

The Euro and the European Central Bank

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In order to form a more perfect economic union, establish a single financial market, provide a high level of employment, promote convergence of economic performance, and secure the benefits of sustainable and noninflationary growth, 11 European countries have established a common currency and a European Central Bank. The formal introduction of the new monetary

unit, called the euro, occurred on January 1, 1999. On that date, the old national currencies officially became subunits of the euro, much as the nickel and quarter are subunits of the dollar. (See Table.)

Fifteen countries passed a major milestone on the road to monetary union in 1992, when they signed the Treaty on European Union, commonly called the Maastricht Treaty, which outlined a basic structure for the alliance. Of those 15, only 11 actually joined the European Monetary Union (EMU): two opted out for now, and two others have not yet met the economic criteria established

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TABLE

Conversion rates between the national currencies of the 11 member countries and the new euro were irrevocably fixed at midnight, local time, on December 31, 1998. Between January 1, 1999, and June 30, 2002, one euro will be equivalent to the following amounts of each of the 11 currencies:

Austrian shilling 13.7603

Belgian franc 40.3399

Dutch guilder 2.20371

Finnish markka 5.94573

French franc 6.55957

German mark 1.95583

Irish punt 0.787564

Italian lira 1936.27

Luxembourg franc 40.3399

Portuguese escudo 200.482

Spanish peseta 166.386

Thus, a German mark is a bit over half a euro, and a French franc is a bit more than 15 euro cents.

for membership in the union.¹ The EMU countries decided that the benefits of having one common currency instead of 11 different ones will

¹The 11 countries are Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain. Denmark and the United Kingdom opted not to join initially. Greece did not meet the criteria for inflation, long-term interest rates, and ratios of government debt and budget deficits to GDP; all were too high. Movements in the foreign exchange value of Sweden's currency were deemed incompatible with the necessary conditions for adoption of the euro,

outweigh the costs, especially given the amount of travel and trade that takes place between these countries.²

To facilitate adoption of a single currency, the EMU countries also established, after a great deal of preparation, a European Central Bank (ECB) that sets a single monetary policy for the 11 members. (See *Foundations of and the Legal Framework for the Euro*.) The new setup is similar in some respects to that in the United States, in which the states share a common currency (the dollar) and central bank (the Federal Reserve). The ECB took responsibility for monetary policy on January 1, 1999. We'll have more to say about its functions and operations later.

THE TRANSITION PERIOD

In the transition period — January 1, 1999, to December 31, 2001— a consumer can use the euro for *noncash* transactions, but euro notes and coins will not yet circulate. To buy something with euros during the transition period, a consumer can use a credit card or traveler's check, or she can make an electronic funds transfer or write a check. Euro-denominated bank accounts, credit cards, and traveler's checks have been available since January 1, 1999.

During the transition period, the "optional use principle" applies: no one can be forced to use the euro or be prevented from using it. For example, a bank customer with an account de-

as was the statute of the Swedish central bank. In any case, the Swedish government, citing lack of popular support, decided that Sweden would not introduce the euro at the beginning of monetary union in 1999. See the European Monetary Institute's 1998 convergence report for details of the economic criteria and evaluation of the individual countries.

²For a discussion of the economic and political benefits and costs of European monetary union and policy, see the articles by Barry Eichengreen, Gwen Eudey, Martin Feldstein, Maurice Obstfeld, and Ed Stevens. The book by Peter Kenen provides a broad description of European monetary and economic union.

Foundations of and the Legal Framework for the Euro

There have been many steps toward European economic and monetary integration, dating back at least to 1951 when the treaty that established the European Coal and Steel Community was signed. The history of *monetary* integration in particular began with the Werner Report, published in 1971, which set out a blueprint for the stage-by-stage realization of economic and monetary union. In 1979, the European Monetary System was established: bilateral exchange rates among all currencies in the system were to fluctuate only within narrow preset margins.

In 1989, the Delors Report, which had been commissioned by heads of government at the 1988 meeting of the European Council in Hanover, Germany, laid the foundation for the euro.^a The report insisted that Europe's economic union, monetary union, and the single market were inextricably linked. It advocated a monetary union characterized by the complete liberalization of capital movements, the full integration of financial markets, the irrevocable fixing of exchange rates via a progressive tightening of the European Monetary System, and the completion of the single market for goods and services. The Delors Report also envisaged a fully independent institution to set the union's monetary policy. The report was endorsed by governments at the European Council summit held in Madrid in 1989.

