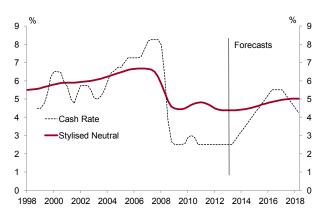


The neutral OCR: a moving feast

- The neutral OCR was probably above 6% before the Global Financial Crisis, but is around 4 $^1\!/_2\%$ today.
- There are strong reasons to expect the neutral rate will rise again over the coming five years we are working on the assumption that it will reach 5%.
- It is not today's neutral rate that will determine the peak of OCR hiking cycle. It is the neutral rate that prevails at the time of the peak.

Westpac estimate of neutral cash rate and actual cash rate



The neutral OCR is normally defined as the OCR that would neither increase nor decrease inflation if the economy were operating at its capacity. It is used as a benchmark by central bankers. For example, if inflation seems likely to fall below target, the RBNZ can reduce the OCR to below neutral in order to bring inflation back up to target.

By this definition, the neutral OCR is a fluid concept. It can and does change over time.

The Reserve Bank estimates that neutral was around 5.8% in the mid-2000s. ¹ To us, the surprising resilience of inflation at the time indicates that neutral may have been even higher for a while. ² Either way, economists universally agree that the neutral OCR fell in the aftermath of the Global Financial Crisis (GFC), and remains relatively low today. In a recent speech the Reserve Bank estimated that the neutral OCR was now 4.3% ³, and we do not have a huge disagreement with that.

However, the remainder of this bulletin gives three reasons that we expect the neutral OCR to rise again over the next five years. This is a critical point for markets. It is not today's neutral that will determine the peak of the coming OCR hiking cycle. It is the neutral rate that will prevail at the peak of the cycle. We think that will be 5%.

1. Inflation expectations will rise

Expected inflation is an important determinant of all interest rates, including the neutral OCR. The more inflation people expect, the higher the interest rate they demand on their savings, and the higher the interest rate they will pay to borrow. Between 1999 and 2008, inflation expectations rose from 134% to 234% – a major cause of the increase in neutral that we think occurred that decade.

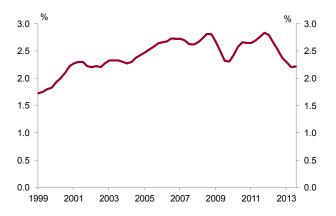
The neutral OCR is to economists what dark energy is to physicists –unobservable, subject to highly uncertain estimates, and yet critically important for understanding the system in question. In the case of economics, the neutral OCR determines the average level of interest rates. Markets are particularly interested in the concept right now, because the higher the neutral OCR, the higher interest rates will go over the next few years.

¹ To be precise, the RBNZ estimates that the neutral 90-day interbank rate was 6% in the 2000s, and is 4.5% today. For the sake of comparability, we have converted these RBNZ estimates into a neutral OCR by subtracting the usual 20bp margin between the OCR and the 90-day rate.

² See our bulletin "Neutral about neutral", http://www.westpac.co.nz/assets/ Business/Economic-Updates/2012/Bulletins-2012/Neutralaboutneutral.pdf

 $^{^{3}\;\}mathsf{http://www.rbnz.govt.nz/news/2013/5473702.html}$

Expected inflation in two years time, RBNZ survey, fourquarter moving average



Since the GFC inflation expectations have fallen back to around 21/4%. This must have driven the neutral OCR down.

But we expect inflation expectations will soon begin rising again – we've pencilled in 2½% as a future long-run average.

There is copious evidence showing that inflation expectations tend to follow actual inflation. This implies that the recent drop in inflation expectations is partly just a by-product of unusually low actual inflation over the past year. As inflation rises over the next two years, as it is universally forecast to do, inflation expectations will rise alongside.

Another factor behind the fall in inflation expectations was the effective reduction in the RBNZ's inflation target last year. But at the next change of Government the inflation target is likely to be increased again, or the RBNZ's focus on inflation will be blurred. New Zealand's two main opposition parties propose requiring the Reserve Bank to pursue broader objectives alongside inflation, and would change the RBNZ's decision making structure in a way that erodes its independence. The effect would be to reduce the Reserve Bank's focus on inflation. This would lead to higher average rates of inflation, higher inflation expectations, and therefore a higher neutral OCR.

