

# Official Foreign Exchange Intervention

Shogo Ishii, Jorge Iván Canales-Kriljenko,  
Roberto Guimarães, and Cem Karacadag



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The following symbols have been used throughout this paper:

. . . to indicate that data are not available;

— to indicate that the figure is zero or less than half the final digit shown, or that the item does not exist;

– between years or months (e.g., 2004–05 or January–June) to indicate the years or months covered, including the beginning and ending years or months; and

/ between years (e.g., 2004/05) to indicate a fiscal (financial) year.

“Billion” means a thousand million.

Minor discrepancies between constituent figures and totals are due to rounding.

The term “country,” as used in this paper, does not in all cases refer to a territorial entity that is a state as understood by international law and practice; the term also covers some territorial entities that are not states, but for which statistical data are maintained and provided internationally on a separate and independent basis.

## Preface

This Occasional Paper aims to develop a deeper understanding of foreign exchange intervention in emerging markets. Central banks intervene in the foreign exchange market for several reasons, including to calm disorderly markets, correct misalignments, and accumulate reserves. The prevalence of central bank intervention in emerging markets has led to renewed interest in how central banks should intervene to maximize their efficacy. This paper sheds light on a number of operational aspects of intervention. It also presents evidence on intervention practices and characteristics based on a survey on the organization of foreign exchange markets in developing countries. The survey was carried out in 2001 by the International Monetary Fund. Finally, the paper presents empirical evidence on the effectiveness of intervention in Mexico and Turkey, two countries where intervention data are publicly available. The authors emphasize that intervention is not an independent policy tool and is most effective when the exchange rate policy is consistent with other macroeconomic policies.

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# I Introduction

Shogo Ishii

Central banks operating flexible exchange rate regimes intervene in the foreign exchange market for a variety of reasons. In developing countries, prevalent among those reasons are to correct misalignment or stabilize the exchange rate, calm disorderly markets, accumulate reserves, and supply foreign exchange to the market when the public sector is a prime foreign exchange earner and the central bank is the public sector's foreign exchange agent.<sup>1</sup>

Risks associated with central bank intervention are high, particularly in developing countries. Intervention puts the central bank's credibility and scarce foreign exchange reserves at risk. The depletion of reserves by Mexico in 1994 and by Thailand in 1997 while defending their currencies was an important factor in their respective financial crises.

Intervention is widespread in developing countries, in contrast to its steady decline in advanced economies. This pattern may reflect the fact that exchange rate stability commands a high premium in economies where liability dollarization and pass-through from exchange rate movements to inflation are higher. According to a 2001 survey on the organization of foreign exchange markets carried out by the International Monetary Fund, central banks in many developing countries intervene in the foreign exchange market frequently and in amounts that are large relative to total market turnover. They also tend to back up their interventions with monetary policy to enhance their effectiveness in stabilizing the exchange rate. In other words, these central banks often do not sterilize the impact of their foreign exchange purchases and sales on domestic money supply.

Despite a vast literature on the effectiveness of intervention in advanced economies, empirical research on its effectiveness in developing countries is limited. Similarly, there are few sources of guidance on the operational issues and best practices in

this area for developing countries. This paper attempts to shed light on a number of questions about the mechanics of interventions by central banks, including the timing and amount, rules versus discretion, degree of transparency, and the choice of markets and counterparties. It also presents empirical evidence of the effectiveness of interventions in Mexico and Turkey, where daily intervention data are publicly available.

Throughout this paper it is emphasized that intervention is not an independent policy tool. Its success is conditional on the consistency of targeted exchange rates with macroeconomic policies. The paper also presents a number of reasons for central banks to be selective in their interventions and parsimonious in their use of foreign exchange reserves:

- Exchange rate misalignments and disorderly markets—the most common justifications for intervention—are extremely difficult to detect. There is no consensus on a methodology to estimate the equilibrium exchange rate.
- Determining the timing and amount of intervention is a highly judgmental exercise, and the two depend heavily on such factors as changing market conditions, the nature of economic shocks, and available reserves.
- Empirical evidence on the effectiveness of intervention in influencing the exchange rate is mixed, and even where favorable evidence is found, the impact of intervention on the exchange rate level is short lived. Similarly, empirical studies find that intervention tends to increase exchange rate volatility under flexible exchange rate regimes.

It is important that intervention policies and objectives be transparent and clearly specified and that decisions to intervene be made after rigorous analysis of market conditions. Transparency in intervention objectives can enhance the credibility of the central bank by holding it accountable for its record of policy implementation, even though the degree of transparency in the tactical implementation of intervention policies may vary with the specific objectives involved.

<sup>1</sup>In this paper, the term “developing countries” includes emerging and transition economies.