Foreign exchange intervention in Venezuela

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Introduction¹

In the last eight years, different exchange rate regimes have been applied in Venezuela: crawling band (1996-2001), free floating (2002) and, since January 2003, capital controls with a fixed exchange rate. After the disruption of oil activity in December 2002, capital controls were implemented to prevent the depletion of international reserves. Under the current system, an administrative office (*Comisión de Administración de Divisas*: CADIVI) is in charge of regulating and managing the use of foreign currency. The Central Bank of Venezuela (BCV) fixes a monthly allocation of foreign currency to be administered by CADIVI, purchases foreign currency from residents, and sells foreign currency to the public and private sectors subject to approval from CADIVI. Thus, there is not much scope for central bank interventions in the foreign exchange market in Venezuela with the current regime. However, we might refer to the intervention mechanisms that were applied during the currency band and the floating regimes that preceded capital controls. In this context, this note is organised as follows: Section 1 mentions the rationale of central bank intervention in the forex market; Section 2 refers briefly to the experience during the currency band system; Section 3 focuses on the intervention during the float, and Section 4 presents some concluding remarks.

1. The rationale of central bank intervention in the forex market

Venezuelan law establishes that PDVSA, the state oil enterprise, must sell its oil export revenues to the central bank. These revenues constitute the main source of foreign currency in Venezuela. On the other hand, the private sector is characterised by demanding more foreign currency for imports than those generated by its export activities. These two particular facts make the BCV the main supplier of foreign currency in Venezuela and justify its regular participation in the market to satisfy the private sector's currency requirements, regardless of the exchange rate arrangement. We call this form of intervention *foreign currency provisions*.

In addition, during the last two exchange rate regimes - the band system (July 1996 - February 2002) and the dirty float regime (February 2002 - January 2003) - the BCV intervened to reduce the volatility of the nominal exchange rate. We call this kind of intervention simply *intervention*.

For monetary analysis, keep in mind that when the BCV buys foreign currency the counterpart in domestic currency is deposited in the accounts that PDVSA and the government maintain with the BCV. When the government and PDVSA withdraw bolivars from their accounts the money base increases. Then, the BCV might take into account the regular sales of foreign currencies as an additional element that reduces any excess of money base.

2. Interventions during the band system

The exchange rate band regime was implemented as part of a set of new economic policies aimed at reestablishing macroeconomic stability. In particular, the exchange rate policy had the objective of reducing inflation expectations while providing some flexibility to the exchange market. The collapse of the currency band regime was preceded by an important increase in exchange market pressure, which

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triggered significant capital outflows as the BCV tried to defend the exchange rate. As a result, international reserves experienced a significant reduction.

During the crawling band system, the BCV did not establish an explicit mechanism to separate interventions from *currency provisions* in the foreign exchange market. This policy was criticised since economic agents did not understand why the BCV intervened when the exchange rate was far from the boundaries of the bands. For most agents, given the behaviour of the exchange rate (see Figure 1), the BCV seemed to be targeting the path of the exchange rate, instead of allowing free movements of the exchange rate within the band.²

In addition to the sales and purchases of foreign currency, the BCV intervenes in the market by establishing rules on foreign transactions. For example, the BCV set limits to financial institutions' foreign currency positions, in order to diminish their exposure to the exchange rate risk. The BCV also established a foreign currency intermediation index to ensure that a minimum of sales of foreign currency by the BCV to commercial banks went to final non-financial clients.³

Bs/US\$ 850 800 750 700 650 600 550 500 450 400 96/20/60 25/10/99 11/01/02 5/11/96 07/05/98 2/09/98 28/01/99 2/06/99 08/03/00 01/12/00 02/04/97 3/08/97 9/12/97 8/04/01 03/09/01 Central parity Upper limit

Figure 1

Exchange rate crawling band, 1996-2002

Source: BCV.

3. Intervention during the floating exchange rate system

A floating exchange regime was adopted to re-establish the external equilibrium, increase competitiveness and make more efficient monetary policy in terms of controlling inflation. Nevertheless, the float collapsed when oil exports virtually ceased in December 2002, which caused, in the middle of political turmoil, a speculative attack that led to a sharp depreciation of the bolivar.

