

U.S. Economic Update – Fed funds rate

by NAB Group Economics

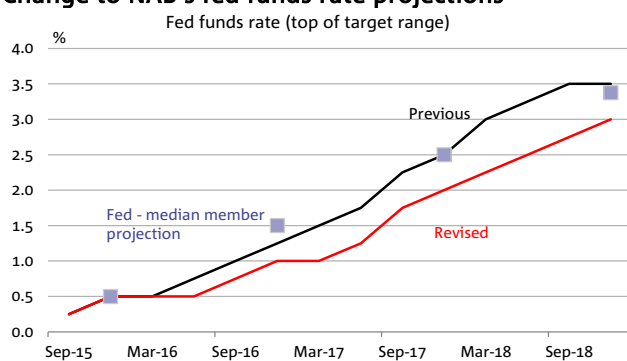
22 February 2016



- We have pushed out our expectation of the next Fed funds rate hike from June quarter 2016 to September quarter 2016.
- We have also slowed the pace of increases through to mid-2017 and lowered our expectation of the peak fed funds rate in this tightening cycle to 3.0%.

In the light of recent developments in financial and commodity markets, we have changed our view on the likely path of the federal funds rate. Our revised projection calls for a slower pace of increases earlier on and also lowers the expected peak rate. This is in the light of the recent tightening in financial conditions, an expectation that bouts of financial volatility are unlikely to go away soon, and further indications that inflation expectations are falling, all of which will induce Fed caution.

Change to NAB's fed funds rate projections



Sources: Federal Reserve (December 2015 projections of mid-point +0.125ppts to convert to top of target range estimate), NAB

While there has been chatter around the possible use of negative interest rates as a policy tool, our view is that the most likely trajectory for the fed funds rate is upwards.

We have not changed our forecasts for the economy – as measured by GDP – since our last [update](#). Indeed, since then we have seen some positive data on the economy, particularly in the form of strong January retail sales and industrial production. This supports our view that the weak December quarter GDP estimate was not an indication that the economy has shifted towards a lower gear.

The unemployment rate – at 4.9% – is already at the long-term level expected by the Fed (albeit they currently believe the unemployment rate understates the degree of labour market slack or underutilisation). It would take a large shift in the level of job creation to reverse this downwards trend in unemployment. There are also signs that wages growth is strengthening.

Not only headline (due to oil prices) but also core (ex food and energy) inflation is low. As oil prices stabilise and even move higher and US dollar appreciation slows down, then inflation should move higher. Core PCE inflation is currently

at 1.4% yoy; Fed modelling detailed in its February Monetary Policy Report suggests that US dollar appreciation depressed core inflation by around ½ppts last year (similar to our own estimate). In other words, absent currency depreciation core inflation would be close to the Fed's target.

In this environment – unemployment at or below target, inflation likely to move back to target rate over time – increases in the fed funds rate are to be expected. The issue is how quickly they will occur.

The Fed has consistently signalled rate hikes will be gradual. Indeed, by past standards, four rate hikes in a year – the median Fed member December meeting projection for 2016 – is slow by historical standards. However, the Fed is likely to do less than it was indicating at the December meeting.

Financial conditions – including credit spreads, the decline in equity markets, bank lending standards for business loans and a stronger dollar – have tightened to a degree the Fed did not expect. Indeed, several of these indicators have moved to an extent which in the past has been followed by easier policy. For a modern central banker, signalling a 'lower for longer' rate track with more gradual increases is monetary easing.

Looking at this another way, as noted in the Fed's January meeting minutes:

"The effects of these financial developments, if they were to persist, may be roughly equivalent to those from further firming in monetary policy."

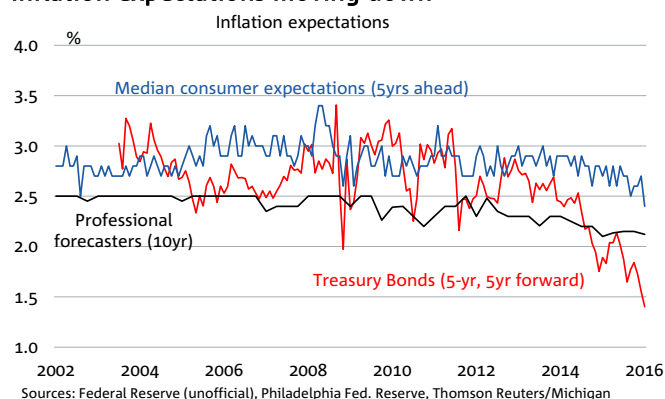
In other words, the markets have done their job for them and so the Fed doesn't need to tighten as much.

Like the Fed we have been in 'wait-and-see' mode to see whether the turbulence in markets would be permanent or transitory. While they appear to have stabilised – and equities are off their recent lows – the tightening in conditions is still in place. Even if it fades in coming weeks the factors that triggered it – concerns over China slowdown and emerging market debt, stress in the energy sector, are not going away soon. Another factor was likely weak U.S. data for late 2015 – but recent history tells us that even within on-going moderate growth, there will be periods of weak activity readings (low GDP), which always seem to be accompanied with the query of whether the U.S. is about to go into recession or not.

The uncertainty that recent market turbulence engenders – against the backdrop where Fed options for dealing with another economic downturn are relatively limited – supports a conservative approach to rate increases.

Another consideration is inflation expectations. Market based measures of inflation compensation (derived from bond markets) have been at low levels for a while now but have been discounted by the Fed on the grounds that they are not pure measures of inflation expectations. The Fed has placed more emphasis on survey measures. The Fed’s January meeting statement noted that survey based measures were little changed in recent months, although the Fed Chair (Janet Yellen), in her February congressional testimony indicated that they were stable but “at the low end of their recent ranges”. Since then the 5 year inflation expectation measure in the University of Michigan’s consumer survey has dropped to a record low.

