more give, less take

United States Economic Update

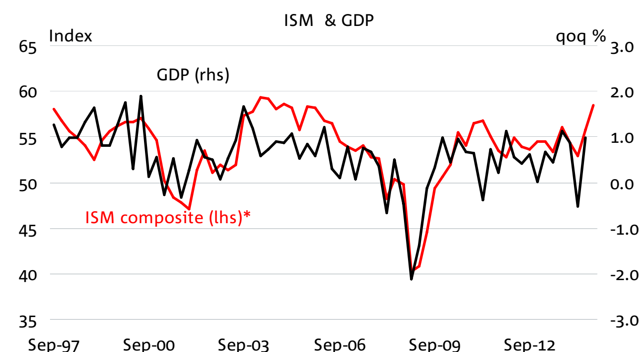
by NAB Group Economics 6 August 2014

- **GDP bounced back strongly in the June quarter, growing at an annualised 4.0% rate. Early indicators for the September quarter are positive.**
- **Tapering of asset purchases under QE is continuing and we expect the end of the program to be announced after the Fed's October meeting.**
- **The first hike in the fed funds rate is not expected for a while yet – June quarter 2015. Subsequent rate hikes will be gradual by historical standards, although the risk is biased towards a faster pace.**
- **We expect the fed funds rate to peak at 3.75% - lower than in the last tightening phase. Late in the tightening cycle the Fed will also move to reduce the size of its QE asset holdings.**

After declining at the start of the year, GDP bounced back strongly in the June quarter, growing at an annualised 4.0% rate. While this included a sizeable contribution from stocks, the improvement was broad based with consumption and business and residential investment all strengthening, as did government expenditure, while net exports were less of a drag. Revisions to past GDP estimates also suggest there was more momentum in the economy over the last year than previously thought. Our report on the June quarter estimate provides further detail.

Data since the GDP release have been generally positive. In particular, non-farm employment grew by over 200,000 for the sixth consecutive month. With employment growth over the last year more than twice the growth in the working age population the unemployment rate is trending down. While the unemployment rate increased by 0.1ppt in July, this followed a large 0.6ppt fall over the previous three months. Moreover, the downwards trend in unemployment is no longer due to falling workforce participation, which has been broadly unchanged since late 2013.

Early indicators generally positive at start of Sept. qtr



Sources: BEA, ISM, NAB. * weighted average of manuf. & non-manuf. ISM surveys (based on GDP shares). Sep qtr 14 ISM composite based on July '14 reading

The ISM business surveys are suggesting particularly strong momentum at the start of the September quarter. Our composite measure of the manufacturing and non-manufacturing ISMs surged higher in July to a level consistent with strong GDP growth.

Also worth noting is the Fed's latest loan officer survey, which indicates that banks recently eased lending standards for most major loan categories. This has been the trend for a while for consumer and business loans - supportive of consumer spending and businesses investment. However, for the first time this year this easing process was extended to residential mortgages. Also for the first time this year loan officers reported a large increase in residential mortgage demand. Housing data continues to be mixed, but this is clearly a positive signal.

We expect above trend growth over the rest of this year and through 2015. As a result we are forecasting GDP growth of 2.1% in 2014 and 3.0% in 2015.

A closer look at U.S. monetary policy

We recently reviewed our outlook for monetary policy in the U.S. and made some modifications to our projections. In particular we looked at (1) when the Fed might start to raise rates (now expect June quarter 2015), (2) when it does start raising rates how quickly will it do so (we still think gradually) and (3) how high might rates go (we think 3.75% with the Fed also to reduce the size of the balance sheet late in the tightening cycle). We will take a look at each of these issues in the rest of this note.

(1) Start of rate hikes

Before even considering the timing of fed funds rate hikes, a preliminary question is when will the Fed's monthly asset purchases of Treasury bonds and mortgage-backed securities, also known as QE, end?

