

# US UPDATE - INFLATION WATCH JUNE 2017



The course of true inflation never did run smooth

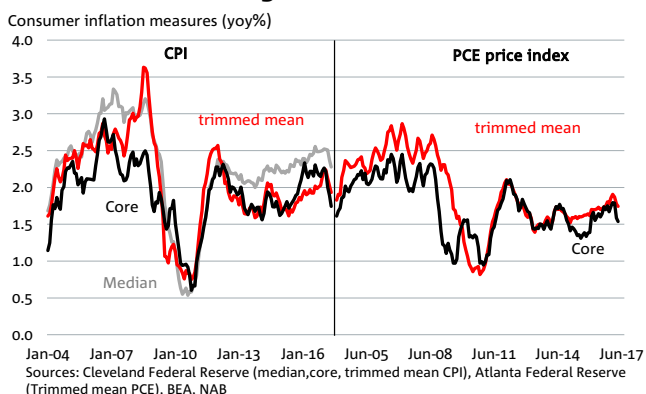
NAB Group Economics

Inflation has slowed recently even allowing for ‘one-offs’. However, producer price inflation and wages growth do not show similar weakness, and the currency drag is fading. History warns against simply extrapolating recent inflation numbers into the future. However, we have made a downward adjustment to our inflation forecasts, which suggests there is downside risk to our current view of one more Fed rate hike at the end of 2017 and three more in 2018.

U.S. inflation has slowed noticeably in recent months. Annual CPI inflation in February was running at 2.8% yoy, but by May it had fallen to 1.9% yoy. Similarly, the Fed’s preferred inflation measure – the personal consumption expenditure (PCE) price index – dropped from 2.1% in February to 1.7% yoy in April.

In part this reflects the recent easing in oil prices. As energy costs, and commodity prices more generally, can be very volatile the Federal Reserve (the Fed) places more emphasis on measures of underlying or ‘core’ inflation. The most commonly used measure of core inflation is the CPI (or PCE) ex energy and food. However, even this has slowed noticeably.

## Core inflation slowing

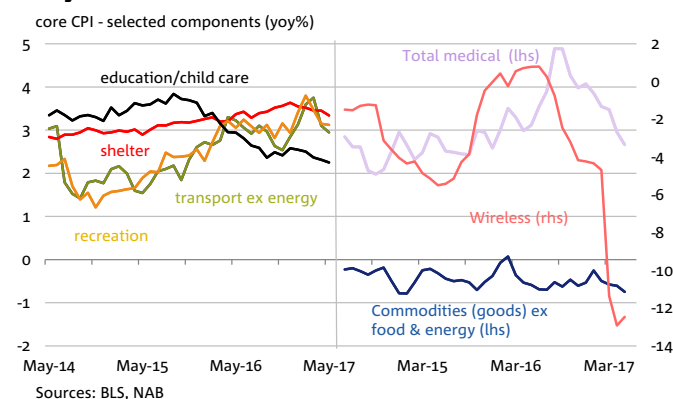


A factor behind the fall in core inflation has been falling wireless (mobile) phone service prices. Mobile phone service prices fell by of 7% in March alone, and by May were 12% lower than a year ago. This does not fully explain slowing core inflation – other measures of core inflation such median or trimmed mean (which removes the fastest and slowest growth items) have also both slowed down, albeit by about half the drop in CPI ex food and energy inflation.

