

# Foreign exchange intervention in emerging market economies: lessons, issues and implications for central banks<sup>\*</sup>

Miguel Pesce<sup>1</sup>

## Abstract

In the wake of the Lehman crisis, intervention in the foreign exchange market has been a topic of increasing relevance in central banking, particularly for small and medium open economies like Argentina. This has implied a change in focus to deal with some problems arising from the combination of the international financial crisis and the monetary policies implemented by developed countries. Therefore, the policies implemented by EMEs to cope with the crisis have included direct central bank intervention in the foreign exchange market, either in the spot or in the forward market, the build-up of international reserves, the adoption of administered floating exchange rate regimes and the regulation of capital inflows and outflows. Argentina followed those policy guidelines well before the crisis erupted, allowing it to reduce nominal exchange rate volatility and maintaining monetary stability.

Keywords: central banks and their policies, foreign exchange, current account adjustment, short-term capital movements

JEL classification: E58, F31, F32

\* Note added in January 2014.

<sup>1</sup> Deputy Governor, Central Bank of Argentina.

1. In recent decades, intervention in the foreign exchange market has been a topic of increasing relevance in central banking. The economic and monetary authorities, in particular that of many small and medium open economies, have pointed out that the combination of the international financial crisis and the monetary policies implemented by developed countries sparks negative spillovers to their economies. In order to cope with this situation, they have had to implement different policies. Considering the financial and economic structure of the economy, those policies included direct central bank intervention in the foreign exchange market, either in the spot or in the forward market, the building-up of international reserves and the regulation of capital inflows and outflows. It is worth noting that central banks of some industrialized countries have been implementing aggressive policies of FX intervention, for example the Swiss National Bank and the Bank of Japan. I will address some of these issues, referring specifically to the Argentine case.

2. During the convertibility plan, Argentina followed a passive monetary policy in which the central bank had to convert foreign currencies into pesos – or the other way round – at a fixed rate. In that situation, the Central Bank of Argentina (BCRA) played the role of the currency board and its foreign exchange policy was totally reoriented towards that goal. When convertibility collapsed in 2001–02, the monetary authority had to establish a new regime: an administered floating exchange rate. Bearing in mind the setbacks of the previous regime, the main goals of the policy were to set up an environment of sustainable growth while trying to avoid the recurrent balance of payments crisis. Since then, the main reasons and motivations behind forex market intervention in Argentina have been the same, according to the following order of importance: (1) to reduce nominal exchange rate volatility, (2) to build up foreign exchange reserves as self-insurance against either external or domestic shocks, (3) to maintain monetary stability, and (4) to avoid domestic asset appreciation. We will see these motivations in more detail below.

3. First, there are some structural and economic reasons why to control the volatility of the foreign exchange market. In economies like Argentina, controlling the volatility of the nominal exchange rate is important because short-term exchange rate changes tend to affect consumption and investment decisions and, for this reason, the central bank's interventions are geared towards both preventing and reducing nominal volatility that goes beyond economic fundamentals. In addition, in dollarized countries, like many emerging market economies (EMEs), controlling the volatility of the exchange rate is also important given the repeated experiences of financial sector crises triggered by balance of payments collapses (usual stop-and-go cycles).

Second, the policy of reserve accumulation followed by many emerging countries is better understood in the context of an international financial framework that has been characterized by the lack of an international lender of last resort with unconditional credit lines which can be quickly disbursed when they are most needed. Sudden short-term capital reversals that occurred especially after the Lehman crisis have proven the appropriateness of this policy. Argentina and other EMEs were able to face the worst of the crisis, among other things, in terms of economic activity by reducing the volatility of the exchange rate using "precautionary" international reserves.

Third, in countries such as Argentina, with strong links between nominal exchange rate movements and domestic inflation, high levels of exchange rate volatility tend also to be an amplifier of domestic inflation. This feature has higher

importance in developing countries than in industrialized ones. This has been seen during the last cycle of increasing commodity prices –particularly agricultural ones.

Fourth, it has been seen that the tendency of domestic assets' real appreciation has been a factor with negative consequences for the level of domestic activity and employment, especially in export- oriented production sectors. High levels of unemployment combined with unequal wealth distribution are worsened by appreciation phenomena.

4. As I mentioned, for different reasons some EMEs show a certain degree of dollarization of their economies. For example, economic agents prefer to keep their savings in foreign currency, and commercial banks are being allowed to raise deposits in foreign currency and furnish loans in a currency other than the domestic legal tender. As shown in different financial crises, such a preference for foreign currency represents a point of vulnerability of the financial system in case of capital outflows, and a challenge to central bank policies. In fact, under those conditions a negative shock can increase the liquidity and solvency risks when banks have currency mismatches affecting their profitability and, therefore, their levels of solvency. Because of this, policy makers have to incorporate the restrictions that arise from this feature when implementing monetary and exchange rate policies. For this reason, reducing exchange rate volatility and encouraging financial stability should be key goals of central bank policies.

