European Union Financial Developments: The Single Market, the Single Currency, and Banking

by Neil B. Murphy*

In the past decade, the financial and banking structure of the 15-member European Union (EU) has changed substantially. In 1993 the single market in banking was inaugurated, transforming the legislative and regulatory environment for banking and financial markets. Then on January 4, 1999, 11 of the 15 member states embarked on a dramatic alteration of their monetary arrangements, initiating a single currency (the euro) and a single central bank (the European Central Bank [ECB]). Conversion to the single currency will be complete in the year 2002, at which time national banknotes and coins will be replaced by euro notes and coins. Clearly, implementation of the single currency will significantly affect the process of consolidation already under way in banking and financial markets. In addition, the EU's size and structure are expected to change. Many nations of Central and Eastern Europe that were formerly behind the Iron Curtain have been working to transform themselves from socialist, command-style economies into market economies. A number of them are preparing to join (accede to) the European Union and are therefore designing their new banking and monetary systems to be compatible with the EU's.

The single market in banking and the single currency are important in their own right, given the EU's size and financial depth, but combined with the EU's expansion eastward they will be even more important in the future. As the United States faces its own changes in the structure and regulation of financial institutions and markets, it is instructive to examine another system to learn how it is dealing with the same forces of deregulation, globalization, financial innovation, and technological change.

After surveying the size and composition of the European Union, the article discusses first the single market in banking and then the single currency. Topics under the single market in banking are the legislative framework, the approach taken, and the directives that address (a) barriers to cross-border banking, (b) capital adequacy, and (c) deposit protection. Topics under the single currency are the new currency, the criteria that must be met by nations wanting to join the single-currency area, and the single central bank system. Discussed next are the implications of all of these developments for banking, particularly with respect to the money and capital markets. The conclusion assesses the past and future of the single-market program in banking.

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Size and Composition of the European Union

The starting point in discussing the EU, and in comparing its financial arrangements and issues with those of the United States, must be the EU's size and composition. In 1958 six nations—Belgium, France, Germany, Italy, Luxembourg, and the Netherlands—formed the European Common Market, and over the years those six nations were joined by nine other Western European nations. As a practical matter, it is useful now to think of the EU as all of Western Europe except Norway and Switzerland. (In the future, the EU will include member nations in Central and Eastern Europe as well.)

After passing through a selection process as outlined below, 11 of the 15 member nations embarked on the single currency. The four nonparticipants are Denmark, Greece, Sweden, and the United Kingdom. In the popular press, the nations in the single currency are sometimes referred to collectively as "Euroland."

Tables 1 and 2 list the population, gross domestic product (GDP), and financial depth (the ratio of financial assets to GDP) of the EU, Euroland, and the United States. The population of the EU is larger than that of the United States, while Euroland's population is approximately the same. In GDP and financial depth, the EU is similar to the United States. However, as discussed below, the EU and the United States are quite different in the composition of their financial assets and in the use of their currencies in international trade. The proportion of financial assets represented by bank deposits is much higher in the EU than in the United States, a difference reflecting the broad and deep money and capital markets in the United States. And the U.S. dollar is widely used in international trade and finance, whereas no single European currency is. (See Appendix for tables.)

In summary, the EU and Euroland are large, wealthy entities whose banking, financial, and monetary arrangements have changed dramatically in the past decade and will undoubtedly continue in change.

The Single Market in Banking

The stage was set for the single market in banking in 1958, and specific directives on barriers, capital standards, and deposit protection were issued in 1989, 1992, and 1994. In the interim, important decisions were made about the place of each member nation's legislative and supervisory framework and about the approach that would be taken to cross-border banking (what activities would be permitted, and would the host country or the home country control the status of foreign banks). The intent of all of this was to allow banks to be able to do business anywhere in the EU so that the benefits of competition would accrue to businesses and households—but, to ensure that competition would not result in banks taking excessive financial risks, identical standards of capital adequacy were imposed on all banks.

Setting the Stage

The goal of the original Common Market in 1958 was to establish an area with no internal barriers to the movement of goods, services, labor, and capital. Banking services were among those for which internal barriers were to be eliminated.

After many years of balancing this goal with the prerogatives of sovereign nations, the European Economic Community assessed the progress made. Its assessment was published in *Completing the Internal Market*, White Paper from the Commission to the European Council (1985), hereinafter referred to as the White Paper. The White Paper listed measures that would have to be adopted if the goal of free circulation of people, goods, services, and capital within the EU were to be achieved. The White Paper also contained 300 proposals for legislation that would have to be enacted if barriers were to be removed. Among the proposed measures and legislation were some that applied to banking services.

Another important document leading to change was the Price Waterhouse/Cecchini Report (1988), which dealt exclusively with banking. The report's basic findings were as follows:

- The nations of Europe had fragmented banking systems characterized by relatively small size, high concentration, excess capacity, and lack of competition.
- Gains could be achieved if the average size of banks was larger (economies of scale).
- Gains could be achieved if the products and services offered by banks in many countries were expanded (economies of scope).
- Beyond achieving economies of scale and scope, banks could also achieve gains in efficiency if there were incentives for banks to adopt "best practices."

- To ensure that all of these gains accrue to bank customers, barriers to competition would have to be removed.
- If economies of scale and scope, increased efficiency, and enhanced competition were achieved, the benefits to consumers would be substantial—an estimated .7 percent of GDP for the nations under study.

