

PRELIMINARY

November 2003

**GLOBALISATION: THE ROLE OF INSTITUTION BUILDING
IN THE FINANCIAL SECTOR**

The EU experience

Contents

1.	Introduction	3
2.	Overview of major institutional changes	4
2.1	The completion of the internal market (1985-1992)	6
2.2	The creation of a single currency (1992 – 1999)	10
3.	Impact on financial sector development and macroeconomic performance	11
3.1	Effects of financial integration on financial sector development and overall economic performance	12
3.2	Features of today's financial markets in the EU/euro area	13
3.3	Evidence on the macroeconomic effects of financial integration in the EU	15
4.	Further steps in institution building following the introduction of the euro	18
4.1	Modernising the EU financial rulebook and improving regulatory and supervisory convergence	18
4.2	Strengthening co-operation in the areas of financial stability and crisis management	20
4.3	The regulatory and supervisory implications stemming from the emergence of large and complex financial institutions	21
4.4	The new capital adequacy regime for banks	21
5.	Policy implications	22
6.	References	25
Annex 1:	Major EU directives on financial regulation and supervision	27
Annex 2:	Evidence on the effects of integration on the banking sector	28
Annex 3:	Evidence on the effects of integration on the money market	32
Annex 4:	Evidence on the effects of integration on bond markets	37
Annex 5:	Evidence on the effects of integration on equity markets	42
Annex 6:	The Financial Services Action Plan (FSAP): initiatives for financial market regulation	44

1. Introduction

Institutions establish the rules of the game for an economy. They can be described as the formal and informal “constraints that structure political, economic and social interactions” (North 1991). According to North, good institutions can be viewed as establishing an incentive structure that reduces uncertainty and promotes efficiency. There is relatively strong evidence linking well-functioning institutions and good governance to positive economic and social outcomes. Institutional factors appear to be more important than productive factor endowments or any other explanations in determining cross-country differences in the overall level of development.¹

Based on this broad definition, EU integration itself can be viewed as an institution-building process in all areas (e.g. trade, economic, monetary and financial policies) where regional co-operation has been developed since the early 1950s. The European Community has created a unique system of governing institutions, which are empowered to adopt several types of legal instruments binding all Member States. EU legislation covers an ever broader range of areas, including not only trade, economic and financial institutions, but also energy, environment, employment, competition and consumer policies. The majority of EU regulatory activity has aimed at the completion and proper functioning of the internal market, an area without internal frontiers, where goods, people, services and capital can move freely.

Through regulation, EU integration has provided a broadly harmonised incentive structure for the economies of all Member States. In many ways, EU integration represents a “commitment device” that has affected performance primarily by fostering better policy choices and institutions at the national level. Though EU integration is a unique experience, it could nevertheless still be regarded as an example of an “external anchor” that puts policymakers under continued pressure to promote better domestic institutions. By defining a set of minimum regulatory requirements that should be applied by all Member States (i.e. harmonisation), while simultaneously enforcing mutual recognition of national practices (i.e. competition) for fully-fledged regulatory measures, EU integration has a built-in tendency to raise the quality of regulation. EU integration has therefore prompted a learning process among Member States about best practice regulation. In striving for best practice, EU integration has speeded up the institutional reform process especially in the peripheral economies; in the same vein, EU enlargement is currently accelerating institutional reform in the acceding countries.

Against this background, the EU experience might be relevant to emerging market economies. The EU’s striving for best practice regulation to some extent is comparable with the standards and codes initiatives in the international sphere. Just as internationally recognised standards and codes have set a benchmark for good governance, so has EU integration provided benchmarks to its Member States. A major difference is, however, that the latter are binding on the Member States. In addition, EU integration may

¹ See, for example, Acemoglu, D. (2003), “Root Causes—A historical approach to assessing the role of institutions in economic development”, *Finance and Development*, June 2003.

be regarded as a globalisation process conducted at the regional rather than the world level. Therefore, the specific experience of the EU with regional integration might also provide some insights of broad relevance to emerging market economies.

