

GAO

Report to the Chairman  
Subcommittee on Domestic and  
International Monetary Policy,  
Committee on Banking and Financial  
Services, House of Representatives

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March 2000

# THE EURO

## Implications for the United States— Answers to Key Questions



**G A O**

Accountability \* Integrity \* Reliability

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# Preface

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On January 1, 1999, 11 of the 15 countries in the European Union (EU) adopted the euro as a common currency.<sup>1</sup> On the same date, the new European Central Bank (ECB) took control of monetary policy in these 11 countries. This strengthening of economic integration in Europe is generally viewed as a way to foster greater political integration in addition to achieving economic benefits for member countries. Monetary union has created in Europe a new, large economic entity that could become a powerful force in world economic and financial markets. Its emergence has raised questions about how the United States will be affected, in areas ranging from the dollar's role as an international currency to the effects on U.S. trade and the relative attractiveness of the United States to foreign investors.

For example, over the past half century, the U.S. dollar has been the primary world currency for business transactions, holdings of currency reserves at central banks, and private portfolios. Concerns have been expressed about whether the euro will change the dollar's role in these areas and, if so, what the implications will be for the U.S. economy. With regard to policymaking, the advent of the euro has implications for U.S. monetary policy because, although such policy is determined primarily by domestic economic conditions, the Federal Reserve does take international conditions into account when setting monetary policy.

Some experts have said that the largest effect of the creation of the euro will be the transformation of

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<sup>1</sup>The 15 members of the EU are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom (U.K.). Denmark, Greece, Sweden, and the U.K. have not adopted the euro.

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financial services in Europe. For example, they predict that European stock and bond markets will become more integrated over time and could rival those in the United States.

Because Europe is an important trading and investment partner of the United States, there has been considerable interest in whether the introduction of the euro could affect trading and investment patterns. A key determinant of any potential effects is the euro's influence on economic growth in Europe. Although the euro can potentially benefit growth, it also brings policy challenges to national governments and the EU, and conclusions on its growth effects may remain tentative for some time.

The advent of the euro has implications for how international economic policies are set and implemented, such as bringing about some changes in representation at G-7 meetings on economic policy.<sup>2</sup> Whether this deeper European economic integration could affect the balance of power in economic policy deliberations, such as trade negotiations with the United States, has been of interest to U.S. policymakers.

We undertook this review of the implications of the euro for the United States at the request of the Chairman of the Subcommittee on Domestic and International Monetary Policy of the House Banking Committee. Specifically, our objectives were to answer the following questions: (1) What is the euro and why is Europe moving to it now? (2) What are the potential effects of the euro on the dollar? (3) What

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<sup>2</sup>The G-7 consists of seven major industrialized countries that consult on general economic and financial matters. The seven countries are Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

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are the potential monetary policy and exchange rate effects of the euro? (4) What are the implications of the euro for financial markets and institutions and their regulation? (5) What are the euro's implications for U.S. trade and investment with Europe? And (6) What are the implications of the euro for international economic policymaking?

In this report, we attempt to provide the information in a clear, concise, and easily understandable manner for a nontechnical audience. For readers who are interested in more detailed information on the topics covered here, we also include a bibliography.

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**Abbreviations**

BIS	Bank for International Settlements
ECB	European Central Bank
EMU	Economic and Monetary Union
ERM	Exchange Rate Mechanism
ESCB	European System of Central Banks
EU	European Union
FDI	foreign direct investment
HICP	Harmonized Index of Consumer Prices
IMF	International Monetary Fund

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# What is the Euro?

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**Q. What is the single European currency and how did countries qualify for membership in the euro area?**

**A.** The euro is the new currency being used by 11 of the 15 countries that are members of the European Union (EU). (See fig. 1.1.) The euro area comprises these 11 countries. The euro area countries have a population slightly larger than the population of the United States and economies with a combined gross domestic product (GDP) about 75 percent the size of the GDP of the United States.<sup>1</sup> (See table 1.1.)

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<sup>1</sup>GDP refers to the total value of goods and services produced in an economy in one year.

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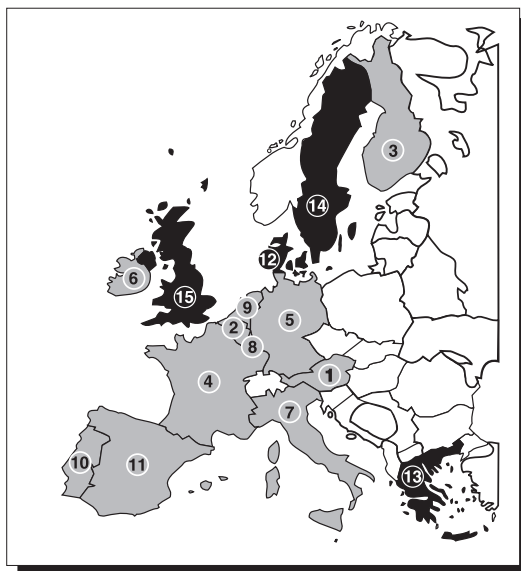
**Figure 1.1: Members of the European Monetary Union and the European Union**

**Euro area countries**

- ① Austria
- ② Belgium
- ③ Finland
- ④ France
- ⑤ Germany
- ⑥ Ireland
- ⑦ Italy
- ⑧ Luxembourg
- ⑨ Netherlands
- ⑩ Portugal
- ⑪ Spain

**Potential euro area members**

- ⑫ Denmark
- ⑬ Greece
- ⑭ Sweden
- ⑮ United Kingdom



Source: European Commission documents.

**Table 1.1: 1999 Population and GDP of the Euro Area and the United States**

	<b>Population</b>	<b>GDP</b>
United States	272 million	\$9.1 trillion
Euro area	291 million	\$6.7 trillion

Sources: European Union, Central Intelligence Agency, Census Bureau, and Bureau for Economic Analysis

When the euro was launched on January 1, 1999, the 11 countries in the euro area locked their exchange rates to the euro, redenominated their national debt into euros, surrendered control of monetary policy to the European Central Bank (ECB), and began using the euro in electronic transactions.

Citizens of countries that have adopted the euro still use their national currencies, such as the German mark or French franc, in daily transactions. However,

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the values of these currencies are legally tied to the euro and do not fluctuate in relation to one another. Thus, the euro represents units of national currencies. For example, €1 equals approximately 1.96 German marks (see table 1.2 for a complete list of currency values). This legal linking to the euro allows financial transactions between countries and new issues of national debt to be denominated in euros. Euro coins and currency are to replace the national coins and currency by June 2002 at the latest, at which time the old currencies are no longer to be used. According to the EU, most countries are planning to have national coins and currency replaced by the end of February 2002.

**Table 1.2: Euro and National Currency Conversion Rates**

<b>€1 equals approximately...</b>	<b>Value<sup>a</sup></b>	<b>National currency</b>
	40.34	Belgian francs
	1.96	German marks
	166.39	Spanish pesetas
	6.56	French francs
	0.79	Irish pounds
	1,936.27	Italian lira
	40.34	Luxembourg francs
	2.20	Dutch guilders
	13.76	Austrian schillings
	200.48	Portuguese escudos
	5.94	Finnish marks

<sup>a</sup>All values rounded to two decimal places. Exact euro values require the use of six figures.

Source: European Council Regulation 2866/98, December 31, 1998.

The EU set out a number of requirements to qualify for membership in the euro area. Countries had to be members of the EU and comply with four general economic criteria: price stability, a sustainable government financial position, exchange rate stability,

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and convergence of long-term interest rates. Table 1.3 spells out these criteria in more detail.

**Table 1.3: Euro Membership Requirements**

General criteria	Specific requirements
Price stability	Annual rate of consumer price inflation must be within 1.5 percent of average annual consumer price inflation from the three countries with the lowest inflation rate as measured by the Harmonized Index of Consumer Prices (HICP).
Sustainable government finances	General government deficit must be no more than 3 percent of GDP and show progress towards lowering general government debt to 60 percent of GDP.
Exchange rate stability	National currency participates in the Exchange Rate Mechanism (ERM) and observes the normal margins of the exchange rate mechanism without severe tensions or devaluations for 2 years.
Long-term interest rate convergence	Long-term interest rates must be within 2 percent of the average rates from the three countries with the lowest inflation rates as measured by the HICP.

Source: Treaty on European Union.

The various institutions of the EU, including the European Commission, the Council of the European Union, the ECB, and the European Parliament, have different roles in determining which countries qualify

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for membership.<sup>2</sup> On the basis of their respective determinations and recommendations, on May 3, 1998, the Council of the EU confirmed that 11 countries would adopt the euro beginning in 1999.<sup>3</sup>

**Q. What is the relationship between the euro and European Economic and Monetary Union (EMU)?**

**A.** The euro is the most significant and far-reaching part of the larger initiative known as EMU. EMU is the effort by EU countries to more closely link their economic policies to achieve greater political and economic integration. EMU continues the EU's efforts to achieve a fully integrated single market in goods, services, labor, and capital within the EU. The requirements for EMU are spelled out in the Treaty establishing the European Community, as amended in 1992 and 1997 (hereafter referred to as the Treaty), and further refined in decisions made by the Council of the EU.<sup>4</sup> In general, EMU requires countries within the EU to implement economic policies that ensure stable prices, sound public finances and monetary conditions, and a sustainable balance of payments.

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<sup>2</sup>The European Commission proposes policies and legislation, is responsible for administration, and ensures that provisions of the treaties and the decisions of the EU institutions are properly implemented. The Council of the EU is composed of ministers or heads of state and government representing the member states. The European Parliament comprises 626 members, directly elected in EU-wide elections for 5-year terms.

<sup>3</sup>The European Monetary Institute, the ECB's precursor, participated in the 1998 decisions. The ECB will participate in future decisionmaking on euro area membership.

<sup>4</sup>Decisions made by the Council of the EU are legally binding on all EU member states. Most decisions are made by majority vote, but some require unanimity.

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The euro is the most significant aspect of the monetary union. The membership requirements for the euro area and the provisions related to the ECB are subsets of the EU's treaty provisions and legislation pertaining to EMU. For example, the requirements for membership in the euro area described above are spelled out in the portion of the Treaty related to economic and monetary policy; protocols to the Treaty; and subsequent Council decisions, regulations, and resolutions.

EMU also has a number of provisions that are not directly related to the euro. For example, EU member states must coordinate their national economic policies and provide information to the EU on their national economies. Representatives from EU member states also meet periodically to discuss approaches to economic issues and other matters of common concern. For example, in recent years, EU leaders have met to coordinate national policies on job creation, taxes, and European security and defense policy. Those EU countries that have not adopted the euro still have to abide by most of the other requirements of EMU.

Despite EMU and the euro, governments still retain a high degree of regulatory and legislative control over large sections of their economies, including their labor markets, tax codes, and welfare legislation. National governments are also responsible for implementing fiscal policy.

However, countries' ability to use fiscal policy is restrained by EMU. The Stability and Growth Pact, adopted by the EU in 1997, clarified how the surveillance of national fiscal policies will be carried out in the EMU environment. The Pact requires countries to have budgets close to balance or in surplus in order to avoid breaching the 3 percent of

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GDP deficit ceiling, except during extreme recessions.<sup>5</sup> For countries that have adopted the euro, failure to do so could result in sanctions from the EU, ranging from public criticism to fines of up to 0.5 percent of annual GDP. In addition, all countries are required to submit annual plans to the EU showing how they will reach this goal.

**Q. What is the rationale for the euro?**

**A.** Government leaders from euro area countries cite a variety of political and economic reasons for adopting the euro. In general, these countries believe the euro supports the broader political goals of greater European economic and political integration. Some leaders also hope that the creation of a more robust European Union will enhance Europe's global position in the world relative to the United States.