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² For more details on exchange rate bands in Venezuela see, for instance, Guerra and Pineda (2000) and Nóbrega (2002).

For more information about these instruments see Belisario et al (2000).

During the float, the BCV designed a more transparent participation mechanism, which distinguished *currency provisions* from *interventions* to control the volatility of the exchange rate. In addition, the BCV maintained the restrictions on foreign transactions established in the previous regime: the limits to the foreign currency positions of financial institutions and the creation of a foreign currency intermediation index.

US\$ 900 Average sales prefloating system (03/12/01 - 15/02/02) = 524.97Average period of floating exchange rate = 283.60 800 700 600 500 400 300 200 100 0 to 22/02 to 15/03 to 17/05 to 07/06 to 28/06 to 09/08 to 30/08 to 11/10 to 13/12 to 01/02 to 05/04 to 20/09 to 01/11 to 26/04 to 19/07 to 22/11 to 03/01 to 11/01 40 28 30

Figure 2
Weekly clear sales of foreign currency by the BCV, 2002-2003

Source: BCV.

Under the floating exchange rate regime, currency sales by the BCV were significantly lower than those observed at the end of the band system (see Figure 2). By the end of 2002, net international reserves held by the central cank were US\$ 11,974 million, a higher amount than that at the beginning of the floating system (US\$ 11,192 million by the end of January 2002) (see Figure 3).

Beginning of exchange administration regime

20,000

Beginning of the floating exchange rate system

15,000

FIEM

BCV

Figure 3

Total international reserves (BCV+FIEM), 2002-2003

Source: BCV.

Note: FIEM indicates Macroeconomic Stabilization Fund.

May 02

Mar 02

3.1 Foreign currency provisions

Foreign *currency provisions* consisted of allocating a daily amount of foreign currency previously established by the BCV. This amount was sold to the economic agents through authorised institutions (commercial banks and currency exchange houses) using three daily auctions. Each authorised institution could make up to five bids, including the price and amount to be purchased. The most competitive bids would win the auction. No operator could get more than 15% of the total. The market determined the exchange rate in each auction, and the BCV published the resulting maximum, minimum and average values.

Jul 02

Sep 02

Nov 02

Jan 03

Mar 03

The amount to be auctioned was subject to periodic revision by the BCV, taking into account the forecasts of the net cash flows of foreign currency and the seasonal nature of imports.

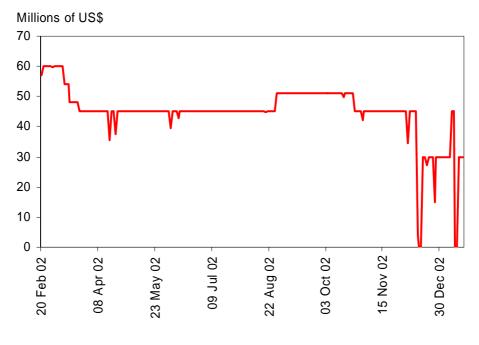
At the beginning of the float, the BCV decided to auction US\$ 60 million daily; to cover the estimated value of daily commercial transactions abroad. From 6 to 18 March 2002, a reduction was implemented to US\$ 45 million. At the end of August, the participation was increased to US\$ 51 million to meet higher demand for foreign currency to cover transactions associated with the seasonal increase of imports during the fourth quarter. On 22 October, the amount was cut back to US\$ 45 million.

Until the beginning of December 2002 the auctions worked quite well. The disruption of the oil and financial activities introduced instability to the auction system, affecting the amount and the number of daily auctions. By January 2003, it was impossible to regular auctions and an end to the auctions was announced on 16 January.

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Figure 4

Daily sales of foreign currencies through auctions during the floating exchange rate system



Source: BCV

3.2 Interventions to control for excess volatility

Under the float, the BCV had the power to intervene in the foreign exchange market to moderate excess volatility of the exchange rate. Policymakers were concerned with negative effects of exchange rate volatility on investment and international trade. Likewise, they argued that excess exchange rate volatility increased the pass-through. For the Venezuelan economy, Mendoza Lugo (2004) finds that in moments of high depreciation, a negative shock in the exchange rate has a significant pass-through. Specifically, negative shocks on the nominal depreciation rate of 1.8 and 5.3 percentage points produce pass-through of 30.6% and 49.3%, respectively, in a year. These results can be interpreted as evidence that intervention in the foreign exchange market might have significant effects in terms of reducing inflation when the depreciation rate experiences an important increase.

