



III

EMU: Systemic Implications and Challenges

The creation of EMU is one of the most important international monetary developments in the post-Bretton Woods period. With the establishment of EMU, the euro will become the second most important official reserve currency in the world,¹³ and the future European Central Bank (ECB) will assume its place as the supranational institution to manage a “multistate” currency. Although the political, cultural, and economic challenges are formidable, the euro has the potential to reshape European and international financial markets and to transform the multilateral international monetary system into a tripolar or even bipolar system.¹⁴ At a minimum, the euro is likely to assume a more significant role in international trade, private financial transactions, and official reserves. Whether the euro will initially be a strong or a weak currency will depend in large part on the ability of EMU member countries to continue along the path of fiscal consolidation and structural reform and on the credibility of the ECB.

In addition to effective macroeconomic management, the international success of EMU will be influenced by the euro’s ability to catalyze existing initiatives to enhance the efficiency and effectiveness of European capital markets (including early implementation of EU directives). The opportunities for beneficial structural changes are far reaching. They include the development of EMU-wide securities markets, the consolidation and restructuring of European banking systems, and the creation of a pan-European payments system. But the structural and institutional prerequisites for capturing these benefits are not all mandated by the Maastricht Treaty and may not evolve without the active participation of national and EU authorities and the confidence of market participants. The remaining challenges that could affect actual outcomes include the elimination of existing impediments to banking system consolidation and restructuring; the impact of the future European System of Central Banks (ESCB) operating procedures on the development of EMU-wide securities markets; access to the evolving European payments system; and the establishment of mechanisms for credible systemic risk management.

¹³See Masson and others (1997) and Prati and Schinasi (1997).

¹⁴See Bergsten (1997).

Global Financial Adjustments After Introduction of the Euro

Once markets absorb the decisions about the country composition and conversion rates of EMU, the introduction of the euro itself could raise the level of market volatility and cause shifts in the patterns of international capital flows. Various sources and motives have been identified that could produce an immediate and sharp sale of dollars for euros (and a depreciation of the dollar), including by EMU central banks and non-European central banks as they attempt to diversify into the euro. About 25 percent of EU reserves are held in core currencies and will be converted into euros at the start of Stage III. The bulk of remaining reserves are held in dollars, a portion of which would become redundant at the time of conversion. Market projections, which typically are based on trade flows, suggest that up to \$50 billion could be sold.¹⁵ However, the size and variability of EMU reserves would be determined primarily by capital flows and ECB exchange rate policies rather than trade flows. Moreover, if past behavior of the major central banks is any guide, the ECB is not likely to sell dollar reserves quickly. Central banks in other regions might wish to reduce the dollar share of their total reserves, either to achieve better portfolio diversification (Asia and the Middle East) or to peg to the euro (as in European developing countries or in some African countries), but they too are likely to shift out of dollars gradually (Table 11). Thus, official portfolio rebalancing is unlikely to be as large, or as concentrated in the near term, as is often suggested.¹⁶

In addition, as important as they are, official reserves (excluding gold) amounted to only about \$1.4 trillion at end-1995, compared with private asset holdings of approximately \$70 trillion in North America, Japan, and the EU alone; private portfolios are likely to be, therefore, the more important source of portfolio rebalancing (see Tables 11 and 12). As with official reserves, the direction and size of private capital flows into the euro zone will be influenced by the size,

¹⁵See several papers in Masson and others (1997) for detailed discussions of this issue.

¹⁶See, for example, J.P. Morgan (1997c) and Paribas Capital Markets (1997).

Table 11. Total Foreign Exchange Reserves Minus Gold in Selected Countries and Regions
(In billions of U.S. dollars)

	1995	1996
All countries	1,412.1	1,563.6
Industrial countries	725.0	789.2
Of which:		
United States	74.8	64.0
Japan	183.3	216.7
European Union	376.3	402.2
Developing countries	687.1	774.4
Africa	25.4	29.3
Asia	375.2	424.5
Europe	84.2	86.9
Middle East	73.7	78.5
Western Hemisphere	128.8	155.2

Source: International Monetary Fund, *International Financial Statistics* (May 1997).

depth, and liquidity of the euro sovereign bond markets and by the characteristics of private markets. Some of the pressures on the euro arising from inflows seeking higher returns could be offset by a rise in issuance of euro securities as the single-currency market evolves. Ultimately, the role of the euro in the international monetary system will turn on the future stability and strength of the euro vis-à-vis the dollar and yen, and will be defined by the shares of the euro in official and private portfolios, international financial transactions, and trade flows. For now, Asian and U.S. investors appear to have shifted out of the deutsche mark and into the dollar because of uncertainties surrounding EMU and the euro, but there could be a gradual rebalancing of portfolios toward EMU as both the euro and the credibility of the ECB become known and accepted and as euro markets acquire liquidity and depth.

