

17 November 2017



NZD vs. Long-Term Fair Value Estimates

- **Over the last 12 months, the NZD has depreciated against most major currencies, including significant falls against EUR, GBP, and CAD. This has closed up some of the long-term currency misalignment as measured by our purchasing power parity estimates.**
- **On a TWI basis, the NZD is currently very close to our long-term PPP estimate, supporting RBNZ Acting Governor Spencer's recent statement that the NZD was "closer to a sustainable level".**
- **Our PPP estimates have no bearing on our 1-2 year ahead projections for the NZD, which are driven more by cyclical factors and short term considerations, but they do play a role in thinking about the longer term outlook. Corporates with a long-term focus, say 3-5 years ahead, should budget for lower NZD/EUR, NZD/GBP, NZD/JPY and NZD/CAD cross rates. Over a long-term horizon, NZD/USD is more likely to be higher than lower, while there is no strong opinion on the current NZD/AUD long-term assessment.**

In a medium-long term context, the NZD is fairly valued, whether measured on a TWI basis or directly by the NZD/USD exchange rate. It is a view supported by our analysis for some time, and it was refreshing for a change to hear that view espoused by Acting Governor Spencer at last week's Monetary Policy Statement press conference.

Spencer noted that the NZD was closer to a sustainable level and in the vicinity of fair value. This view was backed up by the Bank projecting a flat TWI at 73.5, whereas in the past it has frequently projected a depreciating NZD.

By contrast, the previous RBNZ Governor Wheeler persistently talked the NZD down. In 19 of his 20

Monetary Policy Statements delivered over the previous five years, the Statement contained various references to the NZD either being over-valued, unsustainable, and/or some depreciated was deemed to be "needed" or "appropriate". These views were never backed up by any analysis so we can't satisfactorily explain why Governor Wheeler persisted with this view.

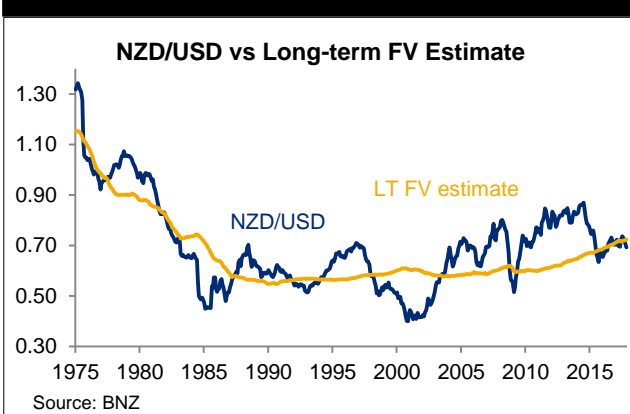
Even back in September 2015, with the TWI at its lowest level since 2012 at around 68 (some 7½% below the current level), Governor Wheeler suggested that further depreciation was appropriate.

Over recent years, some basic analysis on the performance of the economy, balance of payments and anecdotes from the export sector have rarely supported that message. The NZD/USD has spent much of the past few years hovering around our long-term fair value estimate, after spending much of 2003-2014 in over-valued territory.

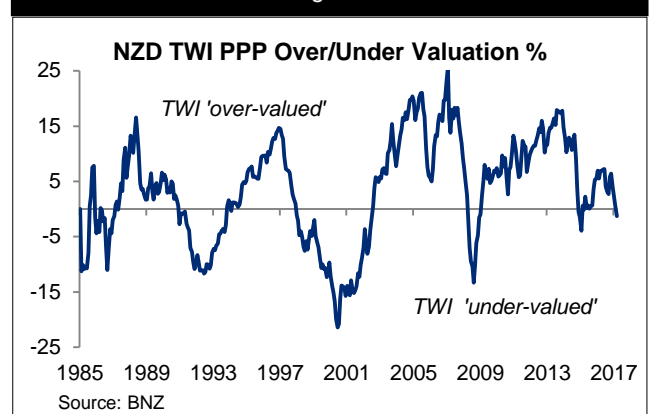
In this report we provide updated long-term fair value estimates for the NZD based on our purchasing power parity (PPP) model. Our PPP estimates are based on CPI ex GST indices and we run a 15-year moving average filter. We think that using a 15-year filter effectively allows for any structural adjustments in the economy over time, and avoids our long-term estimates being "contaminated" by long-term historical data.

