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# Introduction and Overview

*When I was young I thought that money was the most important thing in life.  
Now that I am old, I know it is.*

—Oscar Wilde

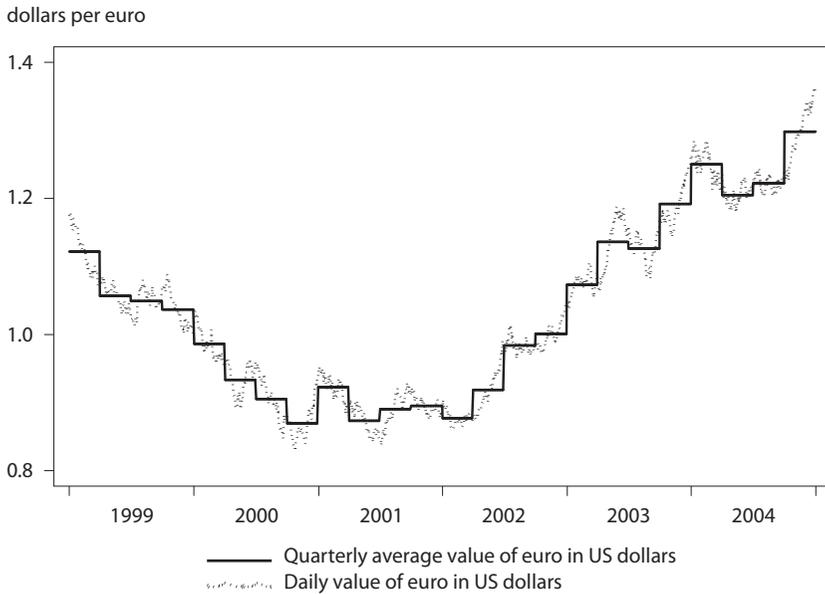
More and more of the world's currencies have floated freely against each other since the early 1970s. In the 1950s and 1960s most currency values were held fixed with only rare realignments. This era of floating exchange rates has been marked by high volatility and large swings in currency values. For example, the US dollar was worth 84 Japanese yen in April 1995, 145 yen in August 1998, and 103 yen in December 1999.

These large swings have caught the attention of economists, politicians, and civil servants. For example, both French President Nicolas Sarkozy<sup>1</sup> and Nobel Prize-winning economist Robert Mundell (2011) recently called for a return to fixed exchange rates. And, in January 2011, an informal group of former finance ministers, central bank governors, and other high-level policymakers declared that governments had to address volatile exchange rates and the global trade imbalances caused in part by “large, lasting swings in currency values” in order to improve the international monetary system (Palais-Royal Initiative 2011). Manufacturers in countries with strong currencies have regularly denounced their loss of global competitiveness, which they consider a result of unfair and opaque currency manipulations by foreigners. Tourists from countries with weak currencies bemoan the expense of foreign travel. And everyone who exports, imports, and invests across borders faces tremendous uncertainty about future revenues, expenses, and returns. Is the current system (or nonsystem, as some consider it) the best way to manage the world's major currencies?

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1. See “The Euro Decade and Its Lessons,” *Wall Street Journal*, January 2, 2009. Sarkozy later backed away from his call for fixed exchange rates, saying only that he wanted to “avoid excessive volatility of currencies” (Angela Doland, “Sarkozy Looks to Limit Exchange Rate Swings,” Associated Press, August 25, 2010).