The focus of this study is on European experience with institution building in the financial sector, concentrating in particular on the banking segment. Broader aspects of European integration are reviewed only to the extent that they have been relevant to the financial sector. This approach is appropriate, given that major initiatives such as the Single Market Programme and the introduction of the euro did not necessarily target (exclusively) the financial sector, but have nevertheless had an important direct or indirect impact on its working. After two major waves of European integration, mostly addressing other areas (microeconomic policies in the Single Market Programme and macroeconomic stability in the context of the single currency), currently a new phase has started, in which institution building is more directly related to supervisory and regulatory aspects in the financial sector.

The study is structured as follows. Section 2 provides a brief overview of the major institutional changes linked to the two main developments in European integration: the establishment of the internal market and the creation of a single currency. Section 3 then looks at how integration has affected financial market development and macroeconomic performance. Section 4 presents some of the further steps in institution building currently underway, while Section 5 tries to distil some policy conclusions, which might be of relevance to emerging market economies.

2. Overview of major institutional changes

Over the last 20 years, institution building in the financial sector has been mainly driven by two major developments in European integration: the establishment of the internal market and Economic and Monetary Union. The focus of these two major waves of integration was not the financial sector as such, but the free movement of goods, persons, services and capital in the context of the Single Market Programme and macroeconomic stability in the context of Economic and Monetary Union. Both steps are rooted in the relevant fundamental provisions of the Treaty of Rome signed in 1957², which sought to transform Europe's highly segmented national markets into a common market. However, the Treaty of Rome did not call for a complete liberalisation of capital movements; capital mobility was fostered only to the extent that would be required for the proper functioning of the single market in general and the free movement of persons, goods and services. Thus, greater financial integration was for many years impeded by severe restrictions on capital mobility in Member States. The process of further integration only gained momentum in the early 1980s, at a time of stagnating internal trade and growth and deteriorating external competitiveness. At the same time, this momentum was only made possible because decades of European integration had provided the institutional and political critical mass needed to progress one step further.

² Treaty establishing the European Economic Community (1957)

Throughout these years, European integration has been characterised by a strong institutional component consisting of several layers. At the political level, Member States have to fulfil minimum common requirements, which at the same time are key conditions for developing and maintaining a stable financial system, i.e. inter alia, a democratic constitutional system and respect for the rule of law. In the economic area, the EU institutional framework includes features that are also important building blocks of well-functioning financial markets, such as central bank independence, leading to a non-inflationary environment and budgetary discipline, avoiding a crowding out of the private sector issuers of debt instruments. With respect to legal and regulatory underpinnings, supervisory and regulatory arrangements have been developed that are based on the principles of minimal harmonisation and mutual recognition. Mutual trust and policy co-operation among EU Members States have been crucial to develop an institutional setting with a sound legal basis. This allowed, inter-alia, legislative power to be shared among supranational EU institutions and national governments as well as mutual recognition of national laws to be accepted as an institution-building principle.

Membership of the EU requires adherence to the whole set of legal and institutional provisions built up by the EU over time. As stated in the Treaty on European Union, any European State that respects the principles of liberty, democracy, respect for human rights and fundamental freedoms, as well as the rule of law, may apply to become a member of the European Union. The Copenhagen European Council in June 1993 marked the political start of the current enlargement process by defining criteria which applicant countries should meet as pre-conditions before becoming members of the EU.³ The Copenhagen criteria require: (i) the stability of institutions guaranteeing democracy, the rule of law, the respect of human rights, and the respect and protection of minorities; (ii) the existence of a functioning market economy, as well as the capacity to cope with competitive pressure and market forces within the EU; and (iii) the ability to take on the obligations of membership, including adherence to the aims of political union and of Economic and Monetary Union (EMU), namely the adoption of the so-called “*acquis communautaire*”⁴. In this respect, the integration of the accession countries into the EU consists of two chronologically different steps, namely: first, entry into the EU with the status of “Member State with a derogation to the adoption of the euro”, which implies that not all the legal provisions of the Treaty relating to EMU are applicable; and second, the adoption of the euro. Against this background, it has to be stressed that although most of the aspects of financial integration relate to the EU as a whole, some