Rather, the weakness in core inflation also reflects a broad-based slowing in many of the major CPI categories. In some cases this is a continuation of the

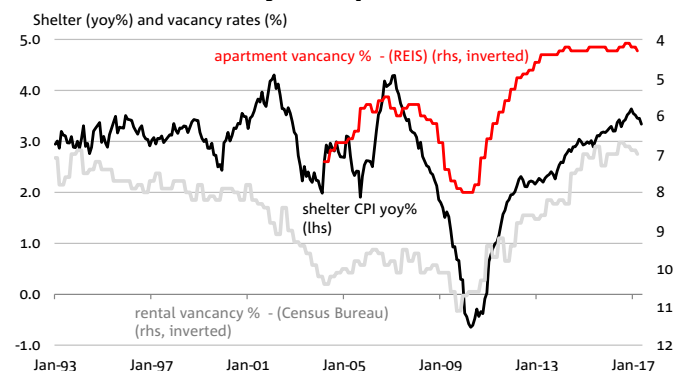
trend (education inflation has been slowing for a while) or follows a recent acceleration (transport ex energy, recreation, shelter, and medical care).

## Not just ‘one-offs’ - inflation slowdown broad based



Shelter services is the single most important component in the CPI. The major component of shelter costs is owner-occupied ‘equivalent rent’ (the ‘rent’ home owners implicitly pay themselves). It tends to move closely with the cost of actual rentals. However, with the rental vacancy rate; still at low levels, there is no reason to expect a sustained downward trend in shelter services inflation.

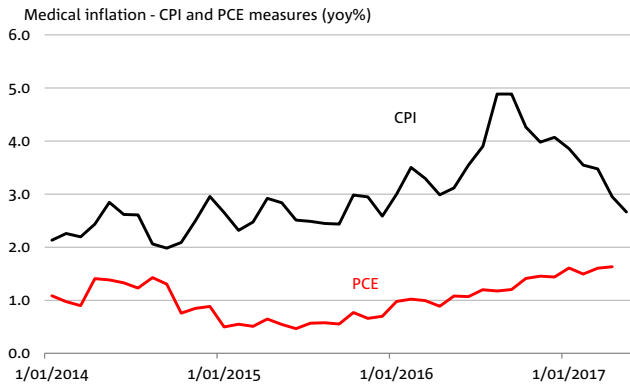
## Shelter inflation may have plateaued



Medical care is another important item, particularly in the Fed’s preferred PCE inflation measure. The PCE

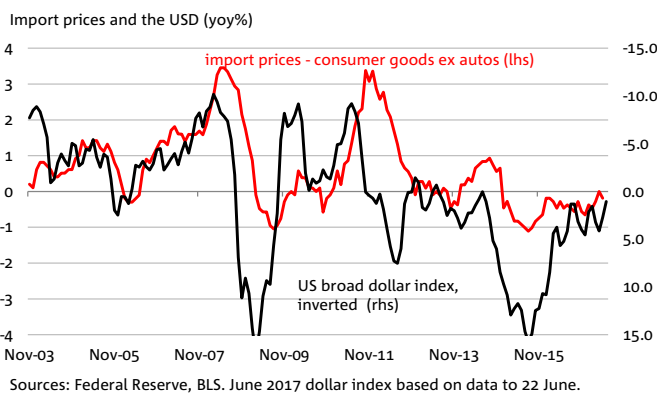
indicator is conceptually different to that in the CPI (it measures the total costs of medical services while the CPI only captures households' out-of-pocket expenses). As a result, the two measures do not always track each closely and this has been the case of late – while CPI medical cost inflation remains higher than the PCE measure, it has been slowing while the PCE measure has been accelerating.

**CPI doesn't always translate to PCE inflation**



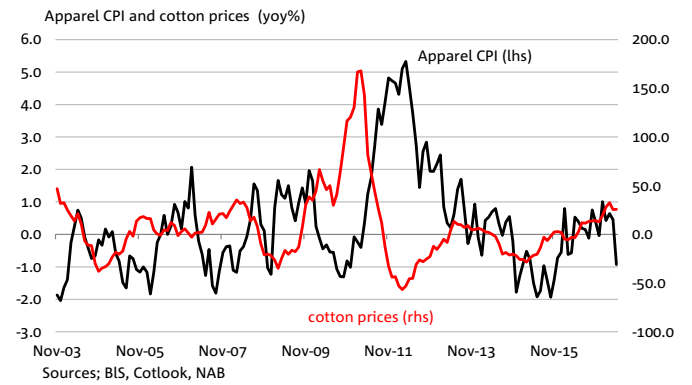
A factor that has been constraining inflation for a while – particularly for goods which are more heavily traded than services - has been US dollar appreciation. The US dollar appreciated significantly between the second half of 2014 through to early 2016. It then eased a little before moving back above its January 2016 high following the November 2017 elections. However, in recent months, the dollar has largely given up its post-election gains. As currency changes take a while to pass through to retail prices, dollar appreciation has probably been exerting downward pressure on inflation for almost three years, but this will soon have run its course.