From an economic perspective, the introduction of the euro eliminates potentially costly fluctuations among values of national currencies within the euro area. It also fosters integration of goods, services, and financial markets. Europeans also hope the stringent economic requirements to join the euro area and sustain EMU will provide discipline to national budgets and encourage structural change in their economies. In particular, some experts believe these requirements, which impose economic restrictions on national monetary and fiscal policy, could pressure countries to liberalize labor markets and make other structural changes in their economies that would

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<sup>5</sup>This provision was added to ensure that countries could increase spending during mild economic recessions and still not exceed the 3 percent of GDP deficit limit set by the Treaty.



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allow labor and capital to move more easily among firms, industries, and member countries.<sup>6</sup>

Individual countries have additional and varying national reasons for joining the euro. For example, German political leaders stressed that adopting the euro would demonstrate Germany's commitment to remaining closely tied to the rest of Europe.<sup>7</sup> French politicians noted that the euro and EMU could bolster Europe's global influence and ensure that France had a direct voice in European monetary policy.<sup>8</sup> Italian leaders stressed the increased economic credibility their country would gain by joining the euro area.

Greece did not meet the criteria for membership in the euro area in 1998 but, according to the EU, it may do so in spring 2000 when its performance will be assessed again. The U.K., Denmark, and Sweden chose not to adopt the euro.

**Q. Why are four EU countries not in the euro area?**

**A.** Although the U.K. meets the fiscal, inflation, and interest rate criteria for the euro, it has not tried to

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<sup>6</sup>Some examples of potential structural changes include reforming labor laws to make it easier to hire, train, and fire workers; allowing greater labor mobility across the EU; and reforming pensions to reduce fiscal burden and allow portability across countries.

<sup>7</sup>The political negotiations over the euro took place in the later 1980s and early 1990s, at precisely the same time Germany was reunifying. Other countries in Europe were concerned that a larger Germany could dominate the continent.

<sup>8</sup>Before the euro, the German Bundesbank (Germany's central bank) was viewed as, de facto, setting monetary policy for the rest of Europe. Because the German economy was so much larger and the mark was viewed as the strongest currency, other EU countries who had entered the ERM felt pressure to follow the lead set by the German central bank.

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join the euro area, in part, because political leaders and the public have not been willing to give up the British pound and control over monetary policy. In 1991, the British negotiated a provision in the Treaty exempting the U.K. from the euro.<sup>9</sup> Support for the euro in the U.K. remains low, with one January 2000 poll showing that those opposed to joining the euro area outnumber those in favor of joining by about two to one. The U.K. does not plan to join the euro area until it has achieved greater economic synchronization with the rest of the EU.<sup>10</sup> The government has also pledged that any decision to adopt the euro must be ratified by the public in a national referendum before going into effect.

In 1992, voters in Denmark rejected the proposed amendments to the Treaty that had been negotiated in Maastricht. This created a political crisis within the EU because all EU member states had to approve the proposed amendments before they could go into effect. Thus, Denmark could have entirely stopped EMU. To avoid this, the EU exempted Denmark from having to join the euro area. Danish voters approved the amended treaty in 1993. Currently, according to public opinion polls, the majority of the Danish public supports adopting the euro, and the government plans to hold a national referendum on eventual membership.

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<sup>9</sup>Modifications to the Treaty on Europe must be approved by all member countries. The U.K. would not approve the changes necessary to implement the euro unless it was allowed to opt out.

<sup>10</sup>The U.K. government says that monetary union membership is contingent on five tests: (1) compatibility of the U.K. business cycle with the rest of Europe, (2) ability to react to problems with sufficient flexibility, (3) impact on foreign direct investment in the U.K., (4) impact on national financial services, and (5) implications for growth and employment.

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Sweden joined the EU in January 1995. Two years later the Swedish government decided Sweden should not join the euro area because of lack of popular support. However, unlike Denmark and the U.K., Sweden does not have a special opt out clause in the Treaty. To avoid membership in the euro area, the Swedish government ensured it would not meet the exchange rate criteria for membership. The ruling party has since come out in favor of joining the euro area, but it has not yet set a date for a national referendum on the issue.

Greece wanted to join the euro area but could not meet the economic requirements. The Greek government, backed by a solid majority of the population who support joining the euro area, plans to reapply in March 2000 in an attempt to gain membership in 2001.

**Q. Is the euro sustainable?**

**A.** Most experts maintain that there are many reasons to believe the euro is sustainable. Adopting the euro has been a top political priority of the euro area governments. Although ruling political parties have changed during this time, political support for the euro has not, even though some countries had to implement sometimes painful economic policies to join the euro area. Many experts told us that the current political leaders in the euro area countries and the EU will not allow the euro to fail.

However, some analysts have observed that the euro's sustainability will not be known until it has been tested by stress or even an economic crisis, especially a crisis that affects member countries differently. If the public believes that their country is suffering additional economic harm from the euro, there could be greater pressure on political leaders to back away

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from their support for the euro. Some experts have also pointed to the euro's potential for creating greater political and economic strains among national governments. For example, national leaders will no longer be able to use monetary policy or reductions in exchange rates to soften the impact of economic shocks. In addition, the EMU requirement to maintain a roughly balanced budget places some limits on the ability of national governments to spend more money to provide fiscal stimulus during economic downturns.

As a practical matter, it would be very difficult for a country to withdraw from the euro area. Many experts believe that the economic disruptions of leaving the euro area and recreating a national currency could outweigh the possible benefits of regaining a national currency and national monetary policy. Politically, there are no provisions in the Treaty for a country to voluntarily withdraw, nor are there processes for removing a country against its will. If a country left the euro area, it would violate the Treaty and likely trigger a political crisis within the EU.

According to experts, failure to maintain the euro area would have far-reaching consequences for Europe and the rest of the world. Most agree that only a major economic or political crisis could bring down the euro area. The collapse of the common currency would create economic uncertainty in Europe with likely spillover effects onto the rest of the global economy. Politically, failure of the euro area would be a major setback for the EU. According to many analysts, it would bring EU enlargement to a halt and undermine the credibility of other EU initiatives.

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**Table 1.4: Chronology of Selected Events Surrounding the Euro**

<b>Date</b>	<b>Event</b>
March 1957	Six European countries sign the Treaty of Rome, establishing the European Economic Community (EEC).
January 1962	Council adopts first regulations establishing common market in agriculture.
July 1968	Customs union completed, common external tariff established, and freedom of movement guaranteed for workers within the EEC.
February 1986	The 12 members of the European Community sign the Single European Act. The act extends the powers of the Community and establishes framework for a single market.
June 1989	European Council calls for negotiations on treaty revisions necessary for the introduction of EMU and the euro based on plan developed by governors of central banks and Commission President Delors.
February 1992	Maastricht Treaty signed by EU heads of state and government.
1992-1993	Treaty ratified by EU member states.
1993-1997	Countries reduce inflation and cut budget deficits to meet euro membership criteria.
1994	European Monetary Institute created as the precursor to the ECB.
June 1997	EU adopts the Stability and Growth Pact.
May 1998	Council of the EU announces participating countries.
January 1, 1999	ECB begins operations as a central bank. Irrevocable fixing of conversion rates to euro. National debt converted into euros.
By January 1, 2002	The euro notes and coins are to be introduced among the participating countries.
By June 2002	National currencies are to be withdrawn, and only euro notes are to be legal tender.

Source: European Union.

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# How Could the Euro Affect the Dollar As An International Currency?

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**Q. What is an international currency?**

A. An international currency is one that is used for payments and finance outside the issuing country's borders. In the case of the U.S. dollar, for example, a sizeable amount of international trade that never crosses our borders is invoiced and paid for in dollars. Banks outside the United States take deposits and make loans in dollars. Dollar-denominated bonds are issued outside the United States. U.S. dollar currency notes circulate in substantial amounts in some foreign countries, sometimes for illicit purposes. In addition to these uses, which largely involve private sector entities, foreign central banks hold dollars as part of their official reserve holdings.

**Q. How could the euro change the dollar's use as an international currency by the private sector?**

A. The dollar is used by the private sector in a variety of ways. The dollar is the primary transaction currency in international trade. Presently, the dollar plays a dominant role in invoicing around the world, especially for primary commodities like oil. In 1998, it was estimated that the dollar served as the payment currency for about 48 percent of world trade, although the U.S. share of world trade was about 18 percent. This provides an incentive for companies engaged in international trade to maintain working balances in dollars. In the EU's view, the use of the euro in trade invoicing (not counting intra-euro area trade) is likely to exceed the sum of the currencies that have been replaced by the euro. This is due in part to economies of scale in the use of currencies leading to lower transaction costs and better availability of hedging instruments.

The dollar is also the primary currency of international banking. Bank for International

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Settlements (BIS)<sup>1</sup> data show that at the end of 1998, about 41 percent of international bank assets<sup>2</sup> were denominated in U.S. dollars (see fig. 2.1); however, the U.S. banks' share of international bank assets was about 11 percent. This shows that the dollar is used by non-U.S. banks as well as U.S. banks.

The dollar's 41-percent share of international bank assets in 1998 was well below its 63-percent share in 1985. At the end of 1998, the largest portion of the "all other currencies" category was the national currencies of euro area members, which accounted for about 31 percent of international bank assets.

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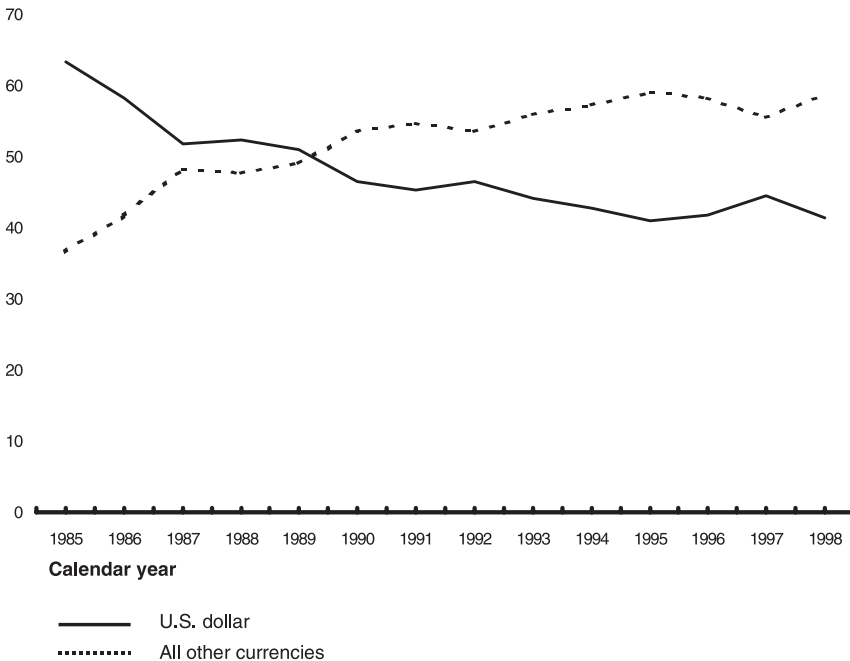
<sup>1</sup>BIS is an organization of major central banks that is based in Basel, Switzerland. It is the principal forum for consultation, cooperation, and information exchange among central bankers.

<sup>2</sup>International bank assets are assets of banks located in 24 major industrialized countries or off-shore centers.

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**Figure 2.1: Cross-Border Assets of Banks in Industrial Countries by Currency (1985-1998)**

Percentage of international bank assets by currency



Source: BIS.

A large share of international bonds and notes is issued in dollars.<sup>3</sup> (See fig. 2.2.) BIS data show that at the end of 1998, about 45 percent of international bonds and notes outstanding was denominated in dollars. Less than half of these have been issued by

<sup>3</sup>International bonds and notes include both domestic currency issues in a given country by nonresidents of that country (e.g., dollar bonds issued in the United States by foreign entities) and foreign currency issues in a given country by either residents or nonresidents (e.g., dollar bonds issued in London by either a U.S. company or a British company).