The Treaty on European Union was agreed to in December 1991 and was signed on February 7, 1992, in Maastricht. This treaty entered into force on November 1, 1993, after it was ratified by all member countries. It forms the basis for economic and monetary union. Annexed to the Treaty on European Union is the statute of the European System of Central Banks and of the European Central Bank.

At a summit held in Madrid on December 15-16, 1995, the heads of government reconfirmed that monetary union would begin on January 1, 1999, and agreed on euro as the name of the single currency. At the same time, they adopted firm dates for the transition period (January 1, 1999 to December 31, 2001) and the final period (January 1, 2002 to July 1, 2002 at the latest).

Early in May 1998, in Brussels, leaders of the European Union formally approved the launch of a single currency on January 1, 1999. After consulting the European Parliament, the European Monetary Institute, and the European Commission, the European Council determined which countries had met the convergence criteria and would therefore be founding members of the European Monetary Union.^b The method for permanently fixing bilateral exchange rates among the 11 member countries was set, and members of the Executive Board of the European Central Bank were recommended (and subsequently accepted by the European Monetary Institute).

^aThe Delors Report was produced by a committee of all European Union central bank governors; the then-president of the European Commission, Jacques Delors; and a number of independent experts.

^bThe European Monetary Institute, the precursor of the European Central Bank, was set up in accordance with the terms of the Maastricht Treaty to prepare for establishing the European Central Bank's functions and monetary policy operations.

nominated in German marks may work for a company that has chosen to pay employees in euros. The customer can choose to switch to a euro account, if the bank offers such accounts, but the bank may not convert the account against the customer's wishes.³

Also during this period, many merchants in the 11 member countries of the EMU are marking prices in both the national currency and euros. However, merchants are not legally obligated to show two prices. And although using euro-denominated checking or credit card accounts while still using a national currency may be confusing, it's part of the cost of monetary transition.

There are other costs, aside from shopping inconveniences. For example, Europe's three million plus vending machines will need to be reconfigured at an estimated cost of between \$100 and \$500 per machine, depending on the machine's age. Every ATM machine will also have to be converted to dispense euros rather than a national currency.

Regulations implementing the Maastricht Treaty forbid contracting parties from altering or terminating contracts because of the introduction of the euro.⁴ For example, a contract denominated in French francs will remain in force during and after (if applicable) the transition period, and its terms will be unaltered by

³There are exceptions to and restrictions on the principle. For example, if a national law stipulates the use of a national currency unit for certain transactions with the public sector, such as tax payments, citizens and enterprises must respect the use of this denomination. Anyone wishing to purchase new debt issued by member countries of the EMU must use euros, because all such debt is denominated in the new currency. In addition, some issues of private bonds are denominated in euros.

⁴This continuity principle does not apply if a contract contains a clause specifically allowing for renegotiation or termination because of the introduction of the euro.

the euro's introduction, except that payment may be made in euros.

Overall, legislation governing the euro and transactions made with euros provides a framework to ensure acceptability of the new currency. So far, the transition period has proceeded without major difficulties, a situation that reflects the extensive planning that took place well before the EMU member countries entered into the union.

THE FINAL PERIOD

In the final period, which will begin on January 1, 2002, and will end on July 1, 2002, at the latest, national currency notes and coins will be withdrawn from circulation and euro notes and coins will start to circulate. The old notes and coins will continue to be legal tender during the final period, unless an individual member country decides to remove legal-tender status from its currency before July 1, 2002.⁵

Parallel circulation will pose practical problems for consumers in Europe, who will need to keep two separate sets of notes and coins, and for shopkeepers, who will need two tills. Methods are being sought to shorten the parallel-circulation period, perhaps by stocking cash dispensers with euros only; by giving change in euros only, regardless of the unit of payment; or by removing legal-tender status from the old notes and coins very quickly.

An important determinant of the success of the monetary union is the performance of the institution controlling monetary policy, the European System of Central Banks, including the European Central Bank.

⁵According to the European Commission, EMU member countries are discussing withdrawal of legal-tender status for national currencies earlier than July 1, 2002, because of the difficulties of maintaining dual circulation for a full six months. See the question-and-answer database "Quest" at the commission's website: <http://europa.eu.int>.