**Dollar has been a drag but it is fading**



One component of the CPI that has recorded a large fall in annual price growth recently is apparel. Apparel includes clothing, footwear and jewellery, with clothing the most important. As a result, while not the only factor, big swings in cotton prices tend to be reflected, with a delay, in apparel inflation. Given this, the recent drop in apparel CPI looks likely to be reversed as cotton prices have been rising.

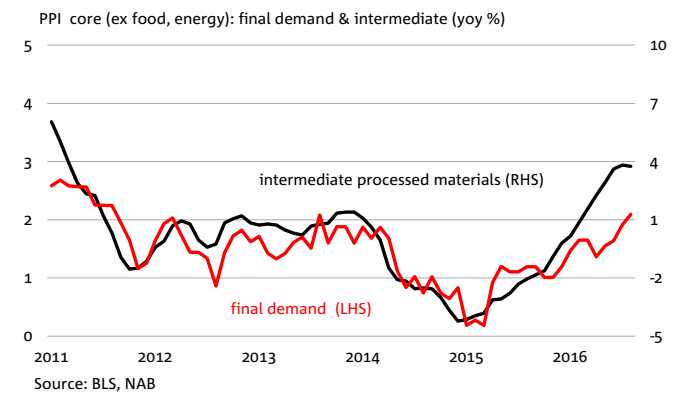
**Commodity prices still affect parts of core CPI**



**Producer price inflation holding up**

Producer prices provide a measure of upstream prices, and are currently running at around their highest level for several years. At most annual growth may have plateaued but they do not point to a downturn in broader inflation.

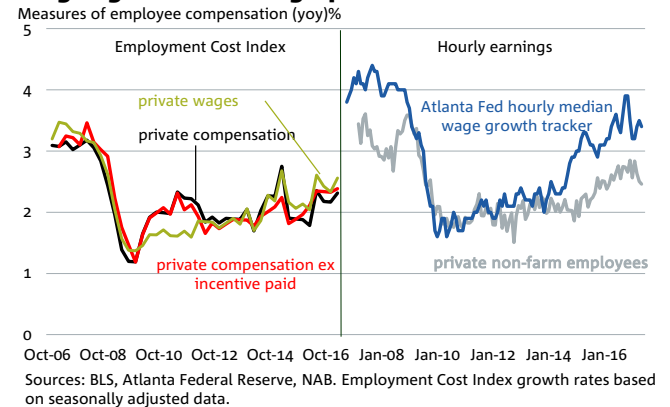
**Core producer price inflation not falling**



**Wages do not corroborate CPI slowdown**

The price of labour – i.e. wages – is also relevant to discussions of prices, partly through its potential to influence broader prices (through rising costs) but also because it provides another measure of underlying inflationary pressures that the low – and still declining - unemployment rate may cause.