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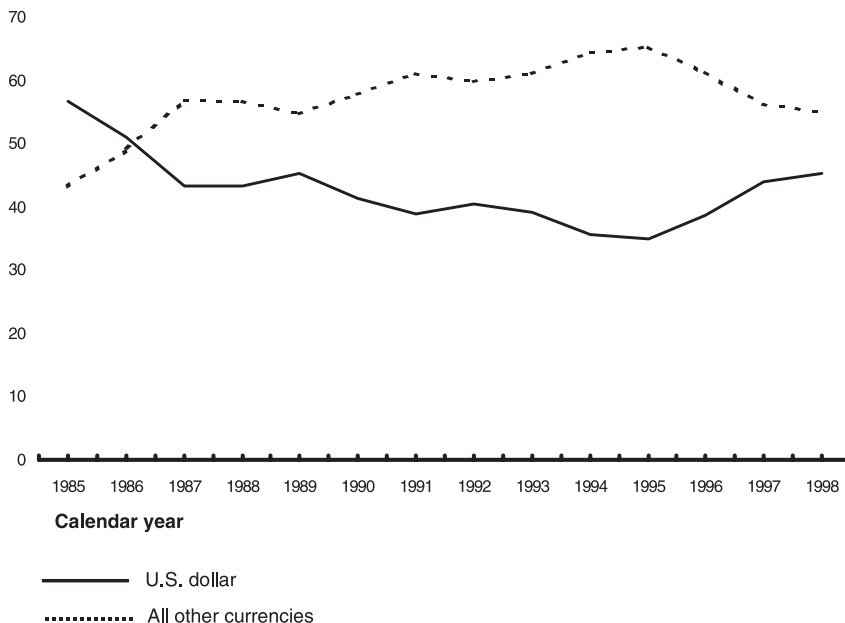
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U.S. borrowers, who accounted for 20 percent of the total outstanding. The largest share of bonds and notes issued in currencies other than the dollar was issued in the national currencies of euro area members. These currencies accounted for about 28 percent of the total at the end of 1998. During the period 1985 to 1998, the dollar share of international bonds and notes outstanding fluctuated between a high of about 57 percent in 1985 to a low of about 35 percent in 1995.

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**Figure 2.2: International Bond and Note Issues Outstanding by Currency (1985-1998)**

Percentage of all outstanding international bonds and notes by currency



Source: BIS.

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In some foreign countries, U.S. dollar currency notes circulate in substantial amounts.<sup>4</sup> In these countries, the dollar is used as a substitute for local cash transactions—particularly in countries where hyperinflation or social disorder undermines the public’s faith in the local currency. In mid-1998, it was estimated that about 60 percent of the \$441 billion dollar notes in circulation—about \$265 billion—were held outside the United States. Many of these dollar notes are used in underground economies, and it is widely believed that some of these dollars are used as a medium of illicit exchange.

Holdings of paper currency by the public, whether inside or outside the United States, serve as a form of interest-free financing for the U.S. government. Using an interest rate of 5 percent, the foreign holdings of dollar notes yield a seigniorage of about \$13 billion a year. That is, the U.S. government saves \$13 billion annually because foreigners hold currency instead of interest-paying bonds. If euros were to become more widely used for similar purposes, outside the euro area there would be a decreased demand for dollars, and it is possible that the U.S. government would lose some earnings it receives through seigniorage.

A variety of factors will determine whether the emergence of the euro will have a significant impact on the international role of the dollar. Euro area companies may be in a stronger position than before to require that the euro be used in their transactions in order to avoid exchange rate risk. The analysts we spoke with told us that those nonindustrial countries that had been conducting their cross-border transactions in the currencies of the member

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<sup>4</sup>See C. Randall Henning, Cooperating with Europe’s Monetary Union, Institute for International Economics, Washington, D.C.: May 1997.

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countries of the euro area are expected to do so in euros. Those developing countries closely linked to the United States would continue to use dollars.

Over the longer term, several of the analysts we spoke with believe that the comparative status of the dollar and euro as international currencies may be affected by potential developments in the euro area payments and securities settlements infrastructure. The U.S. dollar is supported by systems that allow money and financial assets to be moved with great speed, efficiency, and reliability. In the euro area, each country still has its own separate systems for wholesale payments. The ECB has established a new wholesale system for cross-border euro payments called Trans-European Automated Real-Time Gross Settlement Express Transfer System (TARGET), which links the comparable systems of each member central bank. TARGET must be accessed through the national systems, which are not yet harmonized. Nonetheless, progress is being made in dealing with euro area-wide payments and securities infrastructure. The EU expects lower transaction costs to result from this process. Through the first 10 months of 1999, TARGET carried 69 percent of euro payments value. Moreover, providers of securities infrastructure services announced a wide range of plans involving integration of their systems through links or cross-border alliances. Lower transaction costs are not only related to official payments systems and securities settlement systems, but also to economies of scale for enterprises, banks, and in the foreign exchange markets.

Responses of investment managers to the euro as an investment and financing currency will depend on the euro's competitiveness with the dollar as an

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international currency.<sup>5</sup> The decisions of these private agents will be influenced by factors that make euro-denominated investments attractive, such as the prospective ECB monetary policy stance, the inflation rate in the euro area, the perceived riskiness of the rate of return on euro-denominated assets, and economic growth in Europe.

Economic size favors neither the dollar nor the euro because the economies are similar in size. Relative confidence in the currencies is likely to depend upon both economic performance and the monetary policy stances taken by the respective central banks. Both the Federal Reserve and the ECB have pursued stable monetary policies aimed at low inflation. Officials in the United States and Europe stressed that the dollar's international role will not be challenged if the underlying strength of the U.S. economy remains fundamentally sound.

It is possible that the euro could eventually affect the dollar's position as the premier international currency. However, most analysts we spoke with and documents we reviewed maintained that the euro is not likely to cause a sudden decline in the dollar's use as an international currency in the near future, and any shift away from the dollar will be gradual. Some experts argue that the euro is not likely to displace the dollar's international role because of inertia in the use of international currencies and that at best, the euro will complement the dollar. There are, however, other experts who argue that the euro will compete with the dollar for a substantial share of its international role. An intermediate view is that the euro's gains will not necessarily come at the expense of the dollar because

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<sup>5</sup>See "The International Role of the Euro," *ECB Monthly Bulletin*, August 1999.

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increased use of the euro may not decrease the use of the dollar in absolute terms.

**Q. How could the euro change the dollar's use as an international currency for official purposes?**

**A.** Central banks around the world hold large amounts of currency reserves, and a large portion of these reserves is denominated in dollars. Central banks hold foreign currency reserves for use in case they wish to intervene in foreign exchange markets to prevent the exchange rate of their domestic currency from falling against foreign currencies.<sup>6</sup> From 1985 through 1998, the dollar's share of official foreign exchange reserves ranged between about 44 percent and 57 percent, the peak year being 1998. (See fig. 2.3.) At that time, the euro area national currencies and the European Currency Unit (ECU)<sup>7</sup> accounted for about 15 percent of official currency reserves.

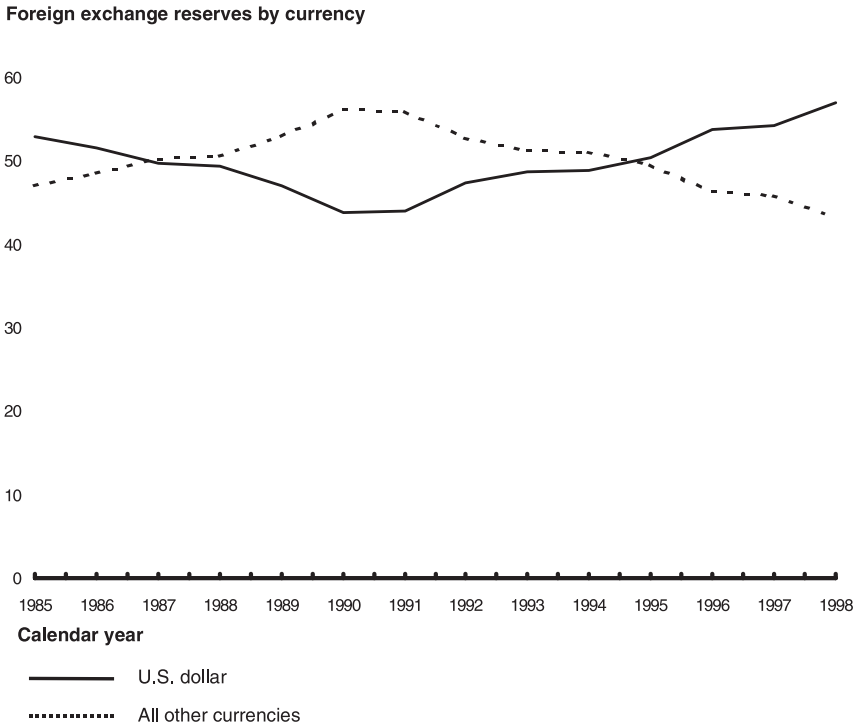
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<sup>6</sup>The foreign exchange markets are where domestic currency is exchanged for foreign currency. When one country experiences an increase in demand for foreign currency relative to its domestic currency, the exchange rate of the domestic currency will fall. A central bank can "intervene" or try to influence this by selling foreign currency and buying its domestic currency.

<sup>7</sup>The European Currency Unit is a composite basket of currencies in which each currency is weighted according to its share in intra-European trade, its percentage share of EU gross national product, and the relative importance of each country's foreign exchange reserves. As of January 1, 1999, the ECU was converted into the euro on a one-for-one basis.

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**Figure 2.3: Official Foreign Exchange Reserves by Currency Denomination (1985-1998)**



Source: IMF.

Another official international role for a currency is as a base against which other countries might “peg” their exchange rates. Countries peg their exchange rates by tying the value of their currency to the currency of another country—typically the currency of its largest trading partner. The value of the pegged currency rises or falls simultaneously with the value of the currency to which it is tied. Several dozen smaller countries around the world peg their currencies to the dollar, the euro, other currencies, or a basket of currencies. A country that pegs its currency to another

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is likely to keep most of its foreign exchange reserves in that other currency.

Some Eastern European countries, which have pegged their currencies to the German mark in the past, now peg their currencies to the euro. The euro has replaced the former national currencies of the French franc and the Portuguese escudo as a pegging currency. The EU expects more countries to peg their currencies to the euro in the future, in some cases upon accession to the EU. Experts we spoke with expect the countries that pegged their exchange rates to the dollar before the advent of the euro to continue to do so because it makes economic sense for them.

Most Latin American and Asian countries have closer trade relations with the United States than with Europe, and thus it seems likely that these countries will continue to use the dollar as a reserve currency. However, it also seems likely that the euro would be used by countries that intend to peg their exchange rates to the euro or to intervene in currency markets in the euro for other purposes.

Before the inauguration of the euro, there were questions about whether the European System of Central Banks (ESCB)<sup>8</sup> and other central banks around the world might sell large amounts of their dollar reserves. Prior to EMU, the central banks of the present members of the euro area needed part of their reserves for possible intervention in the currency markets in case of instability between their currencies. Once EMU converted the intrazone trade and capital flows into domestic-currency transactions, such intervention was no longer necessary, and it was thought that the pooled foreign currency reserves of

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<sup>8</sup>ESCB comprises the ECB and the central banks of all EU member countries.