The outlook for QE asset purchases is reasonably clear. The Fed has been reducing the size of the monthly asset purchases by $10 billion in each meeting since December last year, and it is currently set at $25 billion. While 'data dependent' it will take a big change in the Fed's outlook to stop the taper – not even a reported 1.0% qoq decline in GDP in the March quarter (the estimate at the time of the June meeting) stopped the process. According to the June meeting minutes, Fed members expect that the October meeting will decide to end QE purchases altogether.

The Fed views continuing QE asset purchases as a policy easing (but by smaller amounts as the taper goes along). In terms of concrete actions – as distinct from 'forward guidance' in which the fed tries to change perceptions about the future of monetary policy - monetary tightening will occur through one of two routes. These are either increases in the fed funds rate (and other short-term rates) as such interest on reserves) or through reductions in the

size of the fed's QE asset holdings by ending (or limiting) reinvestment of principal repayments.

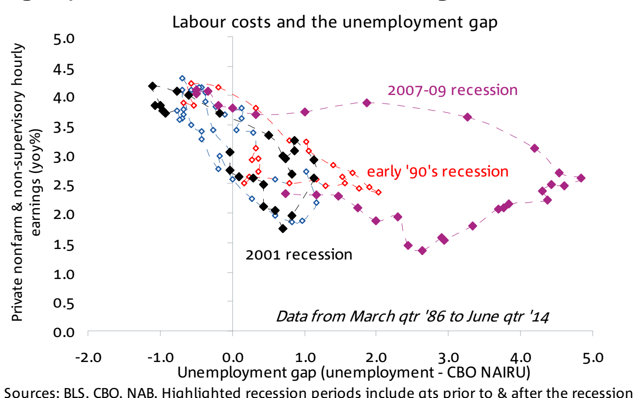
According to the June 2014 minutes "Many participants agreed that ending reinvestments at or after the time of liftoff would be best, with most of these participants preferring to end them after liftoff." This suggests that one factor that may have delayed rate hikes – a policy tightening by reducing QE holdings – is unlikely.

The Fed has stated that there will be 'considerable time' between the end of QE purchases and rate hikes if the economy evolves as expected. The Fed Chair in March said this meant around six months. While she has been unwilling to repeat this comment, an October end to QE firmly puts the June quarter on the map for rate hikes.

Moreover, as we have noted previously, progress towards the Fed's goals has been faster than expected. Even with the increase in July, the unemployment rate is trending down and inflation has started to pick-up. The head of the St Louis Fed (Bullard), has been sounding increasingly hawkish of late, in-part based on his analysis that the Fed is closer to its (current) inflation and unemployment targets than it has been most of the time since 1960., while at the same time policy settings are far form normal.

One of the debates currently is whether the unemployment rate is an accurate measure of labour market slack. To the extent that it is understating slack, then it argues for a looser monetary policy, other things equal. A broader measure of labour market underutilisation is the 'U6' measure published by the BLS. This measure adds to the unemployed those marginally attached to the labour force and those employed part-time for economic reasons. While it remains higher, relative to the unemployment rate, than is typical – suggesting that the unemployment rate is understating slack - the gap is narrowing, and we expect this will continue.

Wages post recession recover with a lag



Sources: BLS, CBO, NAB. Highlighted recession periods include qts prior to & after the recession

Related to this issue of slack is wages growth, as a tightening of labour market conditions is expected to show up in wages growth. While the story changes a bit depending on the measure used, overall there is limited evidence of much acceleration in wages growth from its recent, subdued, levels. However, this is not necessarily inconsistent with the labour market tightening. The chart above plots one measure of wages growth against the unemployment gap and shows over time, as expected, a tighter labour market is associated with higher wages.