In summary, first the White Paper indicated that the process of achieving the internal market was not complete, and it made specific proposals to that end. Then the Price Waterhouse/Cecchini Report specified the nature of the costs of not having an integrated, competitive banking market in the European Union. The stage was set for the development of the single-market program in banking.[1]

Single-Market Legislative Framework

Three principles guide the EU's approach to the single market in banking. First, each nation retains its own banking supervisory and regulatory agencies. Second, there is to be minimal harmonization from a level above the national level. Most of these are related to safety and soundness. That is, individual countries may have their own regulatory and supervisory regimes, but all banks and nations within the EU must abide by certain minimal standards. Third, "directives" are to be issued at the EU level. That is, nations will be required to take legislative action, but the exact content of the legislation will not be dictated to them. There is normally a timetable that the nations must meet, and when they have enacted their legislation, it is submitted to the EU to ensure its consistency with the original directive.

Approach to Cross-Border Banking

In general, the activity of foreign banks doing business in another country is approached in one of two major ways, assuming such activity is permitted. The first approach is called *national treatment*: a host nation allows banks from foreign nations to conduct business on the same terms as banks that are domiciled in that host nation. This is the approach the United States takes. Foreign banks abide by the same rules and regulations as U.S. banks. Of course this approach implies that some banks will find they cannot do certain things in the host country that are permitted in their own nation. For example, the amount of investment banking activity conducted by banks in the United States has been limited. Thus, a foreign bank (say, German) may find that in the United States activities are forbidden that in Germany are quite legal. By the same token, U.S. banks in nations that have universal banking and national treatment will find they have far greater powers abroad than they do in the United States.

The second approach taken to the activity of foreign banks doing business in another country is called *mutual recognition*. This means that a host nation allows a foreign bank to do whatever is permitted in that bank's domestic environment; in other words, the host nation recognizes the primacy of home-country control. This approach implies that banks in the same market may have different powers. That is, a nation that simultaneously allows mutual recognition and has a restrictive regulatory environment may find that foreign banks coming from a more liberal home-country environment will have more powers than, and therefore a competitive advantage over, their domestic counterparts.

In developing the single market in banking, the EU took the mutual recognition approach internally. That is, the host nation recognized the primacy of the home nation's regulation of banks. Thus, the host nation would have to adapt its own regulatory environment or else stand by while foreign institutions might have advantages in the host nation's domestic market. This approach to the single market in banking allowed for a "market" in regulation, in that nations would strive to ensure that implementing EU requirements would not mean putting their own domestic banks at a competitive disadvantage. Of course, the danger is that such a situation may result in a competition in laxity whereby some nations seek to attract the business of banks by maintaining a lax set of rules and regulations. To forestall such a situation, the EU imposed some minimum standards for all banks in the EU.

Banking Directives

The minimum standards are contained in several banking directives. These address barriers, capital adequacy, and deposit protection.

Barriers and the Second Banking Directive. The cornerstone of the single market program is the

[1] Other documents and assessments of European banking were published at this time, some of them critical of the White Paper and Price Waterhouse/Cecchini. For a review, see Molyneux, Altunbas, and Gardener (1996), chapter 2. For an earlier analysis of European banking, see Gardener and Molyneux (1990). A thorough econometric analysis of economies of scale and scope as well as efficiency can be found in Molyneux, Altunbas, and Gardener (1996).

Second Banking Directive, which was adopted in 1989 to be implemented at the beginning of 1993.[2] Thus, by the end of 1992 all nations had to have in place laws and regulations consistent with this directive. It has three major components. First, it defined exactly what is meant by "banking." Across the EU, there were differences in the activities that could be undertaken by banks, but for purposes of the Second Banking Directive, banking activities were specified (see table 3). Taken together, these activities constitute "universal banking."

The second component of the directive is the principle of home-country control, or mutual recognition. That is, banks will be regulated by, and will conform to, the regulation and legislation of their home country. If a bank does business in another EU nation, the regulatory authorities of the host nation recognize the primacy of the home nation.

The third component of the Second Banking Directive is the concept of a "single passport." That is, a bank licensed to do business in any EU nation is allowed to do business in any other EU nation on whatever basis it considers most advantageous. A bank may establish a branch or subsidiary, or may acquire another bank, in any other nation. The host nation is not allowed to impose any barriers to such action. Previously, cross-border activities had been permitted, but nations had routinely required separate capital for branches located in their borders. A combination of capital requirements, called *endowment capital*, and the need to seek and obtain permission made it somewhat difficult for banks to conduct cross-border activities. The Second Banking Directive removed all such barriers.

As a result of mutual recognition and the single passport, a bank located in a nation with permissive laws about activities would be able to enter a nation with a restricted set of activities and conduct business that would not be permitted to domestic banks. Thus each EU nation, in passing the legislation required by the Second Banking Directive, has an incentive to consider all specified banking activities (table 3) as permissible activities for its domestic banks, since to do otherwise would put domestic banks at a competitive disadvantage. Hence, the principle of mutual recognition is used to create incentives for nations to enact legislation that makes universal banking the norm in the entire EU.[3]

Capital Adequacy. The amount of capital a bank holds has an effect on its competitiveness, its financial strength, its profitability, and its incentives to take risk. It also represents a cushion against losses elsewhere in the bank, standing between those losses and potential losses to depositors and/or (in nations with deposit insurance programs) the taxpayer.[4]

Because of the crucial role of capital in banking, the EU promulgated a series of directives intended to ensure that all banks in the EU had the same capital standards. The first two directives (the Own Funds Directive and the Solvency Ratio Directive) defined what is meant by bank capital and what is considered to be adequate. In these directives, the EU adopted the definitions, approach, and standards of the Basel (Bank for International Settlements) Committee of the Group of Ten.