**Figure 1.1 Euro-dollar exchange rate**



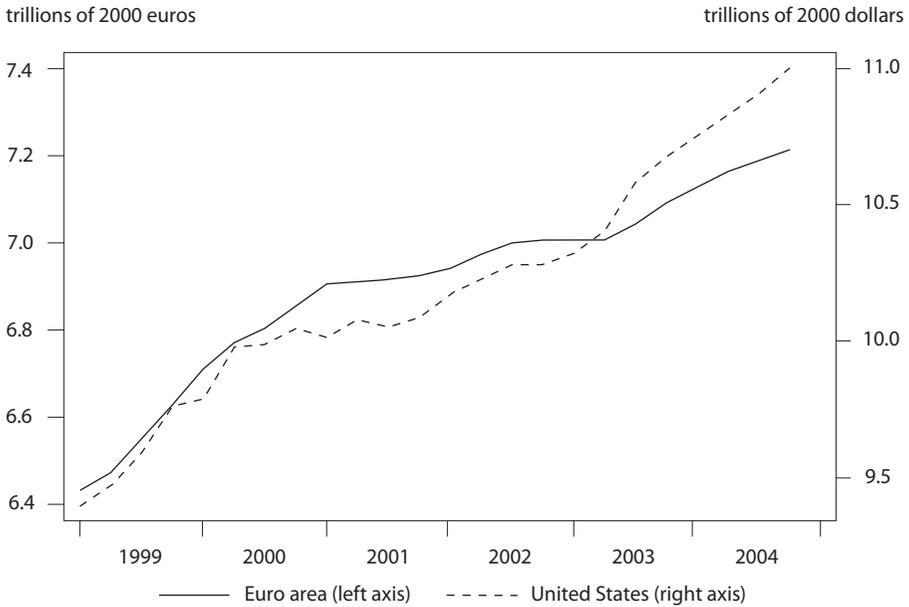
Sources: Datastream.

This book argues that a return to fixed or tightly managed exchange rates would not serve the best interests of households or businesses or governments. Instead, a return to fixed exchange rates would reverse the progress made during the past 25 years toward more stable inflation and economic output in many countries and might lead to more frequent financial crises. This is true for the major economies of the euro area, Japan, and the United States, and also for many smaller economies, including many that are relatively open to international trade and investment. However, floating rates may not be advantageous for (1) countries that seek deep political and economic integration with their neighbors and (2) very small and/or poor countries that lack the institutional resources to prudently manage an independent monetary policy; for these countries, an exchange rate firmly anchored to the currency of a major trading partner (or a currency union) may be more appropriate. Even so, some very small and very poor countries have had good economic outcomes over the past decade with floating exchange rates.

### **Exchange Rate Volatility Does Not Impede Steady Growth with Low Inflation**

Figure 1.1 shows the impressive volatility of the euro-dollar exchange rate between 1999 and 2004. On a quarterly-average basis, the euro depreciated against the dollar by about 25 percent from the beginning of 1999 through

**Figure 1.2 Real GDP in the euro area and the United States**



Source: IMF International Financial Statistics database.

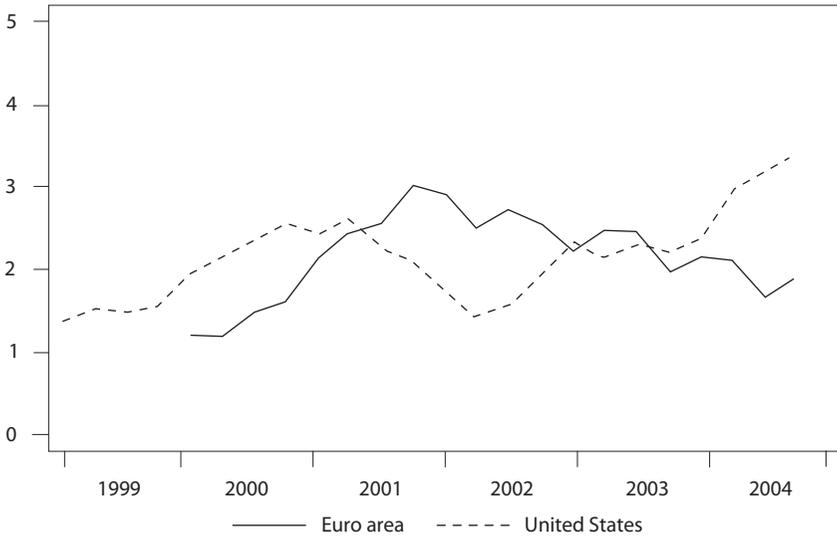
the end of 2000, remained roughly steady through the first part of 2002, and then appreciated by more than 45 percent by the end of 2004. During the latter period, as the euro appreciated sharply, the euro-area economy grew by 15 percent and the US economy grew by 19 percent, when each economy is measured in terms of its own currency. When measured in terms of euros, however, the US economy shrank by 18 percent, and when measured in terms of dollars, the euro-area economy grew by 67 percent! This represents an enormous swing in the relative market value of economic output in these two economies. However, this swing in market valuation does not correspond to actual trends in the quantity of goods and services produced, and thereby profoundly challenges our understanding of the world economy.

