



Inflation lower forever now priced

The orthodox view is now one of very low inflation into the distant future. The best measure of long term inflation expectations is 5y Zero Coupon Inflation Swap (ZCS) 5yrs forward (see appendix for explanation). This takes out nearer term inflation movements which may impact inflation for the next few years. Graph 1 shows that as recently as October 2018 the expectations for longer term inflation were only just below 2.5%. Now they are nearing actual inflation at 1.5%. This is a major move and shows the market believes the inflation moves are largely structural and not just cyclical. This requires investigation and should concern the RBA if what the market is saying spills into the broader economy. A flexible inflation targeting regime allows for short term deviations but longer term ones damage the credibility as the anchor starts to drift.

Chart 1.

Australian inflation

2.4
2.2
2.0
1.8
1.4
Aug-18
Nov-18
Feb-19
May-19
Aug-19

AUD 5y5y fwd inflation swap

Source: Bloomberg

All markets globally turning pessimistic on long term inflation

Chart 2. US and European inflation swaps Of course Australia is following the global trends. As Graph 2 shows as recently as Q3 last year both European and US inflation markets were forecasting long term inflation (using $5y5y\ ZCS$) at 1.7% (Europe) and 2.4% (US). Since then they have fallen 50bp in Europe and 100bp in the US. Both now sit well below their 2% inflation targets.





During the same period Australian and US 5y5y nominal swap has rallied around 200bp and 170bp. Clearly this means that falling inflation expectations have accounted for around half the dramatic fall in long term rate expectations, the other half being the fall in real yields.

The debate around long term real yields being around zero (as measured by government inflation bonds) is one for another paper. Global excess savings, the lack of productivity, low investment and post GFC pessimism (even 10 years on) mean savers no longer generate risk free real return and there is little evidence that will change anytime soon. However with inflation there is a measurable index that generates the outcome so it can be hedged, both from those investors with inflation revenues and those with inflation liabilities.

Insurance companies have long recognised their explicit exposure to inflation (largely via wages) but pension money, mainly in defined contribution funds in Australia, largely underestimate their retired members' explicit exposure to the cost of living. Scenarios where growth is poor but inflation is rising, such as supply shocks or massive fiscal spending, is one few are prepared for. Everyone is focused on nominal returns and few talk about the actual spending power of returns. Perhaps with inflation insurance so cheap that should change. Let's look at the medium and long term outlooks for inflation.

The outlook medium term is more positive

Most commentary around inflation concentrates on the general idea that inflation is a demand driven phenomenon. A stronger economy puts pressure on capacity pushing up prices. Therefore tracking the macro economy will create a view on inflation. Whilst this is true, CPI is a bottom up index and too many people do not delve into the details of the index when forming a view on inflation. Also supply side considerations do matter. Understanding the components, what influences them and the lags involved is crucial. This is the mistake people make and provides opportunities for investors when considering inflation.

Top of the list in the index is housing at 23% of CPI. As it's a consumer price index overall house prices are not included as land is the major component and land is not considered a consumer good. The breakdown of the 23% for housing is a follows:

Table 1.
Housing inflation breakdown

Housing constituents	stituents Percent	
Rents	7%	
New Dwelling Purchase	8%	
Maintenance	2%	
Rates and charges	1.5%	
Utilities	4.5%	

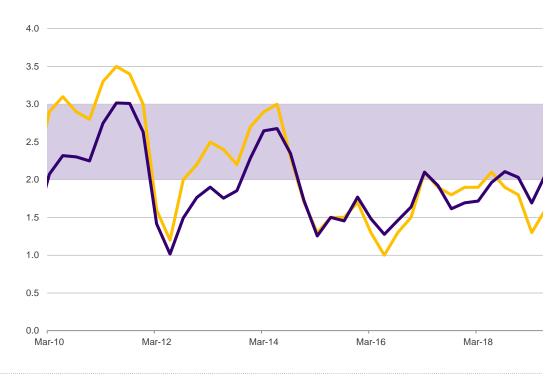
The first two are clearly cyclical factors related to the housing cycle. Housing shortages pushes up rents then prices, the subsequent building boom pushes up new dwelling costs before finally excess supply operates the other way. Whilst these two items make up only 15% of the CPI their volatility makes them crucial items to track. Utilities prices are also cyclical to some degree but technology and government policy is perhaps having a more structural impact.