In the absence of capital standards, a low capital ratio allows a bank to price loans aggressively and still meet a return-on-capital target. But, if all banks face the same capital standards, there are no capital-related incentives to price loans overly aggressively. A high capital ratio implies financial strength and, in the absence of deposit insurance, can result in an enhanced ability to attract deposit funds easily and cheaply. Of course, if a credible deposit protection program covers any potential losses, the incentive for depositors to monitor and assess the financial strength of banks is removed. But the deposit guarantor has the same incentive as the now-protected depositor would have had to monitor financial strength, and can be expected to favor strong capital standards.

The third capital-related directive was the one on Monitoring and Controlling Large Exposures of Credit Institutions. It requires that the maximum lending exposure to a single client cannot exceed 25 percent of a bank's capital, and a bank must report to its supervisor any exposure greater than 10 percent of capital. This requirement is designed to avoid concentration of risk in a single client whose financial difficulties could substantially affect an individual bank.

[2] There was a First Banking Directive that made some progress toward integration. Under it, however, banks needed authorization from host-country supervisors; host-country legislation determined permissible activities; banks had to earmark endowment capital for new branches as though they were new banks; and capital controls restricted cross-border financial activities.

[3] Of course, EU nations' adoption of universal banking has implications for the transition economies of Central and Eastern Europe, which are designing their banking systems. To be compatible with the EU, such nations have an incentive to adopt the universal banking model.

[4] The EU requires that all member nations have a deposit protection program, as discussed below.

Effects of Second Banking Directive and Capital Standards. The approach taken by the directives discussed above may be set against the objectives mentioned by the White Paper and the concerns expressed in the Price Waterhouse/Cecchini Report. Freedom of movement, as advocated by the White Paper and Price Waterhouse/Cecchini, implies that banks may conduct business in any part of the EU. The Second Banking Directive imposes no apparent regulatory restrictions that would keep a bank from realizing economies of scale by expanding via branching and/or merger and acquisition, throughout the EU. In addition, because of home-country control with a single passport, all EU nations have adopted a broad array of banking powers, allowing banks to realize economies of scope. All nations' banking markets have become *contestable*, a development implying that either existing banks in a market will change their conduct to forestall external entry or foreign banks could indeed enter a market. Thus, the Second Banking Directive sets the stage for cross-border activity, deconcentration of markets, and the ability of larger banks to produce efficiently by realizing economies of scale and scope and having incentives to adopt "best practices" in conducting their banking activities.

But although the pro-competitive aspects of the Second Banking Directive should lead to lower loan rates, higher returns to depositors, and higher-quality services, the combined effect of the capital directives is in the opposite direction. Higher capital standards should result in higher loan rates and lower returns to depositors. That is, the net interest margin should be higher than would be the case if capital ratios were lower and the bank was still trying to meet a return-on-capital target.[5]

The fact that the Second Banking Directive and the capital directives have opposing effects may seem contradictory, but it is not. The combination is designed to achieve for consumers the maximum benefits from competition that is constrained by safety-and-soundness standards, as these are manifested in capital requirements.

Deposit Protection. The EU issued a Deposit Guarantee Scheme Directive to be effective on July 1, 1995. This directive indicated that all member nations had to have a deposit protection scheme (analogous to deposit insurance in the Unites States): deposit protection was to be mandatory for all member nations and for all banks within member nations. The directive put a floor on coverage, €20,000 per depositor, but contained no requirements for funding the scheme, nor did it say whether the deposit insurance agency should be public or private or, if public, whether it should be an independent agency, part of a bank supervisory agency, part of the central bank, or part of the ministry of finance. The scheme could be funded either in anticipation of any problems (so that the deposit insurance agency would have the resources to deal with problem situations) or after the fact (so that other members of the scheme would be assessed to deal with problems). The directive also indicated that depositors should be paid quickly (no more than three months after a deposit became "unavailable").

Those drafting the directive recognized that the principles of mutual recognition and the single passport could cause difficulties for deposit protection schemes. If the deposit protection provided by a home country were much less than that of a host country, a branch within the host country might be at a competitive disadvantage. That is, the deposit products and services that it offered to the public would have a deposit guarantee that was smaller, or might have a requirement for co-payment in which the depositor shared in losses up to some specified amount. This competitive disadvantage seemed inconsistent with the spirit of the single market in which banks can enter markets and compete for the business of the public. For that reason, the directive allowed a bank with a low-coverage home-country scheme to enter a high-coverage market and join the host-country scheme for the difference. Doing this is referred to as "topping up." Thus, the host-country scheme provides deposit protection coverage in excess of what the home-country provides.[6]

In contrast, branches of banks with high home-country coverage do not have symmetrical treatment. That is, these branches cannot "export" their higher coverage to low-coverage countries and acquire a competitive advantage.

