

Papua New Guinea's exchange rate trading bands: the first year impact

By Rohan Fox 23 October 2015

It has been more than a year since the Central Bank of PNG (BPNG) introduced a trading band to its exchange rate on 3 June 2014 with the stated purpose being to address excess bank profiteering on exchange transactions. A trading band is usually used to limit volatility by only allowing trade within a specified exchange rate range. However in PNG's case, as the bottom of this allowed range was above the at-the-time current trading rate, it resulted in an immediate 17 per cent increase in the exchange rate. Subsequently the exchange rate began to depreciate, but 12 months on, it was still 6 per cent higher than just before the bands were introduced. Sixteen months on, by the end of September, the exchange rate has just dipped below what it was immediately before the band was introduced.

This post looks at what happened to the exchange rates of other resource exporters in the year after PNG introduced its trading bands and makes a comparison.

Commodity price shocks disproportionately affect countries that are large commodity exporters through reducing demand for those countries' currencies. As shown in Table 1 below, Papua New Guinea is very reliant on exports, and particularly on LNG, gold and oil. As shown, oil and oil-related products have fallen sharply.

Table 1: PNG export revenue values, 2014

| | K million | As % of GDP | %∆ price 2014 – 2015 |
|--------------------------------|-----------|-------------|-------------------------|
| Cocoa | 213.3 | 0.6 | -6.9 |
| Coffee | 450.3 | 1.2 | -14.0 |
| Palm Oil | 1086.4 | 2.9 | -14.7 |
| Other Agricultural Products*** | 430.4 | 1.1 | _* |
| Refined Petroleum Products | 871.5 | 2.3 | _* |
| Logs**** | 815.1 | 2.1 | -9.6 |
| Marine Products | 321.4 | 0.8 | _* |
| Gold | 5453.7 | 14.4 | -2.1 |
| Copper | 1510.7 | 4.0 | -14.0 |
| Nickel | 739.5 | 1.9 | -15.9 |
| Cobalt | 111.9 | 0.3 | _* |
| Crude Oil | 2087.4 | 5.5 | -44.1 |
| LNG | 6323.0 | 16.6 | -24.5 |
| Condensate | 1404.7 | 3.7 | -24.7** |
| TOTAL | 21819.30 | 57.45 | |

Sources and notes: Export list from <u>BPNG export data statistics</u>, 2014 GDP estimated using 2013 GDP from <u>World Bank PNG country profile</u>, 2014 GDP growth rate from <u>ADB PNG country economic profile</u>, prices taken from the <u>World Bank commodity price forecasts</u> [pdf]. *No price data for these commodities/commodity groups; **Condensate prices from Ycharts using average prices for 2014 and 2015; ***'Other agricultural products' includes tea, copra, copra oil and 'other'; ****'Logs' includes logs and 'other forest products'.

The movement in PNG's exchange rate over the last year makes it unique amongst similar economies. Table 2 shows the movement of PNG's exchange rate against the US dollar over the last year, in relation to the movement of the top 15 resource-dependent countries in the world with floating exchange rates. According to the most recent set of World Bank data, natural resource rents made up 32 per cent of PNG's GDP, making it the second most reliant on resource rents in the world.

As can be seen, all of these countries' exchange rates fell, except for PNG, whose exchange rate appreciated. For other countries, this reflects the increasing strength of the US dollar in general but also the commodity price fall. For PNG, it shows the influence of the trading

bands. It is true that the PNG kina declined in value prior to June 2014 (in particular because of the end of the construction phase of the LNG project) but this should be seen as a natural process interrupted by the June 2014 appreciation. It might also be thought that the strengthening of the currency this year in PNG is due to the commencement of the LNG project, but with low gas prices this has not in fact significantly helped boost the supply of foreign currency. Also note the large depreciations experienced by oil exporters since June 2014.

Table 2: 15 most resource-dependent economies with floating exchange rates, and PNG

| | %Δ exchange rate 1 June 2014 – 1 June 2015 | Natural resource rents as % of GDP | Largest export categories as % of GDP |
|-----------------|--|---------------------------------------|---------------------------------------|
| Brazil | -29.32 | 6.5 | Iron ore, oil |
| Madagascar | -26.39 | 9.8 | Textiles, cloves |
| Ghana | -26.36 | 17.8 | Gold, oil |
| Norway | -23.07 | 10.9 | Oil, LPG |
| Australia | -17.82 | 7.2, | Iron ore, coal |
| Uganda | -17.37 | 13 | Coffee, oil |
| Mexico | -16.40 | 7.7 | Automobiles, electronics |
| Mozambique | -15.04 | 14 | Aluminium, oil |
| Peru | -13.00 | 9.7 | Gold, copper |
| South Africa | -12.98 | 6.8 | Gold, coal |
| Indonesia | -11.77 | 6.6 | Coal, LPG, oil |
| Chile | -10.97 | 16 | Copper, sulphates |
| Solomon Islands | -6.56 | 33.3 | Timber, gold |
| Mongolia | -5.25 | 28 | Coal, copper |
| Zambia | -5.01 | 19.4 | Copper, corn |
| PNG | 5.99 | 31.8 | LNG, gold* |

Sources and notes: Resource dependency is measured by the ratio of natural resource rents to GDP, as measured by the <u>World Bank Databank</u>. Exchange rates from <u>OANDA</u> datasets using average rates for the months of May 2014 & 2015. Export categories from <u>The Observatory of Economic Complexity</u> datasets, 2012. *PNG export category taken from <u>BPNG</u> export data statistics, 2014.

In summary, for the year after the introduction of trading bands in June 2014, at a time when PNG should have allowed its currency to depreciate to cushion the external price shock, instead the kina was actually allowed to gain in value, ending the period stronger

than it began. Although the exchange rate has now fallen to just below its June 2014 level, a year has been lost. To avoid standing out among commodity exporters, a lot more depreciation will be needed.

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About the author/s

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