United States Economic Update

by NAB Group Economics 14 August 2015

National Australia Bank

- **Economic growth strengthened in the June quarter, and is set to remain above its long-term trend rate.**
- **The Fed is likely to raise rates this year. We expect this to start in September although it could easily be delayed. Subsequent rate hikes will occur at a slow pace by past standards.**
- **The neutral fed funds rate, and the likely peak fed funds rate in this cycle, are lower than in the past.**

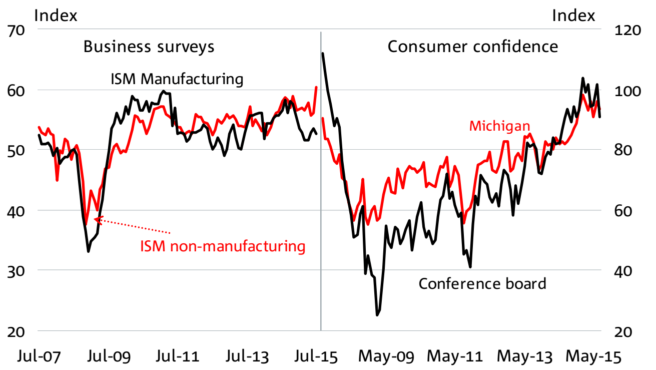
Economic Overview

After the first quarter's slowdown, economic growth strengthened in the June quarter, with GDP growing by 2.3% qoq (annualised rate) in the June quarter. Based on partial data since the advance June quarter estimate, the growth rate is likely to be revised up when the second estimate is released later this month.

The details behind the June quarter GDP estimate were mixed. Consumption growth strengthened, housing investment grew strongly, exports picked-up, as did government demand. However, business fixed investment declined, although excluding mining structures investment it was healthier. As with the March quarter, there was further strong inventory accumulation, which is unlikely to be sustainable. More details on the advance June quarter GDP estimate can be found here.

More corroboration that the economy has at least reasonable momentum came from the ISM business surveys. The ISM survey for the non-manufacturing sector reached its highest level in almost ten years in July. In contrast, the manufacturing ISM remains relatively weak (but still signalling growth) reflecting the sector's relatively high exposure to the subdued global economy, a loss of competitiveness due to dollar appreciation and its links to the oil sector.

Business activity and consumer confidence

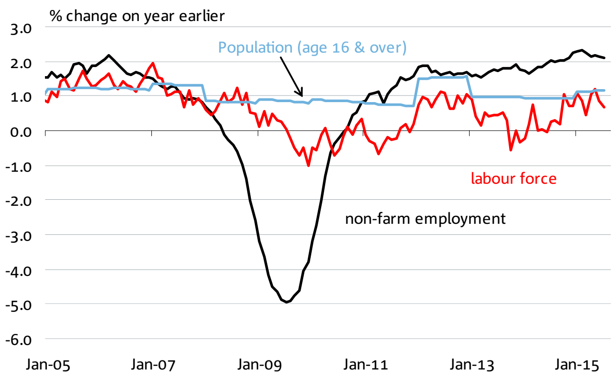


Sources: ISM, Conference Board, Univ.of Michigan/Thomson Reuters

However, manufacturing is little more than 10% of the economy, and a combined reading for the two indices is consistent with an over 5% growth rate for the economy based on historical relationships. While this is certainly an exaggeration, it does at least suggest that the economy is continuing to grow at an above trend pace.

Above long-term trend growth also continues to be reflected in the employment data. The number of non-farm jobs increased by over 200,000 again in July. As a result, employment growth continues to be well above growth in the working age population and the labour force. Consequently, the unemployment rate is trending down; while it was unchanged in July, this followed a 0.2ppt fall in June, and over the last year it has declined by 0.9ppts.

Jobs growth well above population growth



Sources: BLS, NAB

Looking forward we expect that the economy will continue to grow at an above long-term growth rate – 2.3% this year and 2.6% the next. As a result, the unemployment rate should continue to decline and inflation gradually return towards the Fed's 2% target.