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the ESCB might exceed the potential reserve needs of EMU.<sup>9</sup> The ECB reported that in 1999 some of the national central banks did reduce the proportion of foreign reserves in their balance sheets. Nonetheless, such actions were not sizeable; between the end of January and the end of October 1999, the combined foreign exchange reserves of the euro area only dropped from \$234 billion to \$223 billion. The impact of reduction in excess reserves would be small relative to the stock of U.S. international assets and liabilities. Moreover, statements from both the ECB and the U.S. Treasury indicated that dramatic or abrupt changes in the currency reserves of the central banks were unlikely.

A shift in the type of reserves held by developing countries may have more of an effect on the value of the dollar than a shift by industrialized countries. As of March 1999, International Monetary Fund (IMF) data show that developing countries held 58 percent of global foreign currency reserves, and developed countries held 42 percent of global foreign currency reserves. As of the end of 1998, 57 percent of developing country currency reserves was dollars, and 64 percent of developed country currency reserves was dollars.

The ECB expects the euro to inherit the reserve currency roles of the respective euro area former national currencies and to be the second most used international reserve currency. Most analysts maintain that the advent of the euro is not likely to cause a sudden decline in the use of the dollar as a reserve

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<sup>9</sup>Note that the creation of the euro did reduce the ESCB's currency reserves somewhat, because the portion of each national central bank's reserves that had been in other members' currencies was converted into domestic currency upon creation of the euro. In January 1999, the euro area foreign exchange reserves dropped by \$32.8 billion, possibly reflecting this effect.



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currency in the near future. Central banks have traditionally refrained from abrupt and large changes in the level and composition of their foreign reserves. Over time, official sector preferences for currency use could change, and the euro could eventually replace part of the dollar's role as a reserve currency, but experts we spoke with expect any change to be gradual. As the euro achieves depth and liquidity, over time central bankers may see it as an increasingly desirable currency for diversification purposes. Ultimately, the ability of the euro to become a major reserve currency will depend on the confidence that both foreign central banks and international investors have in it as well as on its usage in international trade and finance.

Although there are certain economic benefits that derive from the public and private international roles of the dollar, the importance of such benefits is uncertain. Some analysts believe that these roles provide, in addition to economic benefits, important political benefits to the United States that are worth maintaining. Other analysts believe the importance of a country's currency has little to do with the well-being of its citizens over the long run, as attested by the experience of many successful economies whose currencies do not have major international roles.

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# What Could Be the Effects of EMU on Monetary Policy and on Exchange Rates?

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## **Q. What is monetary policy?**

**A.** Monetary policy is the set of central bank actions that adjust the supply of money and credit conditions in the economy to achieve a set of policy goals. Important monetary policy goals include price stability, economic growth, and keeping output near its potential and, thus, unemployment low. An additional objective is to manage credit conditions to facilitate a smoothly functioning economy. Monetary policy is designed to affect economic variables such as interest rates and the level of output and employment in the short run in ways compatible with long-run policy objectives.

An “easy” monetary policy lowers unemployment and increases output over the short run through faster monetary growth and possibly lower interest rates. However, these effects may not last over the long term, and such a policy also tends to raise the rate of inflation and decrease the value of the currency on international markets. In contrast, a “tight” monetary policy raises interest rates and lowers inflation, possibly at the cost of higher short-term unemployment. Such a policy can also increase the value of the currency on international markets. A tension exists in monetary policy decisions between the desirable goals of low unemployment and low inflation.

## **Q. How is monetary policy set and implemented in the euro area?**

**A.** In the euro area, monetary policy is decided upon and implemented by the European System of Central Banks (ESCB), which consists of the ECB and the

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central banks of all EU members.<sup>1</sup> The Governing Council of the ECB—composed of the 6-member Executive Board plus 1 representative from each of the 11 euro area member central banks—formulates monetary policy, and the Executive Board implements monetary policy through the national central banks. A central way monetary policy is conducted is through open market operations—the buying and selling of approved securities.<sup>2</sup>

According to the Maastricht Treaty, the ECB's primary goal is price stability, which the ECB has operationally defined as less than 2 percent per year of inflation in consumer prices. In contrast to the German Bundesbank, the leading European central bank, which had aimed for a specific rate of growth of its money supply, the ECB's stated policy is to be more flexible and consider other indicators in making monetary policy decisions. Specifically, the ECB has set forth a "two-pillar" strategy for conducting monetary policy, which includes (1) a reference value for money supply growth of 4 ½ percent annually in the broadly-defined money supply measure, M3;<sup>3</sup> and

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<sup>1</sup>The four EU member states that are not part of the euro area have a special status; they are allowed to conduct their national monetary policies and do not take part in decisionmaking nor in implementation of the common euro area monetary policy.

<sup>2</sup>Other tools of monetary policy include setting (1) the interest rate of the Marginal Lending Facility, through which eligible financial institutions may borrow overnight from ESCB; (2) the interest rate in the Deposit Facility, through which ESCB accepts overnight deposits from eligible financial institutions; and (3) financial institutions' reserve requirements.

<sup>3</sup>The most common measures of money are M1, M2, and M3. M1 is the narrowest measure and includes the most liquid assets—currency held by the (nonfinancial institution) public and checking account-type balances at financial institutions. M2 is a broader concept, and includes, for example, certain time deposits. M3 is the broadest measure; in addition to M2, it includes other assets such as large time deposits, and marketable liabilities of financial institutions.

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(2) a broad-based assessment of the outlook for inflation generally.

A fundamental question surrounding the introduction of the euro was whether the ECB would pursue a relatively strict monetary policy and maintain low inflation over the long run in the face of potential pressures to pursue an easy monetary policy to lessen (short-run) unemployment. Those who raise this question cited several factors including that almost two-thirds of the ECB's Governing Council are representatives of national central banks that have only recently become independent, and more liberal member governments may come into power and pressure the ECB for a more expansionary monetary policy.

In its brief history, the ECB has appeared to be focused on price stability in numerous public statements. To date, inflation has remained modest, generally not exceeding 2 percent per year, and broader measures of the euro money supply have grown moderately, although above the reference value rate.<sup>4</sup> One issue continues to be how the ECB will conduct monetary policy when economic conditions differ significantly among member countries--if, for example, the economies of some countries, but not others, are depressed by external or internal events.

**Q. How could the euro affect monetary policy in the United States?**

**A.** Conducting U.S. monetary policy is the responsibility of the Federal Reserve System (the Fed), the central bank of the United States. Congress has defined the primary objectives of national

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<sup>4</sup>From December 1998 through January 2000, M3 grew almost 6 percent.

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economic policy as economic growth, a high level of employment, stable prices, and moderate long-term interest rates, and the Fed is required to pursue these goals.<sup>5</sup> As a practical economic matter, tensions can arise in the pursuit of these goals. In general, low inflation has been a clear priority of U.S. monetary policy over the past 15 years.

Open market operations are the principal means of conducting U.S. monetary policy. They are the responsibility of the Federal Open Market Committee, which comprises all 7 members of the Board of Governors of the Fed plus the presidents of each of the 12 (regional) Federal Reserve banks.<sup>6</sup> After considering the current and expected state of the economy and its future prospects, including domestic and foreign economic activity, output, inflation, wage inflation, interest rates, money supply growth, consumer spending, and securities markets, the committee decides upon what it considers an appropriate open market policy for the New York Federal Reserve Bank to implement. Meetings occur eight times a year.

The Board of Governors oversees two other tools of monetary policy. The discount rate—the rate at which banks and other deposit-taking institutions can borrow from their Federal Reserve Banks—is changed from time to time to reinforce open market operations. Reserve requirements—the schedule by which these institutions must keep reserves as cash in

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<sup>5</sup>These laws include The Federal Reserve Act of 1913, which established the Federal Reserve System; The Employment Act of 1946; and The Full Employment and Balanced Growth Act of 1978, also known as the Humphrey-Hawkins Act, after its original sponsors.

<sup>6</sup>At any one time only five presidents may vote, one of whom is the head of the New York Federal Reserve Bank.

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their vaults or as deposits in accounts at the Fed—are rarely changed.

Although the Fed determines U.S. monetary policy primarily on the basis of domestic economic conditions, the Federal Reserve also takes international conditions into account insofar as they influence U.S. domestic objectives. For example, increases in the price of oil, an international commodity, can significantly affect the U.S. inflation rate and has influenced U.S. monetary policy. Similarly, following the Russian default in 1998, the Fed started to ease U.S. monetary policy by lowering short-term interest rates in September to offset the downward effect on U.S. economic growth of increasing weakness in foreign economies. Monetary policy does affect exchange rates; however, according to Fed officials, in recent years the Fed has not intervened in the foreign exchange market, except to combat disorderly markets during brief periods.

Although the Fed has a track record of cooperating and coordinating with some of the central banks in the ESCB, it has little experience dealing with the ECB as it is a new institution. Thus, how those interactions will affect U.S. monetary policy is yet to be determined.

**Q. How can exchange rates vary?**

**A.** Exchange rates vary due to a variety of influences—current and expected monetary, fiscal, and structural policies, as well as cyclical and other economic forces. Exchange rate movements can be characterized in terms of longer term trends and shorter term fluctuations around those trends, termed volatility. Generally, the more that two countries' fundamental economic conditions or macroeconomic policies differ, the greater will be the trend movement

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of their common exchange rate, other things being equal. Volatility reflects market participants' reactions to new information on a variety of changing economic as well as other conditions. Actual or expected intervention by the central banking authority in the foreign exchange market to maintain the exchange rate can, in certain cases, reduce volatility.

**Q. What is the recent history of exchange rate variations among euro area members?**

**A.** Although exchange rates among continental European countries have been relatively stable in recent years, governments have at times experienced difficulties in defending currency values, with the latest currency crisis occurring in 1992-93. Governments of EU member states have tried to lessen exchange rate variability among their countries for some time, due to the high degree of trade and investment among them. Some central banks have intervened in foreign exchange markets and increasingly governments have coordinated macroeconomic policies to reduce exchange rate fluctuations. A common view is that large fluctuations in currency values result in increased costs to businesses to cover the risks of conducting international transactions, although the effect of such costs on trade volume is not clear.

**Q. How could the euro affect exchange rates with other currencies?**

**A.** The euro's effect on the volatility of the euro area's external exchange rate with respect to other currencies—e.g., the dollar—has been subject to debate among international economists. Some economists have argued that the euro will be more volatile against other currencies than were the major

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national currencies of euro area members, and others have argued that volatility will be less.

Reasons given for higher expected volatility are (1) during the initial period of the euro there will be greater uncertainty about how the ECB will conduct monetary policy, a rapidly changing financial environment in Europe, and unknown shifts by international investors and central banks; and (2) the ECB may be less concerned about exchange rate fluctuation than the individual central banks had been before EMU because creation of the large, single-currency zone reduces the share of GDP that is influenced by these fluctuations.

One reason given for possible lower volatility is that the monetary policy of the euro area is likely to respond to business conditions across the euro area and not a particular country. These conditions can vary across countries. Thus, interest rates in the euro area, reflecting more heterogeneous business conditions, could fluctuate less than they would have for one country, leading to less fluctuation in capital flows between the euro area and the rest of the world, and less fluctuation in the euro exchange rate, other things being equal.

Over the longer term, the credibility of the value of the euro currency will likely depend primarily on the performance of euro area economies and their economic policy mix.

**Q. How has the euro-dollar exchange rate varied?**

**A.** After its introduction in January 1999, the euro steadily declined in value, going from \$1.17 to about \$1.02 by July 1. Its value recovered somewhat after that but declined again, dropping below \$0.98 by the



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end of January 2000, a more than 16-percent depreciation since January 1999. Because the euro was launched at a point when the values of euro area currencies against the dollar were relatively high compared to the previous 2 years, it is difficult to know at this point the significance of this decline. One factor behind the depreciation against the dollar may be the relative strength of the U.S. economy, which led to an increased demand by foreigners for U.S. stocks and bonds and increased foreign direct investment in the United States. Some analysts also believe that slow progress in restructuring economies in some euro area countries has also lowered the market's confidence in the euro. Figure 3.1 shows recent trends in the dollar-euro area exchange rate.

