
Policy Conclusions

*But the past is of no importance. The present is of no importance.
It is with the future that we have to deal.*

—Oscar Wilde, *The Soul of Man under Socialism*

This book examines a number of issues related to exchange rate volatility and the implications of large swings in currency values in a globalized economy. The analysis points to the following conclusions:

- Floating exchange rates appear to be excessively volatile, but the harm from this volatility is less than the potential harm of moving to fixed exchange rates.
- Many economies would benefit from greater exchange rate flexibility and few, if any, would benefit from reduced exchange rate flexibility.
- Exchange rate flexibility has no measurable effect on economic output in the long run, but—when combined with sound monetary policy—flexible exchange rates help to effectively stabilize inflation and output.
- An internationally coordinated strategy to set “reference rates” for verbal and actual foreign exchange intervention might lead to a gradual and modest reduction in excess exchange rate volatility, but such a strategy should not involve the defense of any specific levels for exchange rates nor should it detract in any way from the use of monetary policy to stabilize inflation and output.

Volatility of Exchange Rates

The standard model of exchange rates does not explain much of the actual behavior of floating exchange rates. The two main explanations proposed for this failure are that there is a systematic error in market expectations of the future exchange rate and that there is a factor missing from the standard

model, commonly called a risk premium. Chapter 3 developed new evidence that the risk premium is indeed the main reason for the poor performance of the standard model, reinforcing the findings of a preponderance of studies of this issue.

Attempts to explain the risk premium raise as many questions as they answer, and no single explanation has garnered convincing support. There is a general presumption that the risk premium may be excessive and harmful, although that is far from certain. Not surprisingly, risk premiums are much smaller and less volatile in long-lasting fixed exchange rate regimes, which effectively reduce the risk arising from future exchange rate movements.

Costs and Benefits of Floating

The costs and benefits of floating exchange rates can be grouped into two categories: (1) the effects on the long-run level of economic output and/or growth; and (2) the effects on the stability of inflation and economic output.

Effects on Long-Run Economic Output

Floating exchange rates influence long-run economic output through a variety of channels. They increase the costs of international transactions, and they appear to reduce the volume of international trade. Floating rates may cause wasteful shifts of resources across sectors of the economy, and they increase uncertainty about the future levels of exchange rates, which may deter productive investment. On the other hand, floating exchange rates free central banks to adopt monetary policies aimed at stabilizing inflation and output. This enhanced economic stability may encourage productive investment and raise the long-run level of economic output.

It is not possible to detect any reliable effect of exchange rate volatility or the type of exchange rate regime on the level of economic output or the long-run growth rate. The data show that long-run economic output is influenced by many other more important factors than the exchange rate regime.

Effects on the Stability of Inflation and Output

A floating exchange rate, by itself, does not guarantee economic stability. But, by allowing policymakers the freedom to take actions to stabilize the economy, a floating exchange rate can foster greater stability of inflation and output. Chapter 6 demonstrated this interrelationship using a small theoretical model under a wide range of parameter values. Existing research broadly confirms the results of this theoretical model. In addition, chapter 6 presented new statistical and case-study evidence of the benefits of a floating exchange rate in terms of stabilizing inflation around a target and stabilizing output around its potential.

Overall, the benefits of floating exchange rates are difficult to measure and surely vary across economies. One particular difficulty is that countries

with floating exchange rates often fail to pursue sound monetary policy, which dilutes or even reverses the benefits of exchange rate flexibility. For a country with sound monetary policy, however, a switch from a fixed to a floating exchange rate may help stabilize inflation and output, potentially reducing the standard deviation of both by as much as 1 percentage point or even more. Potential improvements in economic stability of such magnitudes clearly could be very advantageous in improving social well-being, particularly compared with other options available to policymakers.

Exchange Rate Regime Recommendations

Economies with Highly Mobile Capital

Economies with a high degree of capital mobility, which includes all the advanced economies, have been forced out of the middle of the spectrum of exchange rate regimes (adjustable pegs and soft pegs) by the damaging crises that are associated with these regimes. These crises typically result from speculative attacks launched when exchange rate targets appear to conflict with other policy objectives, such as stable inflation and output. As developing economies progress to advanced levels of per capita economic output, their capital markets will become increasingly open and they will become increasingly subject to such speculative attacks. As a result, they too likely will be forced out of the middle of the spectrum, notwithstanding the recent consensus about the potential value of using capital controls in limited circumstances.