On a TWI basis (using the six largest components which make up three-quarters of the index), the NZD is very close to our long-term fair value estimate, within 1%. Since 2003, the NZD on this measure has spent most of the time above, rather than below, long-term fair-value, but the value-gap over recent years has been fairly unremarkable.

NZD Has Tracked LT FV for Several Years Now



NZD TWI in Line With Long-Term Fair Value



The NZD has typically traded above long-term fair value for such a long time owing to the above-normal terms of trade. In this sense the “over-valuation” of the NZD hasn’t caused any great harm overall. It might have been a nuisance for the RBNZ that the NZD hasn’t depreciated substantially over recent years to help drive inflation higher. But it is hard to detect any serious misalignment of the NZD over recent years. NZ’s external accounts show NZ’s current account deficit running lower than average and NZ’s net international investment position has improved considerably over recent years, supported by the low global interest rate environment and strong terms of trade.

The Table below shows our estimated PPP levels on various NZD cross rates. At one extreme, on a long-term fair value basis, the NZD looks over-valued against JPY and GBP, in the order of 18% and 14% respectively, reflecting the very cheap levels of JPY and GBP – the former reflecting the endless money-printing by the BoJ with no end-point in sight and the latter reflecting the uncertain outlook under Brexit.

Compared to a similar report we did a year ago, some of the more extreme over-valuation on NZD cross rates has materially reduced. NZD/GBP currently sits 0.9 standard deviations above long-term fair value and NZD/JPY sits 1.2 standard deviations above fair value. This time last year, the NZD was more than 1 standard deviation above fair value on four separate crosses: EUR (2.0), CAD (1.9), GBP (1.7), and JPY (1.6). The weaker NZD over the past year has seen a move much closer to fair value.

The NZD remains over-valued in a long-term context against EUR and CAD, although moderately so. The NZD is on the cheaper side of fair value against the USD and AUD, although insignificantly so. The largest misalignment on the crosses is a cheap NZD/CNY exchange rate, although the caveat here is that PPP analysis on this cross might be less appropriate against a developing country such as China, which is showing much stronger productivity growth and thereby overstates how expensive CNY looks.

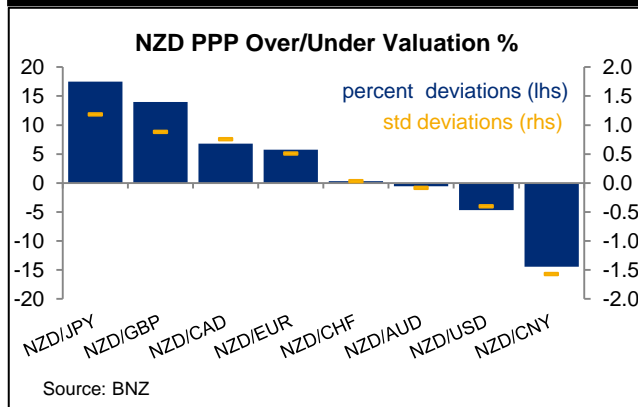
Our PPP estimates have no bearing on our 1-2 year ahead projections for the NZD, which are driven more by cyclical factors and short term considerations, but they do play a role in thinking about the longer term outlook.

Most of the time, there are good reasons why currencies trade well away from long-term fair value estimates.