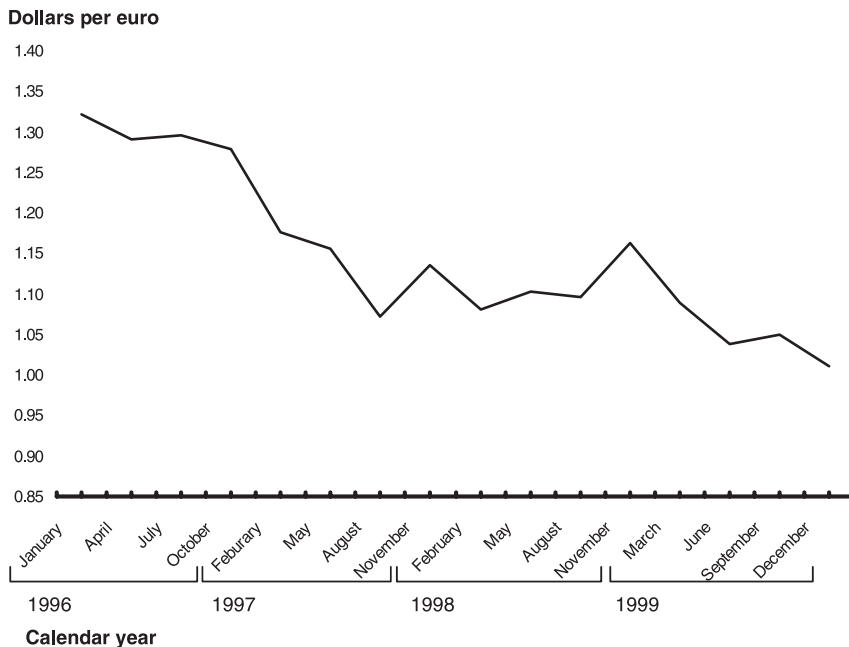
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**Figure 3.1: Dollar-Euro Area Exchange Rate, January 1996 – February 2000**



Note: Values before January 1999 reflect a synthetic euro based on trade-weighted averages of the exchange rates of the 11 euro area countries. Beginning in January 1999, values reflect observed dollar-euro exchange rates.

Source: Department of Commerce.

Future movements of the dollar-euro exchange rate are likely to depend upon the macroeconomic policies of the United States and euro area countries, their future relative economic growth, how quickly euro area countries restructure their economies, and other forces affecting these economies.

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# What are the Implications of EMU for Financial Markets, Financial Institutions, and Their Regulation?

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**Q. What are the implications of the European Monetary Union (EMU) for financial markets, institutions, and their regulation?**

A. EMU is a major step in the economic unification of Europe, which began with the Treaty of Rome in 1957. As with the nonfinancial aspects of unification, EMU is intended to strengthen Europe economically by achieving the benefits of economies of scale. From the U.S. perspective, key questions about EMU focus on financial markets, banking, and financial regulation.

**Q. How could the euro affect financial markets in Europe and the United States?**

A. Financial markets serve investors and users of capital better when the markets have sufficient size and liquidity to allow large sums to be traded without destabilizing prices. By substituting a single currency for numerous currencies that could fluctuate against each other, EMU and the euro are intended to add to the depth, liquidity, and competitiveness of capital markets in the euro area, and to lower trading costs for borrowers. Although EMU does not by itself make one uniform and unified market, the establishment of the single currency removes an important impediment to the intra-euro area capital flows: i.e., exchange rate risk. Some experts have said that the largest effect of the creation of the euro will be the transformation of financial services in Europe. They predict that European stock and bond markets will become more integrated over time and could rival stock and bond markets in the United States. The introduction of the euro may eventually create the largest single-currency financial market in the world.<sup>1</sup>

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<sup>1</sup>The market value of bonds, equities, and bank assets issued in EU countries, not euro area countries, amounted to more than \$27

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Various structural differences still exist in the euro area financial markets. The development of Europe-wide private securities markets has thus far been inhibited by long-standing regulations for issuing, dealing, and trading securities; by elements of tax systems that encourage bank financing; and by differences in market practices and in securities and settlement systems. With the introduction of the euro, European financial markets could become less segmented and market practices could be more uniform.

Nonetheless, the first year of the euro was marked by a surge of activity in euro-denominated international debt securities. In the first 9 months of 1999, announced new issues of such securities almost doubled compared to the amounts for the pre-EMU currencies in January-September 1998. As shown in figure 4.1, in the 1999 period, the euro-denominated share of international securities issues climbed, and that of dollar-denominated announced issues dropped. The inauguration of the euro was an important factor in the strength of euro-denominated issues: according to BIS, the merger of euro area currencies can broaden the range of investors who might be interested in investing in some bond issues and also resulted in a pooling of investment demand. One reason for this increased bond issuance in 1999 was an upsurge in merger and acquisition activity in the euro area, according to an IMF official. One financial services industry official told us that part of the surge in euro issues last year may have reflected temporarily favorable terms offered by underwriters competing to establish market share.

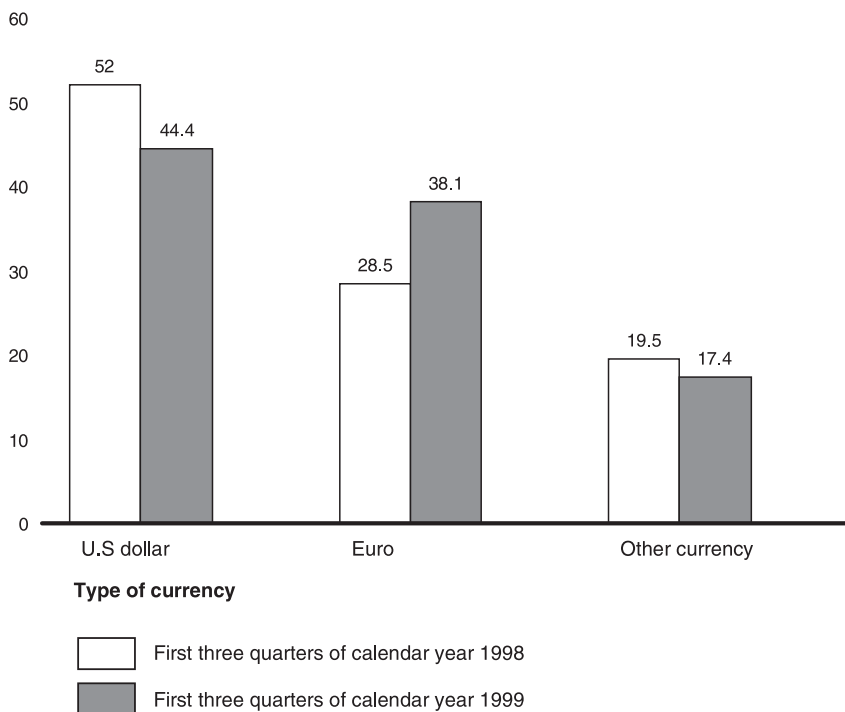
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billion at the end of 1995. This is larger than the number for North America (See International Capital Markets: Developments, Prospects, and Key Policy Issues. IMF, Nov.1997).

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**Figure 4.1: Announced New Issues of International Bonds and Notes (January – September 1998 and 1999)**

Percentage of total announced new issues by currency



Source: BIS.

Just as dollar-denominated debt issues have been issued by non-U.S. entities, euro-denominated issues have been issued by non-euro area entities. Countries such as Brazil, Argentina, South Africa, and Canada have launched euro issues in significant amounts; according to the ECB, this was in order to rebalance the currency composition of their foreign debt. Moreover, U.S.-based companies have issued euro-denominated debt. Nonetheless, there is a stronger “home-currency bias” for euro-denominated issues; BIS data show that less than half of outstanding

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dollar-denominated issues have been issued by U.S. entities, but 68 percent of euro-denominated issuance has been raised by euro area borrowers. Most of the rise in international debt securities issuance in 1999 has come from European companies, a growth that BIS ascribes to the euro.

Not only was there an increase in the total amount of euro-denominated funds raised in 1999, there was also a broadening of the type of European companies that were able to tap this market. Previously, corporate securities issuance in Europe had been primarily by the highest-rated and best-known companies; other companies were more dependent on financing from banks. Changes in investor strategies stemming from the merging of currencies, however, facilitated the entry of lower rated borrowers into the international bond market. Because EMU will permit investors to more accurately assess and price corporate risk, higher yielding debt issued by small to medium sized or highly leveraged companies will become more attractive. The emergence of a European junk bond market is widely predicted.

An opening of securities issuance to less-than-highest-rated companies may lessen some borrowers' dependence on bank loans. This would move Europe toward a more U.S.-style financial system, where financial markets are a more important source of finance than bank lending. Figure 4.2 shows the comparative shares of securities and bank financing in the euro area countries and the United States in 1995. In the United States, combined stock market capitalization plus outstanding debt securities amounted to \$17.9 trillion, compared to bank assets of

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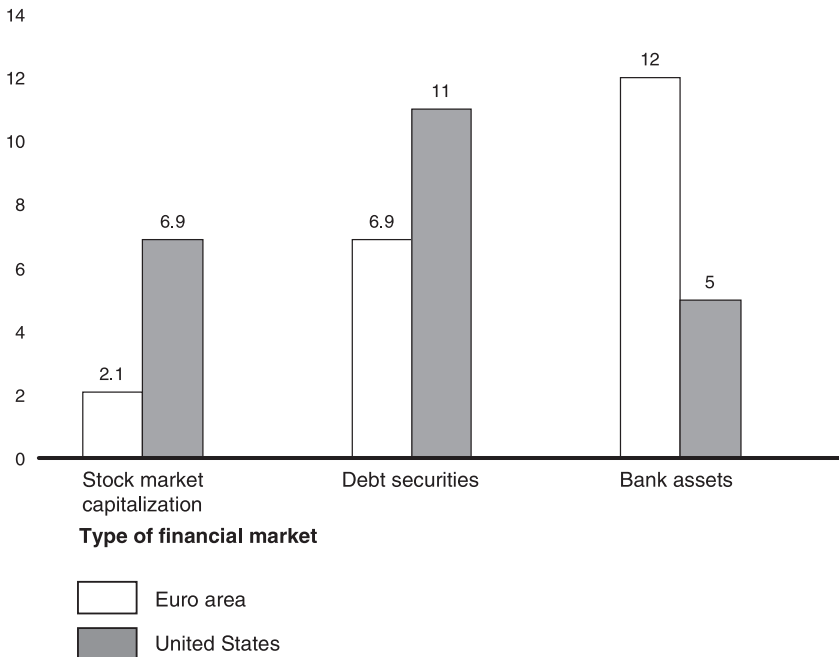
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\$5 trillion.<sup>2</sup> In the euro area countries, the comparative sizes were reversed, with bank assets of \$12 trillion exceeding combined stock and debt securities of \$9 trillion.

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**Figure 4.2: Size of Euro Area Versus United States Financial Markets (End- 1995)**

Dollars in trillions



Source: IMF.

The faster growth of euro-denominated activity on the international financial markets does not appear to have been at the expense of U.S. entities. As noted, U.S.-based borrowers have issued euro-denominated

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<sup>2</sup>Market capitalization is the value of outstanding shares of securities listed on exchanges. It is calculated by multiplying share price by number of outstanding shares.

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debt. Moreover, the move toward a more unified financial market in the euro area has presented opportunities for U.S. financial services companies. These companies, through their experience at home, have developed considerable expertise in such activities as securities underwriting and mergers and acquisitions. Notwithstanding shifts in the currency composition of issues in 1999, data for the first 9 months of 1999 show that U.S. investment banks increased their share of international bond underwriting to 45 percent, up from 41 percent in 1998. European underwriters had about a 40-percent share in the 1999 period.