Housing is still largely cyclical

Housing has always been cyclical but those cycles are slightly longer now given the larger share of apartments which have a longer lead time from planning to completion compared to single houses. This means supply is slower to respond to prices than previously. For example rents in Sydney are potentially going to fall for the first time since records were kept back in the early 1970s. Melbourne only experienced negative rents in 1992 and higher population growth has seen them hold up better this cycle. But how much of the volatility in inflation is caused by housing?

Below is a graph of actual CPI since 2002 compared to CPI holding Housing at a 2.5% increase every year. It shows that inflation would currently be around 2% if it weren't for low housing inflation. This level is actually close to 5 year highs and consistent with the long term view of inflation around 2%. It highlights the impact that the cyclical nature of housing has on CPI, with housing inflating CPI back in the period 2010-14 and now working to deflate headline CPI.

Chart 3.
CPI v CPI holding housing steady at 2.5%



Tradable inflation is picking up

CPI YoY

Source: ABS, RBA

CPI ex Housing YoY (Housing Fixed At 2.5%)

Tradables are goods whose prices are largely set by global factors. If a significant part of domestic output is exported or if a significant part of domestic consumption is imported it is considered a tradable. Within categories such as food some goods might be tradables and some non-tradables.

The entry of China into the global economy and wider globalisation in the last 30 years has meant it is now conventional wisdom there will never be tradables inflation. The largely flat performance of tradables has masked huge differences in sub groups since 2002 (and since China entered the global economy in the late 1980s).

The table below gives examples of four groups:

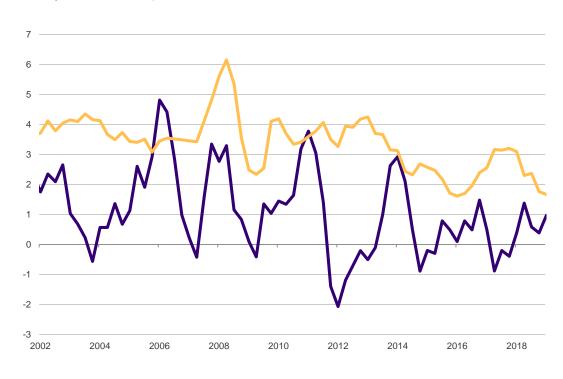
Table 2.

Tradable price examples since 2002 (nominal change)

	Category examples	Change
Quality Led Deflation	Audio, visual and computing equipment	-88%
Import led Deflation	Footwear, Electrical Appliances, Motor Vehicles	-25% to -10%
	Garments, Communication Equipment	
Inflation	Wine, Food, Pharmaceutical, Newspapers, Books, Spare parts, Accessories, Overseas travel	25% to 60%
Regulatory inflation	Tobacco	340%
Tradables		19%

As the RBA graph below shows tradable inflation has averaged around 1% with nontradables above 3%. Given non-tradables is around 60% of CPI this balance has kept inflation around the 2.5% target. However recently tradables inflation has picked up and if the AUD keeps falling could push higher than non-tradable inflation, something we rarely see without oil price shocks.

Chart 4. Tradables v Nontradables inflation

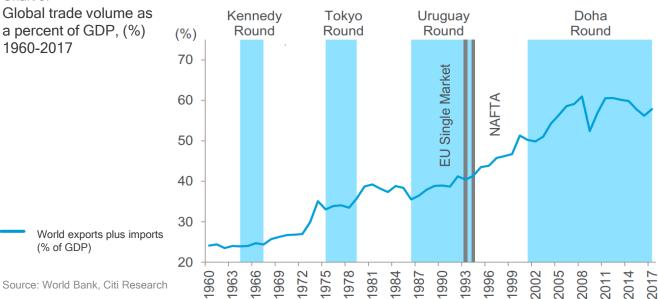


Tradables YoY (%) Non-tradables YoY (%) Source: ABS, RBA

Has peak globalisation passed?