As opposed to the case of *foreign currency provisions*, interventions controlling exchange rate volatility were unannounced. Transactions related to this type of intervention were made through the BCV trading desk. The mechanism, including the parameters of a "normal exchange rate variation zone", was approved by the board of directors.

This intervention rule differs from that used during the crawling band in two ways: (1) the central parity was determined by the evolution of the exchange rate (moving average) instead of being defined exogenously, taking into account an inflation objective; (2) the parameters of the variation zone were not announced, as opposed to those of the exchange rate band.

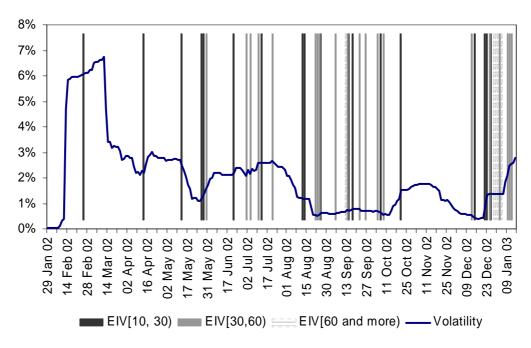
By the end of the floating period, intervention behaved very close to a full discretionary instrument. Once economic agents realised that the disruption in oil activity initiated in December 2002 could have medium and long-run consequences for the economy, exchange market pressures increased substantially and the BCV decided to have a permanent presence in the exchange market.

⁴ As proposed by Bonser-Neal (1996).

3.3 Effectiveness and implications of forex interventions

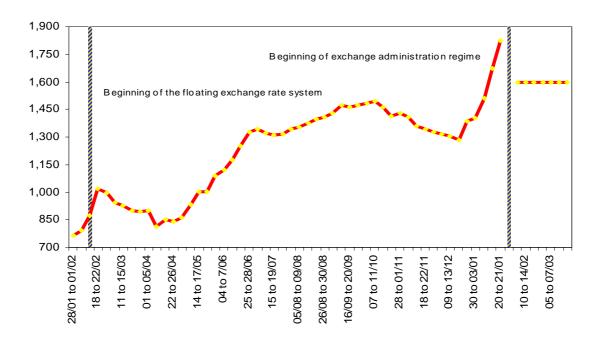
The interventions aimed at controlling excess volatility initially had some success. The effectiveness of the interventions, however, decreased as interventions became more frequent. By December 2003, interventions were practically ineffective; that is, exchange rate volatility increased in spite of the frequent interventions in the forex market (see Figures 5 and 6).

Figure 5 Interdaily volatility of the exchange rate, 2002-2003



Source: BCV

Figure 6
Weekly average nominal exchange rate, 2002-2003



Source: BCV

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In a study of interventions in the foreign exchange market in Venezuela during the floating period, Pedauga (2003) identified moments in which the BCV was presumed to have intervened in the market to control for excess volatility. Most of these moments coincided or led by, one or two days, the date when the BCV intervened. However, this study identified fewer than the 50% of the days where the bank sold foreign currencies through the trading desk to moderate exchange rate volatility. On the other hand, some international comparisons suggest that during the float exchange rate volatility in Venezuela was higher than that of its main trading partners, with the exception of Brazil (see Table 1). This could provide evidence that the central bank probably was not very effective in moderating excess volatility in Venezuela. However, further studies need to be done in order to reach a final conclusion about the effectiveness of the foreign exchange interventions.

Table 1

Daily volatility of the exchange rate for Venezuela and its main trading partners, 2002

Currency	Average %	Maximum %	Minimum %	
Bolivar	2.66	6.59	0.38	
Real	2.81	4.68	0.46	
Colombian peso	1.15	2.46	0.16	
Yen	0.97	1.85	0.35	
Chilean peso	0.93	1.52	0.27	
Euro	0.87	1.45	0.36	
Mexican peso	0.76	1.44	0.21	
Pound sterling	0.63	1.31	0.19	
Canadian dollar	0.63	1.06	0.21	

Notes: All exchange rates are expressed in terms of US\$. The daily volatility is the standard deviation of the change in exchange rate, based on the average exchange rate reported by Reuters, using a historical window of 20 days for the period 18 February 2002 - 21 January 2003.