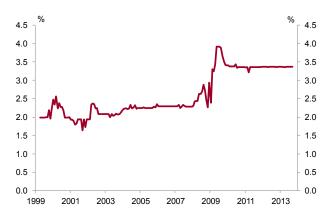
Thinking ahead to the future, it does seem reasonable to presume that the RBNZ's inflation target will drift higher, as it has tended to do over the past twenty years. After all, lifting the inflation target requires the Reserve Bank to run with looser monetary policy for a period that roughly equals one electoral cycle.

By the way, no lasting good would come of relaxing the Reserve Bank's inflation target. In particular, a softer inflation target will not improve our export competitiveness, because any fall in the exchange rate would soon be offset by rising New Zealand dollar costs. And higher inflation will worsen New Zealand's tax distortions via our lack of a comprehensive capital gains tax.

2. Bank funding costs and mortgage margins

The margin between the OCR and mortgage rates widened considerably after the Global Financial Crisis, as overseas lenders demanded larger risk premiums before they would lend to New Zealand banks.

Margin between floating mortgage rate and cash rate



The Reserve Bank's response was to reduce the OCR aggressively in order to ensure that actual mortgage rates fell to a level consistent with stable inflation.

This amounts to a reduction in the neutral OCR. But this is a temporary situation. As we have written in the past, one of two things is going to happen:⁵

- (a) Margins between the OCR and mortgage rates will fall to more normal levels. The RBNZ will have to increase the OCR to prevent mortgage rates falling. In other words, the neutral OCR will rise.
- (b) If wider mortgage margins become permanent, then the New Zealand economy will slowly transition to a new equilibrium that accounts for the fact that foreigners are less willing to lend to us. All else equal, the new equilibrium will involve higher interest rates, more saving, and less borrowing. In other words, the wider margin will eventually manifest as a higher neutral mortgage rate, not a lower neutral OCR. The flow-on effects to the real economy would be a lower capital-to-GDP ratio, a higher return on investment, and a lower long-run standard of living.

Either of these scenarios involves the neutral OCR rising from today's level, although in scenario (a) this would happen faster than in scenario (b).

⁴ The latest Policy Targets Agreement (PTA) specifies an allowable inflation range of 1% to 3%. This is unchanged from the previous PTA. However, in the past the RBNZ's practice was to target the top half of the allowable range. This was precluded by the latest PTA, which specifies that the RBNZ must focus on the 2% mid-point. So in effect, the target was reduced from 2.5% to 2%

⁵ See our bulletin "A matter of interest", http://www.westpac.co.nz/assets/Business/Economic-Updates/2012/Bulletins-2012/Amatterofinterest.pdf

3. Productivity, savings, and population growth

Recent fundamental changes to the New Zealand and global economies do point to a lower neutral OCR:

- The rate of productivity growth appears to have fallen, certainly in New Zealand and possibly around the world.
 Lower productivity growth means a lower return on investment, less desire to invest, and therefore less desire to borrow. And if nothing else changes, less desire to borrow will mean lower average interest rates.
- The global rate of population growth has been falling steadily. Lower population growth may mean a lower rate of return on investment, which works in a similar way to the point above.
- There has been a global shift in preferences toward saving more. All else equal, this implies a lower average interest rate will be required to equilibrate global saving and investment.

We suspect that some, but not all, of the fall in neutral stemming from these factors will prove permanent. Lower global population growth is certainly here to stay. But productivity growth is known to slow during prolonged recessions, so it may accelerate again as the economy recovers, both in New Zealand and in the US. Similarly, some of the global preference to save may be permanent, but another portion is probably a precautionary response to turbulent economic times. If more clement economic winds blow in years to come, global preferences might shift away from higher savings, which would push the neutral OCR higher again.

On balance, these factors seem to suggest that neutral may rise in the next few years. But they also strongly suggest that the neutral OCR will remain lower than it was last decade, even at the peak of the next cycle. We are comfortable assuming that neutral will rise to 5% in the coming cycle, compared with above 6% last cycle.

The bottom line

The upshot here is that the neutral OCR is not static. It can be pushed around by inflation expectations, bank funding costs, productivity growth, and savings preferences, to name a few. The neutral OCR may be around $4\frac{1}{2}$ % today, but the likely trajectory of the economy over the next few years points to it rising to 5%.

Dominick Stephens

Chief Economist

Westpac economics team contact details

Dominick Stephens, Chief Economist +64 9 336 5671

Michael Gordon, Senior Economist +64 9 336 5670

Felix Delbrück, Senior Economist +64 9 336 5668

Anne Boniface, Senior Economist +64 9 336 5669

Any questions email: economics@westpac.co.nz

For email address changes contact: WNZResearch@westpac.co.nz

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