For economies with at least a moderate degree of capital mobility, the pairing between economies and optimal exchange rate regimes can be described as follows:

- *Free float.* On purely economic terms, and assuming that the central bank is capable of conducting sound monetary policy aimed at stabilizing inflation and output, a free float is the most desirable regime.
- *Currency union.* If there is a strong desire to unite economically and politically with neighboring countries and if economic policies are established to integrate the national economies, currency union may be a reasonable option. As the euro-area sovereign debt crisis of 2010–11 demonstrates, putting the necessary policies in place can be difficult. Dollarization is a less attractive version of currency union because it means forgoing a voice in setting monetary policy and forfeiting seigniorage revenues, but it may be the least bad option for economies seeking a hard peg that they cannot otherwise attain. About 50 countries are currently members of a currency union or are dollarized. Few other countries are likely candidates to join this group.
- *Hard peg.* For countries that lack the necessary institutional ability to conduct sound independent monetary policy and that have no strong desire for greater economic and political union with their neighbors, a hard peg may be the best option. This group comprises mainly small economies.

Economies with Limited Capital Mobility

For the relatively poorer developing economies with limited capital mobility, a wider range of regimes is feasible. But even for these countries, there is a presumption that floating exchange rates will deliver better outcomes if the central bank has the capacity to stabilize inflation and output. A number of developing economies have successfully managed floating exchange rates during the past 10 years or so.

Improving the Current System

The most important improvement to be made to the current system is for developing economies that already have some flexibility in their exchange rate to make stabilization of inflation and economic output the only goals of monetary (interest rate) policy. These economies should not attempt to use monetary policy to stabilize their exchange rates; this should be accomplished solely by foreign exchange intervention within reasonable limits. When the two goals are in conflict, inflation and output stabilization should take priority over exchange rate stabilization. In most respects, these recommendations follow closely those spelled out by Morris Goldstein (2002).

Reference Rates as an Incremental Improvement?

For the most part, this book has ignored foreign exchange intervention as a policy tool, arguing that such intervention has little effect when capital is highly mobile across economies. However, for developing economies with reduced capital mobility, foreign exchange intervention can have significant effects. Given that the extreme of perfect capital mobility does not exist in the real world, is there a role for foreign exchange intervention even in economies with relatively high capital mobility, including the advanced economies? In particular, might central banks be able to damp exchange rate volatility without sacrificing their primary objectives of stabilizing inflation and output?

The “reference rate” proposal by John Williamson (2007) provides a framework for foreign exchange intervention that may be helpful in reducing and stabilizing volatile risk premiums. Under the “monitoring zone” version of this proposal, the International Monetary Fund (IMF)—in consultation with member countries—would establish relatively wide zones around estimated equilibrium values of each economy’s effective exchange rate. When the exchange rate is within this zone, the central bank would not be allowed to intervene in the foreign exchange market. When the exchange rate is above the zone, the central bank would be encouraged to sell domestic currency for foreign currency to put downward pressure on the exchange rate. Similarly, when the exchange rate is below the zone, the central bank would be encouraged to sell foreign currency for domestic currency to put upward pressure

on the exchange rate. These operations would be aimed at damping wide swings in exchange rates and would not prevent central banks from setting their interest rate instrument as needed to achieve inflation and output stability. Most important, central banks would not try to limit the value of the exchange rate; the monitoring zone would be considered a guide for when the central bank should start and stop intervening, not as a limit to exchange rate movements.

Estimating Equilibrium Exchange Rates

The IMF has a long history of assessing equilibrium exchange rates for its members. The IMF's Consultative Group on Exchange Rate Issues (CGER) uses three different approaches for estimating medium-term (roughly five-year-ahead) equilibrium exchange rates (Lee et al. 2008). All three may be interpreted as producing estimates of the exchange rate consistent with long-run purchasing power parity (PPP), after factoring in influences from net foreign assets, the Harrod-Balassa-Samuelson (HBS) effect, and other structural conditions. The first approach compares current account balances to norms based on a country's fundamental conditions, such as demographics, net exports of primary commodities, and fiscal balance. The equilibrium exchange rate is determined by the change relative to the current exchange rate that would be needed to move the current account to its norm. The second approach relates exchange rates directly to fundamental factors in a cross-country setting, and predicts the equilibrium exchange rate by those fundamentals. The third approach simply asks what change in the exchange rate would be needed to stabilize net foreign assets assuming output grows at potential in all countries. All of these approaches focus on predicted values over the next five years or so.