Chart 5. Global trade volume as a percent of GDP, (%)

Whilst technology and supply chain management, together with low wage growth, should keep goods prices low there are structural headwinds in the 'trade wars' that bear close attention. Peak globalisation was already in place prior to Trump, with the GFC being the first major headwind in decades.



Should tariffs rise there is no doubt prices would increase, particularly for Australia where it could coincide with a weak currency. This is hard to predict but the days of assuming no tradable inflation may be past.

Inflation models were very slow to explicitly incorporate globalisation and therefore have generally over predicted inflation for the last few decades. Frameworks focused on domestic factors, particularly slack in the domestic economy. Yet inflation did not collapse in the GFC as these models predicted; nor has it bounced back with the economy running at or near capacity. Given this has been the case across all major economies there is clearly a case to include global slack in inflation models. Increased trade flows, global supply chains and the view that labour can be a global market are all under threat in recent trade wars. Maybe the famous Phillips curve, which measures inflation v unemployment, has a chance to steepen once more just as many were writing its obituary.

Longer term policy uncertainty is rising

Besides Trump's trade wars the other long term question that needs testing is the inflation targeting regime. The current regime deals well with demand side shocks but supply side shocks are more difficult. As Warwick McKibbin examines in his 2018 paper "Twenty-five Years of Inflation Targeting in Australia: Are There Better Alternatives for the Next 25 Years?" these supply shocks in the future are likely to be driven by climate change, productivity shocks from rapid technology growth (artificial intelligence) and supply shocks from changes to globalisation, both positive and negative. He argues a regime of targeting nominal income growth works better than inflation targeting given these influences. In a highly leveraged world sustainable growth of GDP is more important than low inflation and politically a central bank tightening in response to rising inflation from a supply shock (think RBA early 2008) would be dimly viewed. Therefore in the long term investors need to think about monetary policy regime uncertainty although it would likely first evolve overseas than in Australia, especially in the US as Trump takes aim at Chairman Powell.

Another source of uncertainty is governments potentially adopting a form of Modern Monetary Theory. Fiscal policy is increasingly in focus as monetary policy reaches its lower limits. The idea is that inflation is the only constraint to government spending to achieve full employment under MMT. This turns the central bank orthodoxy of targeting inflation and the idea of NAIRU on its head, instead targeting full employment via a base level government job guarantee with a wage high enough to achieve a base living standard (likely the minimum wage). This produces an unemployment rate closer to 2% (similar to the 1950s and early 1960s). MMT argues that whilst there may be a temporary price adjustment as demand in the economy surges, firms will eventually respond with increased capacity and there would not be a longer term inflation problem. Whilst economists and policy makers can argue the costs and benefits of this approach it does remove the prospect of more disinflation that current excess capacity is producing globally.

Inflation insurance is now cheap...

This paper suggests that market pricing for inflation on a long term basis has fallen too far in the last year. Whilst our core view remains the world does not have an inflation problem or that high inflation is coming, we believe that the cyclical elements of CPI, largely housing, will rebound with the economy in 2020/21. This will push actual inflation back towards 2%. We view 2% as a sustainable level in the medium to long term providing Australia continues to have population growth above 1% and that the economy grows around 2.5%. These are both reasonable medium to longer term forecasts. The added bonus is that insurance is in place should regime shift occur longer term.

