What Impact Will EMU Have on European Securities Markets? ALESSANDRO PRATI AND GARRY J. SCHINASI

The introduction of the euro will create opportunities for greater integration of Europe's financial markets. If integration and efficiency gains are achieved, Europe's securities markets could rival US markets in size and efficiency.

UROPEAN Economic and Monetary Union (EMU) is scheduled to occur on January 1, 1999, when an as vet unknown number of member countries of the European Union (EU) will adopt a single currency—the euro. EMU will create strong incentives for countries to dismantle the barriers between their domestic markets and work toward greater financial integration. The result could be the creation of the world's biggest financial market. At the end of 1995, the market value of bonds, equities, and bank assets issued in EU countries amounted to more than \$27 trillion (see table). By comparison, the market value of assets in the United States amounted to about \$23 trillion.

Whether EMU will lead to the complete integration of Europe's financial markets depends on many factors, however. Much remains to be done at both the national and the EU levels to remove legal, regulatory, tax, and other impediments.

Incentives for change

European securities markets have become more integrated and liquid over the past decade, driven by financial deregulation—a global phenomenon changing investment opportunities, and bank disintermediation. Large issues of sovereign debt have stimulated the development of efficient secondary bond markets and caused yields on government securities to rise, making them an attractive alternative to bank deposits. Capital mobility across EU countries has been facilitated by the recent convergence of macroeconomic policies. Against this background, the introduction of the euro will alter incentives in such a way so as to encourage the further securitization of European finance, the harmonization of market practices, and greater transparency in pricing.

First, the adoption of a single currency will reduce the cost of spot transactions.

Second, the euro will eliminate the foreign exchange risk in long-term contracts between entities in EMU countries, and the relative importance of other types of risk will increase. Credit risk is likely to become the most important determinant of securities prices, but other factors (e.g., liquidity, settlement, legal, and event risks) will also influence pricing. For example, the bond issues of a French company and a German company with the same credit risk may be priced differently if issuing techniques and clearing, settlement, and legal procedures are different in France and Germany. Countries will thus be motivated to improve their financial infrastructures.

Taken together, the elimination of currency risk and the convergence of credit spreads and market practices may increase the depth and liquidity of European securities markets. Contracts in short-term markets will be denominated in euros and could be traded across national markets. For securities listed on more than one exchange, competition among exchanges could lead to the consolidation of trading in a single location. Even markets that remain somewhat segmented (because of larger credit spreads or more restrictions) will become more liquid thanks to lower transaction costs and fewer trading restrictions.

Third, the barriers to cross-border investment will drop, and some intra-EMU foreign exchange and investment

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Selected indicators on the size of capital markets in the European Union, Japan, and the United States

	Population	GDP	Stock market capitalization	Debt securities ¹				Bonds, equities	
				Public	Private	Total	Bank assets ²	and bank assets ³	Bonds, equities, and bank assets ³
	(millions) (billion dollars) (percen								(percent of GDP)
EU (15) ⁴	369.0	8,427.0	3,778.5	4,814.4	3,858.6	8,673.0	14,818.0	27,269.5	323.6
EU (11) 5	286.1	6,803.9	2,119.4	3,909.7	3,083.5	6,993.2	11,971.6	21,084.2	309.9
EU (8) 6	181.8	5,054.8	1,693.8	2,330.4	2,611.0	4,941.4	9,456.0	16,091.2	318.3
Japan	125.2	5,114.0	3667.3	3,450.3	1,875.5	5,325.8	7,382.2	16,375.2	320.2
United States	263.3	7,253.8	6,857.6	6,712.4	4,295.1	11,007.5	5,000.0	22,865.1	315.2

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

restrictions that now apply to pools of capital such as pension funds and insurance companies will become irrelevant. The size and diversification of portfolios managed by EU institutional investors could increase rapidly as a result. Indeed, the need for diversification as European markets integrate could lead investors to reduce their holdings of EU assets.

Fourth, once the advantages of currency diversification disappear, investors and financial institutions will seek to diversify their portfolios with a broader range of euro instruments as well as with assets outside the euro area.

Interbank and repo markets

Whether or not these incentives stimulate the development of deep and liquid short-term securities markets will depend, in part, on supply and demand factors; cross-border competition between financial intermediaries; the removal of legislative, regulatory, and tax impediments to cross-border investment; and the institutional arrangements for the implementation of monetary and financial policy.

Historically, the role played by the central bank in private money markets has had an important bearing on the development of domestic securities markets. In contrast with the US Federal Reserve, which has played an active role in the development of efficient money and securities markets by intervening daily in the markets, European central banks rely on minimum reserve requirements, reserve averaging, and biweekly market interventions. The

European style of central banking has tended to discourage the development of private securities markets and has led to the predominance of bank-intermediated finance.