ORGANIZATION OF THE EUROPEAN SYSTEM OF CENTRAL BANKS

The European System of Central Banks consists of the European Central Bank (ECB), headquartered in Frankfurt, Germany; the 11 national central banks of the EMU member countries; and the four national central banks of the European Union countries not currently EMU members.⁶ Except for the inclusion of central banks from outside the monetary union, the structure of the European System of Central Banks looks similar to the setup of the Federal Reserve System. The Eurosystem, composed of the ECB along with the 11 national central banks of countries that have adopted the euro, bears an even closer resemblance to the Board of Governors and 12 regional Federal Reserve Banks. As we'll see, however, there are some important differences.

The most important decision-making body within the ECB is the Governing Council. The Governing Council consists of an Executive Board (six members, including the president and the vice president of the ECB, appointed by common accord of the governments of the 11 EMU countries) and the central bank governors of the 11 EMU countries (appointed by their respective governments).⁷ The tasks of formulating and

⁶The four countries not in the EMU (Denmark, Sweden, the United Kingdom, and Greece) will be allowed some input into the European System of Central Banks but will not participate in decisions about monetary policy for the 11-country "euro zone."

⁷Another organization in the European System of Central Banks, the General Council, does not have a parallel in the Federal Reserve System. The General Council gives some representation to the four European countries that haven't yet joined the EMU. This council is made up of the president and vice president of the ECB and the governors of *all 15* European national central banks. The General Council's tasks are to provide input concerning monetary and exchange-rate policies for European countries inside and outside the EMU; to collect statistical information; to prepare the ECB's reports and financial statements; and to establish rules for standardizing accounting and reporting of operations undertaken by the national central banks.

implementing monetary policy are assigned to the Governing Council. In the U.S., these tasks are performed by the Federal Open Market Committee (FOMC), which consists of the Federal Reserve's Board of Governors (seven members, including the chairman and vice chairman, appointed by the President of the United States and confirmed by the Senate) and five Reserve Bank presidents.⁸

The ECB's Governing Council makes key decisions affecting the availability and cost of money and credit in the EMU countries, similar to the task performed by the FOMC. At their respective meetings, the Governing Council and the FOMC make decisions about targets for interest rates and money growth by majority vote. They also vote on the policy to be carried out during the interval between meetings.⁹ Each member of the ECB's Governing Council has one vote, so the six-member Executive Board has fewer votes than the governors of the participating countries' central banks. In contrast, on the FOMC, the seven-member Board of Governors has more votes than the five Reserve Bank presidents.¹⁰

MONETARY POLICY STRATEGY AND IMPLEMENTATION

According to its president, Willem Duisenberg, the ECB will pursue "a stability-

⁸The five Reserve Bank presidents are the president of the Federal Reserve Bank of New York and four other Reserve Bank presidents who serve one-year terms on a rotating basis.

⁹The Governing Council of the ECB has agreed to hold its meetings on alternate Thursdays. The FOMC holds eight regularly scheduled meetings per year at intervals of five to eight weeks. Special FOMC meetings or telephone conferences take place if circumstances require discussion or action between regular meetings.

¹⁰For more details on the institutional structure of the European Central Bank, see Mark Wynne's article, or look at the ECB's website: <http://www.ecb.int>.

oriented monetary policy.” The major goals of the ECB, as set forth in the Maastricht Treaty, are price stability (the primary goal); support of general economic objectives such as high employment; and establishment and maintenance of a stable, credible euro in an open market economy with free competition. These objectives are similar to the goals U.S. law sets for the Federal Reserve: maximum sustainable employment and price stability.

The Governing Council of the ECB has adopted the following definition of price stability: “Price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%.”¹¹ At the same time, the Maastricht Treaty recognizes that the ECB cannot be held responsible for short-term movements in inflation because there are lags between a change in monetary policy and its effect on prices. In the short term, inflation may also reflect temporary or external shocks over which the ECB has no control.