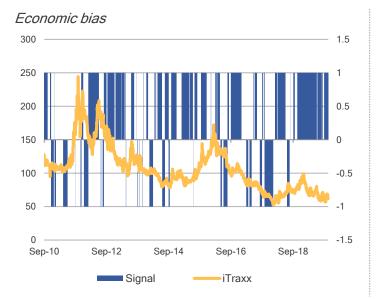
Current market pricing provides an opportunity to hedge for inflation exposures at cheap medium and long term levels. The remainder of 2019 is unlikely to see a significant bounce and may even see expected inflation levels test slightly lower as central banks continue to drive nominal yields lower. Also actual CPI numbers will remain low seemingly justifying these levels. However for medium to longer term investors it is time to consider switching some nominal bond exposures into inflation bonds. Insurance has never been cheaper.

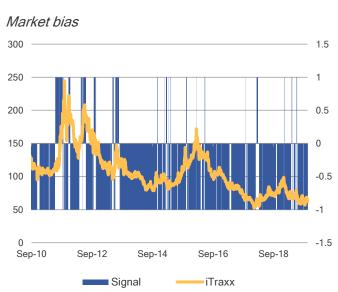
The drama from the trade war and central bank action continued to dominate domestic credit markets over the quarter. While this saw some swings in spreads through the period, ultimately expectations of further monetary stimulus have helped ease investor concerns and support Australian credit.

Mixed signals

As part of the quantitative component to the team's credit process, we monitor the signals from our models closely. As has been the case for most of the year, our economic model continued to suggest a bearish bias (credit spreads wider). This has been attributable to softer leading indicators, which make up the key variables for the model. However, at the same time our market models that consists of market-related inputs have remained bullish (credit spreads tighter). Combined, the two models indicate a neutral signal.

Charts 6 & 7. BIDS quantitative credit models





Source: Pendal, +1 signals bearish credit (wider spreads), -1 signals bullish credit (tighter spreads)

The other key component of our process is the qualitative view. As noted above, the direction of spreads continues to be guided by offshore developments related to trade wars and central banks. The former has proven unpredictable and as such we remain cautious of potential flare-ups that will damage attitudes towards risk and credit. However, we believe central banks will remain on their easing paths, which should continue to support appetite for yield. We saw two cuts from the Fed during the quarter, a new package from the ECB and new record low rates introduced in Australia. Weak leading data in each respective economy suggests additional action will remain needed.

Increasing risk

With the above factors in mind, we prefer tactical positioning in order to take advantage of opportunities when they arise. Over the quarter we further increased the spread duration of the Pendal Enhanced Cash fund (as below). Should the balancing act between stimulus and geopolitical concerns tip in favour of the latter we would look to reduce this exposure, as was done effectively in Q4 last year.

Chart 8. Spread duration vs iTraxx

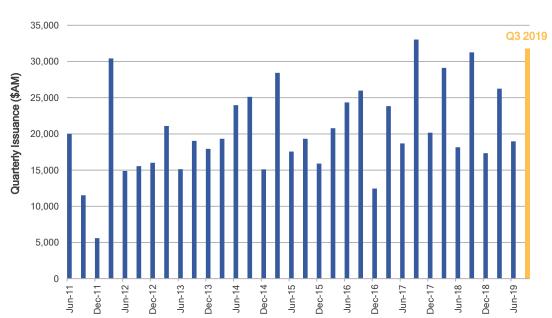


Fund spread duration

Source: Pendal, Bloomberg

Strong quarter for issuance

Chart 9. Australian credit quarterly issuance With a supportive macro backdrop for domestic credit, demand for new issuance was relatively healthy through the quarter. New supply has been well-absorbed and Q3 2019 represented the second largest quarterly volumes since we began tracking deals (below).



Source: Pendal

However, the principal driver of new issuance during the period was not corporates tapping into strong demand for new deals. Roughly half the volume was from July alone. This followed the announcement by APRA that the Australian major banks will need to increase their capital buffer through tier 2 sub-debt issuance.

