

Chapter 2

The International Monetary System

■ Learning Objectives

1. Explore how the international monetary system has evolved from the days of the gold standard to today's eclectic currency arrangement
2. Examine how the choice of fixed versus flexible exchange rate regimes is made by a country in the context of its desires for economic and social independence and openness
3. Describe the tradeoff a nation must make between a fixed exchange rate, monetary independence, and freedom of capital movements—the impossible trinity
4. Explain the dramatic choices the creation of a single currency for Europe—the euro—required of the European Union's member states
5. Study the complexity of exchange rate regime choices faced by many emerging market countries today including China

■ Chapter Outline

- I. History of the International Monetary System
 - A. The Gold Standard, 1876–1913
 - B. The Interwar Years and World War II, 1914–1944
 - C. Bretton Woods and the International Monetary Fund, 1944
 - D. Fixed Exchange Rates, 1945–1973
 - E. The Floating Exchange Rates, 1973–1997
 - F. The Emerging Era, 1997–Present
 - G. IMF Classification of the Currency Regimes
 - H. Brief Classification History
 - I. The IMF's 2009 de facto System
 1. Category 1: Hard Pegs
 2. Category 2: Soft Pegs
 3. Category 3: Floating Arrangements
 4. Category 4: Residual
 - J. A Global Eclectic

- II. Fixed Versus Flexible Exchange Rates
- III. The Impossible Trinity
 - A. Exchange Rate Stability
 - B. Full Financial Integration
 - C. Monetary Independence
- IV. A Single Currency for Europe: The Euro
 - A. The Maastricht Treaty and the Monetary Union
 - B. The European Central Bank (ECB)
 - C. The Launch of the Euro
- V. Emerging Markets and Regime Choices
 - A. Currency Boards
 - 1. Argentina
 - B. Dollarization
 - 1. Ecuador
 - C. Currency Regime Choices for Emerging Markets
 - D. Globalizing the Chinese Renminbi
 - E. Two-Market Currency Development
 - F. Theoretical Principles and Practical Concerns
 - 1. The Triffin Dilemma
 - G. Exchange Rate Regimes: What Lies Ahead?

■ Questions

1. **The Rules of the Game.** Under the gold standard, all national governments promised to follow the “rules of the game.” What did this mean?

A country’s money supply was limited to the amount of gold held by its central bank or treasury. For example, if a country had 1,000,000 ounces of gold and its fixed rate of exchange was 100 local currency units per ounce of gold, that country could have

100,000,000 local currency units outstanding. Any change in its holdings of gold needed to be matched by a change in the number of local currency units outstanding.

2. **Defending a Fixed Exchange Rate.** What did it mean under the gold standard to “defend a fixed exchange rate,” and what did this imply about a country’s money supply?

Under the gold standard, a country’s central bank was responsible for preserving the exchange value of the country’s currency by being willing and able to exchange its currency for gold reserves upon the demand of a foreign central bank. This required the country to restrict the rate of growth in its money supply to a rate that would prevent inflationary forces from undermining the country’s own currency value.

3. **Bretton Woods.** What was the foundation of the Bretton Woods international monetary system, and why did it eventually fail?

Bretton Woods, the fixed exchange rate regime of 1945–73, failed because of widely diverging national monetary and fiscal policies, differential rates of inflation, and various unexpected external shocks. The U.S. dollar was the main reserve currency held by central banks and was the key to the web of exchange rate values. The United States ran persistent and growing deficits in its balance of payments requiring a heavy outflow of dollars to finance the deficits. Eventually the heavy overhang of dollars held by foreigners forced the United States to devalue the dollar because the United States was no longer able to guarantee conversion of dollars into its diminishing store of gold.

4. **Technical Float.** Speaking very specifically — technically, what does a floating rate of exchange mean? What is the role of government?

A truly floating currency value means that the government does not set the currency’s value or intervene in the marketplace, allowing the supply and demand of the market for its currency to determine the exchange value.

5. **Fixed versus Flexible.** What are the advantages and disadvantages of fixed exchange rates?