The Governing Council of the ECB agreed on the main elements of its policy strategy in October 1998. This strategy focuses on the money supply, in particular the growth rate of a broad monetary aggregate labeled M3.¹² Recognizing that too rapid money growth is a primary cause of inflation, the ECB sets a target for average money growth. For 1999, the target is 4.5 percent. On a week-to-week basis, however, the ECB

does not attempt to control M3 growth directly. Instead, like the Fed, the ECB conducts monetary policy in the very short run by managing short-term interest rates. By raising or lowering these interest rates, the ECB can indirectly manage money growth.

What will the ECB do if money grows faster or slower than the target? It won’t necessarily change short-term interest rates to hit the M3 target; instead, like the Fed, it will try to determine if the difference between actual money growth and the target is due to special factors or is an indication that monetary policy has been too easy or too tight.¹³ The results of this analysis and its impact on monetary policy decisions are explained to the public through speeches and published reports.

Before we look at the tools the ECB uses to put monetary policy into effect, let’s consider the basics of how the Federal Reserve typically executes monetary policy in the United States.

Federal Reserve’s Monetary Policy Actions. The Federal Reserve executes monetary policy in pursuit of its goals mainly through the use of open market operations—the sale or purchase of previously issued U.S. government securities. By purchasing government securities, the Fed increases the supply of reserves in the banking system; by selling them, it reduces the supply. (Reserves consist of cash that banks hold in their vaults along with banks’ balances on deposit at the Federal Reserve.) Banks need reserves to settle payments among themselves and to satisfy legal requirements that they hold reserves equal to 10 percent of most balances in checking and other transaction accounts.

¹¹See the speech “Monetary Policy in the Euro Area,” by ECB President Duisenberg on the Internet at <http://www.ecb.int/key/sp990125.htm>. The HICP is simply a price index using data constructed in similar fashion by statistical agencies of different member countries.

¹²In the EMU, M3 consists of currency in circulation, overnight deposits, deposits and debt securities with agreed maturity up to two years, deposits redeemable at notice up to three months, repurchase agreements, and money market fund shares. Technically, the ECB focuses on “Harmonised” M3; see footnote 11.

¹³In accordance with the Humphrey-Hawkins Act of 1978, the FOMC sets ranges for annual growth of the U.S. money supply. In recent years, however, rapid financial innovation has made money growth an unreliable indicator of future economic developments in the U.S., so the FOMC has de-emphasized money growth ranges.

Banks that have excess reserves often try to lend them in the federal funds market, generally overnight. Banks that have a shortage of reserves usually try to borrow some in the same market. In the federal funds market, supply and demand interact to determine the quantity of reserves that banks borrow or lend and at what interest rate—the federal funds rate.

The supply side of the federal funds market is influenced by transactions undertaken by the Federal Reserve Bank of New York at the direction of the FOMC—the buying and selling of securities as noted above. The Fed’s day-to-day objective is to engineer a supply of reserves that, in conjunction with banks’ demand for reserves, achieves a federal funds rate equal or close to a target determined by the FOMC. The target for the federal funds rate depends on the state of the economy relative to the Fed’s long-term goals.¹⁴

ECB’s Monetary Policy Actions. The ECB enacts monetary policy through 11 national central banks that buy and sell securities to influence the interbank interest rate. Consequently, the ECB’s implementation of monetary policy is slightly more complicated than that of the Federal Reserve System. But its approach is not fundamentally different from the Fed’s.

The ECB has three tools for conducting monetary policy: reserve requirements called “minimum reserves,” open market operations, and provision of standing facilities.

Minimum reserves. Reserve requirements are applied to a wide range of financial intermediaries in the euro area.¹⁵ Each intermediary’s re-

serve requirement is determined in relation to its balance sheet. Currently, each intermediary must hold reserves in an amount equal to or exceeding 2 percent of its total amounts of these liabilities: overnight deposits, deposits with maturities of up to two years, deposits redeemable at notice of up to two years, debt securities issued with agreed maturities of up to two years, and money market paper.¹⁶ Compliance with the reserve requirement is determined on the basis of an intermediary’s average daily reserve holdings over a one-month maintenance period.

The Federal Reserve, by law, also imposes reserve requirements, though only on deposit-taking institutions.¹⁷ Since January 1999, each institution subject to reserve requirements must meet a requirement of 3 percent applied to net transaction accounts totaling between \$4.9 and \$46.5 million; a 10 percent rate is applied to net transaction accounts above \$46.5 million.¹⁸ While these required reserve rates are higher than those imposed by the ECB, they apply to a narrower class of liabilities and a narrower class of financial institutions. We can see the difference if we compare average daily required reserves

banks but also money market mutual funds and some leasing companies. A list of monetary financial institutions subject to reserve requirements is available at the ECB’s website at <http://www.ecb.int>.