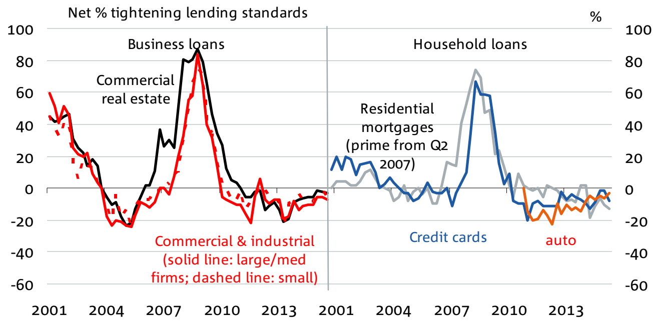
Household spending will be supported by rising wealth, improving credit conditions as well as solid employment and income growth. As the labour market tightens further, wages growth should strengthen.

Residential investment should also continue to grow strongly. Residential vacancy rates are at low levels, and there are signs that more people are starting new households which will further encourage new construction.

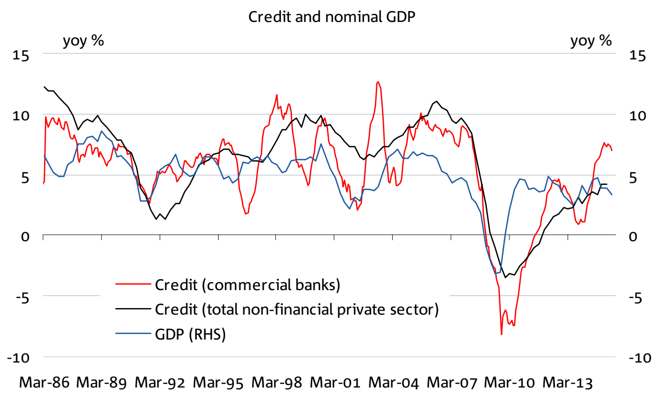
Solid domestic activity and easing credit conditions should underpin business investment, particularly as mining investment bottoms out (the oil and gas rig count stopped falling in late June), although the recent declines in oil prices are a risk. Headwinds, however, will remain from the appreciation of the US dollar and subdued global economic conditions which will continue to weigh on net exports.

At the same time fiscal policy is no longer a drag on the economy (although it is not much of a tailwind either) but monetary policy (discussed further below) remains very supportive. Reinforcing this is, as noted above, the continued gradual easing in lending standards. This is being reflected in credit growth, which is growing at a faster rate than nominal GDP.

Lending standards easing and credit growth higher



Source: Federal Reserve (Senior Loan Officer Opinion Survey). Commercial Real Estate from Dec. '13 Qtr is a simple average of the three CRE categories. Res. Mortgages 2007Q2: 2014 Q4 are prime, from 2015 Q1 average of GSE eligbile, Govt, QM non-jumbo, non-GSE eligible, QM jumbo



Monetary policy – Fed rate hikes likely this year

We continue to expect that the Fed will start lifting rates this year. The Fed's July meeting statement indicated that it only needs to see 'some' further improvement in the labour market before it considered conditions right to start this process. The latest employment report met this test.

Our call is for the first rate hike to be in September but it could easily be in October or December. The uncertainty caused by the People's Bank of China's decision this week to devalue the Renminbi highlights how easily events can arise that may make the Fed pause. That said, with around 5 weeks to go until the September meeting, there is plenty of time for the dust to settle from the PBoC's decision. As the direct impact on the US economy are small we have left our call for a September rate hike unchanged, particularly in the light of comments from Atlanta Fed head that he would need to see a substantial deterioration in order not to vote for a September hike.

That said, even apart from unexpected overseas developments, continued subdued inflation, the recent downturn in oil prices (if sustained) and further US dollar strength are all factors that could lead the Fed to delay until October or December.

Once the Fed does start tightening we continue to expect that, the pace of subsequent increases will be gradual by past standards.

How high will the fed funds rate go?

In addition to a gradual rate tightening cycle, we also expect the peak of the federal funds rate in this cycle will be lower than in the past.