- Fixed rates provide stability in international prices for the conduct of trade. Stable prices aid in the growth of international trade and lessen risks for all businesses.
- Fixed exchange rates are inherently anti-inflationary, requiring the country to follow restrictive monetary and fiscal policies. This restrictiveness, however, can often be a burden to a country wishing to pursue policies that alleviate continuing internal economic problems, such as high unemployment or slow economic growth.
- Fixed exchange rate regimes necessitate that central banks maintain large quantities of international reserves (hard currencies and gold) for use in the occasional defense of

the fixed rate. As international currency markets have grown rapidly in size and volume, increasing reserve holdings has become a significant burden to many nations.

- Fixed rates, once in place, may be maintained at rates that are inconsistent with economic fundamentals. As the structure of a nation's economy changes, and as its trade relationships and balances evolve, the exchange rate itself should change. Flexible exchange rates allow this to happen gradually and efficiently, but fixed rates must be changed administratively—usually too late, too highly publicized, and at too large a one-time cost to the nation's economic health.

6. **De facto and de jure.** What do the terms *de facto* and *de jure* mean in reference to the International Monetary Fund's use of the terms?

A country's actual exchange rate practices is the *de facto* system. This may or may not match the "official" or publicly and officially system commitment, the *de jure* system.

7. **Crawling Peg.** How does a crawling peg fundamentally differ from a pegged exchange rate?

In a *crawling peg* system, the government will make occasional small adjustments in its fixed rate of exchange in response to changes in a variety of quantitative indicators such as inflation rates or economic growth. In a truly *pegged exchange rate regime*, no such changes or adjustments are made to the official fixed rate of exchange.

8. **Global Eclectic.** What does it mean to say the international monetary system today is a global eclectic?

The current global market in currency is dominated by two major currencies, the U.S. dollar and the European euro, and after that, a multitude of systems, arrangements, currency areas, and zones.

9. **The Impossible Trinity.** Explain what is meant by the term Impossible Trinity, and why it is in fact "impossible."

- Countries with floating rate regimes can maintain monetary independence and financial integration but must sacrifice exchange rate stability.
- Countries with tight control over capital inflows and outflows can retain their monetary independence and stable exchange rate, but surrender being integrated with the world's capital markets.
- Countries that maintain exchange rate stability by having fixed rates give up the ability to have an independent monetary policy.

10. **The Euro.** Why is the formation and use of the euro considered to be such a great accomplishment? Was it really needed? Has it been successful?

The creation of the euro required a near-Herculean effort to merge the monetary institutions of separate sovereign states. This required highly disparate cultures and countries to agree to combine, giving up a large part of what defines an independent state. Member states were so highly integrated in terms of trade and commerce, maintaining separate currencies and monetary policies was an increasing burden on both business and consumers, adding cost and complexity that added sizeable burdens to global competitiveness. The euro is widely considered to have been extremely successful since its launch.

11. **Currency Board or Dollarization.** Fixed exchange rate regimes are sometimes implemented through a currency board (Hong Kong) or dollarization (Ecuador). What is the difference between the two approaches?

In a *currency board* arrangement, the country issues its own currency but that currency is backed 100% by foreign exchange holdings of a hard foreign currency—usually the U.S. dollar. In *dollarization*, the country abolishes its own currency and uses a foreign currency, such as the U.S. dollar, for all domestic transactions.

12. **Argentine Currency Board.** How did the Argentine currency board function from 1991 to January 2002 and why did it collapse?

Argentina's currency board exchange regime of fixing the value of its peso on a one-to-one basis with the U.S. dollar ended for several reasons:

- As the U.S. dollar strengthened against other major world currencies, including the euro, during the 1990s, Argentine export prices rose vis-à-vis the currencies of its major trading partners.
- This problem was aggravated by the devaluation of the Brazilian real in the late 1990s.
- These two problems, in turn, led to continued trade deficits and a loss of foreign exchange reserves by the Argentine central bank. (4) This problem, in turn, led Argentine residents to flee from the peso and into the dollar, further worsening Argentina's ability to maintain its one-to-one peg.