¹⁶A lump-sum allowance of 100,000 euros is deducted from an institution’s reserve requirement so that banks with 5 million euros or less of reservable liabilities will not have to hold minimum reserves.

¹⁷In the United States, only *depository financial institutions* are required to hold reserves. According to the Monetary Control Act of 1980, this term covers commercial banks, mutual savings banks, savings and loan associations, credit unions, agencies and branches of foreign banks, and Edge Act corporations.

¹⁸Compliance with U.S. reserve requirements is generally determined on the basis of an institution’s average daily reserve holdings over a two-week maintenance period.

¹⁴Additional details of the Fed’s activities in the federal funds market can be found in the book by Ann-Marie Meulendyke.

¹⁵More specifically, the ECB imposes reserve requirements on *monetary financial institutions*, defined by the ECB and European Community law as resident financial institutions whose business is to receive deposits and close substitutes for deposits, to grant credit, or to make investments in securities. This includes not only

held in March 1999: more than 100 billion euros (almost \$109 billion) were held as required reserves in the EMU and around \$42 billion were held in the U.S.¹⁹

Banks and other financial intermediaries in the EMU have to hold a larger amount of reserves than financial institutions in the United States because the ECB assigns reserve requirements a more prominent role in monetary control. The need to hold more required reserves increases the demand to hold reserve deposits at the central bank. By ensuring a large demand for reserve deposits, the ECB can more easily control short-term interest rates by managing the supply of reserves.

In contrast to the Federal Reserve, which cannot legally pay interest on required reserves, the ECB pays interest on minimum reserve holdings. The interest rate reflects short-term money market interest rates prevailing over the reserve maintenance period. Paying interest on required reserves helps to make up for the income banks could otherwise earn by lending the reserves. Without payment of interest on the large quantity of reserves required by the ECB, banks in the euro area might suffer a competitive disadvantage.

Open market operations. Open market operations consist of the purchase and sale of securities initiated by the ECB and executed by the 11 EMU national central banks. In contrast to the Federal Reserve, the ECB accepts a wide range of assets in the conduct of monetary policy operations and does not focus trading on any particular government's securities.²⁰

¹⁹The average exchange rate in March 1999 was 1.0886 dollars per euro.

²⁰Precise definitions of eligible assets for monetary policy operations, as well as eligibility requirements for counterparties in asset transactions, are given in the ECB's September 1998 publication. The list of eligible assets can be found on the ECB's website; it includes private debt and equities as well as government securities.

Like the Federal Reserve, the ECB uses open market operations to inject more reserves into or extract reserves from the banking system. By doing so, the ECB keeps the average interbank interest rate, called the EONIA, close to the ECB's target overnight rate, called the main refinancing rate. The ECB's most important open market instrument is a *reversing transaction*, which can be used to make temporary changes in the supply of bank reserves. Suppose, for example, the ECB needs to change the supply of bank reserves for three days. It will instruct national central banks to engage in reversing transactions: the central banks agree to purchase securities from or sell securities to dealers who agree to repurchase or resell them at a specified price three days later. Purchasing securities adds euros to the banking system's reserves; selling them drains euros from the banking system's reserves. When the reversing transactions mature, the initial injection or drain of euros is automatically reversed.²¹ Reversing transactions serve as a convenient way for the ECB to deal with short-term pressures on the interbank interest rate, since transaction costs for reversing transactions are low.

The Fed, too, frequently uses reversing transactions called repurchase agreements, or repos, and matched sale-purchase transactions, or MSPs, to deal with short-term pressures on the interbank interest rate. Thus, the ECB and the Fed use the same types of transactions, but give them different names.