The neutral rate

In large part, this will turn on the perceived 'neutral' rate for the economy (which goes by other names such as natural or equilibrium rate) The neutral rate refers to the interest rate consistent with the economy operating at its potential (with no inflationary pressures) in the absence of headwinds.

While the neutral rate is just a concept – and therefore not directly observable – Fed member views on where it sits will influence monetary policy decisions in coming years.

We last reviewed the neutral interest rate for the US in March[1], and lowered our estimate to 3.50%, which was the mid-point of what we (and others) considered the consensus range.

Since then, the issue has continued to be debated. However, the median Fed FOMC members view on the longer-term rate has not changed since March, as outlined in the table below. While it is slightly above our view it would only take one member to move to push the median down to 3.5%. Fed staff forecasts from the June FOMC meeting have the Fed funds rate increasing to 3.34% by 2020. This is basically equivalent to our projected peak of 3.5% (given that we project the top of the target band).

Projections for top of fed funds range

End:	NAB	FOMC – median of June projections (March projections)*
2015	0.75	0.75 (0.75)
2016	1.75	1.75 (2.00)
2017	3.25	3.00 (3.25)
Longer run (neutral)	3.50	3.75 (3.75)

* FOMC dots based on mid point of target range so have added 0.125 (other than the longer-run rate which appears to be a target point).

While not observable, a lot of research is conducted on the neutral rate, using both quantitative and qualitative methods to estimate it. Some recent work that has caught our eye includes:

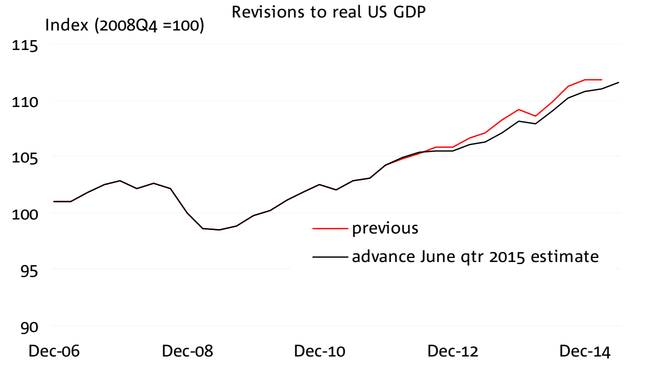
- IMF June 2015 working paper: more a short term concept of the neutral rate but it has projections out to 2020 which have the real neutral rate rising to around 1% (range of 0.4 to 1.6% around this).
- Clarida's view that the neutral rate, until at least 2017, will likely reside between 2% and 3% (consistent with the Laubach–Williams estimate of neutral at the most recent business cycle peak in 2007:Q4).
- Williams (head of San Francisco Federal Reserve) estimated the equilibrium interest rate at -0.2 in 2014 but did not provide projections. He notes, however,

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

that it is time-varying (see Laubach-Williams estimates in chart) and difficult to estimate, with estimates varying widely. For example, the Laubach-Williams estimate for end 2014 was 1.6ppt below that of the Blue Chip consensus estimate.

As we have noted previously when discussing the neutral rate, a common reference point for the long-run or neutral rate of the fed funds rate is to set it a little below the potential growth rate. Our view has been that the potential growth rate is around 2% although risks around this are likely weighted to the downside. This downside risk was highlighted by the revisions to GDP growth since the GFC contained in the advance June quarter estimates (with the growth rate revised down 0.1ppts p.a. between 2009Q4 to 2015Q1).

Pace of recovery revised down



Sources: BEA, NAB

That said, the link between potential GDP and the equilibrium interest rate is open to dispute. Some studies find only a weak link. While other studies do find it plays a role, other factors (such as precautionary savings/risk aversion, uncertainty, global savings and lending standards etc) are important.

What do financial markets say?

Estimates of real yields can be obtained from the US inflation indexed market (TIPS). To get an idea of rates in the future, a common measure used is the 5 year forward 5 year rate (i.e. market expectation of the five year rate in five years time).