13. **Special Drawing Rights.** What are Special Drawing Rights?

The Special Drawing Right (SDR) is an international reserve asset created by the IMF to supplement existing foreign exchange reserves. It serves as a unit of account for the IMF and other international and regional organizations and is also the base against which some countries peg the exchange rate for their currencies.

Defined initially in terms of a fixed quantity of gold, the SDR has been redefined several times. It is currently the weighted value of currencies of the five IMF members having the largest exports of goods and services. Individual countries hold SDRs in the form of deposits in the IMF. These holdings are part of each country's international monetary reserves, along with official holdings of gold, foreign exchange, and its reserve position at the IMF. Members may settle transactions among themselves by transferring SDRs.

14. **The Ideal Currency.** What are the attributes of the ideal currency?

If the ideal currency existed in today's world, it would possess three attributes, often referred to as *The Impossible Trinity*:

15. **Exchange rate stability.** The value of the currency would be fixed in relationship to other major currencies so traders and investors could be relatively certain of the foreign exchange value of each currency in the present and into the near future.
16. **Full financial integration.** Complete freedom of monetary flows would be allowed, so traders and investors could willingly and easily move funds from one country and currency to another in response to perceived economic opportunities or risks.
17. **Monetary independence.** Domestic monetary and interest rate policies would be set by each individual country to pursue desired national economic policies, especially as they might relate to limiting inflation, combating recessions, and fostering prosperity and full employment.

The reason that it is termed *The Impossible Trinity* is that a country must give up one of the three goals described by the sides of the triangle, monetary independence, exchange rate stability, or full financial integration. The forces of economics do not allow the simultaneous achievement of all three.

18. **Emerging Market Regimes.** High capital mobility is forcing emerging market nations to choose between free-floating regimes and currency board or dollarization regimes. What are the main outcomes of each of these regimes from the perspective of emerging market nations?

Highly restrictive regimes like currency boards and dollarization require a country to give up the majority of its discretionary ability over its own currency's value. Currency boards, like that used by Argentina in the 1990s, restricted the rate of growth in the country's monetary policy in order to preserve a fixed exchange rate regime. This proved to be a very high price for Argentine society to pay, and in the end, it could not be maintained. Dollarization, an even more radical extreme in the adoption of another country's currency for all exchange, removes one of a government's major attributes of sovereignty.

A free-floating rate of exchange is, however, in many ways not that different from the highly restrictive choices just mentioned. In a free-floating regime, the government allows the foreign currency markets to determine the currency's value, although the government does maintain sovereignty over its own monetary policy, which in turn has significant direct impacts on the currency's value.

19. **Globalizing the Yuan.** What are the major changes and developments that must occur for the Chinese yuan to be considered "globalized?"

First, the yuan must become readily accessible for trade transaction purposes. This is the fundamental and historical use of currency. Secondly, it then needs to mature toward a currency easily and openly usable for international investment purposes. The third and final stage of currency globalization is when the currency itself takes on a role as a reserve currency, currency held by central banks of other countries as a store of value and a medium of exchange for their own currencies.

20. **Triffin Dilemma.** What is the Triffin Dilemma? How does it apply to the development of the Chinese yuan as a true global currency?

The *Triffin Dilemma* is the potential conflict in objectives that may arise between domestic monetary and currency policy objectives and external or international policy objectives when a country's currency is used as a reserve currency. Domestic monetary and economic policies may on occasion require both contraction and the creation of a current account surplus (balance on trade surplus).

21. **China and the Impossible Trinity.** What choices do you believe that China will make in terms of the Impossible Trinity as it continues to develop global trading and use of the Chinese yuan?

This is purely speculative opinion, but many believe China will continue to move the yuan toward globalization rapidly. As Chinese financial institutions and policies become more mature, and policies more consistent with those of other major country financial markets, the yuan will grow as a medium of exchange for both commercial trade and capital investment transactions. The gradual opening of the Chinese economy to foreign investment is a critical component of this process.