³ Enlargement was originally the term used to refer to the four successive waves of new members joining the European Community. Nine countries have so far joined the six founder members - Belgium, France, Germany, Italy, Luxembourg and the Netherlands - at the following times: Denmark, Ireland and the United Kingdom in 1973; Greece in 1981; Portugal and Spain in 1986; Austria, Finland and Sweden in 1995. The current wave of accessions has turned enlargement into a unique opportunity to bring peace, stability and prosperity to the entire continent of Europe. It is an unprecedented enlargement in terms of its dimension and diversity, and involves ten applicant countries from Central and Eastern Europe (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia) as well as two Mediterranean countries (Malta and Cyprus) and Turkey. (See: <http://europa.eu.int/scadplus/leg/en/cig/g4000a.htm#a11>)

⁴ The Community *acquis* is the body of common rights and obligations which bind all the Member States together within the European Union. It is constantly evolving and comprises: the Treaties, Community legislation, the case law of the Court of Justice; the declarations and resolutions adopted by the Union; measures relating to the common foreign and security policy and to justice and home affairs, international agreements concluded by the Community and by the Member States between themselves in the field of the Union's activities. (See <http://www.europa.eu.int/scadplus/leg/en/cig/g4000c.htm#c16a>)

elements to be discussed in the remainder of this paper concern only those countries, which have already adopted the euro.

2.1 The completion of the internal market (1985-1992)

Until the early 1980s, financial markets in the EU remained significantly segmented, not only across countries but also within countries, with extensive regulatory constraints to the ability of banks and other financial intermediaries to expand their activities beyond local markets and a narrow set of pre-assigned product lines. The heavy regulation of financial activities in several Member States was acknowledged as a source of inefficiency in financial intermediation and a co-ordinated move towards liberalisation was generally seen as being required. However, it was realised that complete harmonisation of regulations was not workable, due to the wide variety of approaches followed by national authorities, and would have conflicted with the objective of a streamlined and more efficient institutional framework.

In 1985, the European Commission published the White Paper on the “Completion of the Internal Market” (often referred to as the “Single Market Programme”), which suggested how to move forward with the removal of internal barriers, in order to achieve the free movement of goods, persons, services and capital by the end of 1992. The 1985 White Paper also presented a new strategy of institution building, i.e. the reliance on the principle of mutual recognition⁵ and home country control coupled with a minimum level of harmonisation.

In the area of financial services, this new method of integration implies that, financial institutions have the right to conduct business in the whole EU under a single licence, being subject to regulation and supervision of the authority that has issued that licence (“home country principle”). The authority has to comply with some minimum legislative requirements that are common to all EU Member States. For example, an investment firm authorised to operate by France and supervised by the French regulator under French law is able to operate across the whole EU. This implies that financial institutions subject to partly different regulatory and supervisory settings compete in the same market.

This integration strategy also implied the introduction of qualified majority (instead of unanimity) voting for a large number of legislative decisions at the EU level, which were then incorporated into the domestic regulations of all EU Member States.

The Single Market Programme formed the legal framework for the free circulation of capital and stipulated the removal of all barriers to the provision of cross-border financial services and to the right of establishment. With the increased relevance of cross-border activities, a market-driven process of regulatory competition took place, which was seen as an important tool to prevent the adoption of unnecessarily cumbersome regulations and to select the best supervisory practices. At the same time, the

⁵ The general rule of mutual recognition was established by the European Court of Justice in its *Cassis de Dijon*⁵ judgement 1979, providing that goods lawfully manufactured and marketed in one Member State must be allowed free entry into other Member States, unless restrictions are necessary in order to satisfy mandatory requirements (Inter alia: the effectiveness of fiscal administration, the protection of public health, the fairness of commercial transactions, consumer protection and environmental protection). Harmonisation henceforth would focus on minimum requirements; compliance with the latter would entitle a product to free movement within the Community.

minimum common standards set a floor to regulatory competition, preventing the adoption of lax regulation to attract business. In order to make effective a system in which several national authorities are jointly responsible for an integrating market, the Single Market Programme envisaged also a substantial development of co-operation among competent national authorities, including improved exchanges of information among them.