[5] For an assessment of the likely consequences of the single-market program, see Dermine (1993).

[6] Massachusetts illustrated a similar arrangement: a state-sponsored deposit insurance fund for savings banks provides 100 percent coverage. For Massachusetts savings banks that are also insured by the Federal Deposit Insurance Corporation, the Massachusetts deposit insurance agency provides a guarantee for deposits in excess of the FDIC's maximum, $100,000.

As a result of this directive, a number of different deposit protection schemes operate side by side in the single market, as table 4 indicates. Coverage varies greatly, ranging from €20,000 to €114,000. This variation implies a large difference in the amount of safety that can be provided from one country to the next. To be sure, the combination of topping up and no export implies that within a country, banks are offering the same guarantee. Yet as electronic banking and the single currency evolve, consumers will be able to access banking services originating anywhere in the EU, and the competitive implications of deposit protection may change. Another important competitive factor is the cost of delivering deposit services, including the guarantee. Even if the coverage for the deposit protection schemes of two countries is identical, banks may face different costs depending upon the method of funding the deposit protection scheme.[7]

In any event, the EU nations are relatively new at providing deposit protection schemes. Most of the schemes were set up either in anticipation of the Deposit Guarantee Scheme Directive or in reaction to a banking crisis. How this system of differently structured schemes can coexist in the context of a single market and single currency will have to be carefully evaluated, especially in a technological environment in which physical location of customer and bank matters less and less.

Summary of Single-Market Initiatives in Banking

The pieces for the single-market program in banking are now in place. All countries have enacted the legislation required by the directives; all EU countries now have the universal banking model;[8] all banks are permitted to enter into other nations' markets by branching, acquisition, and/or solicitation of business across borders by remote means; all consumers can deal with banks in their nations knowing that their deposits are protected; and all banks have the same capital rules, both as to how capital is measured and as to how much is sufficient.

However, until early 1999 all transactions across borders within the EU involved currency risk and transactions costs. Each nation had its own currency, and, for example, a bank that made a loan in a currency other than its own had to consider not only the normal credit risk but also the risk that the value of the other currency would change in relation to its own currency. Banks had to consider the risk involved in setting the price of the loan or had to engage in costly hedging activities to reduce these risks. In addition, the process of exchanging currency involved in these transactions entailed transactions costs. Finally, the quotation of prices and rates in many differing currencies reduced transparency and made it more difficult for consumers, businesses, and banks to make the comparisons necessary for markets to become more integrated.

On January 4, 1999, however, all of this changed, as the European Union launched its single currency for 11 of its 15 member nations.

The Single Currency: Background, Convergence Criteria, and Central Bank

The single currency began with the signing of the Maastricht Treaty (Treaty on European Union) by all EU heads of state in 1992. Appended to it was the Statute of the European System of Central Banks and of the European Central Bank.

The Maastrict Treaty set the stage for an historical change: sovereign nations agreed to go without their own monetary policy, give up the possibility of an exchange-rate policy, and accept limited flexibility in fiscal policy. For the nations participating in the single currency, there would be a single monetary policy. And because they would no longer have their own currency, it would no longer be possible for them to change the exchange rate to accomplish some national objectives. For example, a nation whose product prices were not competitive in world markets would not be able to effectively reduce those prices by lowering the value of its currency. Finally, the conditions for being considered for participation in the single currency required many EU nations to adopt restrictive fiscal policies regardless of the phase of their business cycle.

[7] In the United States, there has been much debate among savings institutions, commercial banks, and credit unions over the cost of delivering virtually identical deposit guarantees to the public.

[8] Of course, having the power to conduct particular types of business does not imply that all banks will do all things. Indeed, it is likely, for example, that a relatively small number of banks will be involved in investment banking activities.

Before the Maastricht Treaty, the EU had adopted a policy in which the central banks of the member nations would maintain the value of their currencies to each other within an agreed range. This was known as the Exchange Rate Mechanism (ERM). However, the policy did not work, partly because different nations were in different phases of their business cycles and, for some, maintaining the currency value resulted in a degree of monetary restrictiveness that was inappropriate for their domestic economy. The Exchange Rate Mechanism broke down in 1992.

With that experience in mind, those who wrote the Maastricht Treaty had two guiding principles: first, no nation is required to participate, and second, in order to participate, each nation has to satisfy *convergence criteria*. The convergence criteria were designed to ensure that all nations were starting from similar positions regarding inflation, public debt, interest rates, and exchange rates. The convergence criteria are as follows:

- **High degree of price stability.** Each country must attain an average rate of inflation that does not exceed the average inflation rate of the three best-performing member countries by more that 1.5 percentage points.
- **Sustainable government financial position**. The ratio of government deficit to gross domestic product (GDP) cannot exceed 3 percent, and the ratio of government debt to GDP cannot exceed 60 percent.
- **Long-term interest rates**. In the year preceding admission, a country's average nominal long-term interest rate may not exceed the average of the three best-performing member countries by more than 2 percentage points.
- **Participation in the narrow bands of the Exchange Rate Mechanism (ERM)**. In the two years preceding admission to the single currency, the currency of each member country must have remained within the normal bands of the ERM without experiencing severe tension.

In 1994 the EU established the European Monetary Institute (EMI) as a sort of "shadow central bank" and as a forum for coordinating the monetary and fiscal policies of the member nations in preparation for the single currency. Time passed, and some nations decided not to participate. In May of 1998, the participating nations were chosen (as listed in table 5).