The ECB also has other types of open market operations at its disposal: (1) *outright transactions* (operations in which the ECB buys or sells assets in the financial markets to make changes in the supply of euro bank reserves that do not automatically reverse); (2) *issuance of debt certificates* (in which the ECB issues its own debt rather

²¹The interest rate on regular reversing transactions, called the main refinancing rate, is also the rate of interest the ECB pays on required reserves.

than selling some of its assets to absorb euros from the banking system); (3) *foreign exchange swaps* (in which the ECB buys or sells a foreign currency and simultaneously agrees to sell or buy that currency at a specified future date); or (4) *collection of fixed-term deposits* (in which the ECB, to absorb euros from the banking system, invites eligible depositors, such as banks, to make interest-bearing fixed-term deposits at national central banks). These operations would produce long-term changes in the supply of euro bank reserves. Of these operations, the Federal Reserve uses only outright transactions.²²

Standing facilities. Standing facilities are outlets through which eligible banks can borrow from or lend to the national central banks overnight. Standing facilities provide reserves (when banks borrow) or absorb reserves (when banks lend). The ECB uses standing facilities to signal the general stance of monetary policy and to provide upper and lower bounds for overnight market interest rates.

The ECB provides two types of standing facilities. Any eligible bank can use a *marginal lending facility* to obtain overnight loans from its national central bank. Under normal circumstances, there are no credit limits or other restrictions on banks' access to the facility apart from a requirement to present sufficient assets as collateral.²³ The interest rate on the marginal lend-

ing facility is higher than the ECB's target interbank rate; it normally provides a ceiling for the overnight market interest rate, since banks wouldn't borrow from each other overnight at a higher interest rate than that offered at the marginal lending facility.²⁴

Any eligible bank can use a *deposit facility* to make overnight deposits with its national central bank. The interest rate on the deposit facility is lower than the ECB's target interbank rate; it normally provides a lower bound for the overnight market interest rate, since banks wouldn't lend to each other overnight at a rate lower than the interest rate at the deposit facility.

A plot of the overnight rate shows its movements over the first half of 1999 (see the Figure). Also shown are the marginal lending rate and the marginal deposit rate, as well as the ECB's target rate (the main refinancing rate). Note that the overnight rate sometimes differs from its target, since the ECB can't control it precisely. The overnight rate always lies between the lower bound provided by the marginal deposit rate and the upper bound provided by the marginal lending rate.

Implementation. On April 8, 1999, the ECB's president provided an example of how the ECB monitors M3 growth relative to its target value

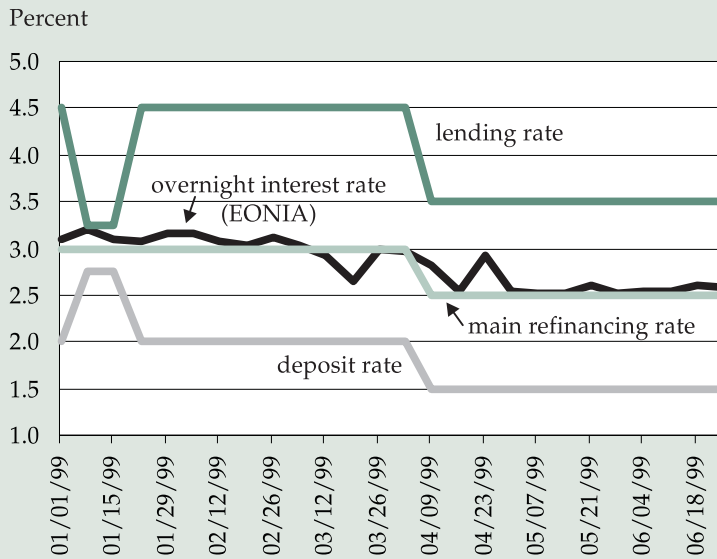
²²The Fed does have the ability to maintain reciprocal currency arrangements (sometimes called swap facilities) with other central banks, but does not use them to implement monetary policy. Currently, under NAFTA, the Fed maintains swap facilities with Canada and Mexico.

²³The Federal Reserve also provides a lending facility called the discount window. Eligible depository institutions can borrow from the discount window, typically overnight but sometimes for longer periods, when they face a temporary need for liquidity and cannot readily raise funds from other sources. As is true of the ECB's marginal lending facility, institutions must post collateral to borrow at the discount window. But in contrast to

the ECB, the Fed lends at a rate that is usually slightly below policymakers' target for the interbank interest rate, for approved purposes only, and at its own discretion — banks and other depository institutions are not free to borrow as much as they might wish.