The Single Market Programme was also instrumental in supporting domestic financial reform efforts towards deregulation, thus increasing the level of competition and contributing to a first wave of consolidation in domestic banking markets. This enhanced, in turn, the positive impact of the dismantling of cross-border barriers on banking sector development. Overall, the Single Market Programme considerably expanded the scope and the competitiveness of national banking sectors across the EU. However complete freedom of capital and current payments was only achieved in January 1994. Full liberalisation within the Community, as well as vis-à-vis third countries, has since then been also enshrined in the Treaty on European Union.

Box 1. Developments in the legal environment

The 1985 White Paper: the principle of mutual recognition with minimum harmonisation. The Commission's White Paper on the Completion of the Internal Market, published in 1985, provided the basis for the EC single market. It identified approximately 300 pieces of legislation designed to remove restrictions or to harmonise national laws, and aimed for the end of 1992 as the completion date for this process. Most importantly, the White Paper presented a new strategy of institution building. Instead of aiming at the complete harmonisation of standards, as had previously been the case, the White Paper instead proposed the mutual recognition of national rules on the basis of only minimum legislative harmonisation at the EU level.

The Single European Act (1986): more efficient decision-making. The Single European Act (SEA) formalised the goal of implementing the internal market by the end of 1992, as well as the principle of mutual recognition of national regulations. In addition, the SEA aimed at making decision-making more efficient, by replacing unanimity voting with qualified majority voting among Member States for the adoption of harmonisation measures. This also created the conditions for enhancing institution building.

The Capital Liberalization Directive (1988): Free movement of capital. Council Directive 88/361 established the basic principle of free movement of capital as a matter of European law, with effect for most Member States from 1 July 1990. Exchange controls or other forms of interference with capital mobility could thus no longer create obstacles to cross-border banking services in the Community.⁶

The Delors Report (1989): road map towards the single currency. The starting point of the Delors Report was the belief that the development of the single market necessitated more effective co-ordination of economic policy between national authorities. The report pointed out that, with full freedom of capital movements and integrated financial markets, incompatible national policies would quickly translate into exchange rate tensions and put an increasing and undue burden on monetary policy (as was proved correct in the 1992/93 crisis of the exchange rate mechanism of the European Monetary System). The Delors Report set out a three-phase transition period spread out over ten years with the aim of achieving Economic and Monetary Union (EMU) by 1999. Stage I, running from 1 July 1990 to 31 December 1993, provided for the freedom of capital flows and the co-ordination of national monetary policies. Stage II, starting in July 1994, called for the creation of the European Monetary Institute (EMI), which would then prepare for what became later the European System of Central Banks (ESCB). Finally, Stage III would lead to Economic and Monetary Union in January 1999. The conclusions of the Delors Report were embodied in the 1992 Maastricht Treaty establishing the European Union.

⁶ While this Directive prohibited the use of permanent restrictions on capital flows from 1 July 1990 onwards, it still made it possible for individual Member States to adopt temporary restrictions lasting no more than six months. A few countries used this "safeguard clause" during the ERM crisis in 1992/93. However, with the subsequent Maastricht Treaty the safeguard clause for individual Member States was abolished and replaced with the following Article referring to the whole area: "Where, in exceptional circumstances, movements of capital to or from third countries cause, or threaten to cause, serious difficulties for the operation of Economic and Monetary Union, the Council, acting by a qualified majority, on a proposal from the Commission and after consulting the ECB, may take safeguard measures with regard to third countries for a period not exceeding six months if these measures are strictly necessary" (Art. 73g, renumbered as Art. 59 in the new consolidated version). So far, this provision has not been implemented, and it is very unlikely that it will be activated in the future either.