#### **Q. What impact might the euro have on the market for U.S. Treasuries?**

**A.** By eliminating currency risk on cross-border transactions, the introduction of the euro has reduced the cost of issuing and investing in euro area government securities. Some analysts have questioned whether the U.S. Treasury bond market might be challenged by a euro-denominated government bond market of bonds issued by euro area countries—especially in an era when the United States is issuing less debt. This question arises because existing euro area national government debts that were previously denominated in national currencies and all future issues are now denominated in the single currency. The totals of euro area government debt exceed the amount of publicly issued U.S. Treasury debt.

Nonetheless, since the conversion of government debt to the euro, interest rate differentials still exist between the different governments' debt. One analyst has compared these interest rate differentials to the different interest rates of U.S. state and municipal bonds. Although there has been some convergence of interest rates, these differentials reflect, among other



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things, the respective credit standing of each government's debt, which still depends on that country's ability to service its debts in the future. There is no common taxing authority in the euro area and no statutory guarantees of one country's debt by another. Each euro area member has different financial needs, fiscal policies, and regulations. Interest rate differentials may also depend on issuing techniques, clearance and settlement procedures, and legal procedures. Thus, the government bonds are not deemed to be fungible, and there are still as many different government bond markets as there had been previously. Treasury officials we spoke with believe that the possibility of a unified euro-government bond market competing with the U.S. Treasury market is unlikely at the present time.

According to the EU, although the euro area government bond market is not yet unified, greater harmonization is being promoted through extensive consultations that take place among national debt offices on instruments and issuing techniques and practices. A European debt agency has been proposed to issue debt instruments on behalf of national governments. Such a supranational debt agency would require a costly process of revision and amendment of European treaties.

#### **Q. How could the euro affect banking in Europe and the United States?**

**A.** Banks operating in the euro area, including U.S. banks, are facing a number of possible effects stemming from the establishment of EMU.<sup>3</sup> The reduction of foreign exchange activity in currencies

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<sup>3</sup>Other fundamental forces have also led to changes in the financial system, including financial liberalization, innovation, technological progress, and diversification of savings and investment portfolios.

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replaced by the euro was regarded by banks as the main negative consequence of EMU. Creation of a single-currency area removes one deterrent to banks in any one euro area country from conducting banking in another euro area country, namely the risk of adverse moves of exchange rates. Because the disappearance of national currencies reduces the home currency advantages that banks in euro area countries had vis-à-vis banks in other euro area countries, the introduction of the euro can be expected to trigger a further increase in cross-border competition and operations of banks. This increased competition could put downward pressure on profitability.

Faced with the potential for greater competition and the need to increase efficiency and reduce costs, banks in the euro area countries have embarked on a wave of mergers and acquisitions in an attempt to enhance their size and competitiveness. In terms of the nominal value of deals, bank mergers in the euro area surpassed those of the United States by some 70 percent in 1999. Thus far, however, consolidation activity has mostly been within national borders, in part because national authorities have appeared reluctant to approve major foreign ownership roles in their domestic banking systems. That is, although the market shares of foreign institutions have recently shown a gradual increase in a number of countries, the euro area banking sector is still fragmented along national lines. The need to become familiar with conditions in the various national markets and the difficulty of developing pan-European banking products have constituted barriers to cross-border banking activity. In addition, the EU believes there are sound economic and practical reasons, such as language differences, for consolidation taking place first on a national level.

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All banks operating in the euro area, as well as banks in London and elsewhere, that had accounts in euro area national currencies report that they have had to expend substantial sums adding new systems for recording and managing activities in the new currency. Moreover, banks' earnings may be reduced by the disappearance, culminating in 2002, of revenues generated from customers' foreign exchange trading between the national currencies.

In addition, there could be a more fundamental adjustment of banks' role in financing in the euro area in the future. As shown in figure 4.2, the euro area's financial markets are dominated by bank financing, followed by debt security financing, with stock markets least important. In contrast, the financial markets in the United States are dominated by debt securities financing, followed by stock market financing, with bank financing least important.

As noted in the above discussion of financial markets, EMU is expected by many experts to bolster the capacity and efficiency of euro area capital markets. This development would allow a broader spectrum of euro area companies to raise money by issuing securities, making the companies less dependent on borrowing from banks. According to the EU, corporate bond issuance in euro in 1999 was about four times as great as bond issuance in euro area member national currencies in 1998.

Furthermore, retail banks in most euro area countries are relatively inefficient. Financial systems in Europe are "over-banked" in that complex ownership structures have prevented exit and entry, retarded innovation, and perpetrated mispricing of financial

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## Chapter 4

### What are the Implications of EMU for Financial Markets, Financial Institutions, and Their Regulation?

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services.<sup>4</sup> The introduction of the single currency is thought likely to accelerate the transformation of European finance by eliminating home currency advantages that EU banks have had in their local deposit-taking and lending activities.

The impact of these developments on U.S. banks would vary with the business focus of each bank. All U.S. banks operating in Europe presumably faced extra costs from upgrading their accounts and management systems to accommodate the euro. But the disappearance of revenues from foreign exchange trading among national currencies would affect only those banks active in this business. Similarly, the possibility that some groups of companies will be able to raise money by issuing securities, thus borrowing less from their banks, would not necessarily affect all U.S. banks operating in Europe, only those that have been lending to these groups of companies. On a broader level, however, if subsequent mergers in Europe eventually lead to stronger, more efficient financial institutions, U.S. banks would face increased competition. This would affect U.S. banks doing business in Europe; and it could also make some larger European banks more formidable competitors worldwide, including in the U.S. market itself.

#### **Q. How could the euro affect the regulation of financial services companies in the United States and Europe?**

**A.** Monetary union in Europe does not mean that new financial regulatory and supervisory structures have been created. Creation of the ECB did not entail any

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<sup>4</sup>See Folkerts-Landau, David, D.J. Mathieson, and G.J. Schinasi. "EMU: Systemic Implications and Challenges," International Capital Markets: Developments, Prospects, and Key Policy Issues. Washington, D.C.: IMF, Nov. 1997.

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transfer of supervisory powers to the ECB. Euro area countries continue to regulate financial services at the national level supplemented by EU directives.<sup>5</sup> At the national level there are a variety of regulatory arrangements. In some cases, bank supervisory functions are combined with monetary policy functions within the central bank. Other countries assign supervisory responsibility to another agency. There are considerable differences in the regulation of bank activities and their ownership structure across EU countries. Other nonharmonized regulatory differences include taxation, subsidies, supervisory reporting, on-site inspections, provisions for bank liquidation and restructuring of banks, and other factors. Unless further harmonization takes place, banking regulations will continue to grant considerably different powers to banks in each country.

One important restriction on intra-euro area cross-border investment has been made irrelevant by the euro. The EU has a matching rule that liabilities in a foreign currency must be 80-percent matched by assets in the same currency. That is, fund managers must invest in assets denominated in the same currencies as the liabilities they back. This rule applies to investments of pension funds and insurance companies. With the advent of EMU, insurance companies will be able to invest their assets in any country of the euro area as long as their liabilities are denominated in euros. Asset allocation will move away from domestic equities and bonds to those from all EMU participant countries.

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<sup>5</sup>Directives are measures passed by the European Commission that EU member national governments are required to adopt through their own national legislation. Current EU directives allow freedom of establishment of cross-border service provision and have substantially harmonized prudential regulation, including solvency ratios and large exposures.

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The implementation of several EU directives and the Basel Accord on capital adequacy<sup>6</sup> have not fully harmonized capital standards. The EU is currently conducting a review of its capital adequacy standards. In the meantime, capital standards differ somewhat across EU countries owing to the different lists of items that banks can use to meet capital requirements. Likewise, supervisory practices vary in terms of procedures for examinations and inspections, disclosure of regulatory reporting, lending limits, and limits on bank activities abroad.

One important issue has been ambiguity about mechanisms for resolving banking crises. The Maastricht Treaty is silent about lender of last resort responsibilities. There is no central authority with the explicit mandate to ensure market stability over the EMU financial system. Situations could arise in which the ECB would have to act decisively and quickly. The euro area central banks, the ECB, and bank supervisors would have to cooperate and share information. According to the EU, the ECB has made it clear that it is satisfied with the organization of lender of last resort activities. However, work remains to be done in the area of crisis management involving central banks, supervisory organizations, and Ministers of Finance.

Although there is an EU requirement for all EU countries to develop deposit insurance systems, the structure of deposit insurance is far from harmonized. Deposit insurance administration is the responsibility of the government in five EU countries, of the banking system in six, and of both in the remaining four. Funding is to be provided before the occurrence of a bank failure in 10 of the 15 EU countries and after the

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<sup>6</sup>The Basel Accord, developed under the auspices of BIS, is a risk-based capital standards framework for internationally active banks.

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occurrence of a failure in the remaining countries. Deposit insurance premiums are risk-based only in two euro area countries, and the basis on which the premium is calculated varies considerably across the EU. The extent of coverage is uneven ranging from a low of \$12,000 in one country to full coverage in another euro area country. This lack of harmonization could be a concern for regulators if it triggers regulatory competition between national banking systems with funds flowing towards countries offering the most protection.

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# What are the Implications of the Euro for U.S. Trade and Investment with Europe?

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**Q. What are the current levels and composition of trade between the United States and the EU?**

**A.** The amount of U.S. trade with euro area countries has grown rapidly in recent years. (See fig. 5.1.) In 1998, euro area countries were the second largest U.S. trading partner, behind Canada, accounting for 15 percent of U.S. trade. Although the United States has in recent years had a trade deficit with the euro area countries in terms of merchandise (goods) trade, the service sector has seen a surplus. (See fig. 5.2.)



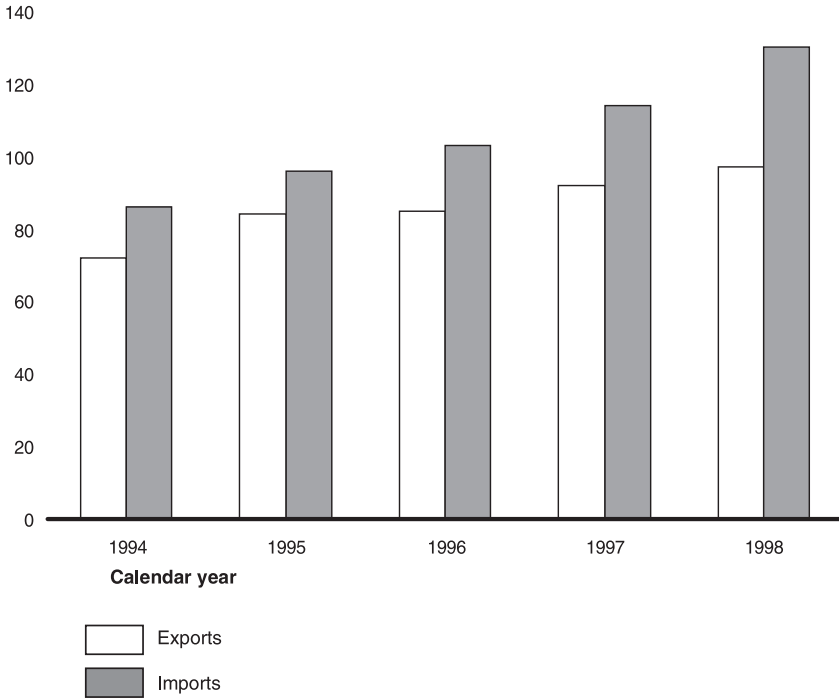
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**Figure 5.1: U.S. Merchandise Trade With Euro Area Countries (1994-1998)**

U.S. dollars (in billions)



Source: U.S. Department of Commerce.