For purposes of setting reference rates, it would be useful to augment the CGER medium-term estimates with an adjustment for the effect on the exchange rate of near-term macroeconomic conditions. Effectively, these would be based on interest rate differentials and prospects for inflation, as in the standard model of exchange rates. A country experiencing an economic boom with high interest rates would be expected to have a near-term exchange rate higher than its medium-term equilibrium, and conversely, a country in an economic slowdown would be expected to have a lower near-term rate.

Because of the uncertainties involved in estimating equilibrium exchange rates—for example, the three CGER approaches often give somewhat different results—it would be essential to establish a wide monitoring zone around the reference rate, at least ± 10 percent and possibly as much as ± 20 percent. Notably, one set of estimates of the disequilibrium among exchange rates of the G-20 countries in early 2011 ranged from -22 percent to $+30$ percent, with most estimates under 10 percent in absolute percentage points (Cline and Williamson 2011).

Reference Rates in Practice

The proposed reference rate system would not commit central banks to any specific level of intervention. In order to have a significant immediate effect on its exchange rate, an advanced-economy central bank would need to make very large purchases or sales of foreign currencies, but this would not be required under this proposed system. Instead, the aim would be for a central bank to make small to moderate interventions to provide a useful signal to the foreign exchange market that the central bank and the IMF believe the exchange rate has deviated significantly from its fundamental value—in other words, that there is an excessive risk premium.

Indeed, it is possible that central banks and the IMF have a better view of long-run exchange rate fundamentals than market participants, who can get caught up in short-run fads.¹ A recent study by Christopher Kubelec (2004) builds on this insight, finding evidence that central bank intervention is more effective when the exchange rate is far from its equilibrium rate and the intervention is aimed at returning the exchange rate toward that equilibrium. If central banks apply a strategy of buying low and selling high consistently over time, they should be able to make extra profits, which would gradually increase the credibility of their exchange rate pronouncements among market participants.

One central bank that appears to have embraced this approach is the Reserve Bank of Australia (RBA). Its view, clearly expressed on its website (www.rba.gov.au, accessed April 14, 2011), is that it may indeed know better than the financial markets. The RBA characterizes the foreign exchange market as subject to

speculative bubbles, herding, fads, and other behavior which can drive market prices away from their equilibrium values, even in a market which is deep and liquid. When such overshooting occurs, intervention may help in limiting the move or returning the exchange rate toward its equilibrium level, thus obviating the need for costly adjustment by the real economy to the incorrect signals which the exchange rate would otherwise give.

The RBA notes that, over time, its intervention has shifted away from attempts to smooth short-term fluctuations and has moved toward less frequent operations aimed at large and relatively long-lasting misalignments. The acid test of such a strategy is profitability. The RBA has made excess profits on foreign exchange intervention during 1983–2003 as a whole as well as during each of three subperiods (Becker and Sinclair 2004).² The US Federal

1. Appendix 3A to chapter 3 noted that chartist trading strategies may be an important factor underlying exchange rate risk premiums.

2. Excess profits are defined as the difference between actual profits and profits on a hypothetical portfolio entirely invested in Australian dollars.

Reserve also has been profitable in its interventions on average during the floating rate period (Leahy 1995).³

A widespread and sustained reference rate strategy along these lines, with official support from the IMF, might have a gradual but transformative effect on financial markets. Such a strategy could be combined with verbal intervention—that is, communicating to markets when they appear to have things wrong. It also would be beneficial if central banks were to publicize their strategies, explain the long-run nature of their objectives, and stress the primacy of domestic objectives and the lack of any commitment to a specific value for their exchange rates. For economies with a high degree of capital mobility, the benefits of the reference rate strategy likely would be small at first, but they might build over time as financial markets came to more highly respect the track record of central bankers. The reference rate strategy would help to reduce harmful long-term swings in exchange rates, even if it had little effect on less damaging short-term ups and downs.

Reference Rates and the Global Saving Glut

The element of international cooperation inherent in the proposed reference rate system makes it a natural vehicle with which to counter the recent tendency of many developing economies to deliberately hold down the value of their currencies through massive purchases of foreign exchange. The reference rate rules would forbid these purchases of foreign exchange by central banks whose currencies were not judged by the IMF to be overvalued. In such cases, central banks seeking to put downward pressure on their currencies would have to lower their interest rates and accept any inflationary consequences. In other words, the reference rate system would put tighter restrictions on the policy freedom of central banks operating under conditions of imperfect capital mobility. Goldstein (2010) and Mattoo and Subramanian (2010) propose specific changes to international institutions to enforce such rules for all economies.

3. However, Humpage (2000) asserts that fewer than half of US interventions have been successful at changing market expectations of future exchange rate movements in the desired direction.