Of more interest are the periods identified pre, during and after recession periods; the experience is that even after unemployment starts to recover, wages growth can decelerate further before it eventually picks-up again. This suggests both that wages growth lags labour market changes – making it a poor measure of current slack – and secondly that wages growth will eventually accelerate from current levels adding to inflationary pressures.[1]

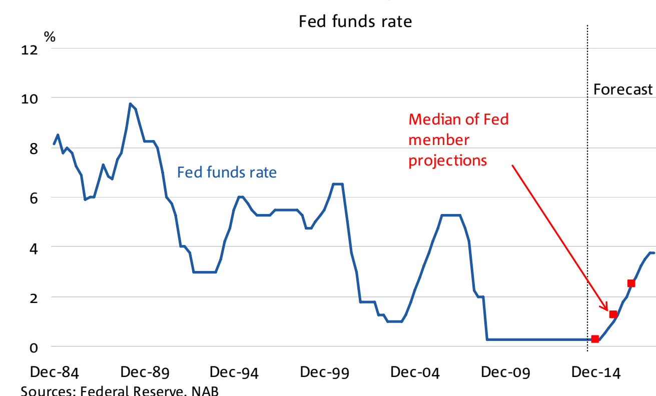
To sum up, with faster than expected progress towards the feds goals and with the economy expected to grow at an above trend rate, resulting in a continuing fall in unemployment and gradually accelerating inflation, a June quarter rate hike looks most likely. The risk around our projection is weighted to it being later than sooner, although an earlier date (March) cannot be ruled out.

It is worth noting that the June minutes indicated that many Fed members expressed a preference to continue targeting a range (currently 0 to 0.25%). This suggests that the Fed will not return to its historical practice of a point target as it lifts rates from their current near zero levels. Our projections are shown as a single point estimate which represents the top of the range.

(2) Pace of rate hikes

When the Fed does start to tighten we expect that it will be relatively gradual by the standard of past episodes. In both the early 1990s and 2000s tightening phases, rates were increased by a 2ppt annual pace or faster. We are allowing for the target to increase by only 75bps in 2015 and then 1.5ppts in 2016. The tightening cycle that started in 1999 had a similar pace to this, but as the starting point for rates was much higher it is not really comparable.

Gradual rise in fed funds rate expected



Sources: Federal Reserve, NAB

The main reason for our gradual track is that this is what the Fed is signalling it will do. Given this, it is no surprise that our projections are pretty similar to the mid-point of Fed member projections. The events of mid-last year where talk of tapering led to a rapid spike in longer-term bond yields will also be fresh in the Fed's mind and it will want to move cautiously. In particular, they will not want to spook

[1] Daly, M., Hobijin B., Ni T., The Path of Wage Growth and Unemployment, FRBSF Economic Letter 2013-20, July 2013, explore this issue in more detail.

markets by doing something they have signalled they would not do (rapid rate rises).

That said, there are many caveats to the Fed's signals – not only is it data dependent but is based on the view that various headwinds will continue to face the economy in coming years. However, perceptions of headwinds may change in a period when the unemployment rate is likely to be moving below what the Fed considers its long-term level and inflation is threatening to go above target. If Fed members were to become concerned about a build-up of inflationary pressure due to the economy hitting capacity constraints, then the risk is that policy will move more quickly rather than that it will be more gradual.

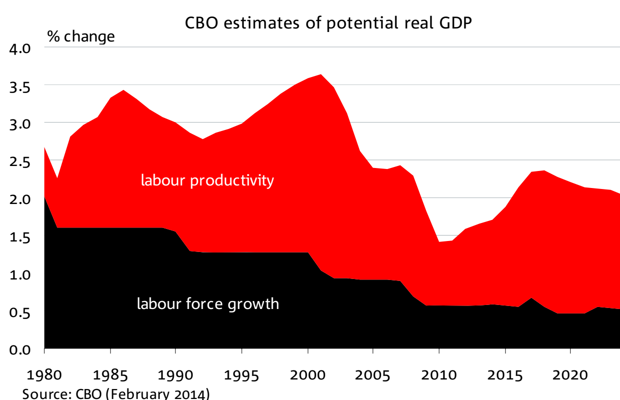
(3) How high will rates go?

