Westpac Institutional Bank

I've fallen and I can't get up: Another look at inflation expectations[1]

24 February 2016

- Inflation expectations are a key determinant of inflation, and an important influence on what the RBNZ does with the OCR.
- Looking over a range of measures, we see evidence of a downshift in inflation expectations. And this isn't just a response to the recent softness in oil prices. Expectations for inflation over the next few years have also fallen.
- Continuing weakness in actual inflation means that expectations are likely to remain under downward pressure for some time. This will make the uphill battle the RBNZ has been fighting to generate a sustained lift in inflation that much harder.

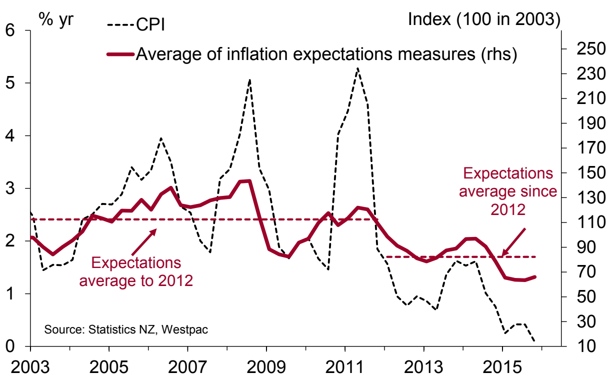
Overview

At the start of this year, RBNZ Governor Wheeler noted that *"survey measures of inflation expectations have fallen and are now consistent with inflation settling at 2 percent in the medium term".*[2] More recently, however, we've seen sharp falls in several key gauges of inflation expectations. As a result, there may be more for the RBNZ to worry about.

Inflation expectations are a significant influence on wage and price setting decisions, and as a result play an important role in determining actual inflation. Looking across some of the main approaches to measuring inflation expectations, three things stand out:

- First, there has been a marked downshift in inflation expectations.
- Second, this downshift does not simply reflect recent falls in oil prices and the related weakness in the near-term inflation outlook. Inflation expectations have been trending down for several years, including measures of longer term expectations.
- Third, this downshift has become more pronounced over the past year.

Inflation and inflation expectations



Note: The "Average of inflation expectations measures" is an index that combines 10 survey measures of expected inflation, wages, prices and costs.

The downshift in inflation expectations will be a major concern to the RBNZ, making the uphill battle they have been fighting to generate a sustained lift in inflation that much harder.

1 This work is an update of our earlier paper "What's been happening with inflation expectations", which is available here: http://www.westpac.co.nz/assets/Business/Economic-Updates/2015/Bulletins-2015/Whats-been-happening-with-Inflation-Expectations-May-2015.pdf

2 http://rbnz.govt.nz/research-and-publications/speeches/2016/the-global-economy-new-zealands-economic-outlook-and-the-policy-targets-agreement

Expectations have been falling since 2012 – well before the recent oil-related weakness in inflation. This corresponds with an extended period of generalised softness in New Zealand inflation. It also corresponds with the start of Governor Wheeler's tenure when there was a tightening of the Policy Targets Agreement to include an explicit focus on the 2% midpoint of the target range for inflation. However, as shown in the figure on the previous page, the downshift in expectations in recent years appears to have gone beyond just bringing inflation expectations back to the target mid-point.

Furthermore, downward pressure on inflation expectations is likely to continue for some time yet. We're forecasting annual inflation to linger close to 0% this year. On top of this, over 2017 and 2018 (i.e. the longer term horizons which are the key focus for the RBNZ) growth is set to slow as reconstruction in Canterbury eases back, and the current boom in migration dissipates. This slowdown in growth will compound the RBNZ's difficulties in returning inflation to target.