It is too early to say whether the European System of Central Banks (ESCB)—which consists of the European Central Bank (ECB) and national central banks (NCBs)—will more closely resemble the US or the European model. The current plan is that repurchase agreements (repos) will be the ECB's main instrument for implementing monetary policy and repo operations will be decentralized. The NCBs will collect repo bids from local markets, send them to a central computer in Frankfurt, and allocate the repo transactions according to instructions from the ECB. This reliance on repos could stimulate the development of an EMU-wide repo market. Although private repo markets now exist in some countries, with few exceptions (most notably, France) they are neither as highly developed nor as liquid as US repo markets.

Another question is whether interbank markets in individual countries will retain their distinct national characteristics or whether market pressures will force them to merge into a single EMU-wide market. Integration has already increased slightly—foreign interbank deposits have grown and discrepancies between interest rates on euromarket instruments and domestic markets have narrowed. With the elimination of foreign exchange risk, the establishment of ECB repo operations, and the provision of

intraday liquidity for settlement purposes, there would be few, if any, impediments to keep first-, second-, and third-tier European banks from supplying each other directly with overnight funds. This could quickly lead to the creation of an efficient EMU-wide interbank market, followed by the development of a private repo market. Large global financial institutions that now rely on the London and New York markets for liquidity management would become more active in short-term EMU markets.

Sovereign bond markets

By eliminating currency risk and reducing transaction costs, having a single European currency will lower the costs of issuing and investing in government securities. It is thus likely to drive both supply and demand and to provide strong incentives for harmonizing market practices and making them transparent and cost-effective. EMU members will no longer be able to take their "home-currency" market for granted when investors can search among different sovereign issuers for their preferred risk-return profiles.

As credit risk gets more attention, crossborder competition is likely to increase between financial intermediaries in bringing new issues to market, rating new credit, and allocating investment funds across national markets. There may be a spate of mergers and acquisitions—and a restructuring of the banking sector—as European banks strive to develop the scale of operations needed to compete with each other and with UK and US banks.

¹ Domestic and international debt securities shown by the nationality of the issuer.

² The 1994 data are shown for all banks except for the following: commercial banks plus savings banks for Denmark; commercial banks for Canada (consolidated worldwide), Greece, Luxembourg, and Mexico; domestically licensed banks for Japan (excluding trust accounts); commercial banks plus savings banks plus cooperative banks for Sweden; and commercial banks plus savings banks plus savings and loan associations for the United States.

³ Sum of the stock market capitalization, debt securities, and bank assets.

⁴ Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

⁵ Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain.

⁶ Austria, Belgium, Finland, France, Germany, Ireland, Luxembourg, and the Netherlands.

The pricing of credit risk will determine how integrated and how liquid European sovereign debt markets become. Several potential EMU members now have higher ratings on debt denominated in domestic currency than on debt denominated in foreign currency. For these countries, credit ratings on euro-denominated debt could be closer to the latter than to the former. However, countries that improve their fiscal positions to meet the Maastricht criteria could counteract pressures for ratings to deteriorate.

Other factors will also influence credit spreads. Although the "no-bailout" clause in the Maastricht Treaty rules out the possibility of direct EU assistance to individual EMU member countries, sovereign debt is not likely to be priced as if it were corporate debt. The sheer size of public debt outstanding in any potential EMU member country means that an involuntary restructuring or outright default would have significant systemic implications.

Starting in 1999, all new issues of government bonds and bills (at least those traded on the secondary market) will have to be denominated in euros, but countries will have a choice as to whether or not to redenominate outstanding stocks of debt. The coexistence of new euro-denominated bonds and old nationalcurrency bonds could segment the new euro market for government securities and reduce its liquidity. At the same time, competition among European sovereign issuers seeking to provide the benchmark yield curve for pricing sovereign and private debt is likely to create pressures for more integration.

Corporate bond markets

Although EU financial market legislation and the fund-management industry have begun to chip away at regulatory and tax impediments to the development of European corporate debt markets, these markets have remained small. Of the total outstanding volume of debt securities issued by EU private entities (approximately \$4 trillion, or roughly 87 percent of the US corporate debt market), only about 25 percent was issued in international markets. The volume of domestic issues in 1995 was low compared with other developed markets: \$0.1 billion in Germany and \$6.4 billion in France, compared with \$20.7 billion in the United Kingdom, \$77.2 billion in Japan, and \$154.3 billion in the United States.

EMU is likely to accelerate the develop-

ment of corporate bond markets. However, the development of a Europe-wide corporate debt market will probably take some time, primarily because of excessive regulation and a narrow institutional investor base. In Germany, for example, tax policy and issuance requirements prevented the development of commercial paper and private bond markets until very recently. More generally, regulators in almost all EU countries have discouraged issuance of lowergrade corporate debt securities. With respect to the investor base, corporate debt securities are often highly heterogeneousacross issuers as well as across issues by the same issuer-and the costs of evaluating risks are high. These markets therefore require a large institutional investor base, which is likely to develop gradually in

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Europe. Moreover, the present "bank financing" culture in Europe may, as it did earlier in Japan, continue to impede the development of corporate bond and equity markets.