5. The central bank and economic authorities introduced several measures and policies to regulate the FX market. Regarding currency mismatch, after the collapse in 2001 of the currency board regime, the BCRA implemented a number of policies in order to sharply reduce the likelihood of the problem. These measures included ones promoting a reduction in currency risk, e.g. capital requirements for currency mismatches, together with a regulatory framework establishing that deposits in dollars in local banks should only be used for loans in dollars, and dollar-denominated credit should only be granted when payment capacity of the debtor is linked to the dollar (e.g. tradable sector activities). This new framework reduces currency mismatch risk and has given the BCRA more freedom to intervene and buffer exchange rate volatility (see below).

The BCRA did not usually resort to forex derivatives for intervening in the FX market. One of the reasons preventing more frequent use of forex derivatives is the low level of traded volume which, in part, is a consequence of the small size of the Argentine capital market. However, the central bank had used it when the stress in the FX market reached an extremely high level.

6. Another way of regulating foreign exchange markets in EMEs has been the introduction of measures to discourage short-term capital inflows and mitigate sudden outflows. In order to diminish the negative effects of short-term capital flows, Argentina has successfully taken a series of measures to directly or indirectly deal with this problem. Since mid-2005, the economic authorities have implemented measures oriented towards regulating and discouraging short-term capital flows. New financial borrowing traded in the domestic foreign exchange market and rollovers of nonfinancial private sector and financial sector residents' external liabilities must be made and kept within the system for at least 365 consecutive days (in the first regulation, the term was 180 days). These loans cannot be paid before the maturity date, regardless of the settlement modality and whether or not that modality involves access to the domestic foreign exchange market. In addition, later when the economy was receiving an increasing amount of capital inflows, Executive Order 616/2005 and BCRA Communication A 4359 established a one-year

interest-free deposit equivalent to 30% of certain capital inflows (financial sector and nonfinancial private sector financial liabilities). This deposit basically applies to portfolio investments in secondary securities markets and foreign loans for investment in financial assets, and was aimed at reducing part of the yield of local assets acting as a dissuasion of short-term financial investments. There have been no other restrictions on FDI inflows and foreign financing of external trade operations (imports or exports).

Regarding capital outflows, currently there are practically no restrictions for residents to meet their commercial and financial obligations abroad. Amortizations and interests of foreign debts can be paid without any restriction at their maturity.

Non-residents can repatriate FDI. In the case of banking institutions, they require prior BCRA approval. For investments that took place after October 28th 2011, the funds that originated the investment must have been previously sold in the local FX market. Non-residents can also repatriate portfolio investments with a monthly limit of US\$500,000 and must prove that the funds that originated the investment have been sold in the local FX market (the Single Free Exchange Market, MULC). There is no limit, for non-residents, to repatriate National Government debt services.

In the second part of 2012, considering the volatility and restrictions of the international situation and its probable effects on the domestic market, the Argentine government modified its system of foreign resource administration in order to ensure the availability of necessary foreign exchange so as not affect the imports required to maintain local production and to meet foreign obligations (including public and private financial debts). It was established that residents require prior central bank approval to access the MULC to buy foreign assets (foreign currency, portfolio investments and FDI).

7. In relation to the previous policy measures implemented to regulate the FX market, it is important to stress two points. (1) Recently, the change of views about the rationality of capital regulation has been remarkable. Indeed, the IMF released an institutional paper ("The liberalization and management of capital flows: an institutional view", by Olivier Blanchard and Jonathan Ostry, November 2012) recognizing the important benefits that capital flows may bring, but at the same time cautioning about the risks. The paper also identifies conditions and situations where capital and prudential measures and regulations may be needed and appropriate to safeguard macroeconomic and financial stability in the face of sudden inflows, stops and reversals. In the paper, the authors acknowledge that full liberalization of the capital account may not be the right goal for all countries at all times. (2) All the measures implemented are in full accordance with the Articles of Agreement of the IMF, Article VI Capital Transfers, 3 Controls of Capital Transfers, which states that "Members may exercise such controls as are necessary to regulate international capital movements, but no member may exercise these controls in a manner which will restrict payments for current transactions or which will unduly delay transfers of funds in settlement of commitments, except as provided in Article VII, Section 3(b) and in Article XIV, Section 2."