**Wages growth holding up better than CPI**



There are many measures of wages growth in the U.S. and they rarely all move in the same direction at the

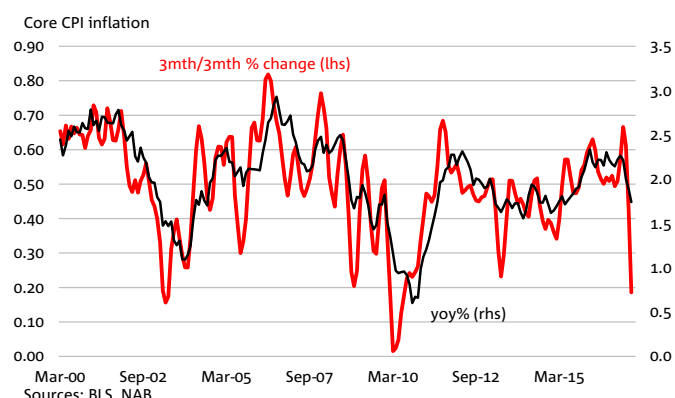
same time. A clear message is that wages growth has strengthened from where it was a few years back. Less clear is whether it is further accelerating. Growth in the hourly wage measure – which gets a lot of attention – has slipped a little recently. However, the employment cost index (ECI) excluding incentives paid occupations, which abstracts from compositional changes, is indicating that there is a gradual uptrend in regular wages underway.

**Don't forget statistical volatility**

Most economic statistics are 'noisy', showing short term moves that go against, or exaggerate, the underlying trend. This can reflect sampling error or transient factors. The CPI is no exception.

There have been many sharp swings in inflation in the past, with the current one at the high end of historical experience. As a result, the most recent reading on inflation is not always a good guide to what will happen next. On a 3-month on previous 3-month basis, core CPI inflation in May was at its lowest point since the GFC period. However, as recently as February 2017, on the same basis, core CPI inflation was at its highest level in over five years.

**Even core inflation is volatile**



What is clear from historical experience is that against trend short-term swings can happen when inflation is on the way up (mid-2000s) as well as on the way down (post GFC). This suggests that we should be careful about simply extrapolating recent monthly data into the future.

**Reflecting on our inflation forecasts**

In summary, the recent weakness in inflation is substantial and not just due to one or two one-off factors. However, producer price and wage growth do not show similar weakness, currency effects are waning and history tells us not to extrapolate recent inflation readings out to the future.

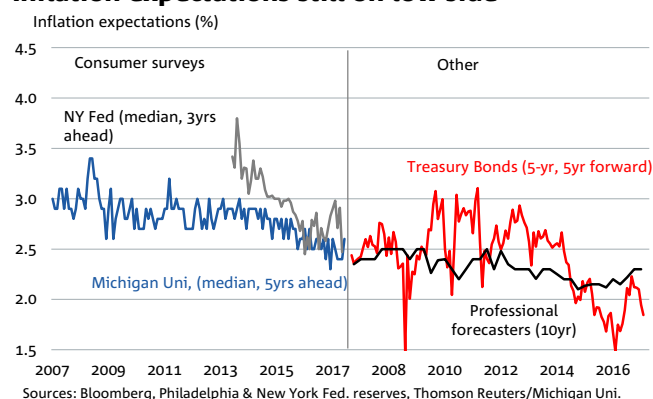
Nevertheless, we have reviewed our forecast track in light of the recent data – while a large part may be 'noise' or other transient factors, it can't be ignored completely.

We forecast PCE inflation using a top-down model based on inflation expectations, the output gap

(based on the unemployment rate), import prices, oil & food prices. Non-oil import prices are modelled using overseas inflation and the dollar. The model's output gap term is not strong – consistent with observed flattening of the Phillip's curve.

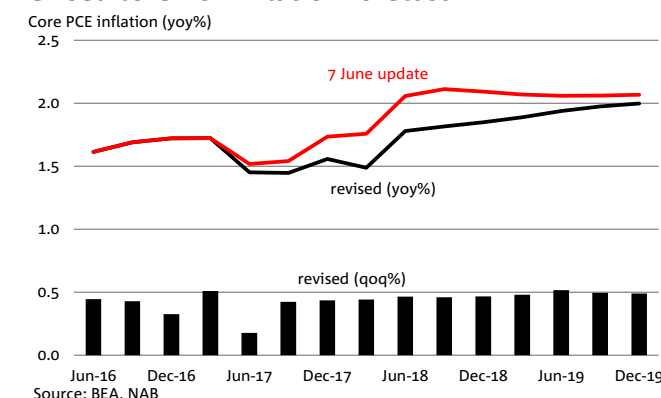
Over time inflation expectations anchor the model. We had assumed that inflation expectations would come back up as oil prices recovered and the economy tightened. However, not all expectations measures have improved and some that did see gains have fallen back again. As a result, we have moderated both the extent and the pace of recovery in inflation expectations built into our forecasts.

