

# Changes to the real TWI

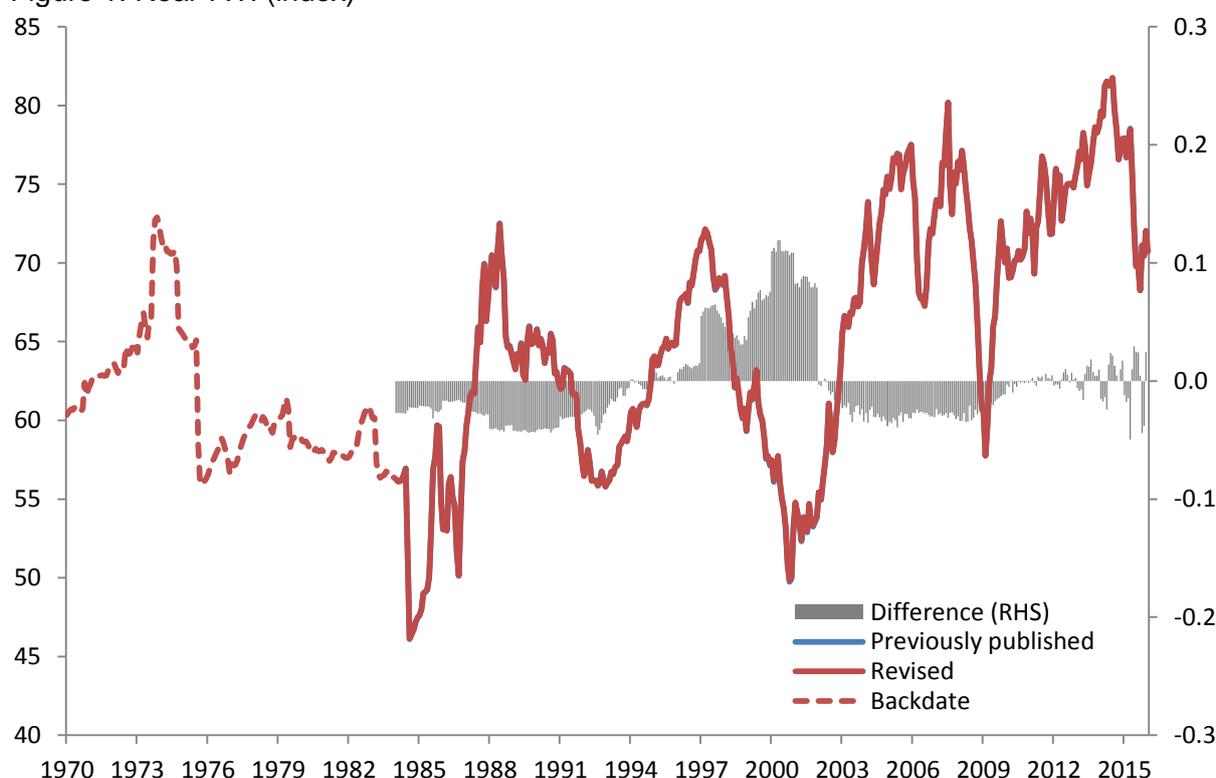
7 March 2016

The Reserve Bank's real trade-weighted index (TWI) is a weighted average of the New Zealand dollar with the currencies of New Zealand's major trading partners, adjusted for relative inflation. It is calculated on a monthly basis and published in the [B1 table](#) and [exchange rate key graph](#).

In 2016 we incorporated three changes to the real TWI:

1. New real TWI weights and scale factor for 2016.
2. Updated real TWI weights and scale factor from 1984 to 2015.
3. Backdated real TWI data to 1970.