The best measure of an economy's actual output of goods and services is real gross domestic product (GDP).<sup>2</sup> Figure 1.2 shows that real GDP in the euro area and the United States grew reasonably steadily during 1999–2004, the period of high exchange rate volatility. Both economies suffered a mild

2. Economists use the term real GDP to refer to the quantity of goods and services—that is, the number of cars and haircuts purchased. In order to add together cars, haircuts, etc., real GDP is expressed in terms of the prices that prevailed in a given base year. In figure 1.2, that base year is 2000 and so the lines show the total volume of economic output at each point in time valued at the prices that existed in 2000. In contrast, economists use the term nominal GDP to refer to the value of goods and services in terms of each year's prices.

**Figure 1.3 Inflation rates in the euro area and the United States**

four-quarter changes of GDP deflator (percent)



Source: IMF International Financial Statistics database.

slowdown in 2001, followed by a gradual recovery. The exchange rate fluctuations played no role in causing the shared slowdown; in fact, if the exchange rate had played a role, it would have had opposing effects, with growth accelerating in one economy and slowing in the other. The slowdown started earlier and ended earlier in the United States. It is possible that the relative lag in US growth during 2001 and 2002 was caused in part by dollar appreciation during 1999 and 2000, and that the relative surge in US growth that started in 2003 may have been related to the dollar depreciation that began in 2002. But the ratio between euro-area GDP and US GDP stayed within a range of 3 percentage points, many times smaller than the swing in the exchange rate. (Note that the scale of figure 1.2 is magnified relative to that of figure 1.1.)

The exchange rate fluctuations also do not appear to have influenced inflation rates in the two economies. Figure 1.3 shows that the average inflation rate during this period was close to 2 percent in both economies and that differences in their inflation rates never exceeded about 1 percentage point. US inflation rose somewhat in 2004, but it peaked at about 3 percent and remained there during 2005 (not shown). Both economies exhibited very low and stable rates of inflation in a global and historical context.

## Overview of this Book

This book addresses the following questions:

- What causes large changes in currency values?
- Should globalization have prevented such large swings in the relative market values of the output of major economies?
- Does currency volatility make economic growth and inflation less stable? Why, or why not?
- Does exchange rate volatility have important long-run economic implications?
- What harm, if any, may be caused by stabilizing the value of one currency in terms of another?
- What is the best policy response to currency volatility? What would be the benefits and costs of returning to a system of fixed exchange rates or adopting a common global currency?

Chapter 2 explores the origins of national currencies and describes the various regimes for managing exchange rates, which lie along a spectrum from firmly fixed to freely floating. It examines the advantages and disadvantages of fixed versus floating exchange rates in terms of the ultimate objectives of economic policy. A fixed exchange rate reduces transaction costs in international business and also reduces uncertainty about the future value of the exchange rate, which may increase international trade, investment, and output in the long run. A floating exchange rate allows the central bank to better stabilize inflation and economic output, but only when there is a sound framework for monetary policy. Stabilizing inflation and output reduces two important elements of economic uncertainty, which may lead to higher long-run output.

Chapter 3 discusses the standard economic model linking exchange rates with financial markets and international trade. This model shows that, in the long run, exchange rates tend to equalize the prices of goods and services across economies, while in the short run, they respond to differences in interest rates across economies. However, the model fails to explain why floating exchange rates are so volatile. The excess volatility arises from financial-market behavior that is not well understood and may be harmful.