On January 4, 1999, the transformation took place. On that date, for the participating nations, all government debt was denominated in euro, all stock market transactions and prices were in euro, and all monetary policy operations were in euro. Bank deposits and credit-card transactions were in either euro or the legacy currencies. At the outset there were no euro banknotes so coin and currency would still be denominated in the legacy currencies. The domestic legacy currency of each participating nation now had a fixed relationship to the euro. An analogy is the relationship of a U.S. ten cent piece (a dime) to a U.S. dollar: there are always ten dimes to a dollar. Similarly, there are always 6.55957 French francs to the euro, and so on for each nation. (The relationship of each legacy currency to the euro is shown in table 6.) The effort required was monumental, since all banks, all central banks and their large-value payment systems, all governments, and all financial institutions, stock exchanges, and business firms had to reprogram their computer systems extensively to accommodate the new currency. In addition, a new large-value payment system for euro, the Trans-European Automated Real-Time Gross Settlement Express Transfer system (TARGET), was implemented.

The monetary policy of the new single currency is conducted by the European System of Central Banks. This system includes the National Central Bank (NCB) of each country in the EU as well as the European Central Bank (ECB), located in Frankfurt, Germany. The ECB has two major parts, the Executive Board and the Governing Council. The six-member Executive Board (a president, vice president, and four directors) is appointed by the European Council, a body comprising the heads of state of the member countries. The Governing Council consists of the Executive Board and the heads of the member-country National Central Banks, who are appointed by their national governments.

The ECB's primary objective is to maintain price stability. To pave the way for it to do this, the treaty and appended statute give it considerable independence from the national governments and from the Community institutions.

This article leaves it to others to discuss the conduct of the EU's monetary policy, the political reality of the ECB's degree of independence, the difficulties that arise when countries have cyclical problems different from those of Euroland as a whole (asymmetric

shocks), the exchange value of the euro, the euro's role in the international monetary system, and other macroeconomic considerations. The focus here is on the implications of the single currency for the EU banking system.

Implications for Banking: Development of Money and Capital Markets

The European Union has now developed a regulatory framework for a single banking market and has implemented a single currency. All banks are subject to the same capital rules, and all member nations have installed deposit protection schemes. To the extent that the general conclusions of Price Waterhouse/Cecchini are valid, banking and financial markets in the European Union can be expected to change greatly. That is, consolidation should lead to economies of scale; with universal banking a choice for all banks in all nations, some banks can realize economies of scope; and greater competition should encourage all banks to become more efficient. As noted above, the extensive empirical tests conducted by Molyneux, Altunbas, and Gardener (1996) and Economic Research Europe, Ltd. (1997) support the general conclusion that these changes should take place.

Much discussion of the single market and single currency has focused on their implications for banking markets, that is, for bank consolidation, cross-border mergers, the pricing of bank services, and so forth. Not often looked at, however, is one very important outcome of the single currency: the movement toward more *direct* finance within the EU, as money and capital markets develop.

Table 2 shows that the ratio of bank assets to GDP is much higher for the EU than for the United States but that the United States has a much more highly developed market for bonds and equities and much more highly developed nonbank institutional investors, such as pension funds and mutual funds. One of the two main reasons for this observed difference is that the development of money and capital markets is enhanced by the existence of a single currency, and the United States has had a single currency for several hundred years. This longevity has allowed U.S. money and capital markets to develop breadth, depth, and resilience. For the EU, in contrast, developing such markets was more difficult because assets could not be easily accumulated in any one currency, and currency risks were added to the normal credit and market risks. The single currency and the large-value payment system, TARGET, should allow the trend toward direct finance to accelerate.

The second main reason for the observed difference in development of money and capital markets is that in the United States, although a single currency existed, banking markets were fragmented by the historical prohibitions on interstate banking and the separation of commercial and investment banking (Glass-Steagall). Thus, banks could not develop nationwide, and entities other than banks were supporting the development and operation of the money and capital markets.

Several observers (Davis [1999], McCauley and White [1997], and Prati and Schinasi [1997]) have noted that one implication of the single currency is the development of broad, deep, and resilient money and capital markets in the European Union.

To understand how this development might affect banks, one may review the role of banks in dealing with information asymmetries (the theory of financial intermediation places a great deal of emphasis on this role [Diamond 1984]). Information asymmetry means that those who seek funds have more information about the prospective risks and returns than the potential investor does. The potential investor must then expend real resources to obtain the necessary information, and this expenditure lowers the return on any investment. Moreover, once an investment is made, the use of the funds must be monitored. Banks are thought to specialize in resolving the informational asymmetries more efficiently than individual investors and in monitoring the use of the funds once committed.

However, technological change helps make accurate financial information available to many investors. That is, information is available in many forms, some of which involve the Internet, and many analysts follow the prospects of firms whose ownership is publicly traded. Under these circumstances it becomes progressively easier and cheaper for individual investors and nonbank institutional investors to make their assessments. Of course, this statement assumes that financial information is provided in a timely and accurate manner (transparency).