Figure 1: Real TWI (index)

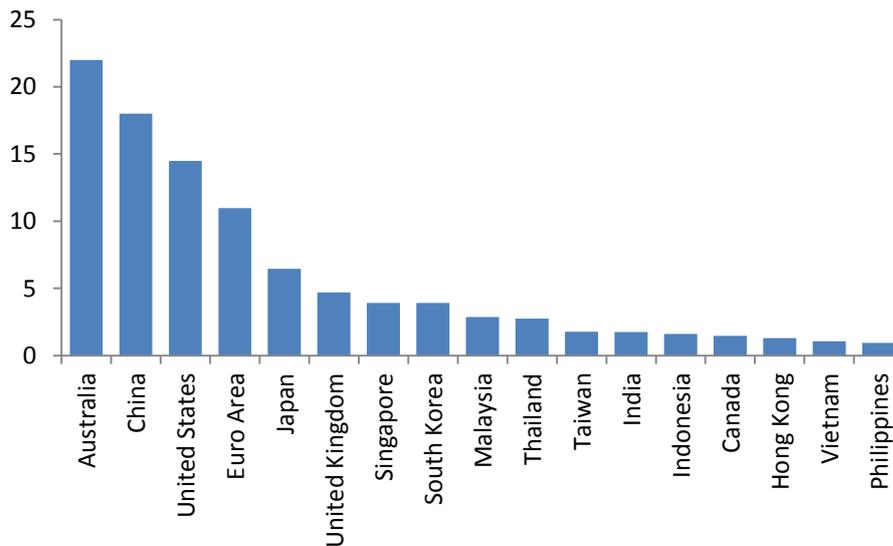


## New real TWI weights for 2016

There are 17 currencies included in the TWI and each currency is weighted using the country's goods and services<sup>1</sup> trade with New Zealand. The weights are updated once a year with the 2016 weights for the real TWI taking effect from January 2016.

<sup>1</sup> Services trade is included from 2009 onwards.

Figure 2: Real TWI weights 2016 (%)



## Updated real TWI weights

The real TWI weights from 1984 to 2015 were updated to incorporate revisions to trade data (published by Statistics New Zealand) and break adjusted euro area trade data.

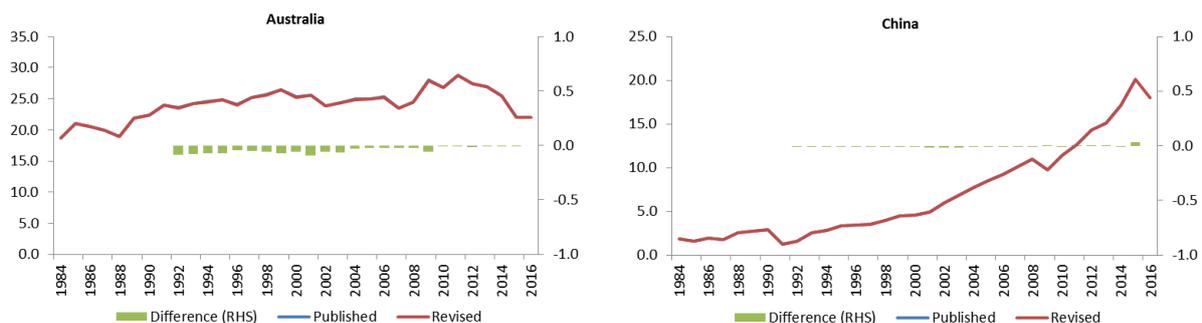
We have a choice of using break adjusted or non-break adjusted data for the euro area in the calculation of the real TWI weights.