Looking at the data

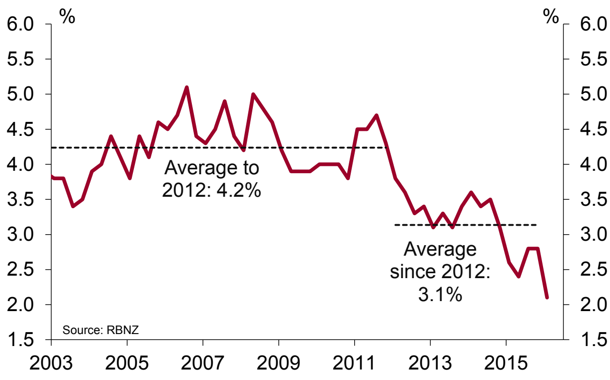
Before proceeding, it's important to remember that unlike most other measures of economic conditions (such as retail spending levels for example), inflation expectations are not directly observable. Instead, they need to be inferred in some way, and there is more than one way of doing this. We took a look at some of the main approaches to measuring inflation expectations – direct surveys of inflation expectations from households and businesses, financial markets pricing, and measures of business behaviour – and looked at expectations over several horizons.

But whatever approach we use, the message is the same: inflation expectations have shifted down. And notably, this downshift has become more pronounced over the past year.

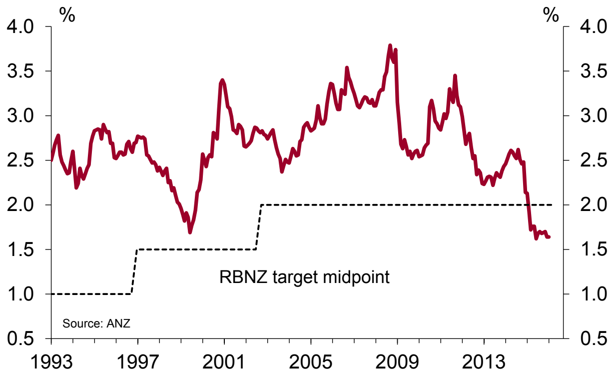
The decline in expectations has been most evident in measures of expected inflation over the near-term. Measures of households' and businesses' expectations over the coming year are at some of the lowest levels in over a decade, with particular softness over the past year. This picture of weakness in expected inflation over the coming year is echoed in businesses' expectations of costs over the next three to twelve months.

The recent decline in near-term inflation expectations is not that surprising given the fall in oil prices and very low level of consumer price inflation.

Marketscope survey – inflation 1 year ahead (households' expectations)



ANZBO – inflation 1 year ahead (businesses' expectations)

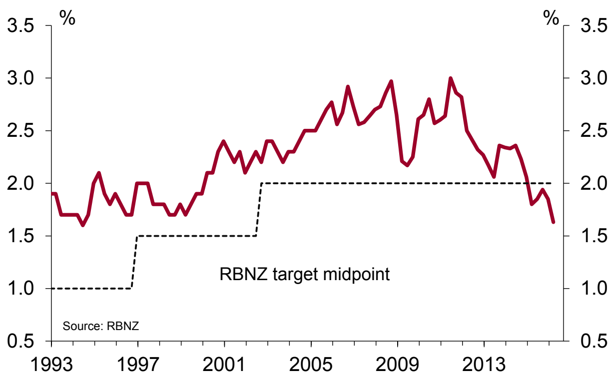


But it's not just shorter term measures that have declined. Expectations of inflation over longer horizons (i.e. more than a year ahead) from business people and economists have also declined.[3] Expectations over such horizons tend to look through temporary fluctuations in prices, such as sharp up and down swings in prices due to movements in global oil prices. As a result, these measures can provide an indication of what the underlying trend in inflation is expected to be.

The most closely watched measure of longer term inflation expectations is the RBNZ's two-year ahead measure. Expectations at this horizon roughly match the timeframe which monetary policy is thought to have the largest impact. In 2015, this measure fell below 2% for the first time in 15 years. And in early 2016, it has fallen to 1.6% - its lowest level since 1994, when the midpoint of the inflation target range was 1%.

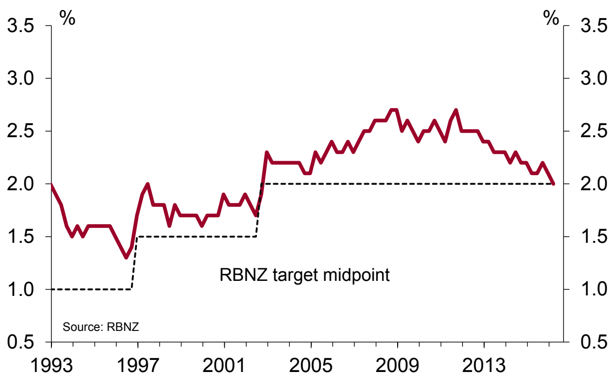
3 There's only limited data on households' longer term inflation expectations. However, the RBNZ/Marketscope survey of households' year ahead inflation expectations has taken a step down over the past year.