Banks are generally compensated for resolving informational asymmetries and for performing delegated monitoring by a difference between the interest

rates they pay to suppliers of funds (primarily depositors) and the interest rates they charge to borrowers. This difference (net interest margin) can be viewed as the cost of intermediation. To the extent that borrowers and suppliers of funds can effectively deal with each other directly, the net interest margin that would occur with financial intermediation is available to be divided between them. For very large transactions, the costs per unit of currency (in this case, either dollar or euro) are relatively low; hence such transactions will probably be the best candidates for direct finance.

Thus, the development of money and capital markets in the EU implies that many of the banks' best customers will borrow long term in the bond markets and short term in the commercial paper markets. It also implies that many of the banks' largest depositors will invest directly in the money and capital markets. The result is likely to be a substantial change in the size and structure of bank balance sheets over time. The very best borrowers will move off the banks' balance sheets. What is left will be those borrowers for whom the bank can make a real contribution to financial intermediation—that is, borrowers whose financial information is not easily and cheaply transparent to potential suppliers of funds. Fund suppliers who can assess the prospects of potential investments in the money and capital markets will supply funds directly, leaving those depositors who do not have the resources to resolve information asymmetries. This development will be favorable to the overall level, cost, and efficiency of financial activity in the EU, but because banks' share of total finance will decline over time, the adjustment will impose costs on banks. Although for European banking the prospect of losing business over time hardly seems grounds for optimism, there are three offsetting factors. First, large corporations with very high credit ratings are paying the lowest rates for any of their borrowing. Large corporations with substantial pools of funds available for short-term investment will demand the highest rates on deposits. Hence, the movement of such activity off the balance sheet should result in higher net interest margins. In the United States, where banks have a smaller share of total finance, net interest margins are higher than those in the EU.

Second, because banks in the United States are more profitable than banks in the EU, it seems reasonable to maintain that a smaller share of total finance can be consistent with strong profitability.

Third, because of universal banking in the EU, many transactions that flow to the money and capital markets will be handled in the investment banking departments of the bank rather than in the credit or deposit departments. Bonds and shares need to be underwritten, and commercial paper may be guaranteed. All such activity must eventually result in placement of securities with investors. The result should be fee income.

Conclusion: Assessments of the Single-Market Program in Banking, Past and Future

Although the single-market program in banking has been in place since 1993, it was the single currency that marked a dramatic change in the EU's financial environment. The single currency, of course, has existed for only a short time, so one cannot yet assess its affect, but one can review the single-market experience up to and including 1996. One may also make reasonable assumptions about the future on the basis of an analysis of the EU's experience with the single market and on the prospects now that the single currency is in place.

The European Union has undertaken a number of studies of the effects of the single-market program in many areas, such as manufacturing, services, trade, and so forth. All of these studies are part of a series known as the *Single Market Review*. Volume 3 of that series, entitled *Credit Institutions and Banking* (1997) was prepared by a team of distinguished scholars under the auspices of Economic Research Europe, Ltd., and contains an exhaustive analysis of the single market's effect on banking. The analysis is based on econometric analysis, surveys of bankers, and detailed case studies in EU countries. The findings may be summarized as follows:

- The Single Market Program (SMP) has had a positive effect on competition and strategy in many product lines and in a number of countries. However, barriers to achieving the goals of the SMP remain.
- It is difficult to disentangle the effects of the SMP from other factors, such as technology and globalization, on the one hand, and the capital regulations implemented at the same time, on

the other hand. That is, technology and globalization would enhance the move to greater competition, reducing the spread between rates charged to borrowers and rates paid to depositors, while at the same time higher capital regulations would push in the other direction.

- Although progress in eliminating regulatory barriers has been impressive, it is not complete. One sector where obstacles remain is mortgage credit. This sector involves a number of issues, including access to capital markets, national subsidies to housing and mortgage credit, and tax law.
- Differences in taxation and fiscal policy affect competition for financial services. For example, in some countries the deductibility of mortgage interest for income tax purposes depends on the borrower's dealing with a domestic lender. Another example: tax-favored investments (analogous to IRAs, 401[k] plans, *etc.*) may be tied to domestic institutions. Such incentives influence consumer choice of financial services in such a way as to constitute a barrier to competition.
- Restrictive labor laws and regulations make it difficult for banks to realize benefits from a more competitive environment. The consolidation that occurs when economies of scope and scale and increases in efficiency are possible implies that labor will probably be displaced. In many countries, displacing labor is difficult to do.
- In some cases, large public-sector involvement in banking involves implicit or explicit guarantees by the state. These give such institutions a competitive advantage not related to the efficiency and effectiveness of their delivery of financial services. In addition, national governments are reluctant to close banks, especially large ones, and this reluctance gives banks perceived as "too big to fail" an advantage.

Notwithstanding these restrictions, there is ample evidence of pro-competitive behavior by banks:

- Prices on particular services are converging to a lower average value, especially in countries that were highly protected before the SMP.
- Case studies and postal surveys show that banks have taken strategic steps to control costs, to increase market share and scale by merging, and to focus on enhancing shareholder value rather than engaging in regulatory capture activities and other noncompetitive behaviors.
- Merger activity, both within countries and cross-border, has increased.
- Measured productive inefficiencies have been reduced, and the reduction has moved banks closer to the "best practices" frontier.