EMU and the Potential Benefits of Europe-wide Securities Markets

By removing the volatile currency risk component of intra-EMU cross-border financing costs, the introduction of the euro may eventually create the largest single-currency financial market in the world. Viewed as a single set of markets, the value of EU bonds, equities, and bank loans circulating in European capital markets totaled more than \$27 trillion at end-1995, compared with \$23 trillion in U.S. capital markets and \$16 trillion in Japan's (see Table 12). The potential benefits of establishing this kind of euro presence in international capital markets would be considerable in terms of market liquidity and depth, and lower funding costs for sovereign and private borrowers. Once the euro is introduced, borrowers and lenders will begin to seek lower costs and higher returns across na-

tional boundaries, European financial markets could become less segmented, and there could be more uniformity in market practices and more transparency in pricing. In addition, if continued efforts toward fiscal consolidation lead to the privatization of state-owned enterprises and of public pension, health, and other social insurance funds, the demand for, and supply of, capital could increase substantially, and this too would support the development of deep and liquid EMU-wide markets.

Major structural changes are required to bring this transformation about. The development of Europe-wide private securities markets has thus far been impeded by long-standing, inhibiting 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 clearance and settlement systems. Some progress has already been made in Europe to harmonize the regulations for issuing securities, the supervision of mutual investment funds and insurance companies, and the liberalization of services in those financial products. However, further progress in removing impediments would increase the pace of EMU-wide market integration.

Whether institutional arrangements and financial policies may also affect the pace of market integration and development is an open question. Two general paradigms and corresponding historical examples can be distinguished of how central bank operating procedures have affected the development of private securities markets.¹⁷ In the United States, the central bank has played an active role by intervening daily in money and securities (repo) markets in order to smooth fluctuations in liquidity during the day and to provide stability to the pattern of interest rates on overnight funds; this paradigm applies also to Australia, Canada, the United Kingdom, and to some extent Japan. Financial institutions that operate within the U.S. markets (including European institutions) have come to expect this level of participation, and the structure of financial activities and balance sheets reflects this mode of central bank operations. It has been argued that this active participation has fostered the development of one of the most efficient money and securities markets in the world. By contrast, in Germany, the central bank's reliance on minimum reserve requirements, reserve averaging, other restrictions on instruments and market practices, and weekly market-smoothing interventions has tended, until recently, to discourage the development of a broad spectrum of deep and liquid money markets and to foster the predominance of bank-intermediated finance.

At this point in building the institutional structure of the ESCB, it is uncertain which paradigm will prevail over the next few years, but any solution would need

¹⁷See Folkerts-Landau and Garber (1992).

Table 12. European Union (EU), North America, and Japan: Selected Indicators of the Size of the Capital Markets, 1995

(In billions of U.S. dollars unless noted otherwise)