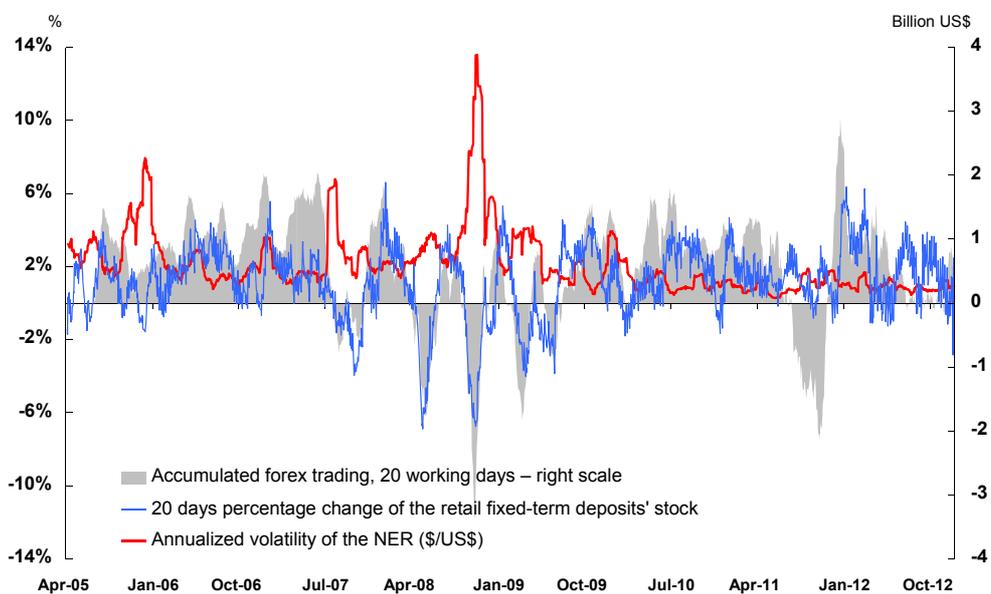
8. Concerning particularly to central bank FX intervention, over the past decade, it has had positive results in terms of one of the main goals mentioned above, reducing exchange rate volatility. Since the end of the currency board regime and after the initial overshooting, the nominal exchange rate showed a fairly smooth trend that was reflected in a relatively stable level of intervention (central bank intervention in the MULC as a percentage of total trade averaged around 8%

in 2003–12). When the international financial crisis began, central banks of the developed countries implemented expansive monetary policies that have constantly affected capital flows across countries, especially from advanced economies to EMEs, and therefore their exchange rates (the adverse spillovers already mentioned). In the case of Argentina and due to its administered floating regime, the evolution and volatility of the exchange rate was not much altered by the international crisis, though the exchange rate has started a new steeper trend.

The fact that Argentina has intervened persistently in the FX market helped to anchor the exchange rate and to prevent temporary shocks that would have distorted relative prices. The reduction in the exchange rate volatility also helps to transfer certain stability to other monetary and financial variables, as can be seen in the relationship between retail fixed-term deposits and the exchange rate (Graph 1).

Exchange rate and retail fixed-term deposits' volatility

Graph 1



Source: BCRA.

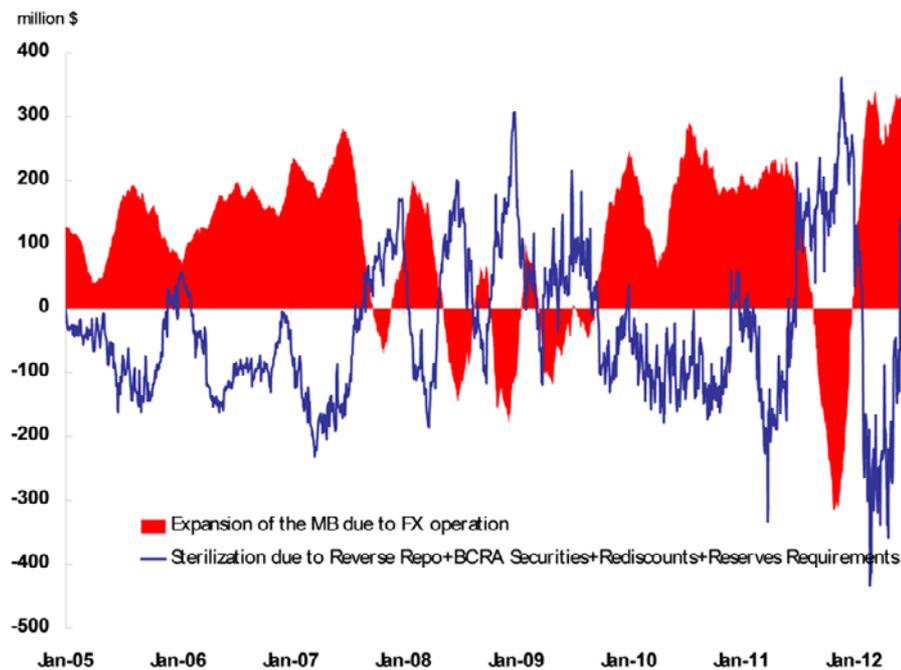
9. The BCRA has combined the policies of international reserve accumulation and FX intervention with a control over monetary aggregate growth, so that the sustained growth recorded by external assets did not undermine the monetary market equilibrium. Thus, in order to control the endogenous expansion of monetary aggregates produced by the precautionary reserve accumulation policy, the BCRA used the sterilization instruments available and developed new ones: reverse repos, reserve requirements, redemptions of rediscounts, together with issuing BCRA bills and notes. In addition to pursuing monetary equilibrium, the sterilization of pesos issued to buy the reserves implied a policy to restrain the growth in domestic demand that would have been triggered by the higher monetary aggregates and lower interest rates (Graph 2). We can also say that obtaining continuous trade surpluses implies that domestic absorption by definition has always been below the national income.