Equity markets

EMU is likely to accelerate the growth of competition, the consolidation, and the technological innovation that have characterized equity markets in recent years. In the late 1980s, the London Stock Exchange —Europe's largest equity market—stimulated turnover in continental equities by creating a screen-based dealer market for non-UK stocks (SEAQ-1) that was separate from the London dealer market. Since the early 1990s, continental exchanges have recouped a substantial share of trading with new electronic continuous auction markets, particularly CAC in Paris and IBIS in Frankfurt, and the importance of SEAQ-I has faded. Nevertheless, London dealers are still the primary source of liquidity for large block transactions and for "programtrading" in a significant number of continental stocks.

In combination with computerization and the implementation of the EU's Investment Services Directive, the launch of the euro could lead to the development of a European-wide equity market for blue-chip stocks in the form of a single electronic exchange with a screen-based, automated

order-driven trading system like IBIS. However, the trading costs of such a system would need to be competitive with those of proprietary trading systems. National bourses may survive by specializing in trading low-capitalization companies, and local trading may continue if local custody, settlement, and tax systems differ.

Derivatives markets

EMU will also affect Europe's 16 futures and options exchanges. With only euro interest rates, there will be fewer derivatives contracts. This will probably cause competition between the three largest exchanges—the London International Financial Futures Exchange (LIFFE), the Deutsche Terminbörse (DTB), and the Marché à Terme International de France

(MATIF)—to intensify, although small exchanges may try to establish technical linkages and common settlement procedures.

In light of their specialization in interest rate contracts, LIFFE and MATIF are likely to be most affected. DTB will be able to capitalize on its technological prominence owing to its fully electronic order-driven system

tully electronic order-driven system that allows almost one-third of its members to trade from workstations outside Germany; its Frankfurt location might also give it a competitive edge. While LIFFE already has electronic capability, MATIF is likely to be handicapped by its failure to finalize a link with DTB. LIFFE's current leading position may be undermined, however, if the United Kingdom does not join EMU, while MATIF could benefit from the fact that the French government has been actively issuing ECU-denominated debt since 1989 and is the leading sovereign borrower in ECU.

The most direct impact of EMU on the structure of derivatives contracts will be the elimination of currency derivatives between EMU countries. If EMU begins with the core countries of the exchange rate mechanism (ERM), the negative impact on trading volumes will be muted, because trading in intra-core currency derivatives is relatively limited. High-volume contracts between core and noncore currencies will simply change into contracts between the euro and noncore currencies, and contracts between dollars, yen, and deutsche markbloc currencies will be only slightly affected, with the euro substituting for European national currencies. But if EMU enhances trading within, and capital flows to, the euro area, the demand for currency derivatives could increase.

After EMU, the market for interest rate swaps should become larger and more liquid, as contracts of participating currencies become perfectly fungible. Enhanced liquidity is also likely to increase the use of swaps outside the banking sector. EMU will boost the demand for options contracts on interest rate spreads and allow investors to hedge credit-risk spreads between bonds of high-debt countries and the euro benchmark. Interest-rate-spread-based contracts may also develop for private debt securities.

For bond market futures, it is difficult to know whether the market will demand a futures contract for each national bond or a generic contract will emerge. This will depend on the volatility of credit spreads between the various national issues. If spreads are stable, the low basis risk could lead the market to develop a single, liquid 10-year futures contract similar to the US Treasury bond future. Otherwise, there could be a range of futures contracts, one for each national benchmark issue. The selection of deliverable bonds will also be crucial. If two or more national bonds are deliverable for a generic bond futures contract, the contract could favor the one that is cheapest to deliver and create liquidity of

that bond at the expense of higher-quality

Conclusion

By reducing transaction costs and removing the volatile currency-risk component of intra-EMU cross-border financing costs, the introduction of the euro may result in greater reliance on direct financing in European capital markets. As investors and issuers of debt and equity shift their focus to the less volatile components of risk and asset pricing, Europe's "currency culture" is likely to be transformed into a "credit-risk culture." Borrowers will try to lower their financing costs by improving their credit ratings and borrowing in the lowest-cost locations. Lenders will try to assess more accurately the underlying relative asset values and credit risk and take account of other risk components. And, if current plans for fiscal reform are implemented, a large pool of investable fundspension, social insurance, and health insurance funds—will be flowing out of the public sector and into the European (and, perhaps, international) capital markets.

The structural changes that will take place in Europe's financial markets as a result of EMU and other developments will

have a significant impact on international portfolio adjustments and capital flows. To the extent the euro is perceived as a stable store of value, it will assume an important role as a reserve currency. Indeed, its role could be greater than the combined roles of the former currencies of EMU members. This would make the euro the world's second most important reserve currency, after the US dollar. Whether the euro will also play a prominent role in international financial transactions and trade invoicing is less certain, but this is clearly possible. It is likely that as markets become less segmented within EMU, more capital will flow to and from the euro zone. F&D

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