	Population (In millions)	GDP	Total Reserves Minus Gold	Stock Market Capitalization	Debt Securities ¹			Bank Assets ²	Bonds, Equities, and Bank Assets ³	Bonds, Equities, and Bank Assets ³ (In percent of GDP)
					Public	Private	Total			
EU-15 ⁴	371.8	8,427.6	376.3	3,778.5	4,809.9	3,863.5	8,673.4	14,818.0	27,269.9	323.58
EU-11 ⁵	289.0	6,804.9	284.5	2,119.4	3,903.8	3,088.6	6,992.4	11,971.6	21,083.4	309.83
EU-8 ⁶	182.7	5,055.4	199.2	1,693.8	2,324.2	2,613.6	4,937.8	9,456.0	16,087.6	318.23
North America	383.1	8,105.7	106.7	7,314.7	7,339.5	4,439.2	11,778.7	5,652.4	24,745.7	305.29
Canada	29.6	565.6	15.0	366.3	580.8	93.1	673.9	515.8	1,556.0	275.11
Mexico	90.5	286.3	16.8	90.7	30.7	23.5	54.2	136.6	281.5	98.32
United States	263.0	7,253.8	74.8	6,857.6	6,728.0	4,322.6	11,050.6	5,000.0	22,908.2	315.81
Japan	125.2	5,134.3	183.3	3,667.3	3,447.7	1,877.1	5,324.8	7,382.2	16,374.2	318.92
<i>Memorandum items:</i>										
EU countries										
Austria	8.5	233.2	18.7	32.5	105.9	105.7	211.6	457.7	701.9	300.97
Belgium	10.0	269.2	16.2	105.0	305.4	165.5	470.9	734.2	1,310.0	486.64
Denmark	5.2	172.7	11.0	56.2	142.1	188.6	330.7	155.5	542.4	314.07
Finland	5.1	125.0	10.0	44.1	94.6	49.5	144.1	143.5	331.8	265.46
France	58.0	1,538.8	26.9	522.1	681.7	801.2	1,482.9	2,923.0	4,927.9	320.25
Germany	81.6	2,412.5	85.0	577.4	893.6	1,284.5	2,178.1	3,752.4	6,507.8	269.76
Greece	10.5	114.3	14.8	17.1	100.1	5.8	105.9	63.9	186.8	163.41
Ireland	3.6	61.9	8.6	25.8	38.5	7.4	45.9	82.3	154.0	248.63
Italy	57.2	1,087.2	34.9	209.5	1,222.0	396.8	1,618.8	1,513.5	3,341.8	307.38
Luxembourg	0.4	19.3	0.1	30.4	1.0	15.9	16.9	555.0	602.3	3,125.08
Netherlands	15.5	395.5	33.7	356.5	203.5	183.9	387.4	808.0	1,551.9	392.39
Portugal	9.9	102.7	15.9	18.4	56.0	15.6	71.6	161.8	251.8	245.06
Spain	39.2	559.6	34.5	197.8	301.6	62.6	364.2	840.2	1,402.2	250.58
Sweden	8.8	230.6	24.1	178.0	234.0	184.2	418.2	202.8	799.0	346.49
United Kingdom	58.3	1,105.1	42.0	1,407.7	429.9	396.3	826.2	2,424.4	4,658.3	421.53

Sources: Bank for International Settlements; Bank of England, *Quarterly Bulletin* (November 1995); Bank of Japan, *Economic Statistics Monthly* (May 1996); Central Bank of Ireland, *Quarterly Bulletin* (Winter 1995); International Finance Corporation, *Emerging Stock Markets Factbook 1997*; Organization for Economic Cooperation and Development, *Bank Profitability: Financial Statements of Banks, 1985–1994*; and International Monetary Fund, *International Financial Statistics* and *World Economic Outlook* databases.

¹Domestic and international debt securities shown by the nationality of the issuer.²All bank data are for 1994. Category definition comprises all banks in each country except as follows: for Canada, comprises commercial banks consolidated worldwide; for Denmark, commercial banks and savings banks; for Greece, Luxembourg, and Mexico, commercial banks; for Japan, domestically licensed banks excluding trust accounts; for Sweden, commercial, savings, and cooperative banks; and for the United States, commercial banks, savings banks, and savings and loan associations.³Sum of the Stock Market Capitalization, Debt Securities, and Bank Assets columns.⁴Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.⁵Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain.⁶Austria, Belgium, Finland, France, Germany, Ireland, Luxembourg, and the Netherlands.

to take into account the diversity of financial systems in Europe. Although final decisions have not been made, the current plan for monetary policy operating procedures is to rely on weekly repo operations that will be centrally controlled but decentrally implemented and on decentralized fine-tuning operations, while leaving open the possibility of a system of minimum reserve requirements, with reserve averaging acting as a liquidity buffer.¹⁸ If the ECB is granted the authority to intervene more frequently and to issue its own paper, it remains to be seen if, when, and how the ECB would choose to centralize ESCB operations should the need arise. It is expected that leaving room for arbitrage by market participants, together with the European payments system, will provide the conditions that will encourage an active single money market. It has also been hypothesized by some officials that even if the ESCB chooses not to play an active role, a new breed of European financial institutions will emerge to manage the volatility that might be associated with deep and liquid European money and securities markets. However, there is market sentiment in Europe that the decentralized implementation of repo and fine-tuning operations would limit the ability of the ESCB to manage liquidity in money markets by way of active day-to-day operations in private interbank and repo markets.¹⁹

Another important aspect of EMU financial institutional arrangements is the safety and efficiency of the European payments systems. In order to implement an EMU monetary policy, to improve payments efficiency, and to reduce the potential for payments system problems, the EU is implementing a new European payments system, the Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET) system, that links the national real-time gross settlement payments systems that are already in place or being established in EU countries. The system is designed to process cross-border euro transactions after the start of Stage III on January 1, 1999. The system is still a work-in-progress, and if it is properly designed and successfully implemented it will support financial market integration within EMU.

