year.

Both rents and healthcare tend to be fairly monotonic: a statistician's way of saying that when they move in one direction they tend to keep moving in that direction. It takes pretty big changes to shift trend direction for these variables.

Ultimately, inflation is a monetary phenomenon, but even though the Fed controls the supply of base money they cannot directly control the broader money supply - that will depend on how much people want to borrow. And even though the Fed can control the price of money at very short durations, they may have less control at longer durations. In the last few years the Fed has pumped a lot of cash into the economy - they can be forgiven for thinking that as the labor market tightens and prospects improve people may use more of it. Perhaps this time they will be right and the market wrong.

The views expressed are as of December 2015 and are a general guide to the views of UBS Asset Management. **This document does not replace portfolio and fund-specific materials. Commentary is at a macro or strategy level and is not with reference to any registered or other mutual fund.** This document is intended for limited distribution to the clients and associates of UBS Asset Management. Use or distribution by any other person is prohibited. Copying any part of this publication without the written permission of UBS Asset Management is prohibited. Care has been taken to ensure the accuracy of its content but no responsibility is accepted for any errors or omissions herein. Please note that past performance is not a guide to the future. Potential for profit is accompanied by the possibility of loss. The value of investments and the income from them may go down as well as up and investors may not get back the original amount invested. This document is a marketing communication. Any market or investment views expressed are not intended to be investment research. The document has not been prepared in line with the requirements of any jurisdiction designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research. The information contained in this document does not constitute a distribution, nor should it be considered a recommendation to purchase or sell any particular security or fund. The information and opinions contained in this document have been compiled or arrived at based upon information obtained from sources believed to be reliable and in good faith. All such information and opinions are subject to change without notice. A number of the comments in this document are based on current expectations and are considered "forward-looking statements". Actual future results, however, may prove to be different from expectations. The opinions expressed are a reflection of UBS Asset Management's best judgment at the time this document is compiled and any obligation to update or alter forward-looking statements as a result of new information, future events, or otherwise is disclaimed. Furthermore, these views are not intended to predict or guarantee the future performance of any individual security, asset class, markets generally, nor are they intended to predict the future performance of any UBS Asset Management account, portfolio or fund. © UBS 2015. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved. 25249A