

Box 5

Considerations for *Banco de la República's* Intervention in the Foreign Currency Market

Since the end of 2021, the growth of inflationary pressure brought about by a combination of supply and demand factors has generated a scenario of tightening international financial conditions in an environment of normalization of monetary policy interest rates and a new cycle of dollar appreciation. In this context, emerging economies have seen devaluation pressure on their currencies.¹

Colombia has not been immune to this scenario. It has also been exposed to important events, such as the loss of the foreign currency investment grade by two rating agencies² and high uncertainty associated with the outcome of the last presidential elections and the future of economic policy in addition to its possible repercussions from the fiscal point of view. Furthermore, foreign imbalances, reflected in a high current account deficit³ have raised agents' concerns about the country's foreign financing needs in an adverse global environment.

This box reviews the main elements of the exchange rate policy, which, since September 1999, has been following a free-floating system where supply and demand determine the COP value relative to the USD. This system that is consistent with the inflation-targeting regime. First, a review of the advantages of the floating regime is presented along with a compilation of the criteria used by the Bank regarding exchange rate intervention and its associated costs. Subsequently, an analysis of these criteria in the current situation is done.

1. Advantages of the Free-Floating Regime

Exchange rate flexibility is desirable in countries that frequently face real shocks. For example, sharp declines in the terms of trade⁴ are usually accompanied by nominal depreciations that help soften the impact of shocks. Thus, exchange rate movements tend to accommodate relative prices in the economy and moderate the impact of shocks on activity and employment.

Moreover, the authorities of a small open economy with a flexible exchange rate such as Colombia have greater autonomy in their monetary policy, and this makes it easier for them to reach their own inflation targets and react to their own economic cycles. Thus, in the case of foreign shocks, the exchange rate makes a large part of the adjustment so that the domestic market interest rate tends to be more stable than the one in an economy with a fixed exchange rate system. When there is a fixed exchange rate against the currency of a developed country, monetary policy is subject to the decisions of the foreign monetary authority.⁵ Thus, if the economic cycles are not synchronized, the monetary policy actions of the developed country could have adverse effects on output and employment in the emerging country.

A flexible exchange rate regime also discourages the emergence of exchange rate mismatches such as those arising from the growth of liabilities in another currency without any type of hedging, and this poses a risk to a country's financial stability. In a flexible regime, where exchange rate volatility exists and is allowed, agents are induced to internalize and limit exposure to exchange rate risk and thus encourage the development of a hedging mar-

1 LACI: Latin American currency index, -5.9%; MSCI: general emerging currencies index, 4.2%; and DXY: developed countries currency index, 13.4%.

2 On May 20, 2021, S&P downgraded Colombia's rating from BBB- to BB+, and Fitch made the same decision on 01 July of the same year.

3 The current account deficit went from 4.0% in 2021 to about 6.2% at the end of 2022.

4 Relationship between export and import prices.

5 The impossible trinity (trilemma) states that an economy cannot simultaneously have a fixed exchange rate, free capital mobility, and an independent monetary policy.

ket. The depth of the latter would contribute to the supply of products at competitive prices. Note that in Colombia, in addition to the hedging mechanisms offered by the market, there is a strong regulation that prevents foreign exchange risk concentration in systemic agents, such as financial intermediaries.⁶

Finally, the exchange rate reflects the changes in macroeconomic and financial factors that are relevant to private sector and government decision-making. In this sense, the exchange rate provides a timely signal of the state of the economy and generates incentives for the real and financial adjustment of this rate to external shocks.

2. Objectives of Foreign Exchange Intervention

As the exchange authority, *Banco de la República* can intervene in the foreign exchange market. Since the beginning of the exchange flexibility regime, the main reasons for such interventions have been the following:

- To accumulate foreign reserves to maintain a level that guarantees payments in foreign currency and allows the country to settle them when faced with extreme situations abroad (e.g., sudden and significant stops in net capital flows). An acceptable level of reserves contributes to maintaining the country's access to financing from abroad.
- To correct exchange rate misalignments that could affect the achievement of inflation targets and the smoothing of economic fluctuations.
- To prevent or address temporary failures in the spot foreign exchange or derivatives market that may affect financial stability or the proper functioning of the markets (short-term liquidity needs due to the closing off of access to foreign credit lines, low supply of a financial hedging market [financial derivatives], etc.).