²⁴In addition to its normal discount window facility, the Fed has chosen to provide a Century Date Change Special Liquidity Facility, from October 1, 1999, to April 7, 2000, as a precaution against unusual funding pressures around the century date change. This special liquidity facility is much like the ECB's marginal lending facility. Eligible depository institutions will be able to borrow as much as they wish from the Fed, provided they have sufficient collateral, at an interest rate 1.5 percentage points above the FOMC's target for the federal funds rate.

FIGURE
ECB Interest Rates and
Money Market Rates



EONIA is the euro overnight index average, a weighted average of interest rates on all unsecured overnight lending transactions in the interbank market in the euro zone. The main refinancing rate is the ECB's target interbank rate.

and how it uses tools of monetary policy. At a press conference that day, President Duisenberg discussed a decision to cut the ECB's target for the interbank interest rate from 3.0 percent to 2.5 percent and to cut the interest rate on the marginal lending facility from 4.5 percent to 3.5 percent, as well as that on the deposit facility from 2.0 percent to 1.5 percent. The figure shows the changes in all three interest rates. The decision to cut rates took into account the rate of growth of M3, which remained close to the ECB's target value; inflation, which had been below 1 percent (per year) for several months and thus

within the ECB's definition of price stability; and the prospects for overall growth in the euro area, which had weakened.

Although the tools available to the ECB allow it to pursue its objectives, what ensures that it can pursue those objectives without facing undue short-term political pressures?

INDEPENDENCE AND ACCOUNTABILITY OF THE ECB

The Maastricht Treaty explicitly set up the ECB as an independent institution free from short-term political pressures. Arguably, the ECB is, by design, one of the most independent central banks in existence. Members of its Governing Council all have relatively long terms of office. Each member of the Executive Board serves a nonrenewable eight-year term, and the central bank governors

of the 11 EMU countries serve renewable five-year terms. Moreover, the ECB's mandate makes clear that institutions such as the European Parliament and the governments of EMU member countries may not give instructions to the ECB, nor is the ECB allowed to follow instructions or suggestions from others. However, independence does not imply lack of accountability.

Proceedings of the Governing Council's meetings are kept confidential, to guard against short-term political pressures on individual members. However, just as the Federal Reserve's FOMC announces decisions made at each meeting on

the day of the meeting, the ECB's Governing Council holds a press conference immediately after its first meeting every month. At that time, it releases the "President's Introductory Statement," which is a summary of the council's conclusions from its assessment of economic conditions.²⁵

In addition, the ECB publishes other reports to communicate its policy objectives, intentions, and actions. The president of the ECB presents an annual report to the European Parliament, the Council of Ministers, and the European Commission, and the ECB publishes monthly and annual reports, as well.²⁶ Similarly, the Chairman of the Federal Reserve Board delivers semi-annual reports on monetary policy to the U.S. Congress, and the Federal Reserve publishes monthly and annual reports. Also, the presi-

²⁵The "President's Introductory Statement" is similar to the minutes of FOMC meetings. The FOMC publicly releases *minutes* of each meeting about six weeks afterward, and it releases *transcripts* from FOMC meetings after five years.

²⁶The Maastricht Treaty requires the ECB to publish quarterly and annual reports covering monetary policy and its other activities. The ECB goes beyond this requirement and, like the Federal Reserve, publishes a monthly bulletin. The ECB also releases weekly financial statements, as does the Fed.

dent of the Governing Council and the other members of the Executive Board of the ECB, at their own initiative or on request, may be heard by committees of the European Parliament. Like the Federal Reserve, the ECB has made clear its willingness to engage in dialogue concerning its own and other institutions' policies with responsible authorities.

Thus, the ECB is accountable for its policy actions within an institutional structure that provides substantial independence.

CONCLUSION

After decades of planning, the euro was born on January 1, 1999. This new currency is shared by the 11 member countries of the EMU, an economic area whose portion of world output of goods and services, at around 20 percent, is second only to that of the United States. The EMU member countries are now in transition to sole reliance on the euro as the single currency of the union. Guiding the EMU through and beyond its transition phase is the job of the European System of Central Banks, including the new European Central Bank that determines monetary policy for the 11 countries that have adopted the euro. The ECB's policymaking body and tools for setting and conducting monetary policy are similar in several ways to those of the Federal Reserve but also have certain differences.

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