Chapter 4 shows that exchange rate regimes have little effect on countries' long-run economic growth or output. Currency stability does appear to boost international trade, although other factors are more important.

Chapter 5 shows that large fluctuations in a country's exchange rate do not necessarily lead to large swings in its inflation or growth rates, including for relatively small open economies. In particular, there is no close link between currency depreciation and inflation, despite widespread popular opinion to the contrary. Floating exchange rate regimes are associated with more stable rates of economic growth. The Great Recession of 2009 was caused by factors

that had little to do with exchange rate regimes and struck economies with both fixed and floating exchange rates. The chapter explores the features of economic policy, international trade, and consumer markets that can insulate national economies from the negative effects of currency volatility. The most important policy feature is that the central bank must be willing and able to stabilize inflation and output. The most important economic features are that goods and services produced in different countries are not close substitutes and that consumers have a preference for goods and services produced at home. Trade barriers and the costs of trade are also important.

Chapter 6 uses a new mathematical model to confirm the standard textbook argument that monetary policy can stabilize an economy better under a floating exchange rate than under a fixed exchange rate. Chapter 6 also explores historical episodes in which policymakers responded well or poorly to currency volatility. Policymakers who focused on stabilizing the exchange rate often ended up destabilizing their economies, whereas policymakers who focused on stabilizing inflation and economic output often had to tolerate large swings in the exchange rate.

Chapter 7 briefly discusses fiscal policy. Monetary policy has proven to be better suited than fiscal policy for stabilizing inflation and output. In most circumstances, fiscal policy should not be used for stabilization except for automatic stabilizers such as progressive tax rates and unemployment benefits. Unsustainably high fiscal deficits eventually lead to fiscal crises, which are more abrupt in economies with firmly fixed exchange rates, including those within a currency union.

Chapter 8 examines the unique features of developing economies that mitigate some of the costs of a fixed exchange rate. Many developing economies have a history of weak institutions and governance. In these economies, a fixed exchange rate may deliver more stable inflation and output than a floating rate, and a fixed exchange rate regime may provide a natural transition toward improving the quality and credibility of policymaking institutions. However, the chapter points out some successful examples of floating exchange rate regimes among even the smallest and least developed economies. Many developing economies have either innate or policy-based barriers to private capital flows that enable the central bank to pursue stabilization of the exchange rate as well as inflation and output. But there are limits to this policy freedom, and policymakers are likely to find these limits ever more binding as their economies become more advanced and sophisticated. Attempts by policymakers in many developing economies to keep their currencies undervalued generated a flood of capital into the advanced economies, which increased the severity of the global financial crisis of 2008; these policies appear to have resumed in 2010 and 2011. Finally, fixed exchange rate regimes in developing economies are associated with a greater risk of financial crisis.

Chapter 9 draws a series of policy conclusions. The main conclusion is that a floating exchange rate regime is preferable, except for countries that seek deep economic and political integration with their neighbors or that do not

have the institutional capacity to conduct stable monetary policy. The chapter ends with a speculative discussion on how central banks may be able to damp exchange rate volatility to a modest degree without giving up either the stabilization of inflation and output or the mobility of private capital.

This book makes a number of original contributions to the theory and data analysis of exchange rates and the economy, including

- direct measures of long-term risk premiums in exchange rates making use of inflation-indexed bond yields and long-run purchasing power parity (PPP) in order to eliminate unobserved expectations variables;
- regression tests of long-term real interest rate parity;
- an estimate of the transaction costs for the global economy of multiple exchange rates;
- a case study of the effect of exchange rates on retail prices of automobiles in Germany, the United Kingdom, and the United States;
- a modern calibrated model of a small open economy to explore the channels through which monetary policy and exchange rates influence the economy;
- historical case studies of productive and unproductive policy responses to large exchange rate fluctuations; and
- evidence that developing economies with flexible exchange rates have had superior economic outcomes over the past 10 years, even in some of the smallest and poorest economies.