What are the prospects for the banking industry in the EU? A number of commentators have discussed this, but the focus here is on two recent contributions, one by White (1998) and the other by the European Central Bank (1999). First, though, it should be noted that banking in the EU is not homogeneous, even though most of the discussion below focuses on the entire area. Marked differences exist between, on the one hand, the banking system of the United Kingdom, the Netherlands, and Ireland and, on the other hand, those of the remainder of Western Europe. The banking tradition of the United Kingdom was similar to that of the United States, and the tradition is generally referred to as the "Anglo-Saxon" model, with limited banking and limited state involvement in the management of individual banks. The Netherlands and Ireland are small, open economies with relatively free financial systems. The rest of Western Europe is characterized by a tradition of universal banking and of state involvement in the ownership and management of financial institutions. Moreover, these nations tend to have more restrictive labor laws. For that reason, White focuses on the potential changes in Continental Europe, and the title of his contribution is "The Coming Transformation of Continental European Banking?"

White concludes as follows: (1) Most of the concerns of the Price Waterhouse/Cecchini report still apply to banking in Continental Europe: too many banks (effects on scale), too many branches (effects on scale), too many employees (effects on efficiency). (2) There is too much state intervention in these banking systems: state-owned banks account for large percentages of banking assets in Italy, Germany, and France, the three largest continental economies. (3) Notwithstanding these difficulties, increased attention is being paid to cutting costs and to reorienting management's focus on activities that increase shareholder wealth rather than increasing market share. Moreover, banks have increased the level of risk in their portfolios in part because of the lack of availability of low-risk government securities as a consequence

of the fiscal policies of the Economic and Monetary Union. (4) Merger and acquisition activity has increased substantially but is focused first on within-country mergers (cost cutting) and mergers of banks with nonbank providers of financial services (economies of scope). Cross-border merger activity is expected to increase.

The European Central Bank's report includes substantial data comparing EU countries with the United States and Japan on many aspects of banking activities and structure. The report was supported by staff of all of the EU members' national central banks and independent banking supervisors. They agree with many of the conclusions reached by White (1998) and Economic Research Europe, Ltd. (1997). Their own conclusions are the following:

- Eliminating commissions and fees from foreign-exchange trading within the single market will substantially affect bank profitability in the short run.
- Money and capital market developments spurred by the single currency will force banks to face disintermediation. They will need to focus on activities to support that shift and will need to gain fee income from underwriting and placement.
- Banks will expand both within country and cross-border not only to achieve economies of scale and scope but also to diversify credit risk across a wider geographic area. With currency risk eliminated inside Euroland, banks can focus on wider geographic patterns of lending and therefore on greater diversification.
- Although concentration ratios for individual countries within the EU are quite high, if all of the single-market area, or the single-currency area, is considered the relevant market, concentration ratios are quite low. Thus, there is room for consolidation without too much worry about anticompetitive consequences.
- Merger patterns show that cross-border activities are preceded by a phase of in-country defensive moves to mop up excess capacity and achieve critical scale levels. There is some evidence that nationalistic sentiments on the part of some governments have a dampening effect on the free movement of banks across national borders.
- Since markets are contestable and EU banks have excess capacity and low profit rates, there is no alternative to a restructuring of the banking sector in the medium and long terms.
- Two related issues must be considered. First, the need to increase revenue and profits may tempt some banks to take excessive risks. Second, building large pan-European banks with home offices in small countries raises the question of the costs of resolving failures and the deposit insurers' temptation to consider some banks "too big to fail." Well-known moral hazard issues are involved.

In summary, there is substantial agreement that the EU financial environment will change dramatically over time. The effects of globalization and technology that all banks in all countries are facing will be reinforced by several major initiatives that the EU has put in place. Increased competition from money and capital markets will change the nature of banking and financial intermediation in Europe. Excess capacity, uneconomic size and structures of banks, and inefficiency will all be eliminated over time. Deregulation, globalization, technological change, and macroeconomic policy are all exerting pressure in the same direction.

In summary, the implications of the single market in banking and the single currency for the EU's financial system and banking structure are significant. Inevitably, money and capital markets will develop for the single-currency area, and their existence will remove business from both sides of their balance sheets. Fortunately, the banks will be able to offer the investment banking services to support money and capital market development.

Although it is generally agreed that banking in the EU has serious problems of excess capacity and uneconomic scale and that adjustment to a more competitive environment will be hampered by restrictive labor laws, nonetheless the signals are fairly clear. To survive and prosper, banking in Europe will need to adapt to the changes in the environment. And with 11 more nations applying for membership in the European Union and working to meet the standards for joining,[9] the banking and financial context described here may eventually encompass a population of 400 million people.

[9] The 11 nations are Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia.

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APPENDIX

A SELECT CHRONOLOGY OF EVENTS RELATED TO THE EUROPEAN UNION

- September 1946—Winston Churchill calls for a United States of Europe.
- April 1951—Belgium, France, Germany, Italy, Luxembourg, and the Netherlands (the Six) sign the Treaty of Paris establishing the European Coal and Steel Community.
- March 1957—The Six sign treaties establishing the European Economic Community (EEC) and the European Atomic Energy Community (Euroatom) in Rome ("Treaties of Rome").
- January 1958—The Treaties of Rome enter into force.
- January 1973—Denmark, Ireland, and the United Kingdom join the European Community.
- January 1981—Greece joins the European Community.
- June 1985—European Commission sends European Council a White Paper on Completion of Internal Market by 1992. Later that month the White Paper is approved by the European Council.
- January 1986—Spain and Portugal join the European Community.
- February 1987—Jacques Delors presents European Commission's program for 1987 to the European Parliament, accompanied by the communication "The Single Act: A New Frontier for Europe."
- February 1992—Treaty on European Union signed in Maastricht by foreign and finance ministers of Member States ("Maastricht Treaty").
- January 1993—The Single European Market enters into force.
- January 1995—Austria, Finland, and Sweden become members of the European Union.
- May 1998—Eleven Member States satisfy conditions for adoption of the single currency. The Governments of the Member States adopting the single currency appoint the president, vice president and the other members of the Executive Board of the European Central Bank.
- January 1999—Eleven Member States adopt the euro as their official currency.

