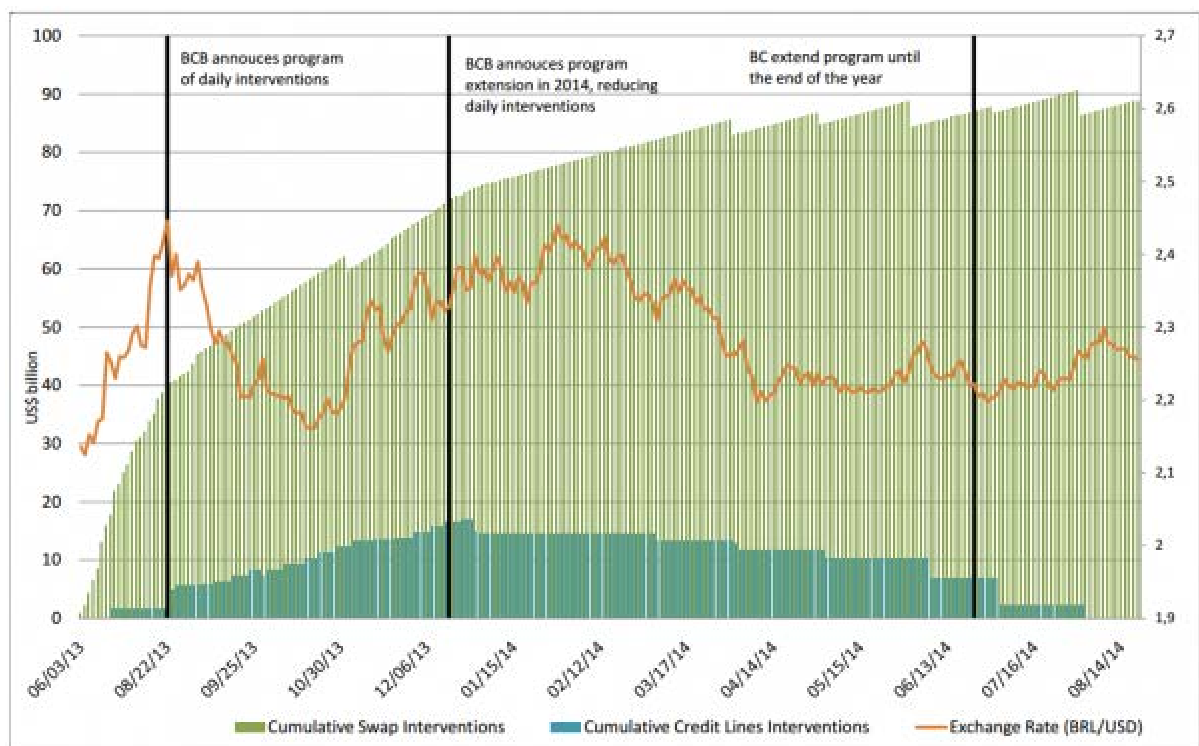
The limits of Brazil's FX intervention programme

By Márcio Garcia of PUC-Rio

Last year's taper tantrum caused massive turbulence in global markets. Risky assets suffered greatly and many emerging markets currencies depreciated heavily, including the Brazilian real.

In response, the Brazilian central bank (BCB) decided to intervene in the foreign exchange markets. After an ad hoc beginning, from August 2013 the BCB announced a programme of sales of $2bn of exchange rate swaps every week, plus a weekly auction of $1bn in short term dollar credit lines to the banks.



Source: AC Pastore, central bank

The chart shows that the announcement of intervention was accompanied by a strong appreciation of the exchange rate (that is, a sharp fall in the rate of R$ per US$). In December, the BCB extended its programme to 2014, with a substantial reduction in the weekly sales of swaps to $1bn.

Yet this second announcement, as the chart shows, seems not to have had the same effect as the first one. In mid-2014, the BCB again announced a further extension of the program until the end of the year.

Despite the enormous volume of the BCB's interventions – nearly $90bn – research I have been doing with Laura Pitta and Marcos Chamon shows that the Brazilian real's behaviour was not significantly different from that of other emerging market currencies. This contradicts the prevailing market view that, had the BCB not intervened, the exchange rate would have depreciated significantly.

How can it be possible that the BCB's intervention was responsible for the real's appreciation and, at the same time, similar behaviour was observed in the currencies of other emerging countries, where authorities either did not intervene or did so to a much lesser degree?

One hypothesis is that the massive depreciation suffered by the real in the wake of the tapering announcement (at the left of our chart) significantly increased the demand for exchange rate hedges. Due to Brazil's very high interest rates, such hedges are very expensive, so financial officers at many corporations may previously have bought too little insurance and found themselves exposed by the taper tantrum.

The subsequent depreciation, however, would have led them to reassess the benefits of hedging, driving higher demand. Had the BCB not offered the exchange rate hedge, the real would have depreciated far more than other emerging currencies.

What are the prospects for the BCB's FX intervention programme? As outlined in my guest post with Tony Volpon of Nomura, the success of the BCB's swaps programme depends on the banks buying swaps from the BCB and providing spot dollars into the market, which they borrow using short-term unsecured credit lines abroad.