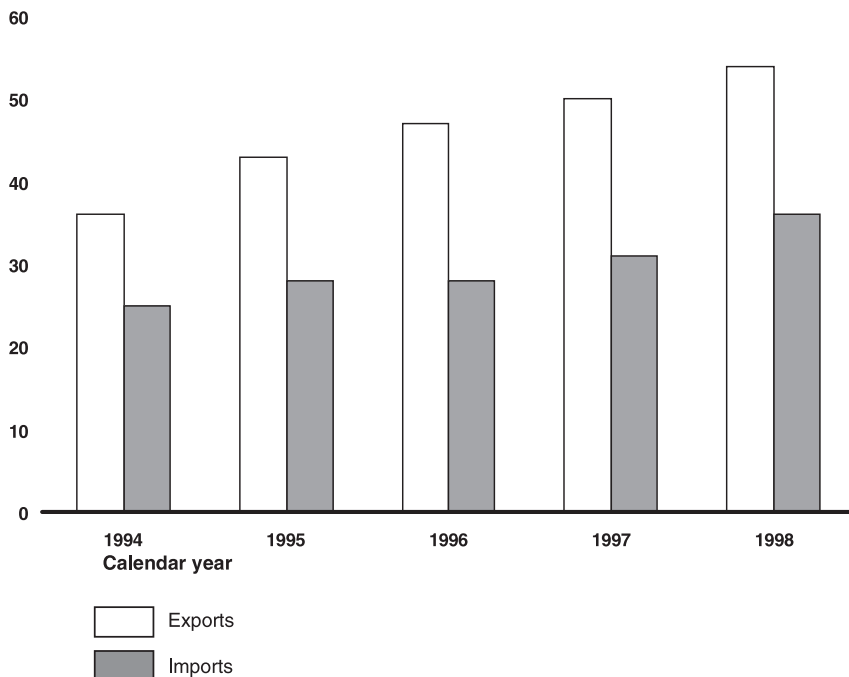
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**Figure 5.2: U.S. Service Trade With Euro Area Countries (1994-1998)**

U.S. dollars (in billions)



Note: Estimated service trade data are for 13 countries. These data include U.S. service trade with Greece and Denmark in addition to the 11 euro area countries. Thus, these data may overstate to some extent the amount of U.S. service trade with euro area countries.

Source: U.S. Department of Commerce.

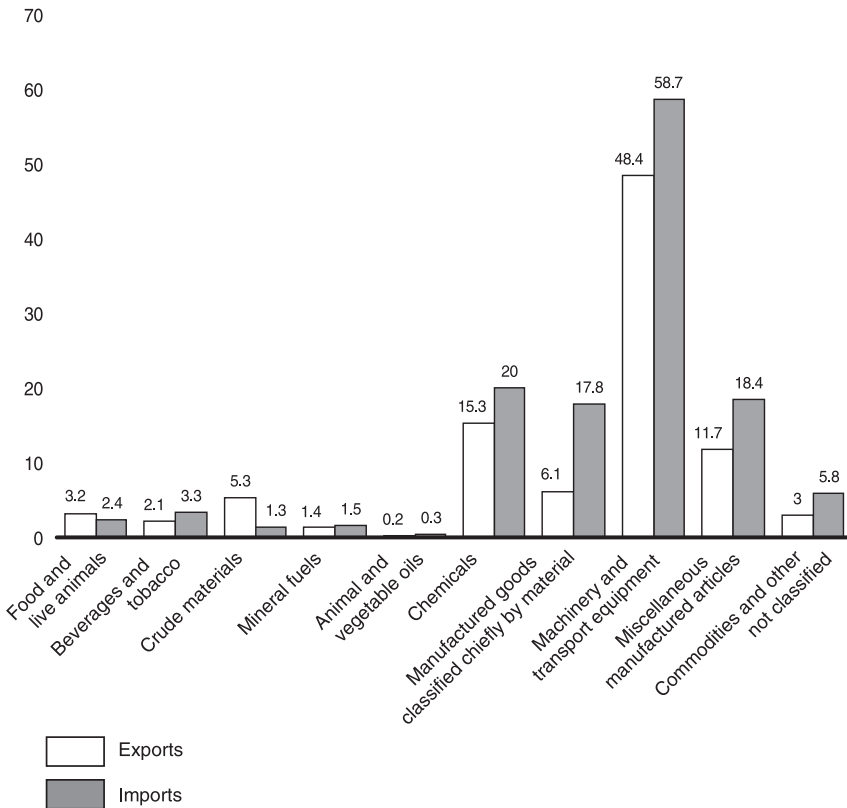
Germany is the United States' largest trading partner among euro area countries, followed by France and Italy. The composition of U.S. trade with euro area countries, by sector, is similar to that of overall U.S. trade. Among nine aggregate sectoral groupings, trade in the top two accounted for about 60 percent of all U.S.-euro area trade. These top categories are

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machinery and transport equipment, followed by chemicals and related products. (See fig. 5.3.)

**Figure 5.3: Composition of U.S. Merchandise Trade with the Euro Area by Sector, 1998**

U.S. dollars (in billions)



Source: U.S. Department of Commerce.

**Q. How could the euro affect U.S. trade?**

**A.** The introduction of the euro is not expected to have a significant direct impact on U.S. trade with the

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euro area or with the rest of the world. However, it may indirectly affect future U.S. international trade if it affects the economic growth of the euro area or its competitiveness. If euro area economies grow faster due to the introduction of the single currency, Europe's demand for U.S. exports could rise. That effect could, however, be offset to some degree if the euro leads to European producers becoming more efficient, and thus more competitive in international markets. Both of these effects, however, could be dampened by corresponding exchange rate adjustments between the euro and other currencies.

In addition, the euro could potentially affect the relative attractiveness of U.S. exports to non-European markets if European producers competing with U.S. exporters in those markets become more efficient producers.

Although the overall trade effects are generally believed to be small relative to overall U.S. trade, those business sectors in which U.S. trade with Europe—or U.S. firms' competition with European producers in third-party markets—is concentrated could see more significant impacts.

**Q. How could the euro affect economic growth in Europe?**

**A.** EMU and the euro's effects on economic growth in Europe will not be known for some time because they depend largely on economic policy decisions to be made in the years ahead. On the positive side, a common currency may to some extent reduce costs of doing business. More transparent pricing can enhance competition. These factors can benefit economic growth. In addition, EMU's requirements for fiscal discipline, e.g., low budget deficit and debt levels, should also benefit economic performance over the

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long run. However, a successful EMU will require a sustained commitment to making what are likely to be difficult policy choices. Because national governments will no longer be able to use monetary or exchange rate policies to adjust to economic downturns, and the use of fiscal policy will be constrained, they will have to turn to structural reforms to allow labor and capital to more easily move among firms, industries, and member countries. According to some analysts, this is how EMU may ultimately provide a strong boost to growth.

However, some analysts continue to express concerns about member countries' and the ECB's ability to make policy choices that are crucial to the euro's long-term success. These include concerns about the countries' ability to keep deficits low; the ECB's ability to maintain price stability; and the countries' ability to, in fact, achieve needed structural reforms.

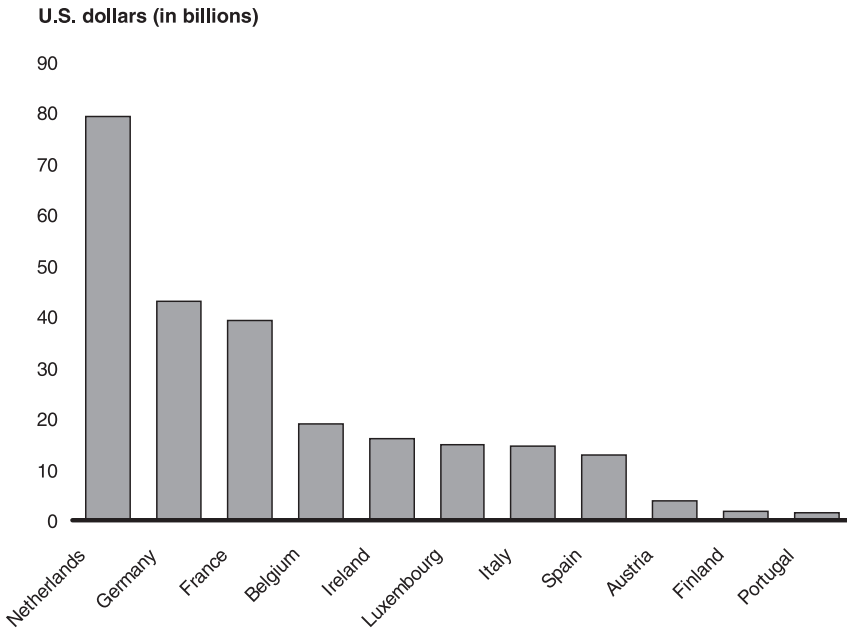
**Q. What are the recent levels and composition of foreign direct investment (FDI) between the United States and euro area countries?**

**A.** U.S. direct investment in the euro area accounted for about 25 percent of total U.S. FDI at the end of 1998. This share has been fairly stable over the past 3 years. The euro area's direct investment in the United States was about 38 percent of all FDI into the United States at the end of 1998, up from 35 percent in 1997. Europe as a whole accounted for about 67 percent of the total stock of FDI in the United States at the end of 1998.

In recent years, the United States has invested more in the Netherlands, Germany, and France than in other euro area countries, and these three countries also invested more in the United States. (See fig. 5.4.)

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**Figure 5.4: U.S. Direct Investment Position in Euro Area Countries 1998 – Historical Cost Basis Data**

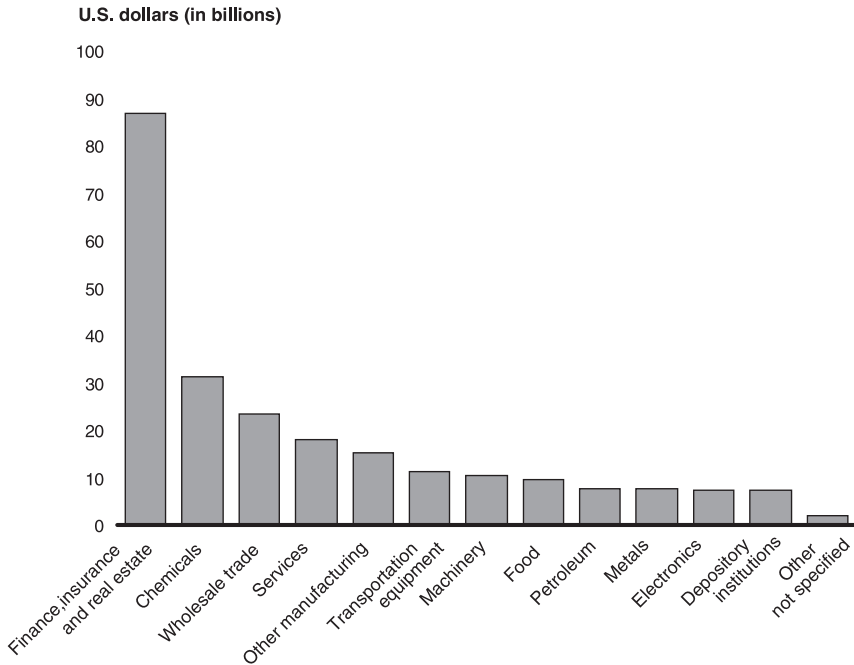


Source: U.S. Department of Commerce.

U.S. companies invested in sectors in euro area countries similar to those that U.S. companies invested in elsewhere: two major groupings (manufacturing sectors and finance/ insurance/ and real estate sectors) each accounted for more than one-third of total direct investment. However, in 1998, the manufacturing sector's share is higher in the euro area than in U.S. FDI elsewhere (39 percent in the euro area compared to 31 percent in all countries). (See fig. 5.5.)