In line with these objectives, the Bank's intervention in the foreign exchange market is not intended to fix or reach any specific exchange rate level. Moreover, the empirical evidence in this regard is mixed.⁷ Research suggests that *Banco de la República's* active role in the foreign exchange market if it has any significant effect, tends to be small and short-lived.

3. Costs of Foreign Exchange Intervention

Intervention decisions should also be evaluated in light of their associated costs. The costs may be of various kinds. Some are associated with confusion about policy objectives (e.g., perceptions about exchange rate objectives), the generation of expectations of intervention in the face of shocks that do not warrant it (moral hazard), and the need to sterilize monetary expansion (or contraction) resulting from the accumulation (or deaccumulation) of foreign reserves. The latter may be high and have quasi-fiscal implications.⁸

4. History of Foreign Exchange Market Interventions

Banco de la República has a broad set of instruments whose appropriateness depends on policy objectives, their effectiveness, associated costs, and macroeconomic and market conditions. During the first fifteen years of foreign exchange rate flexibility, the objectives and instruments for intervention were related to achieving or maintaining an appropriate level of reserves, curbing strong appreciation or depreciation pressure, and moderating exchange rate volatility to its one-month trend in a context in which hedging markets were

6 Banrep has macroprudential limits on the total and currency foreign exchange exposure allowed to FEMIs. These limits correspond to -5% and 20% of their regulatory capital in the case of total exposure and -40% and 40% for currency exposure limits.

7 Some papers on this topic are Kamil (2008), Echavarría, López, and Misas (2009), Rincón and Toro (2010), Murcia and Rojas (2014), Echavarría, Melo, and Villamizar (2014), Fuentes et al. (2014), Villamizar (2015), Ocampo and Malagón (2015), Echavarría, Melo, and Villamizar (2017), Kuersteiner, Phillips, and Villamizar (2018), Arango-Lozano et al. (2020), etc.

8 Costs may affect the profits transferred by *Banco de la República* to the national government, mainly when the return on reserves is lower than the cost of sterilization.

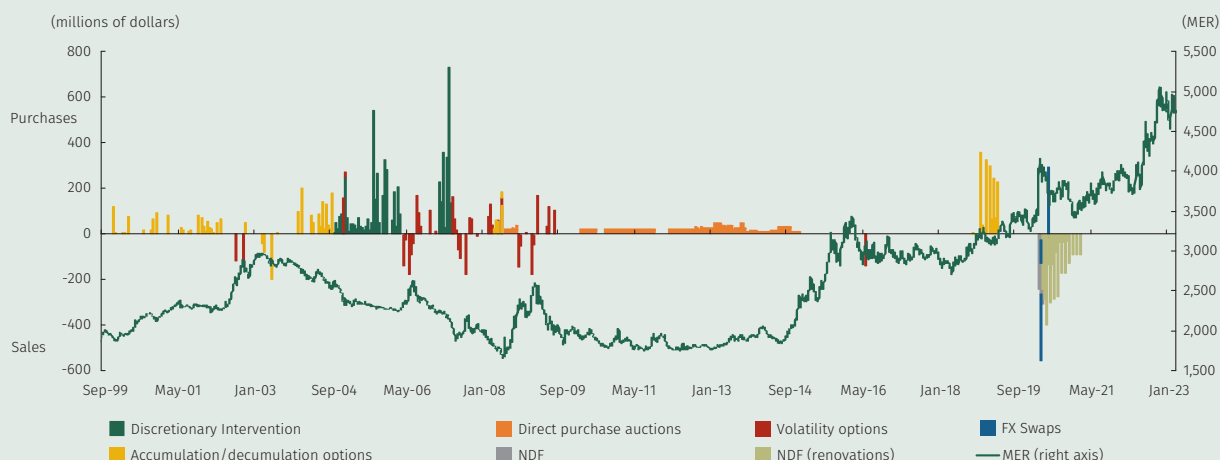
not sufficiently developed. The primary forms of intervention were options for the accumulation and deaccumulation of foreign reserves, volatility options, discretionary purchases of foreign currency in the market, and auctions for the purchase of fixed daily amounts of reserves. Recently, in response to the shocks generated by the emergence of COVID-19, *Banco de la República* implemented new instruments such as dollar sales through *FX Swap* contracts⁹ and dollar forward sales through *NDF forward* contracts.¹⁰ These new instruments were successful in providing liquidity to the foreign exchange market and improving the supply of hedging instruments. At the same time, they were perceived as a clear signal of the Bank's commitment to mitigating disorderly developments in the foreign exchange market (Graph B5.1).