Interventions to control for excess volatility could only succeed in the short run when dealing with transitory disturbances (see Table 2). It was a hard task, however, to distinguish transitory from permanent disturbances during the float. If the nature of the disturbance is not identified and the magnitude of its impact on the economy is not taken into account, international reserves may be depleted when the exchange rate experiences a sharp increase.

One of the implications of systematic interventions in the exchange market is that the floating system tends to a regime with a fixed exchange rate and, as consequence, monetary policy becomes endogenous and its advantages for controlling inflation are lost. Moreover, if interventions are not sterilised, part of their potential effectiveness is due to the influence on monetary conditions and not exclusively to the interventions *per se*.

Table 2

Intervention and volatility of the exchange rate, March - December 2002

	Avera	Average previous days		Avera	Average following days		
EIV[10, 30)	15	10	5	5	10	15	
1	2.7%	2.7%	2.7%	2.2% *	1.7% *	1.6% *	
2	1.3%	1.0%	0.8%	0.6% *	0.6% *	0.6% *	
3	0.6%	0.6%	0.6%	0.8%	0.7%	0.7%	
4	0.7%	0.7%	0.7%	1.4%	1.5%	1.6%	
5	2.1%	1.9%	1.3%	1.3%	1.7% *	1.8% *	
6	2.0%	1.7%	1.2%	1.5%	1.8%	1.9% *	
7	1.8%	2.1%	2.1%	2.2%	2.2%	2.3%	
8	2.1%	1.9%	1.5%	1.1% *	0.8% *	0.7% *	
9	2.1%	2.0%	1.7%	1.2% *	0.9%	0.8% *	
10	2.2%	2.2%	2.2%	2.5%	2.5%	2.4%	
11	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%	
12	0.7%	0.7%	0.7%	0.6% *	0.7%	0.9%	
13	1.5%	1.2%	1.1%	0.6% *	0.6% *	0.6% *	
EIV[30,60)	15	10	5	5	10	15	
1	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%	
2	0.7%	0.7%	0.7%	0.6% *	0.7%	1.0%	
3	0.7%	0.7%	0.7%	0.6% *	0.6% *	0.8%	
4	2.1%	2.2%	2.2%	2.2% *	2.3%	2.4%	
5	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%	
6	1.9%	1.5%	1.1%	1.7%	1.9%	2.0%	
7	0.7%	0.7%	0.8%	0.7% *	0.7%	0.6% *	
8	2.3%	2.4%	2.5%	2.5% *	2.4%	2.1% *	
9	2.2%	2.2%	2.2%	2.5%	2.5%	2.5%	
10	1.6%	1.3%	1.2%	0.5% *	0.6%	0.6% *	
11	0.8%	0.6%	0.6%	0.6% *	0.6%	0.7% *	
12	0.5%	0.5%	0.4%	1.3%	1.4%	1.7%	
13	1.4%	1.1%	1.0%	0.6% *	0.6%	0.6% *	
EIV[60 and							
more)	15	10	5	5	10	15	
1	2.2%	2.2%	2.3%	2.2% *	2.4%	2.4%	
2	0.6%	0.6%	0.7%	1.3%	1.6%	1.9%	
3	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%	

Notes: "*" indicates smaller volatility after intervention (the comparison is made with historical windows of the same size before intervention). "EIV" indicates intervention to control for exchange rate volatility, whereas the amount (millions of US\$) between brackets refers to the range of sales of foreign currency through the trading desk.

4. Concluding remarks

In Venezuela, interventions to control volatility appeared to have had some success in the very short run. In addition, it was noticed that the more frequently the BCV intervened in the foreign exchange market, the smaller the effectiveness in moderating the volatility of the exchange rate. Finally, experience points out that the effectiveness of intervention is jeopardised in the absence of a sound macroeconomic environment. A formal study on this aspect should be undertaken.

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