**Inflation expectations still on low side**



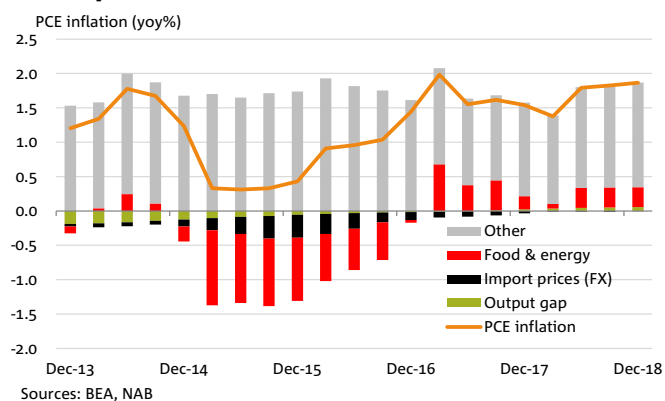
The result of these changes is that annual core inflation is not only lower in coming quarters (reflecting the weak June quarter data so far), but also moves back to the Fed's 2% target more slowly than we previously were projecting.

**Revised core PCE inflation forecast**



The chart below illustrates our outlook for headline inflation out to end 2018. The output gap is turning into a small positive consistent with an economy growing above trend and a falling unemployment rate. At the same time the drag from past dollar appreciation is coming off and, despite some recent falls, we still expect oil prices to trend up gradually over time. The 'other' component in the chart includes inflation expectations (but also picks up model error in history) moves higher over time but not unrealistically so given recent past experience.

### Decomposition of PCE inflation forecast



There are of course upside and downside risks around this outlook. On the upside, rather than quarterly inflation returning to levels seen prior to the June quarter, it is possible that the inflation data bounce back more rapidly (i.e. a correction) or it is possible that the tightening labour market, and economy more generally, leads to greater price pressures than expected.

On the downside, however, it is possible that the recent weak data do indicate a sudden downshift in inflationary pressures. It is also possible that inflation expectations have moved permanently lower or that changes in business practices and technologies – e.g. as is occurring in the retail sector with Amazon’s acquisition of Whole Foods – will lead to margin compression and downwards price pressures.

### What does this mean for monetary policy

In its June meeting, the Fed essentially left its (median) fed funds rate track unchanged. The likely rationale for this was that lower than expected inflation was offset by lower than expected unemployment.

Comments by Fed members suggest that while many view that the slowdown in inflation is likely to be temporary, some are more cautious and would like to see evidence that inflation remains on track to get back towards target.

Our current projection for the fed’s fund rate is one more hike in 2017, the same as the median Fed view. However, this isn’t expected until the December meeting. In the interim we expect they will start balance sheet normalisation in Q3 –the bar for this is pretty low – the Fed has already announced how it will do it and the Fed Chair indicated it might occur relatively soon. We think it is unlikely that the Fed will raise rates and start balance sheet normalisation in the same meeting. So as a result, there is likely to be a six month gap between the last hike and the next likely one; plenty of time for the Fed to see whether the recent weakness in inflation is an aberration or not.