Corporates with a long-term focus, say 3-5 years ahead, should budget for lower NZD/EUR, NZD/GBP, NZD/JPY and NZD/CAD cross rates. Over a long-term horizon, NZD/USD is more likely to be higher than lower, while there is no strong opinion on the current NZD/AUD long-term assessment.

jason.k.wong@bnz.co.nz

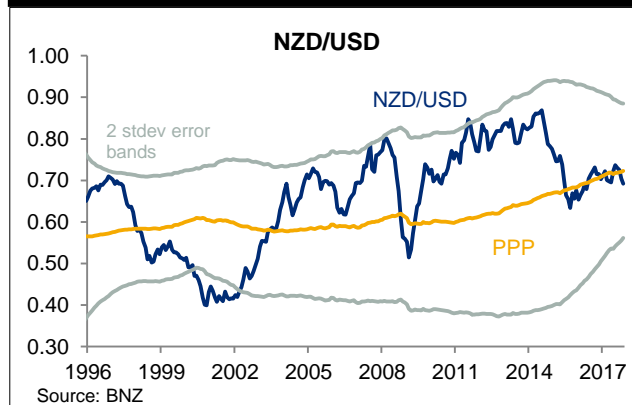
Only a Few PPP Deviations on NZD Crosses



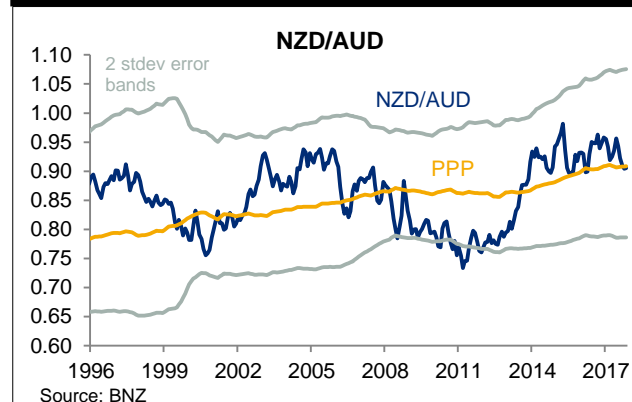
NZD Long-Term Fair Value (PPP) Cross Rates