What is clear from the earlier chart showing the fed funds rate is that the level of interest rates has been moving down over time. Rates peaked at a lower level in the 1990s than in the 1980s and there was a further downward move in the 2000s. This can only partly be explained by lower inflation. There have been several theories put forward to explain this trend – including the idea of a global savings glut, monetary policy setting being too loose (in the 2000s) and lower potential growth.

A common approach for considering where rates might end up is to estimate the neutral (or long-term) interest rate. By this we mean the interest rate that would be consistent with steady inflation for an economy operating at full capacity. There has been considerable debate about where the neutral rate might currently be. For example, PIMCO sees the 'new normal' real policy rate as 0% (2% nominal).

Conceptually, the neutral rate should be the outcome of the marginal product of capital (return on investment) and households time preference (the extent to which households prefer to spend now rather than save and spend later). A proxy for the neutral interest rate is often assumed to be the potential growth rate of the economy which itself broadly reflects growth in the labour force and productivity. A well-known estimate of potential GDP is that of the Congressional Budget Office (CBO) and is shown below, decomposed into its two main components.

Potential GDP has fallen



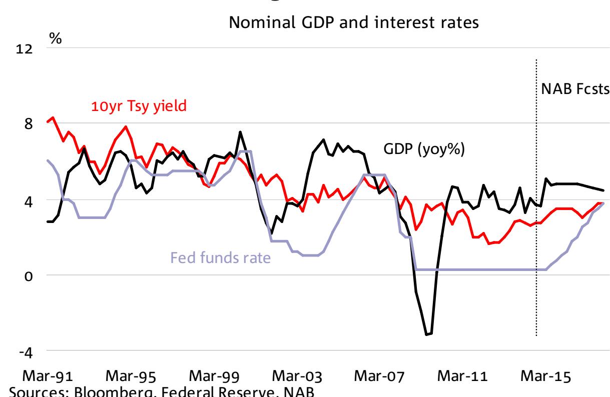
Source: CBO (February 2014)

A factor driving potential growth down has been a decline in the labour force which, over time, is principally driven by demographics and other social factors. From the mid-1990s this was offset by a rising productivity typically associated with the IT revolution. However, this did not last for long and potential productivity growth then weakened, particularly during and after the recession (in part because of reduced business investment). The CBO estimates assume a return to labour productivity growth similar to that before the IT revolution but the slower rate of labour force growth is likely to be maintained. Overall, over the ten years to 2024 they project potential growth of just 2.2%, and see it being around 2% at the end of this period.

Of course this is just an estimate and there are risks around these projections, highlighted by the low productivity growth of recent years. The pessimistic view is that productivity improvements will be harder in future years as all the 'big' inventions have been discovered. Others see a loss of dynamism in the U.S. economy (reflected in fewer business start-ups). However, no matter how forward looking we try to be, views are often overly influenced by recent events, and like the CBO we expect a return to more normal levels of productivity growth.

Estimates of the neutral rate are not always set exactly equal to the potential growth rate. For example the current mid-point of Fed member projections of long-term GDP growth is 2.15% - a nominal rate equal to 4.15% - but the median view on the long-term fed funds rate is 3.75%. One explanation for this is that while the neutral rate concept is based on a generic interest rate in reality there are a range of rates. At least since the 1990s the nominal GDP growth has lined up better with longer-term rates, which tend to be higher than short-term rates – such as the fed funds rate - due to term premia.

GDP tends to match long-term rates



Sources: Bloomberg, Federal Reserve, NAB

Given this, and with potential real GDP growth of around 2% and the Fed targeting inflation of 2%, this suggests a neutral fed funds rate of around 3.75% or a bit lower is a reasonable estimate. This is also the peak fed funds rate we are projecting (or more precisely the top of the Fed's target range). Normally policy rates might be expected to peak at a level above the neutral rate as policy makers try to cool an over heating economy. However, this time around the Fed will have an additional tool – unwinding the stock of QE asset purchases. Our view is that the Fed will not start the process of reducing its QE holdings when it starts to raise the fed funds rate, but leave this to later in the tightening cycle as it approaches the neutral rate. Such a step adds further to the policy tightening, reducing the need to tighten the fed funds rate. The risk is that with

relatively low levels of interest rates expected to be maintained beyond when the recovery is complete, that inflationary pressures will be greater than expected, leading to a 4% or higher fed funds rate for a period of time until the economy cools down.