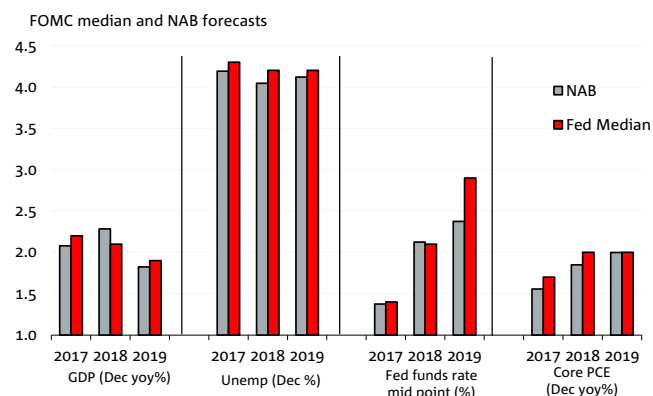
For 2018 we have been expecting three rate hikes (March, June, December). One way to gauge whether

this is still appropriate is to compare our economic forecasts with that of the Fed (whose median member projection is also for three rate hikes).

The main takeaways are that while, like the Fed, we expect inflation to rise over time, we expect it to do it somewhat more slowly. At the same time, we expect greater falls in the unemployment rate.

While unemployment surprises can offset the impact on monetary policy of inflation surprises for a while, ultimately inflation is likely to be the more important factor. The Fed’s focus is not the unemployment rate itself, but the extent to which it is below (or above) the Fed’s view of its long-run level. However, not only does the Fed not have a fixed view of the long-run level, its view is dependent on what happens to inflation (the long-run level unemployment is the level consistent with stable inflation when there is no output gap). We saw this dynamic at play in the June meeting where the median Fed view on the long-run unemployment rate moved down 0.1ppt.

### NAB and Fed forecasts



As we are forecasting a slower return to target than the Fed, this suggests that there is downside risk to our current fed funds rate projections. However, the difference in the forecasts is not particularly large (about 0.15ppt) so at this stage we are staying with our call of a rate hike in December 2017, and three rate hikes in 2018. Like the Fed, however, we will be closely watching the inflation data in coming months.

### CONTACT THE AUTHOR

Tony Kelly  
 Senior Economist – International  
 Antony.kelly@nab.com.au  
 +613 9208 5049

## U.S. ECONOMIC & FINANCIAL FORECASTS

	Year Average Chng %					Quarterly Chng %											
	2015	2016	2017	2018	2019	2016		2017				2018					
						Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>US GDP and Components</b>																	
Household consumption	3.2	2.7	2.4	2.4	2.0	0.7	0.9	0.2	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	
Private fixed investment	4.0	0.7	4.7	3.4	2.5	0.0	0.7	2.9	0.9	0.9	0.8	0.9	0.8	0.8	0.8	0.7	
Government spending	1.8	0.8	0.0	1.3	1.6	0.2	0.0	-0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	
Inventories*	0.2	-0.4	0.0	0.1	0.0	0.1	0.3	-0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Net exports*	-0.7	-0.1	-0.3	-0.1	-0.1	0.2	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<b>Real GDP</b>	<b>2.6</b>	<b>1.6</b>	<b>2.1</b>	<b>2.3</b>	<b>2.0</b>	<b>0.9</b>	<b>0.5</b>	<b>0.3</b>	<b>0.7</b>	<b>0.6</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>	
<i>Note: GDP (annualised rate)</i>						3.5	2.1	1.2	2.7	2.3	2.2	2.4	2.4	2.3	2.1		
<b>US Other Key Indicators (end of period)</b>																	
PCE deflator-headline																	
Headline	0.4	1.4	1.5	1.9	2.0	0.4	0.5	0.6	0.1	0.4	0.4	0.4	0.5	0.5	0.5	0.5	
Core	1.4	1.7	1.6	1.8	2.0	0.4	0.3	0.5	0.2	0.4	0.4	0.4	0.5	0.5	0.5	0.5	
Unemployment rate - qtlly average (%)	5.0	4.7	4.2	4.0	4.1	4.9	4.7	4.7	4.3	4.3	4.2	4.1	4.1	4.1	4.1	4.0	
<b>US Key Interest Rates (end of period)</b>																	
Fed funds rate (top of target range)	0.50	0.75	1.50	2.25	2.50	0.50	0.75	1.00	1.25	1.50	1.50	1.75	2.00	2.00	2.00	2.25	
10-year bond rate	2.27	2.45	2.75	3.00	3.00	1.6	2.4	2.4	2.5	2.8	2.8	3.0	3.0	3.0	3.0	3.0	