This surprised the market, which was expecting tier 3 senior non-preferred issuance to fill the capital buffer requirement. A strong rally in major bank senior preferred securities followed as near term new issuance by the major banks will primarily be tier 2 supply, whilst senior issuance will be scarce. The perceived scarcity factor saw strong demand for major bank senior paper. The second order effect of this saw other sectors perform as investors looked for relative value opportunities in those areas.

As such, volumes should be much lighter in the December quarter, which is also a seasonally lighter period heading into year-end. From a supply and demand standpoint this should be a positive for spreads.

Eyes on the road

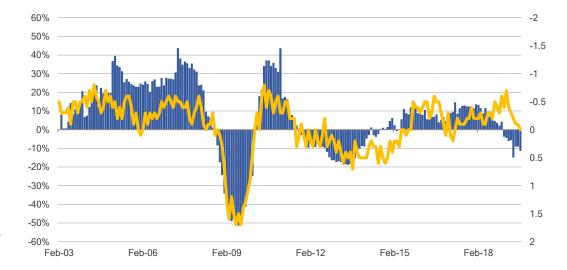
Looking ahead, we continue to monitor a number of factors as part of our credit process. Our quantitative models have provided mixed signals and the economic inputs will most likely remain soft. However, from a qualitative standpoint risk appetite remains driven by global macro factors, which have proven a tendency to fluctuate rapidly. As such we continue to monitor and scrutinise developments closely. Our positioning also remains tactical in nature. While we have increased risk over the quarter we have both hands on the wheel and eyes fixed on the road should we need to reduce speed or change our direction.



The Reserve Bank of Australia eased monetary policy further at its meeting in October, taking the cash rate to 0.75%. The move itself was widely expected however what caught the market by surprise was the change in language around the labour market. In their September statement the Reserve Bank stated that an extended period of low interest rates will be required to make progress in *reducing unemployment*. In their October statement the wording was amended to an extended period of low rates will be required to reach *full employment*. There is a fair difference between lowering the unemployment rate from its current level of 5.3% and reaching an unemployment rate of 4.5%, the point where the RBA sees as the non-accelerating inflation rate of unemployment.

Near term indicators point to a period of slowing labour market growth. One release that we look at is the monthly ANZ job ads series. The following graph shows the 12 month change in ANZ job ads on the left hand axis and the inverted 12 month unemployment rate change on the right hand axis. Not surprisingly rising job ads equates to a lower unemployment rate and vice versa.

Chart 10. 12 month change -ANZ Job ads v unemployment rate



ANZ Job ads - LHS

Unemployment rate - rhs

Source: Pendal, Bloomberg

The graph shows that the annual change in job ads turned negative from mid 2018 and has worsened since that point. It also demonstrates that job ads don't tend to change from falls to gains quickly. This is just one indicator we look at - others also point to a slowing labour market, which should in turn should see the unemployment rate remain elevated. With a sharpened focus on the labour market, economic growth remaining sub-trend and inflation remaining below target for an extended period, it is highly likely that the Reserve Bank eases policy further by the end of the year.



With walk-outs from Australian school students, climate change protests across the country and a no-nonsense address to the UN by Greta Thunberg - there was plenty of publicity over the quarter surrounding humans' impact on the environment. The actions also mirror a strong and growing interest among our clients and the broader community for investments that make a positive contribution to both the environment and society. This is one of the key objectives of impact investing and the focus for this quarter's ESG update.

What is impact investing?

First some groundwork before we delve deeper into the details of impact investing. An ESG approach to investing would typically consider Environment, Social and Governance factors when assessing opportunities. This could be through screening out harmful areas (a negative screen) such as tobacco and firearms. It could also assign each investment a score that would help rank different options. Impact investing takes this approach a step further and actively seeks investments that make a positive impact on the world and include a financial return.

Impact bonds have been a rapidly growing area of the domestic and global bond universe over the past decade and we have provided a breakdown and overview of the different categories in the Q3 2018 update. Delving deeper into these bonds, there is much more detail on the nature of their impact.