Since the beginning of its programme, the BCB has not sold dollars from its reserves and the current balance of credit lines auctioned by the BCB is now just $200m (see chart). Therefore, the net demand for spot dollars has been met by the banks. The register of exchange rate contracts, which records all purchases and sales of spot foreign exchange, shows that since the end of August 2013, foreign exchange purchases have exceeded sales by a little less than $20bn.

These almost $20bn have been provided by the banks, borrowing overseas through short-run credit lines, in order to earn the difference between the *cupom cambial*(the Brazilian onshore dollar rate) and the US interest rate. This arbitrage, however, has its limits, including the extent to which foreign banks are willing to provide unsecured credit to Brazilian counterparties. Historically, the total for all banks of short-term unsecured credit lines tends not to exceed $20bn, a number not far from today's level.

So, if foreign exchange inflows to Brazil (commercial and financial) turn persistently negative in the near future, banks will refrain from arbitraging the swaps and the spot dollar as they have been doing since the BCB's programme began. The consequences would be a combination of exchange rate depreciation and a rise in the *cupom cambial*, indicating a shortage of spot dollars. To avoid such an outcome, besides its sales of

swaps, the BCB would have to sell or lend its international reserves to irrigate the spot market.

What are the prospects for BCB intervention in 2015? The consensus view today is that, until Brazil's general elections in October, the BCB will not let the exchange rate undergo large fluctuations, to ensure that depreciation – which would be of great benefit in helping to reduce the current account deficit – will not worsen the outlook for inflation. (Market consensus is that the current account deficit will exceed $80bn this year, or 3.7 per cent of GDP – a high figure, especially when one takes into account the very low investment rate in the Brazilian economy.)

What will happen in 2015 depends, of course, on the internal and external scenarios. I have developed four scenarios based on alternative outcomes, shown in the table below.

Four scenarios and their impact on the exchange rate

	Taper Tantrum II	Weak US Recovery
Incumbent re-election	I. Capital flight and significant depreciation pressure	II. Brazilian economy remains stagnated; mild depreciation
Opposition victory	III. More intense domestic adjustment eases depreciation pressure	IV. Major capital inflows and appreciation pressure

Domestically, the most important event will be the presidential election. I work with two alternatives: victory of Dilma Rousseff, the incumbent, or of opposition candidates Aécio Neves or Marina Silva.

On the external front, the most important event will be the rise of interest rates in the US. My Taper Tantrum II scenario assumes that similar effects to those of the original taper tantrum, from May 2013, will follow when the Fed finally announces that it will begin to raise the Fed Funds rate and that this communication will occur soon, no later than early 2015.

The Weak US Recovery scenario assumes, instead, that the FED, in order to maintain its economic stimulus, postpones such an announcement until later in 2015.

The current stock of roughly $90bn in currency swaps held by the market accounts for about 25 per cent of foreign exchange reserves. Assuming that the BCB wants to gradually move out of this position, the most favourable scenario would be scenario IV, which combines opposition victory with continued monetary stimulus in the US and the search for yield. The capital inflows and the consequent pressure for exchange rate appreciation would give the BCB ample opportunity to redeem its currency swaps.

Scenario III, in which an opposition victory is combined with the possibility of capital flight prompted by the end of the Fed's monetary easing, would force Brazil to adopt

tighter fiscal and monetary policies to contain exchange rate depreciation. In this scenario, the redemption of the currency swaps would be delayed.

The consequences of scenarios I and II would depend on the degree of change in economic policy to be introduced during a second Rousseff administration. A continuation of the current failed economic policies would keep the economy stagnated, mitigating the balance of payments deterioration. In either scenario it is hard to imagine that the FX intervention policy would be drastically reduced. Therefore, in both scenarios I and II, the swaps programme would be maintained to avoid the inflationary impact of exchange rate depreciation.

In scenario II, the programme could continue for longer. But in scenario I, with intense capital flight, any attempt to control the exchange rate through currency swaps would face two problems. The first is a consequence of the persistent outflows of foreign exchange caused by capital flight. As previously explained, the banks' capacity to obtain offshore credit lines to supply dollars in the spot markets is limited ($20b being the historical maximum). This means that a continuation of the BCB's programme in scenario I would probably have to be complemented soon by sales from foreign reserves and/or by an offer of credit lines by the BCB to Brazilian banks.

Even doing this, if the BCB continued to intervene heavily amid capital flight, it would face again another limit, this one more severe. If the volume of currency swaps rises so that it becomes a substantial share of total foreign exchange reserves, uncertainty could arise over the currency swaps themselves. Although Brazil's situation is much less vulnerable than it was in 2002, it should be remembered that at the height of the crisis that preceded the first Workers' Party (PT) administration, the onshore futures US dollar contract exhibited a large discount (25 per cent) when compared with the corresponding Brazilian real non-deliverable forwards in the US. This large discount was the result of the market's fear that the BCB, faced with a large depreciation, might impose quotas in the foreign exchange market. An attempt to prevent a large currency devaluation in a context of capital flight might cause similar problems to those faced by Brazil during the period of controlled exchange rates at the end of the last century.

In short, the stock of currency swaps involves challenges, even if the BCB decides to rein in its activism in FX markets. An unfavourable external environment would hinder a phaseout of the programme. The worst mistake, however, would be intensify the programme in a bid to sidestep the required adjustment of the exchange rate to prevent an increase in inflation.

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