Source: NAB Group Economics

\*Contribution to real GDP

## Group Economics

Alan Oster  
Group Chief Economist  
+61 3 8634 2927

Jacqui Brand  
Personal Assistant  
+61 3 8634 2181

### Australian Economics and Commodities

Riki Polygenis  
Head of Australian Economics  
+(61 3) 8697 9534

James Glenn  
Senior Economist – Australia  
+(61 4)55 052 519

Phin Ziebell  
Economist – Australia  
+61 (0) 475 940 662

Amy Li  
Economist – Australia  
+(61 3) 8634 1563

### Behavioural & Industry Economics

Dean Pearson  
Head of Behavioural & Industry Economics  
+(61 3) 8634 2331

Robert De Iure  
Senior Economist – Behavioural & Industry Economics  
+(61 3) 8634 4611

Brien McDonald  
Senior Economist – Behavioural & Industry Economics  
+(61 3) 8634 3837

Steven Wu  
Economist – Behavioural & Industry Economics  
+(613) 9208 2929

### International Economics

Tom Taylor  
Head of Economics, International  
+(61 3) 8634 1883

Tony Kelly  
Senior Economist – International  
+(61 3) 9208 5049

Gerard Burg  
Senior Economist – Asia  
+(61 3) 8634 2788

John Sharma  
Economist – Sovereign Risk  
+(61 3) 8634 4514

## Global Markets Research

Peter Jolly  
Global Head of Research  
+61 2 9237 1406

### Australia

**Economics**  
Ivan Colhoun  
Chief Economist, Markets  
+61 2 9237 1836

David de Garis  
Director, Economist  
+61 3 8641 3045

Tapas Strickland  
Economist  
+61 2 9237 1980

**FX Strategy**  
Ray Attrill  
Head of FX Strategy  
+61 2 9237 1848

Rodrigo Catril  
Currency Strategist  
+61 2 9293 7109

### Interest Rate Strategy

Skye Masters  
Head of Interest Rate Strategy  
+61 2 9295 1196

Alex Stanley  
Senior Interest Rate Strategist  
+61 2 9237 8154

### Credit Research

Michael Bush  
Head of Credit Research  
+61 3 8641 0575

Andrew Jones  
Credit Analyst  
+61 3 8641 0978

### Distribution

Barbara Leong  
Research Production Manager  
+61 2 9237 8151

### New Zealand

Stephen Toplis  
Head of Research, NZ  
+64 4 474 6905

Craig Ebert  
Senior Economist  
+64 4 474 6799

Doug Steel  
Senior Economist  
+64 4 474 6923

Jason Wong  
Currency Strategist  
+64 4 924 7652

### UK/Europe

Nick Parsons  
Head of Research, UK/Europe  
+44207710 2993

Gavin Friend  
Senior Markets Strategist  
+44 207 710 2155

### Asia

Christy Tan  
Head of Markets  
Strategy/Research, Asia  
+852 2822 5350

Julian Wee  
Senior Markets Strategist, Asia  
+65 6632 8055

## Important Notice

This document has been prepared by National Australia Bank Limited ABN 12 004 044 937 AFSL 230686 ("NAB"). Any advice contained in this document has been prepared without taking into account your objectives, financial situation or needs. Before acting on any advice in this document, NAB recommends that you consider whether the advice is appropriate for your circumstances.

NAB recommends that you obtain and consider the relevant Product Disclosure Statement or other disclosure document, before making any decision about a product including whether to acquire or to continue to hold it.

Please click [here](#) to view our disclaimer and terms of use.