It is important to mention that the reserve accumulation strategy was a significant counter-cyclical policy tool that cushioned the effects of shifts in short-term financial flows over the economic cycle, bringing down volatility in FX and domestic financial markets. It is also necessary to stress international reserves' positive qualities of automatic and immediate availability to stabilize monetary and financial markets. In spite of some supposed financial costs of that policy, given the fall in aggregate demand in industrialized countries, including their imports from EMEs, having had sufficient reserves, among other factors like a sound fiscal stance, allowed these countries to actively support their domestic economies.

## Sterilization of FX Operations

3 month moving average

Graph 2



According to the BIS, "previous research showed that intervention can have a greater influence on exchange rates in EMEs than in advanced economies partly because of the relatively low substitutability of EM assets". Regarding the Argentine economy, the low level of financial integration and high risk premia has revealed the lack of substitutability of its assets. In this context, FX market microstructure is a key factor to determine the effectiveness of intervention. Whether the market presents some imperfections, such as asymmetrical information, clustering or the existence of black markets, the equilibrium of this market is bound to these factors of uncontrollable nature (in principle) of the monetary authority. However, despite these imperfections the intervention has been successful, precisely due to the low substitutability of EME assets.

10. Reasons for adopting an exchange rate managed float regime: Considering the experience of the currency board in Argentina during the convertibility regime, when the peso was pegged one to one to the US dollar, the adoption of a regime of greater exchange rate flexibility, with less FX market intervention by the central bank, has been controversial. We believe that kind of regime would have few positive effects and many possible disruptive ones on the development of local

financial markets, on the ability of domestic firms to manage forex risks, and on growth rates and macroeconomic volatility. This is so because, as already mentioned, greater exchange rate flexibility in a partially dollarized economy might give rise to more inflation, together with disruptive effects on the whole economy that would lessen economic growth. Furthermore, it is considered that if central banks do not intervene to soften FX volatility, this could entail expensive movements in the allocation of productive factors resulting from temporary distortions in relative prices between tradable and non-tradable goods.<sup>2</sup>

As regards the main challenges of pursuing monetary and exchange rate objectives at the same time, some inconsistencies might arise, especially in EMEs if their economic authorities try to achieve both goals with only one tool, usually the interest rate. This is the case because the interest rate is the usual instrument of monetary policy for dealing with adverse effects from capital inflows related to excessive domestic demand growth. However, it may not be a useful instrument in countries with weak monetary transmission mechanisms given that an increase in the interest rate in these countries would promote growing capital inflows, worsening the problems that need to be prevented. In the latter case and to achieve both objectives, it is adequate to follow policies based on a managed floating regime and the accumulation of international reserves together with the sterilization of the impact on the monetary base of those transactions in the foreign exchange market. This need to be combined with the use of macroprudential tools, as the BCRA has been doing during the last decade.

<sup>2</sup> As mentioned by the US Secretary of State in 1971, "The dollar is our currency but your problem", meaning that the side effects of dollar volatility are a problem that the rest of the world has to deal with ([blogs.ft.com/maverecon/2007/11/our-currency-anhtml/#axzz2BZ3sn5CQ](https://blogs.ft.com/maverecon/2007/11/our-currency-anhtml/#axzz2BZ3sn5CQ)).