Source: European Union, *Yearly Chronology of the European Union*.

Table 1

POPULATION AND GROSS DOMESTIC PRODUCT (GDP) EUROPEAN UNION, EUROLAND, AND THE UNITED STATES, 1998

Entity	Population	GDP (€ Billion)
European Union	374,566,000	€ 7,472.5
Euroland	290,832,000	5,776.1
United States	266,490,000	7,269.4

Source: Eurostat (Statistical Office of the European Communities), 2000. All data are expressed in terms of ECU (European Currency Unit) because the euro did not exist in 1998. However, upon adoption of the single currency, 1 ECU = €1.

Table 2

FINANCIAL STRUCTURE OF EUROPEAN UNION, EUROLAND, AND THE UNITED STATES, 1996

	Equities/ GDP (Percent)	Government Bonds/ GDP (Percent)	Private Bonds/ GDP (Percent)	Bank Assets/ GDP (Percent)	Total/ GDP (Percent)	Institution Assets/ GDP (Percent)
European Union	55%	56%	36%	207%	354%	74%
Euroland	35	55	34	206	330	59
United States	117	96	60	73	346	145

Source: Davis (1999).

Table 3

BANKING ACTIVITIES PERMITTED IN THE EUROPEAN UNION

- Deposit taking and other forms of borrowing
- Lending (including consumer credit, mortgage credit factoring, invoice discounting, and trade finance)
- Financial leasing
- Money transmission services
- Payments services (including credit cards, electronic funds transfer, point of sale, travelers checks, and bank drafts)
- Providing guarantees and commitments
- Trading on their own account or for customers in money-market instruments, foreign exchange, financial futures and options, exchange and interest-rate instruments, and securities
- Participating in share issues and providing services related to such issues (for shares, bonds, and other securities), including corporate advice and arranging mergers and acquisitions
- Money brokering
- Portfolio management and advice
- Safekeeping of securities
- Offering credit reference services
- Safe-custody services

Table 4

SUMMARY OF DEPOSIT PROTECTION SCHEMES IN EUROPEAN UNION

Country	Funded	Coverage	Premium	Location of Deposit Insurance Agency
Austria	No	€ 22,000	ex post, pro rata	Private
Belgium	Yes	€ 20,000	.02% insured liabilities	Bank supervisory agency
Denmark	Yes	€ 20,000	.2% insured deposits (max.)	Bank supervisory agency within central bank
Finland	Yes	€ 27,000	.05% to .3% (risk-based) on insured deposits	Supervised by bank supervisor and ministry of finance
France	No	€ 60,000	on demand, but limited	Responsibility of bank supervisor, part of central bank
Germany	Yes	90% of capital for savings banks, 90% of deposit up to € 20,000 for commercial banks	.03% of insured deposits	Private
Greece	Yes	€ 20,000	.025% to 1.25% of deposits	Private
Ireland	Yes	90% coinsurance to € 22,222	.2% of insured deposits	Private
Italy	No	€ 114,000	ex-post risk adjusted .4% to .8%	Part of central bank
Luxembourg	No	90% coinsurance to € 22,222	ex-post	Private
Netherlands	No	€ 20,000	ex-post	Private
Portugal	Yes	€ 20,000, coinsurance to € 45,000	risk-based .08% to .12% of insured deposits	Private
Spain	Yes	€ 20,000	max. of .2% of insured deposits	Private
Sweden	Yes	€ 20,000	max. of .2% of insured deposits	Part of ministry of finance
United Kingdom	Yes, small (mostly ex post)	coinsurance to € 22,222	on demand	Separate legal entity staffed by bank supervisor

Source: Garcia, (1999).

Table 5

NATIONS IN EUROPEAN UNION AND IN SINGLE-CURRENCY AREA

European Union	Single-Currency Area (Euroland)
Austria	Austria
Belgium	Belgium
Denmark	
Finland	Finland
France	France
Germany	Germany
Greece	
Ireland	Ireland
Italy	Italy
Luxembourg	Luxembourg
Netherlands	Netherlands
Portugal	Portugal
Spain	Spain
Sweden	
United Kingdom	

Table 6

LEGACY CURRENCY VALUES IN RELATION TO THE VALUE OF ONE EURO

Nation and Currency	Number of Units per Euro
Austria—Schilling	13.760300
Belgium—Belgian Franc	40.339900
Germany—Mark	1.955830
Spain—Peseta	166.386000
Finland—Markka	5.945730
France—French Franc	6.559570
Ireland—Punt	.787564
Italy—Lira	1,936.270000
Luxembourg—Belgian Franc	40.339900
Netherlands—Guilder	2.203710
Portugal—Escudero	200.482000