There are also downside risks around our projected peak and neutral rate. As noted earlier, there has been considerable debate on this issue and some estimates are much lower than ours. Reasons for this include: a more negative view on productivity growth, precautionary savings are seen as being higher post-recession, there is now a greater a preference for safe assets (which reduces their return), and changes in bank regulations, including higher capital requirements (as these increase margins, a lower fed funds rate is needed to get the same retail rate than in the past). Again, some of these argument appear to be projecting recent conditions forward – for example, as the recovery becomes more complete will precautionary savings stay elevated?

To a large extent the argument is about how far the neutral policy rate has fallen rather than whether it has or not. Our view is probably at the more conservative (higher) end but even this would still means that the peak policy rate this time round will be lower than the previous cycle.

However, the risks are not one-sided - estimates around potential GDP and how this relates to policy rates are inherently uncertain. Further, while it is true that the peak of rates in the 2000s tightening was lower than in previous episodes, a criticism of monetary policy in this period was that it was too loose, creating a run-up of debt and inflating asset prices. That suggests policy mistakes rather than some fundamental factors have driven rates down. If this view were to gain more currency in the Fed then this might mean higher rates (or a less gradual tightening cycle) as it seeks to avoid the (perceived) mistakes of the past. However, this is definitely not the current view of most Fed members.

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US Economic & Financial Forecasts

	Year Average Chng %				Quarterly Chng %									
					2013		2014				2015			
	2013	2014	2015	2016	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
US GDP and Components														
Household consumption	2.4	2.4	2.7	2.6	0.5	0.9	0.3	0.6	0.8	0.7	0.6	0.7	0.7	0.7
Private fixed investment	4.7	5.1	7.7	6.1	1.6	1.5	0.0	1.4	2.1	2.2	1.9	1.8	1.7	1.6
Government spending	-2.0	-0.6	0.2	0.8	0.0	-1.0	-0.2	0.4	-0.1	-0.1	0.0	0.1	0.2	0.2
Inventories*	0.0	0.0	-0.1	0.0	0.3	-0.1	-0.3	0.4	-0.2	0.0	0.0	0.0	0.0	0.0
Net exports*	0.2	-0.2	0.0	-0.1	0.1	0.3	-0.4	-0.1	0.1	0.0	0.0	0.0	0.0	0.0
Real GDP	**2.2**	**2.1**	**3.0**	**2.8**	**1.1**	**0.9**	**-0.5**	**1.0**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**
Note: GDP (annualised rate)					*4.5*	*3.5*	*-2.1*	*4.0*	*3.0*	*2.9*	*2.9*	*2.9*	*2.9*	*2.9*
US Other Key Indicators (end of period)														
PCE deflator-headline														
Headline	1.0	1.7	1.7	2.0	0.4	0.3	0.3	0.6	0.4	0.4	0.4	0.4	0.4	0.4
Core	1.3	1.7	1.9	2.0	0.4	0.3	0.3	0.5	0.4	0.4	0.5	0.5	0.4	0.5
Unemployment rate - qtly average (%)	7.0	5.9	5.3	4.9	7.3	7.0	6.7	6.2	6.1	5.9	5.7	5.6	5.5	5.3
US Key Interest Rates (end of period)														
Fed funds rate	0.25	0.25	1.00	2.50	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.75	1.00
10-year bond rate	3.03	2.75	3.50	3.00	2.61	3.03	2.72	2.53	2.75	2.75	3.00	3.25	3.50	3.50

Source: NAB Group Economics

*Contribution to real GDP

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