5. Relevance of *Banco de la República's* Intervention in the recent Economic Environment

Starting in September 2021 and up to 31 January 2023, the market has shown a substantial depreciation of the Colombian peso (Graph B5.2) tied to a significant increase in its daily volatility and some deterioration in liquidity.

The high volatility and depreciation trend of the Colombian peso do not seem to be a result of speculative factors but rather coincide with the overall strengthening of the U.S. dollar

Graph B5.1
Use of Foreign Currency Exchange Intervention Mechanisms by *Banco de la República*.



Note: on the main axis, the series are shown as "stacked columns."
Source: *Banco de la República*.

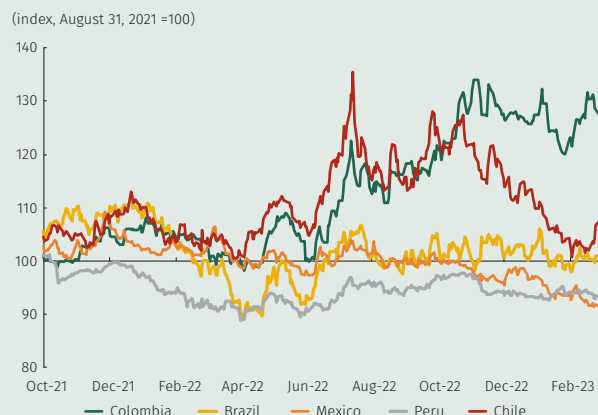
and the significant relative increase in the sovereign risk premium (Graph B5.2). Furthermore, other factors, such as the greater relative sensitivity of the peso, have contributed to amplifying its movements.¹¹ In this context, it is thought that the Bank's intervention would have little effect insofar as, first, the sensitivity of the currency responds to macroeconomic imbalances that would likely correct themselves over a medium-term horizon, and in the case of volatility, the empirical evidence studied suggests that the Bank's tools do not seem

⁹ Derivative instrument by means of which the Bank sells dollars on the spot market while repurchasing the same amount at a future time. The mechanism has a neutral effect on *Banco de la República's* foreign exchange exposure to the extent that it substitutes one foreign currency asset (cash) for another (forward dollars).

¹⁰ Future dollars are sold and the difference between the rate agreed upon in the contract and the market rate on the maturity date is paid.

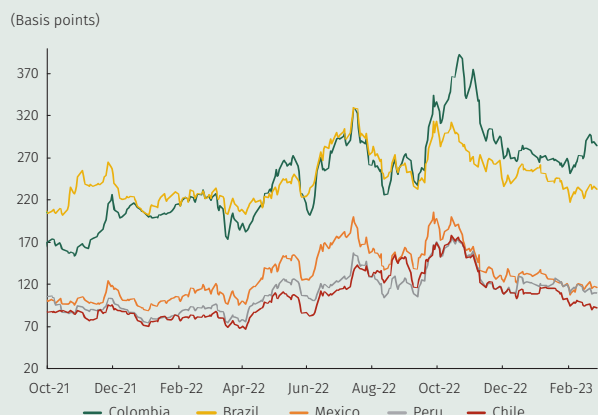
¹¹ When the sensitivity of Colombia's exchange rate against a basket of currencies of different countries (known as exchange rate beta) during different periods is compared, it can be seen that the level of beta for the Colombian peso (COP) is higher than the average of a sample of countries. This suggests that the exchange rate tends to show stronger movements than other currencies when faced with changes in significant variables for these currencies. This greater sensitivity may be explained by Colombia's larger fiscal and current account deficits compared to other emerging countries.