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**Figure 5.5: Sectoral Composition of U.S. Direct Investment Position in Euro Area 1998 – Historical Cost Basis Data**



Source: U.S. Department of Commerce.

**Q. How could the euro affect foreign direct investment between the United States and Europe?**

**A.** Euro area countries are more significant partners with the United States in terms of direct foreign investment than in terms of trade. As European economic integration continues, analysts expect countries to remove restrictions on FDI and harmonize regulations over time. This would help all multinationals, including U.S. companies, to consolidate their capacity across Europe and become more cost-efficient. These efficiencies can in part be

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achieved through mergers. However, at this time it would be quite difficult to predict the magnitude of these impacts and identify the sectors most likely affected. In general, if the euro area economies manage to become more market-oriented with less burdensome government regulation and intervention over time, FDI from many countries could increase, including investment from U.S. companies. Without increased efficiencies, FDI in Europe could well decrease.



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# What Are the Implications of EMU for International Economic Policymaking?

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## **Q. How could EMU directly affect international economic policymaking?**

**A.** The introduction of the euro and the related establishment of the ECB slightly complicate, but do not significantly change, international economic policymaking, according to experts. International economic policy making was, prior to the creation of the ECB, and still is largely the purview of nation states and international organizations composed of representatives from nation states. The ECB is a new, transnational player in these discussions, requiring some new arrangements.

The management of international macroeconomic policy is currently addressed at meetings of the G-7 countries. The seven countries in the G-7 regularly consult on general economic and financial matters.<sup>1</sup>

With the existence of the euro, when the finance ministers from the G-7 meet, the agenda is to be split into two parts. The first part deals with global macroeconomic and exchange rate issues. The president of the ECB and the finance minister from the European country that currently holds the EU presidency is to attend these discussions. Central bank representatives from France, Italy, and Germany do not participate except when one of those countries holds the EU presidency. The second part of the agenda is to deal with such issues as banking regulation, debt relief, and assistance issues. Central bank representatives from France, Italy, and Germany are to participate, but the ECB does not. In addition, the European Commission participates in the second part for discussions on Russia.

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<sup>1</sup>The G-7 comprises Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

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Some experts believe that the creation of a more economically unified EU could affect trade negotiations between the United States and the EU. However, U.S. officials told us that they did not expect EMU to affect trade negotiations. These officials told us that the EU took a strong, unified position on trade issues prior to the creation of the euro, and they expect that to continue.

**Q. How could EMU affect decisionmaking by international financial institutions?**

**A.** In general, the adoption of the euro and continued evolution of EMU has not had significant effects on the formal decisionmaking processes of international financial institutions.

EU countries remain individual members of the IMF. Because the IMF grants membership only to countries, the euro area cannot be represented as a single entity on the Executive Board. However, the IMF has granted the ECB observer status at selected Executive Board meetings. In addition, the IMF holds discussions with the ECB and the European Commission as part of its regular economic reporting on its members. The details of this process, known as Article IV consultations, continue to evolve as the IMF tries to ensure that the positions of the ECB, the EU, and national governments are included in assessments of countries in the euro area. The IMF also has changed the composition of its currency, the special drawing rights (SDR), replacing the French franc and the German mark with the euro.<sup>2</sup>

The World Bank and the Organization for Economic Cooperation and Development (OECD) grant

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<sup>2</sup>The SDR is an international reserve asset created by the IMF from a basket of international currencies.

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membership only to countries, not organizations. Thus, no changes are necessary for the decisionmaking processes of these organizations. The EU already has a seat on the European Bank for Reconstruction and Development's (EBRD) Board of Directors. The existence of EMU will not change this.

The Bank for International Settlements (BIS), which is owned and controlled by central banks, provides a number of specialized services to them and, through them, to the international financial system more generally. The central banks of 14 EU members hold shares in the BIS. The ECB was invited to become a BIS member in November 1999. According to BIS, formal membership of the ECB will be made final when certain formalities have been completed.

**Q. What are the broader implications of EMU for global economic policymaking?**

**A.** If EMU works as European leaders hope, it could lead to an economically stronger and more politically unified Europe. These changes could translate into greater power and influence on the global economic scene. However, experts believe it is too early to discern the extent to which this is taking place. In the near term, most experts believe that representatives from national governments will continue to play the predominant roles in international economic policymaking.

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# Objectives, Scope, and Methodology

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At the request of the Chairman of the Subcommittee on Domestic and International Monetary Policy of the House Banking Committee, we undertook a review of the implications of Europe's new single currency for the United States. Specifically, our objectives were to answer the following questions: (1) What is the euro and why is Europe moving to it now? (2) What are the potential effects of the euro on the dollar? (3) What are the potential monetary policy and exchange rate effects of the euro? (4) What are the implications of the euro for financial markets and institutions and their regulation? (5) What are the euro's implications for U.S. trade and investment with Europe? And (6) What are the implications of the euro for international economic policymaking?

To meet our objectives, we interviewed officials from the Board of Governors of the Federal Reserve; the Federal Reserve Bank of New York; the Departments of State, Commerce, and the Treasury; the European Commission Delegation to the United States; the IMF; and commercial and investment banks. We also interviewed financial analysts and experts.

In addition, we reviewed U.S. government, EU, ECB, international organization, trade association, academic, industry, and private firm documents, including regulations, annual and other published reports, papers and articles, industry journals, and information available at various sites on the World Wide Web.

We conducted our work in Washington, D.C.; and New York, NY, between November 1999 and January 2000 in accordance with generally accepted government auditing standards.

We requested comments on the technical accuracy of this report from officials at the Departments of State,

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**Objectives, Scope, and Methodology**

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Commerce, and the Treasury; the Board of Governors of the Federal Reserve; the European Commission Delegation to the United States; and the IMF. Their comments have been incorporated where appropriate.

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# Glossary

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Bond	Interest-bearing or discounted certificate of indebtedness, paying a fixed rate of interest over the life of the obligation. The issuer is obligated by a written agreement to pay the holder a specific sum of money, usually semiannually but sometimes at maturity, and the face value of the certificate at maturity. Also called fixed-income security.
Council of the European Union	The Council is composed of ministers of EU governments and represents member states within the EU meeting to discuss specific interests. For example, the Ecofin Council consists of the economic and finance ministers. The Council has decision-making powers in the EU legislative process and coordinates the general economic policy of member states. The Council of the European Union should not be confused with the European Council.
Economic and Monetary Union	EMU is a three-stage process that was launched in 1990. The first stage lifted restrictions on movements of capital across internal EU borders (July 1990). The second stage set up the European Monetary Institute (EMI) to pave the way for the European Central Bank (ECB) (January 1994). The third stage (January 1999) was the introduction of the euro and beginning of the ECB.
Euro	The official name for the single currency of 11 of the European Union's 15 countries. The euro was approved at the EU Madrid Summit in December 1995 and went into effect on January 1, 1999.
Euro Area	The area in which the euro operates as the official single currency. Also called the eurozone and euroland.
European Central Bank	The ECB is the common, independent central bank for the euro area. The primary objective of the ECB is the maintenance of price stability. The Governing Council

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**Appendix II**  
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of the ECB comprises representatives from the 11 countries in the euro area and formulates the common monetary policy for these countries. The ECB's Executive Board implements monetary policy for the euro area. The General Council has representatives from all 15 countries in the EU and is responsible for a variety of tasks including collecting statistical information and preparing reports and financial statements. The ECB was inaugurated on June 30, 1998, and became operational on January 1, 1999.

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**European  
Commission**

The executive body of the European Union. The Commission initiates legislation through proposals and recommendations to the Council of the European Union and European Parliament. The Commission also executes adopted legislation and is the guarantor of the EU Treaty.

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**European Council**

The European Council comprises the heads of state or government of EU members. The European Council provides the EU with general political guidance. It makes, in practice, major political decisions at its twice yearly summits. The European Council should not be confused with the Council of the European Union.

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**European Currency  
Unit**

The European Currency Unit was a composite basket of currencies in which each currency is weighted according to its share in intra-European trade, its percentage share of EU gross national product, and the relative importance of each country's foreign exchange reserves. The monetary unit was created in 1979 by nine European nations to promote currency stability in the European Economic Community. As of Jan. 1, 1999, the ECU was converted into the euro on a one-for-one basis.

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<b>European Monetary Institute</b>	The precursor to the ECB. EMI was formed in January 1994 to advise on monetary issues in the run up to the establishment of EMU.
<b>European System of Central Banks</b>	The European System of Central Banks is composed of the central banks of the EU countries and the European Central Bank. The ESCB defines and implements monetary policy in the euro area, conducts foreign exchange operations, and manages the official reserves of members states. EU members that are not in the euro area are still part of the ESCB, but do not participate in decisions or implementation of monetary policy. ESCB has full constitutional independence in that it is not permitted to seek or take instructions from European Community institutions or bodies or others.
<b>European Union</b>	The EU is a treaty-based, supranational organization that defines and manages economic and political cooperation among 15 member countries. The EU attempts to create an ever-closer union by exercising sovereignty voluntarily ceded by its members in economic and political affairs. The European Union replaces the European Community, which succeeds the European Economic Community founded by the Treaty of Rome in 1957.
<b>Exchange Rate Mechanism</b>	ERM fixed participating member currencies within a band that includes either side of a fixed bilateral central rate against the currencies of other members.
<b>Exchange Rate Risk</b>	The possibility that the value of a foreign currency will move in an adverse manner due to unforeseen changes in foreign currency exchange rates.
<b>Foreign Direct Investment</b>	FDI occurs when citizens of one nation purchase assets in some other nation that give them some managerial influence in economic activities related to those assets.



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Foreign Exchange Market	The international market in which currencies are traded. Transactions in foreign exchange include those in the spot, forward, swap, options, and futures markets.
Foreign Exchange Reserves	The stock of official assets denominated in foreign currencies held by the monetary authorities (finance ministry or central bank) of a country. Reserves enable the monetary authorities to intervene in foreign exchange markets to affect the exchange value of their domestic currency in the market. Reserves are typically part of the balance sheet of the central bank and are managed by the central bank. Reserves are generally invested in low-risk and liquid assets—often in foreign government securities.
Foreign Portfolio Investment	The purchase by one country’s private citizens or their agents of a marketable noncontrolling position in foreign equity and debt securities issues by another country’s private citizens, corporation, banks, and governments.
International Bond	Domestic currency issues in a given country by nonresidents and foreign currency issues in a given country by either residents or nonresidents.
Maastricht Treaty	The Treaty of European Union agreed at Maastricht, the Netherlands, in 1991, which set out the current procedures and timetable for EMU. The Maastricht Treaty also addressed political integration through provisions on the two areas of security and foreign affairs, and justice and home affairs.
Market Capitalization	A financial measure calculated by multiplying the number of shares by the market value of shares.
Monetary Policy	Central bank activity designed to influence the cost and availability of credit. In the United States, the legislated goals of monetary policy are economic

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**Appendix II**  
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growth, full employment, price stability, and balanced trade with other countries. In the euro area, the primary goal is price stability.

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**Note** Written promise to pay a specified amount to a certain entity on demand or on a specified date.

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**Reserve Currency** Any currency that is commonly used by central banks as part of their foreign exchange reserves. See the definition of foreign exchange reserves.

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**Securitization** The broad process whereby capital financing occurs through securities issuance rather than bank financing, including conversion of bank loans and other assets into marketable securities for sale to investors.

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**Seigniorage** The profit a government earns from issuing currency notes. Because currency does not pay interest, the issuing government in effect obtains an interest-free loan.

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**Trans-European Automated Real-time Gross Settlement Express Transfer (TARGET)** The settlement system for the euro that processes cross-border transactions denominated in euros. It links the national settlement systems of the participating euro area countries and facilitates the borrowing and lending of funds from their central banks.

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