The 5y5y real yield moves around a fair a bit, particularly since the GFC, where its relationship to potential GDP (estimates) weakened. It also clearly moved lower starting around 2011 and has been tracking a bit under 1% recently.

Other considerations

Overall monetary conditions are not just reflected in interest rates, but also in exchange rates and other factors such as lending standards.

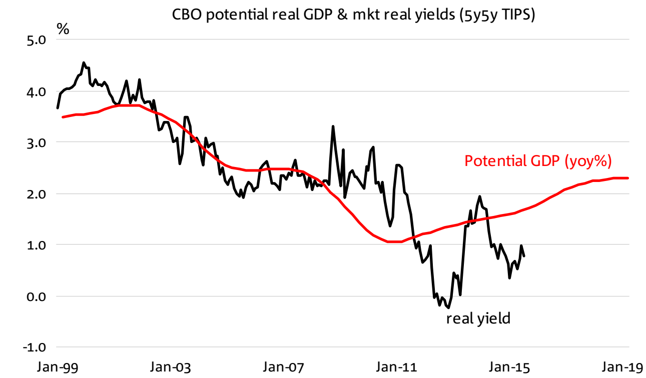
Exchange rates are not just a reflection of US domestic conditions but also overseas ones. One possible reason for the weak link between potential GDP and the equilibrium rate is that with global capital markets increasingly integrated it is global economic conditions (and, in a sense, global interest rates) that are relevant.

The fall in the 5y5y real yield in 2011 occurred around a time of considerable uncertainty in the Euro-zone. At around the same time the US dollar bottomed out and has been appreciating since.

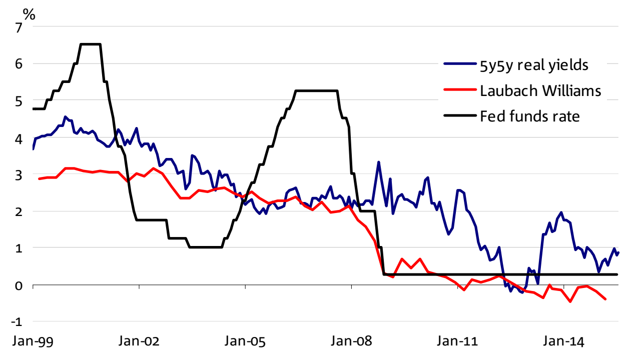
Analysis by Credit Suisse of US real TIPS yields found that "…near-term expectations for the European economic cycle explain around half of the volatility of 5y5y real rates and 10y1y nominal rates in the US."[2]

So while the dollar is part of overall financial conditions, and a higher dollar might in isolation suggest a lower fed funds rate, dollar moves do not happen in isolation. Factors driving the dollar up may also keep US interest rates down. While the Fed looks close to starting to tighten policy (and the UK may not be too far behind), many expect that the Bank of Japan will further ease monetary policy, China has been easing policy, and the ECB is in the midst of an asset purchase (QE) program. As a result whether this means the Fed will need to raise the fed funds rate more or less to get a certain degree of tightening in overall monetary conditions is uncertain.

Neutral rates estimates, potential GDP, fed funds rate



Sources: CBO, Bloomberg, NAB



Sources: Bloomberg, San Francisco Federal Reserve, Federal Reserve.
August 15 yield based on 12 August value.

What this mean's for our fed funds rate projections

With some of the more recent estimates of the neutral rate at the lower end of the plausible range, and further queries on U.S. potential growth, our view of a 3.5% neutral rate looks to have more downside risk attached to it than upside.

What does this mean for our fed funds rate projections, which we also currently have peaking at 3.5%? At this stage, the answer is we are leaving them unchanged.