The money raised from a climate bond will be ring-fenced and can only be used for predetermined projects and not for general corporate activity. Green bonds for example finance a range of projects such as wind farms, solar panels and low carbon buildings. Similarly, the proceeds of social bonds can vary greatly and could be used provide loans to small business owners from disadvantaged backgrounds or social housing.

In turn, these projects will typically report a range of impact measures depending on their nature. For green bonds this may include the amount of renewable energy generated, carbon emissions avoided and water usage saved. For social bonds, the impacts could include the number of homeless or victims of domestic abuse housed, or underprivileged students educated. We highlighted a powerful social bond case study focused on social housing in <u>last guarter's update</u>.

Visualising impact

Given the diversity and scale of the underlying projects for each bond, assessing and aggregating the impacts is not an easy task. This is illustrated in the map below, which highlights a range of the green projects in Australia and New Zealand that are financed in part by climate bonds within one of our portfolios.



Wind farm



Solar



Green buildings



Transport



Water security



Source: Pendal, issuer impact reports

Most of the projects financed will report impact measures, such as carbon emissions avoided, which can then be aggregated by the bond issuer. These will be provided to investors in periodic impact reports. Among the large list of projects financed we have chosen our own example to highlight as a case study. The Coopers Gap Wind Farm, northwest of Brisbane, is expected to become Australia's largest when construction is completed in 2020. It will have a capacity of 453 MW of energy and produce roughly 1,510,000 MWh of renewable energy.¹



Photo: Coopers Gap, supplied by AGL

¹AGL

Accountability

Given the importance of these outcomes, we need to hold issuers accountable for reporting impact measures and closely scrutinising the results. Some accountability is also shared with auditors who conduct annual reviews of the proceeds to ensure they are being used for their intended purpose. This forms part of the larger process from the identification of eligible projects to their ongoing monitoring as outlined below.



Source: NAB annual green bond report FY 17

One example that reflects the growing importance of accountability and transparency was a green bond issue during the quarter by European utilities provider, Enel. It became the first bond to link its coupon payments to hitting predetermined impact targets. If it does not meet its objectives then the coupon is raised, penalising the issuer. Closer to home, Sydney Airport conducted a similar style sustainability-linked loan earlier in the year.

Looking ahead

As the importance of impact investing receives greater recognition we expect the outcomes for investors to continue to improve. There are several challenges that still exist within the area where we expect further progress. This includes greater standardisation and transparency of impact reporting. We note some strides have been made to utilise some best practice, but that there is room to improve further. There is also room for greater consideration of the range of benefits produced by projects. For example, this could extend beyond measures like electricity produced to encompass the number of jobs created by a project and other benefits for a local community.

Overall with further evolution expected we are excited to lead the way by delivering impact investing strategies that best meet the needs of our clients. This includes assessing the best opportunities in the area and providing our investors with the comfort that their investment is having a positive impact on the world around them whilst still delivering a financial return.

For more information call us on 1800 813 886 or visit **pendalgroup.com**



The information in this brochure is current as at October 2019 and has been prepared by Pendal Institutional Limited ABN 17 126 390 627, AFSL No 316455 (PIL, Pendal). It is not to be published, or otherwise made available to any person other than the party to whom it is provided. Prior to May 2018, Pendal Institutional Limited was known as BT Investment Management (Institutional) Limited. This brochure is for general information purposes only, should not be considered as a comprehensive statement on any matter and should not be relied upon as such. It has been prepared without taking into account any recipient's personal objectives, financial situation or needs. Because of this, recipients should, before acting on this information, consider its appropriateness having regard to their individual objectives, financial situation and needs. This information is not to be regarded as a securities recommendation.

The information in this brochure contains material provided by third parties, is given in good faith and has been derived from sources believed to be accurate as at its issue date. While such material is published with necessary permission, and while all reasonable care has been taken to ensure that the information in this brochure is complete and correct, to the maximum extent permitted by law neither PIL nor any company in the Pendal group accepts any responsibility or liability for the accuracy or completeness of this information.