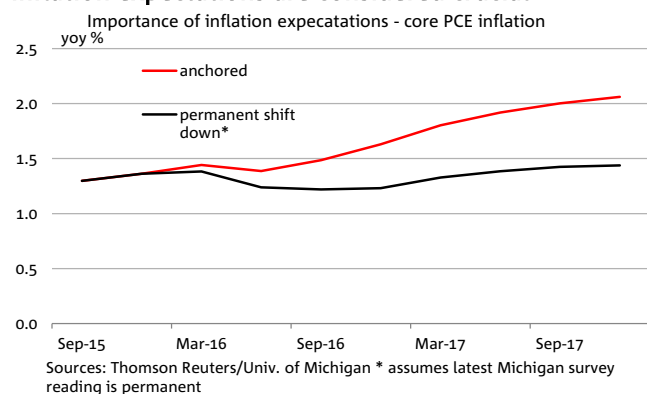
Inflation expectations moving down



The February survey result is preliminary and may be reversed with the final result or next month. However, even if this was to occur survey based measures have been moving trending down.

The Fed sees inflation expectations as crucial in ‘anchoring’ the level of inflation. To illustrate this we can use NAB’s inflation forecasting model which includes the Michigan University’s 5 year inflation expectations measure, the output gap, non-oil import prices as well as food and energy price as explanatory variables. As the chart below illustrates, if we were to mechanically set inflation expectations at the level of the latest Michigan survey, there is a large change in the inflation forecast.

Inflation expectations are considered crucial



Of course, we do not make this mechanical assumption. Consumer inflation expectations edged up pre-GFC when headline inflation was high (around 4% and even core was above 2%). Conversely they have been edging down in recent years in the face of low inflation. So small shifts

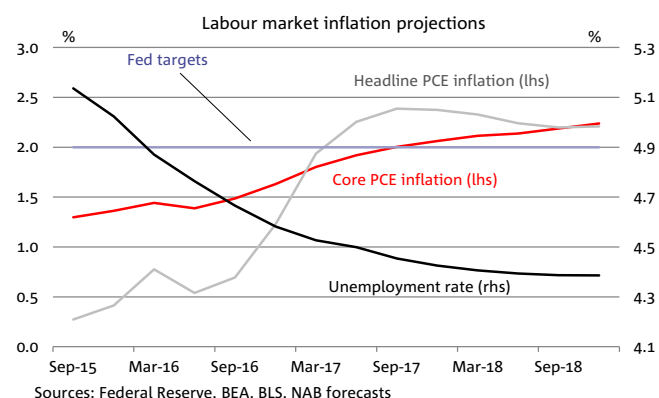
don’t necessarily mean expectations are unanchored and the real test will be when oil stabilises and US dollar appreciation slows.

However, the trend will be concerning to the Fed and the latest readings will add to the case (being pushed by some Fed members) to wait until there is clearer evidence of inflation moving back up before hiking. The case for a rate hike in December – with actual inflation still low – was built around oil and dollar appreciation affects being temporary. However, as noted in the January meeting minutes:

It was noted that although it was generally appropriate for monetary policy not to respond substantially to temporary shocks to inflation, that prescription depended in part on the assumption that longer-term inflation expectations remained well anchored

Overall, these considerations suggest that, while a rate hike in the June quarter is still possible, the next rate increase is more likely to occur in the second half of the year. By then, signs of rising inflation are likely to be clearer, as oil prices move higher (supporting inflation expectations), the drag from the currency fading and a tighter labour market adding to inflationary pressures.

Inflation upswing more likely to be evident in H2 2016



Future tightening by the Fed will likely be quite cautious and sensitive to developments. As noted previously, as some of the underlying factors causing the recent bout of market turbulence are unlikely to go away any time soon, further episodes are likely to re-occur. Even with continued moderate U.S. economic growth inevitably there will be periods of weak data flow, and we do not expect much improvement in the [global economy](#).

As a result, we have less than one rate hike a quarter up to mid-2017. However, if, as we expect, unemployment keeps falling and inflation moves back up around the 2% mark then the Fed will want to accelerate the process, but even then still only slowly by historical standards.

We have also reduced our forecast for the peak federal funds rate for this cycle to 3.0% (from 3.5%). We have previously noted that most estimates of the real long-term neutral rate were 1-2% or 3-4% nominal, but with a downside bias¹. Continued weakness in U.S. productivity data highlights the downside risk to potential growth.

¹ See Forecast path for US Fed funds rate revised lower, 30 March (available at <http://www.wholesale.nabgroup.com/Pages/default.aspx>)

Given that the global economic growth is expected to be below trend in coming years, further monetary easing in other countries is likely, and that U.S. rate hikes in this environment contributes towards a strong USD (in itself a tightening of financial conditions), a lower end point for the forecasts seems warranted.

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Federal funds rate: NAB projections

	<u>Previous</u>	<u>Revised</u>
Sep-15	0.25	0.25
Dec-15	0.50	0.50
Mar-16	0.50	0.50
Jun-16	0.75	0.50
Sep-16	1.00	0.75
Dec-16	1.25	1
Mar-17	1.50	1.00
Jun-17	1.75	1.25
Sep-17	2.25	1.75
Dec-17	2.50	2.00
Mar-18	3.00	2.25
Jun-18	3.25	2.50
Sep-18	3.50	2.75
Dec-18	3.50	3.00

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