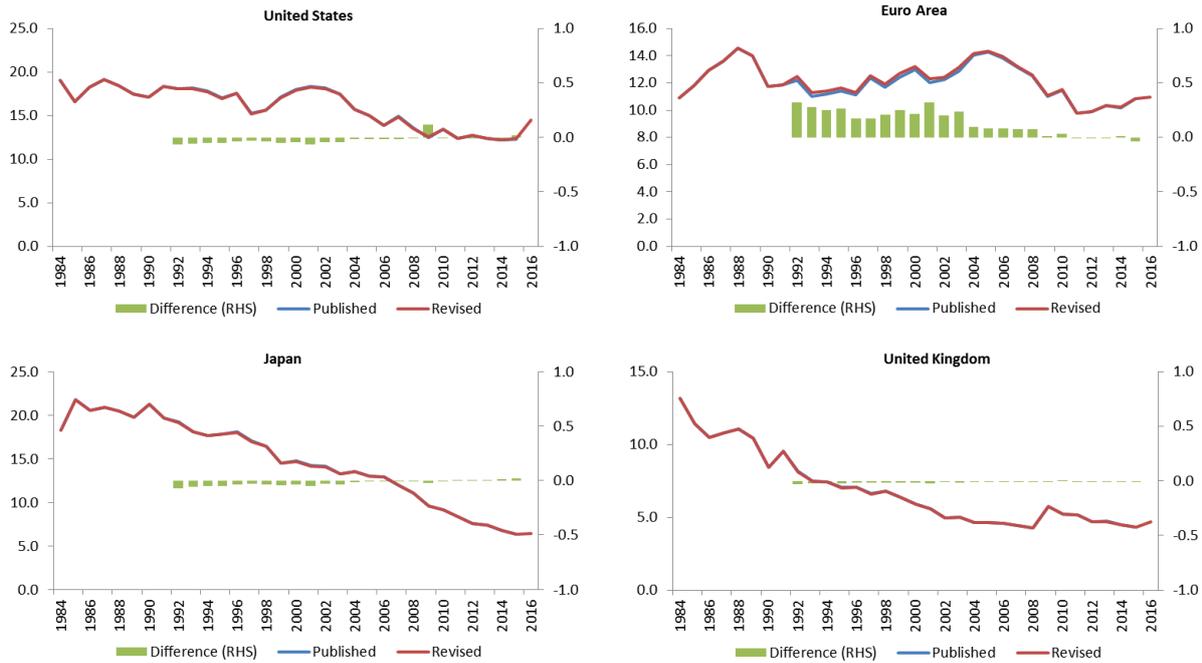
- Break adjusted data reflects the present day membership of the euro area (currently 19 countries). When countries enter (or exit) the euro area historical data is revised to include (or exclude) those countries.
- Non-break adjusted data reflects the membership of the euro area at that point in time. Data prior to 2001 covers the original 11 countries; from 2001 Greece is included, from 2007 Slovenia is included, for example.

Previously the real TWI weight for the euro area was based on non-break adjusted trade data. This year we have used the *official* break adjusted trade data published by Statistics New Zealand as this data has recently become available.

This results in a very slight upward revision to the euro area weight as it accounts for a larger share of trade when all 19 countries in the euro area are included. The increase in the euro area weight is offset by very slight decreases in the weights of other countries.

Figure 3: Real TWI weights for selected countries (%)





The revisions to the real TWI weights from 1984 to 2015 have little impact on the level of the real TWI (figure 1).

## Backdated real TWI

The official (17-country) real TWI is only available from 1984 as this is the earliest that official trade data for all 17 countries are available. The Reserve Bank has created a 5-country analytical real TWI which has been used to extend the official series back to 1970. The long-run real TWI is published as an analytical series in the [exchange rate key graph and data](#).

The backdated series from 1970 to 1983 is based on a basket of five currencies (instead of the 17 that are used in the official series) – the Australian dollar, US dollar, Japanese yen, UK pound and the euro. The weights are solely based on bilateral goods trade data collected from old Statistics New Zealand publications. The exchange rates are based on the rates published on the Reserve Bank website and the CPI series have been sourced from *Haver Analytics*. Synthetic euro exchange rate and euro area CPI have been constructed using the exchange rates and CPIs of the 11 original countries and weighted by the size of each economy.

More detail about the TWI methodology can be found in the Reserve Bank of New Zealand Bulletin article, Steenkamp, D (2014) "[Measuring New Zealand's effective exchange rate](#)".

If you have any questions about these changes, please contact the Statistics Unit at [stats-info@rbnz.govt.nz](mailto:stats-info@rbnz.govt.nz).