¹⁸See European Monetary Institute (1997). This approach would preserve the now-decentralized credit-rating and discounting functions of some potential EMU countries, including Germany and France.

¹⁹Tools other than the ECB's regular repo and fine-tuning operations would include (1) other open market operations (main, longer-term, and structural refinancing operations) through instruments such as outright transactions, the issuance of debt certificates, and the collection of fixed-term deposits operations; (2) standing facilities; and (3) minimum reserve requirements. If relatively high and unremunerated, EMU reserve requirements could push a significant volume of euro transactions off shore, and into London and Switzerland, which would further inhibit the development of EMU-wide securities markets. See Background Material, Annex IV, for a more detailed discussion of ESCB operations.

Who has access to TARGET, and on what terms, could have important implications for the cost of transactions and for the safety and efficiency of the system. Because the euro will increase market integration, cross-border transactions between national payments systems are likely to increase significantly, even for European countries outside EMU. Although all credit institutions will have access to TARGET, still unresolved is the debate about access by non-EMU central banks to intraday credit in euros—not generally thought to have a monetary impact—which could turn into overnight overdrafts, which are thought to have a monetary impact. In practice, although limited access could affect the efficiency of TARGET, it might not affect the operation of euro money markets to the extent that banks in the non-EMU area have branches in the EMU area through which they can settle euro payments and access the ECB's liquidity facilities. However, by restricting intraday credit to EMU institutions and forcing banks outside the EMU area to delay their payments or to incur additional costs, it is likely that alternative settlement systems for euro transactions currently being developed, including private netting arrangements, will become increasingly attractive. This could reduce the number of payments across TARGET and slow down market integration as well as risk reduction in payment systems.

Consolidation and Restructuring of European Banking Systems

European finance has been dominated by bank intermediation, with EU bank loans accounting for 54 percent of outstanding financial instruments (bonds, equities, and loans). U.S. finance, by comparison, has been dominated by capital market intermediation, and bank loans account for only 22 percent of capital market activity. Indeed, the combined banking systems of the 15 EU countries would make up the largest banking system in the world, with bank loans totaling almost \$15 trillion at end-1995. Europe currently has a core of internationally competitive financial institutions, most of which derive a considerable share of their revenues from providing wholesale banking and financial services. Some of these European universal banks are widely viewed as among the set of global wholesale banking institutions that will participate in, and probably prosper from, the consolidation and restructuring that is taking place in the international wholesale markets. By contrast, it is widely recognized that the retail banking industries in the majority of potential EMU countries still have considerable scope for enhancing efficiency. At the retail level, financial systems in Europe are relatively "over-banked," and a significant number of institutions are overstaffed. Complex ownership structures have pre-

vented free entry and exit and constrained management from responding to market incentives. Local market power has retarded innovation and perpetuated the mispricing of financial services, usually to the detriment of bank customers. Rigid labor laws have prevented private banks from shedding redundant labor to reduce operational costs. Although the introduction of the euro could temporarily aggravate the effect of these problems on retail bank performance, it will provide incentives for change.

The globalization of finance has been transforming financial institutions, banking systems, and securities markets worldwide for some time, and some countries are further along in the process of banking system restructuring and consolidation than others. Together with the ongoing changes related to EU banking and financial directives, the introduction of the single currency is likely to accelerate this transformation in Europe, in part by reducing, if not eliminating, the home currency advantages that EU banks currently have in their local retail deposit-taking and lending activities, and by encouraging bank customers to raise and lend funds directly in the EMU-wide markets. Such changes would increase cross-border competition for core businesses in European retail banking systems and increase the pace of disintermediation. If market forces are allowed to prevail in EMU, then European banking systems could experience some of the changes that have already taken place in other countries (e.g., in the United States), including a period of efficiency-enhancing structural changes, restructuring and consolidation (closures, mergers, and other alliances), and labor shedding. These structural changes would provide European borrowers and savers with competitively priced loans and deposits, allow more efficient financial services, and attract a more regional and international clientele to European financial and capital markets. In addition, such changes are likely to increase the flexibility and the diversity of financial markets in Europe, including enhancing the depth, breadth, and flexibility of European capital markets. These financial structural changes, in turn, could enhance the ability of European economies to create new firms and employment opportunities, in part by providing entrepreneurs with greater access to venture capital, as has been the experience in the United States.