[2] Credit Suisse, Global Rates Atlas, 20 March 2015

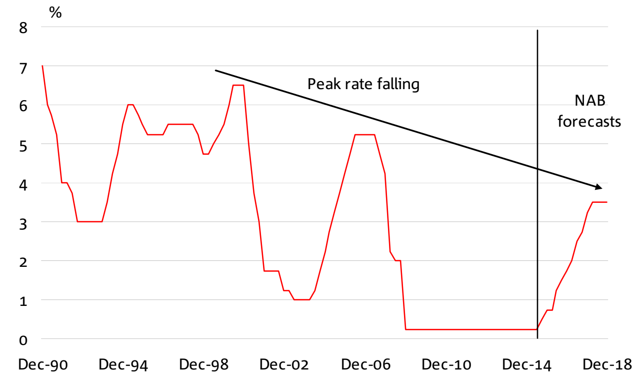
The neutral rate – as best it can be estimated - does not necessarily equal the peak rate in a tightening episode. Typically, the peak of the funds rate will be (well) above the estimated neutral rate (see chart above). This is not surprising – at the peak of the cycle inflation is often above target and unemployment below, so monetary policy rules would suggest the policy rate should be above neutral.

A complicating factor this time around is that the Fed has another tool to use this time, in the form of reducing its balance sheet (quantitative tightening). This may provide additional tightening (through the signalling channel) reducing the need to take the fed funds rate higher than its neutral rate. However, an alternative view is that unwinding QE is simply part of returning conditions to normal (portfolio balance channel). Which view is correct remains to be seen.

Moreover, given that it is set by the Fed, how high the fed funds rate will go will in large part be determined by the Fed's own view of what the neutral rate is (noting, of course, that it can change over time). As a result, even if we were to adopt a lower estimate of the neutral rate (given the downside risks noted above) we would not automatically lower our peak fed funds rate projection.

More importantly, while there is inherent uncertainty in any specific forecast, the main point is that the neutral rate, and the likely peak fed funds rate in the upcoming tightening cycle, is now lower than in the past. Moreover, the pace at which the Fed increases rates is also likely to be slower than in the past.

Peak fed fund rate has fallen



Sources: Bloomberg, NAB. Note projections are for top of Fed's target range

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US Economic & Financial Forecasts

	Year Average Chng %			Quarterly Chng %								
				2014	2015				2016			
	2014	**2015**	**2016**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
US GDP and Components												
Household consumption	2.7	3.0	2.8	1.1	0.4	0.7	**0.8**	**0.7**	**0.7**	**0.7**	**0.6**	**0.6**
Private fixed investment	5.3	4.0	6.3	0.6	0.8	0.2	**1.6**	**1.8**	**1.7**	**1.6**	**1.5**	**1.3**
Government spending	-0.6	0.4	1.3	-0.4	0.0	0.2	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**
Inventories*	0.0	0.2	-0.2	0.0	0.2	0.0	**-0.2**	**-0.1**	**-0.1**	**0.0**	**0.0**	**0.0**
Net exports*	-0.2	-0.7	-0.3	-0.2	-0.5	0.0	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**0.0**	**0.0**
Real GDP	**2.4**	**2.3**	**2.6**	**0.5**	**0.2**	**0.6**	**0.6**	**0.7**	**0.6**	**0.7**	**0.7**	**0.6**
Note: GDP (annualised rate)				*2.1*	*0.6*	*2.3*	*2.4*	*2.6*	*2.6*	*2.6*	*2.6*	*2.6*
US Other Key Indicators (end of period)												
PCE deflator-headline												
Headline	1.1	0.8	2.1	-0.1	-0.5	0.5	**0.3**	**0.4**	**0.5**	**0.5**	**0.5**	**0.5**
Core	1.4	1.4	1.9	0.2	0.2	0.4	**0.3**	**0.4**	**0.4**	**0.5**	**0.5**	**0.5**
Unemployment rate - qtly average (%)	5.7	5.1	4.8	5.7	5.6	5.4	**5.3**	**5.1**	**5.0**	**5.0**	**4.9**	**4.8**
US Key Interest Rates (end of period)												
Fed funds rate (top of target range)	0.25	0.75	1.75	0.25	0.25	0.25	**0.50**	**0.75**	**0.75**	**1.25**	**1.50**	**1.75**
10-year bond rate	2.17	2.75	3.00	2.17	1.92	2.35	**2.50**	**2.75**	**2.75**	**2.75**	**3.00**	**3.00**

Source: NAB Group Economics

*Contribution to real GDP

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