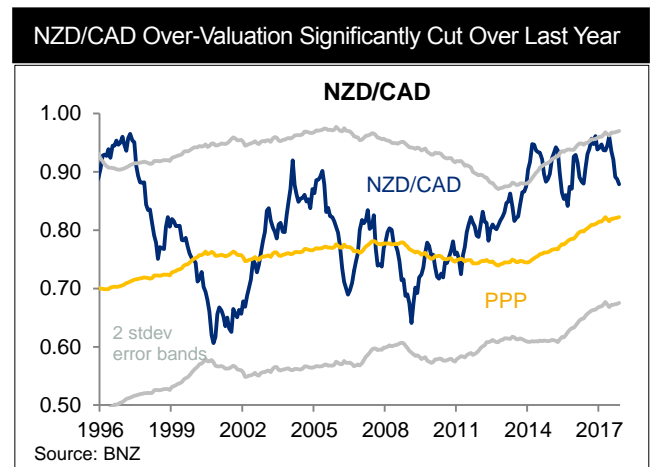
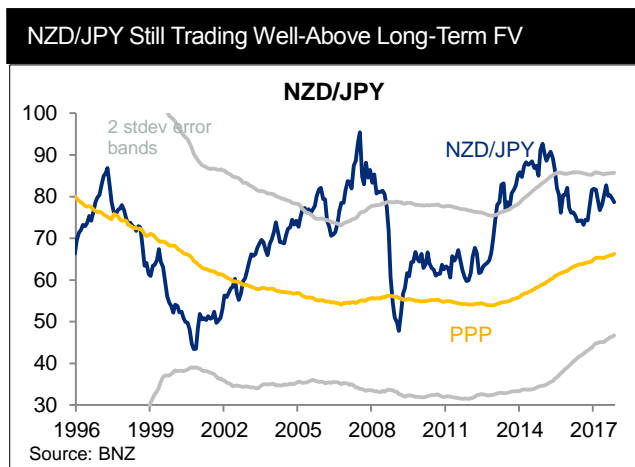
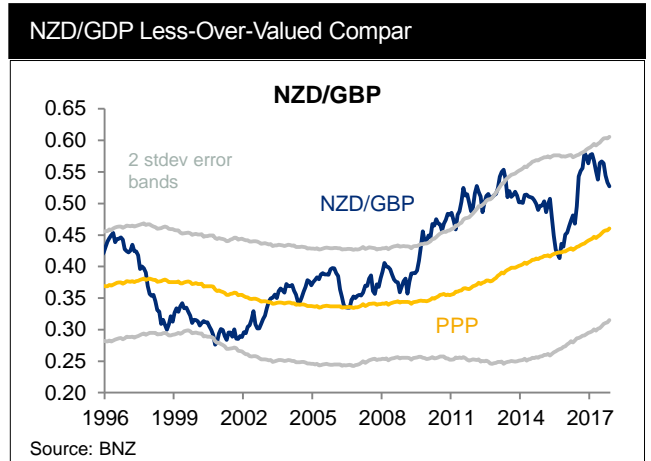
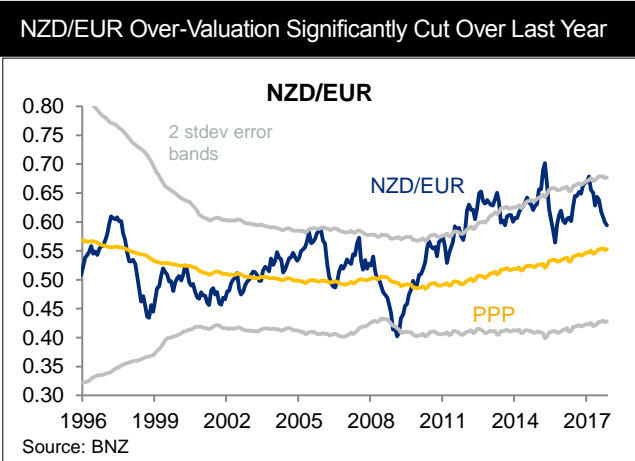
16-Nov	USD	AUD	EUR	GBP	JPY	CNY	CAD
Spot	0.6870	0.9030	0.5830	0.5210	77.60	4.55	0.8770
PPP	0.7200	0.9080	0.5510	0.4570	66.00	5.32	0.8210
% Dev	-4.7	-0.6	5.7	14.0	17.5	-14.4	6.8
st devs.	-0.4	-0.1	0.5	0.9	1.2	-1.6	0.8

NZD/USD Trading Close to Long-Term FV



NZD/AUD Trading Close to Long-Term FV





Contact Details

BNZ Research

Stephen Toplis

Head of Research
+64 4 474 6905

Craig Ebert

Senior Economist
+64 4 474 6799

Doug Steel

Senior Economist
+64 4 474 6923

Jason Wong

Senior Markets Strategist
+64 4 924 7652

Main Offices

Wellington

Level 4, Spark Central
42-52 Willis Street
Private Bag 39806
Wellington Mail Centre
Lower Hutt 5045
New Zealand
Toll Free: 0800 283 269

Auckland

80 Queen Street
Private Bag 92208
Auckland 1142
New Zealand
Toll Free: 0800 283 269

Christchurch

111 Cashel Street
PO Box 1461
Christchurch 8011
New Zealand
Toll Free: 0800 854 854

National Australia Bank

Peter Jolly

Global Head of Research
+61 2 9237 1406

Alan Oster

Group Chief Economist
+61 3 8634 2927

Ray Attrill

Head of FX Strategy
+61 2 9237 1848

Skye Masters

Head of Fixed Income Research
+61 2 9295 1196

Wellington

Foreign Exchange +800 642 222
Fixed Income/Derivatives +800 283 269

Sydney

Foreign Exchange +61 2 9295 1100
Fixed Income/Derivatives +61 2 9295 1166

London

Foreign Exchange +44 20 7796 3091
Fixed Income/Derivatives +44 20 7796 4761

New York

Foreign Exchange +1 212 916 9631
Fixed Income/Derivatives +1 212 916 9677

Hong Kong

Foreign Exchange +85 2 2526 5891
Fixed Income/Derivatives +85 2 2526 5891

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