Graph B5.2
Nominal Exchange Rate for Currencies in the Region



Sources: Bloomberg and Data License.

Graph B5.3
Risk Premia (5-year CDS) for some Economies
in the Region



Sources: Bloomberg and Data License.

to be particularly effective in moderating it, or at least not at those horizons that are particularly relevant for economic agents.¹²

Moreover, the foreign exchange market has generally functioned adequately, with only a slight deterioration in liquidity¹³ which has been in line with the trends in international market liquidity. In addition, there has been no evidence of problems in the price formation process in the foreign exchange market¹⁴ nor restrictions on the availability of hedging instruments in this market. Nor have there been any signs of restrictions on the foreign financing of financial intermediaries.¹⁵ Likewise, no major exchange rate mismatches have been noted on the part of the financial or real sector¹⁶ that could jeopardize financial stability in the event of a pronounced depreciation. In this respect, no need has been perceived for intervention in the foreign exchange market¹⁷ to avoid financial stability problems.

Finally, in a very uncertain environment abroad like the one observed during the recent period, it is believed that the use of foreign reserves should be handled with special care. In particular, the levels

- 12 The evidence on the effectiveness of foreign exchange intervention in Colombia is mixed. However, studies suggest that if *Banco de la República* were to play an active role in the foreign exchange market, any significant effect it might have would be small and short-lived. For example, according to Rincón-Castro et al. (2020), foreign exchange intervention, regardless of the type or instrument used, has limited or no impact on the exchange rate. When it does, it is limited to a few minutes or to two days at most. The literature has also found that the effectiveness of foreign exchange intervention depends on both the intervention mechanism used, the situation of the economy, and the shocks it faces from abroad. For example, in the case of options for volatility control, Echavarría, Melo, and Villamizar (2014) found that between 2000 and 2012, they were effective up to ten days after the intervention, while Kuersteiner, Phillips, and Villamizar (2018) found that put and call options for volatility control had an impact on the exchange rate with a duration of up to three and two weeks after the intervention. Nevertheless, Rincón-Castro et al. (2020) did not find that these types of interventions had any statistical impact between 2000 and 2019 and even increased exchange rate volatility before and after the intervention.
- 13 The average bid-ask spread (BAS) in 2022 deteriorated from the levels seen in 2021. Nonetheless, it is well below the levels noted in March 2020 (average 2022: 0.07% vs. March 2020: 0.13%). The BAS is calculated as the average difference between the best purchase point and best-selling point in the *Set-FX* spot session for each second between 8:30 AM and 1:00 PM each day divided by the average *Set-FX* rate for the day.
- 14 Neither in the spot market nor in the forward market.
- 15 According to the results of the quarterly survey on foreign indebtedness and quotas for December 2022, there is an improvement in the perception of the availability of foreign liquidity by Colombian financial intermediaries since the percentage of respondents reporting that there are foreign entities willing to grant new loans in foreign currency increased with respect to the results of September 2022. Despite the improvement in availability, higher funding costs continue to be evident. According to the entities surveyed, this is due to global uncertainty and market volatility.
- 16 The foreign currency debt of the private corporate sector that has some mechanism to mitigate exchange rate risk represents the largest portion of this item (69.2%). Furthermore, Banrep has a series of macroprudential limits on the total and currency exchange exposure that FEMs may have in relation to their technical equity. These limits correspond to -5% and 20% in the case of total exposure and -40% and 40% for currency exposure limits.
- 17 In other episodes of strong illiquidity and deficient functioning of the foreign exchange market such as the one that occurred in 2020 during the first months of the pandemic, *Banco de la República* intervened with derivative instruments that did not imply losses of foreign reserves and that contributed to restoring proper market operation.

of international foreign liquidity buffers should be maintained to be used only under severe tensions in conditions abroad to the extent that the presence of suitable levels contributes to facilitating the country's access to international financing.

Based on the above considerations and taking into account the advantages of floating exchange rates, the arguments in favor of an intervention by *Banco de la República* to halt the depreciation of the COP, or to reduce exchange rate volatility, have not been clear in the current situation.

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