RBNZ Survey of Expectations – inflation 2 years ahead



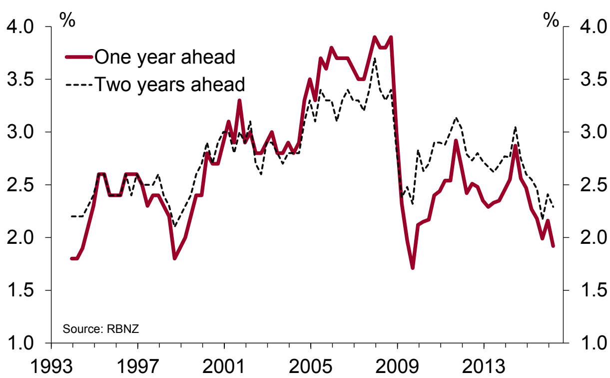
There has also been a smaller decline in the AON-Hewitt Economist Survey measure of expected inflation four years ahead, which actually remains around 2%. However, while this has historically been a relatively stable measure, since 2012 it has been trending down and is now at its lowest level since 2002.

AON-Hewitt Economist Survey – inflation 4 years ahead



Importantly, we are seeing signs that this softness in inflation expectations is passing through to conditions in the economy more generally. Over the past year business expectations for wage growth over the next one to two years ahead have fallen back to the levels seen during the financial crisis. This could exacerbate the current softness in inflation.

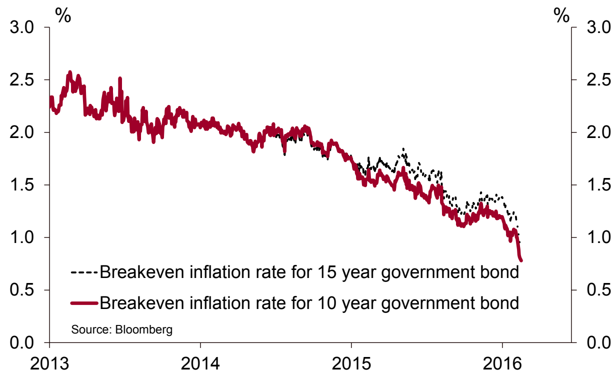
Wage inflation expectations



Finally, a downshift in inflation expectations is also evident in financial markets pricing. Such measures are unlikely to be affected by temporary volatility in inflation due to their very long term focus (over ten years). Consequently, they are often viewed as an indication of the credibility of the inflation target. As shown in the figure below, financial market expectations for inflation over the coming years have been trending down, and are now at very low levels.

One caveat with measures of inflation expectation derived using financial market pricing is that they can be affected by volatility in markets. However, the downshift we have seen has not just been a short-term phenomenon; these measures have been trending down for several years.

Inflation expectations implied by financial markets pricing (breakeven rates)



Note: The inflation expectations measures shown here are based on the prices of inflation linked bonds. Such measures provide an indication of how financial market participants expect inflation to evolve.

Inflation expectations and the RBNZ

Inflation has been below the 1% lower bound of the RBNZ's target range for a year now, and below the 2% target mid-point for five years. Furthermore, declines in oil prices and a more generalised soft pricing environment mean that it's set to remain low over the coming year.

Against this back drop of persistently low inflation, if expectations had remained consistent with the inflation target, then the RBNZ could have taken a gradual approach when trying to get inflation back to 2% inflation. However, measures of inflation expectations actually paint a more worrying picture. Across a range of measures and horizons, we have seen a downshift in inflation expectations. Some of the most reliable measures (including the RBNZ's own medium-term two year ahead measure) are now well below 2%. This means there's a real risk that inflation expectations are deviating from the inflation target. And given the continuing softness in inflation and likely downturn in growth further ahead, this downshift could become even more pronounced over the coming year.

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