Some European banking systems are likely to require greater adjustments and public support than others. The retail banking systems in Belgium, Luxembourg, Germany, and the Netherlands are thought to be in financial positions that will allow them to make some of the necessary adjustments without significant public funding. The banking systems in France and in Italy are viewed as more vulnerable, although the worst of the asset-quality problems may be over. Aggressively attacking existing problems would avoid a potential increase in the volume of nonperforming as-

sets and the potential need for additional public funds for restructuring. Allowing market forces to contribute to the required adjustments through closures and mergers would help to some extent. The adjustment process would also be aided by changing ownership structures—in part, through privatization—and by liberalizing labor laws to allow inefficient financial institutions to better manage their costs.

Systemic Risk Management in EMU

As of August 1997, there was still considerable ambiguity about the mechanisms for resolving crises involving flows across the European payments system and about the coordination of systemic risk management functions. The Maastricht Treaty is silent about lender-of-last-resort responsibilities. Article 105 of the Maastricht Treaty does not provide for a general, direct involvement of the ECB in the supervision of financial intermediaries or institutions, and the subsidiarity principle applies, with national supervisors remaining fully competent. In addition, Article 105 (5) envisions only a supporting role for the ECB in ensuring the smooth functioning of European financial markets,²⁰ and it empowers the ESCB to promote the smooth operation of the European payments system. EMU national supervisory authorities, only in some cases the national central banks, will continue to have a mandate for banking supervision and for enforcing EU directives on capital adequacy, accounting standards, disclosure requirements, and other important aspects of financial supervision, regulation, and market surveillance. However, there is no central authority with the explicit mandate to ensure market stability over the EMU financial system in its entirety.

During a fast-breaking crisis, a central authority—usually the central bank—would require immediate access to information for assessing the financial condition of its counterparties, and in particular their liquidity and solvency. In some situations, problems could be resolved by the relevant national supervisory authorities and national central banks without the involvement of the ECB. But situations could arise in which the ECB would have to act decisively and quickly. This raises the issue of cooperation and information sharing between the ESCB/ECB and the relevant supervisors. Although the treaty establishes a clear institutional distinction between monetary and supervisory responsibilities, it does not prevent cooperation between banking supervisors and monetary authorities. Cooperation and information sharing be-

²⁰The Maastricht Treaty empowers the ECB to “contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system” (italics added).

tween the ESCB and the ECB and the relevant supervisors have been discussed and work is in progress. In practice, Article 16 of the Second Banking Directive provides that banking supervisors are allowed to disclose to the national central banks, acting as monetary authorities, the information they may need. Conversely, the post-BCCI Directive (Directive 95/26/EC of June 29, 1995) stipulates that the national central banks are not prevented from communicating confidential information to the supervisory authorities, provided that this information is used exclusively for supervisory purposes. After the changeover to the euro, these procedures will be extended to the ECB in its capacity as monetary authority. By contrast, in some major countries it is viewed as desirable for central banks to have supervisory responsibility, shared with other agencies if necessary, for the wholesale or money center banking segment. Furthermore, the need

for money center banks to access central bank windows in an emergency also allows the central bank to exert informal but effective prudential influence over this banking segment.

There are alternative ways in which to organize and allocate supervisory and liquidity support responsibilities (see Background Material, Annex IV), but these would normally include mechanisms for determining when and if a problem exists, whether an institution that is experiencing difficulties in settling its payments obligation is liquidity constrained or fundamentally insolvent, and how to resolve the problem either by providing access to lender-of-last-resort facilities or by denying access to the payments system. The challenge in Europe is one of creating clear and easily implemented crisis management mechanisms for very low probability events that would impose potentially high costs on the payments system and its participants.