The Maastricht Treaty (1992): close co-ordination of Member States' economic policies. For the realisation of stages II and III of EMU, it was necessary to revise the Treaty of Rome establishing the European Economic Community in order to set up the required institutional structure. This was accomplished in the new Treaty on European Union, which was signed in Maastricht on 7 February 1992. It provided for the establishment, by 1999 at the latest, of EMU for those Member States that were capable of meeting the convergence criteria set out in the Treaty. The so-called "Maastricht criteria" call upon countries to fulfil the following: (i) a high degree of sustainable price stability; (ii) a sustainable government fiscal position without an excessive deficit (defined as a public deficit not higher than 3% of GDP, with a public debt stock not higher than 60% of GDP); and (iii) participation in the exchange rate mechanism of the European Monetary System for at least two years without devaluing; and (iv) the convergence of long-term interest-rate yields. Institutionally, the Treaty has also been a catalyst for legal convergence.⁷ The EU Treaty prescribes that the ESCB National Central Banks (NCBs) are independent and that the Eurosystem NCBs are fully integrated into the Eurosystem. This requires the adaptation of statutes of NCBs. However, the legal requirements for central bank independence and integration in the Eurosystem are not precisely defined in the Treaty. Therefore, the ECB and its predecessor, the European Monetary Institute, have done so themselves in their so-called Convergence Reports. These Reports assess whether a Member State qualifies for the introduction of the euro and they also contain a chapter on legal convergence. They identify areas in which statutes of NCBs are likely to require adaptation in view of the integration of NCBs in the Eurosystem. These Reports thus gave guidance to national legislators in the process of adapting such statutes. As a result, new statutes of NCBs have come into existence, which, as far as Eurosystem-related tasks are concerned, often contain very similar provisions. Yet, the Treaty does not prescribe harmonisation of statutes and NCBs may perform own, non-Eurosystem related tasks, as long as such tasks do not interfere with the objectives and tasks of the Eurosystem. Overall, statutes of NCBs therefore still differ considerably from one another. In conclusion, there has not been full harmonisation, but rather convergence of national laws on relevant points in the area of central banking.

The establishment of the European Central Bank and the introduction of the euro (1998/9). On 1 June 1998 the ECB was established, replacing the EMI. On 1 January 1999 the third and final stage of EMU commenced with the irrevocable fixing of the exchange rates of the currencies of the 11 Member States initially participating in Monetary Union, the conduct of a single monetary policy for the euro area under the responsibility of the ECB, and the introduction of the euro.

⁷ See Duisenberg, W. (2000), "The euro as a catalyst for legal convergence in Europe", Speech held on the occasion of the Annual Conference of the International Bar Association, Amsterdam, 17 September 2000.

2.2 The creation of a single currency (1992 – 1999)

The 1992 Maastricht Treaty confirmed the Single Market Programme and also decided on the gradual creation of a single currency. It laid out a three-phase transition period for the introduction of the euro, leading eventually to the irrevocable fixing of exchange rates on 1 January 1999 and the introduction of euro banknotes and coins on 1 January 2002 in those Member States that had fulfilled the Maastricht criteria and were willing to commit themselves to EMU (see Box 1).⁸

The introduction of the euro also implied new institutions and rules for the Member States, mainly related to monetary and fiscal policies. EMU can be seen as a system of rules aimed at attaining and maintaining macroeconomic stability. Such a system was bound to have a bearing on the development and integration of financial markets within the monetary area. Therefore, while the Maastricht Treaty as such did not alter the regulatory and supervisory frameworks for financial markets – i.e. regulatory and supervisory powers remained with national authorities – the Treaty provisions relating to EMU have had direct or indirect implications for financial markets.

The most obvious innovation of EMU was the establishment of the ECB and the transfer of competence for monetary policy to the Eurosystem, composed of the ECB and the national central banks of the Member States having adopted the euro, with the primary objective of achieving and maintaining price stability⁹. Another new element is that the Eurosystem, as part of its basic tasks, is asked to contribute to the smooth conduct of national policies in the fields of prudential supervision and the stability of the financial system, notwithstanding the competence of national authorities in that area.¹⁰

The institutional set-up of monetary union also required procedures at the EU level for the co-ordination of economic policies as well as for the monitoring of fiscal policies. The latter have been reinforced through the establishment of enhanced rules for budgetary discipline, which are incorporated into the “Stability and Growth Pact” (SGP) that was endorsed by all EU Member States before the start of EMU. To join EMU, countries have i.a. to meet the convergence criteria related to fiscal policies (see Box 1); it was felt that there was a need to ensure that all EU Members States, irrespective of whether they have adopted the euro or not, continue pursuing sound budget policies after the introduction of the euro. In addition, the prohibition of bailing out public debt through the Community or another Member State, which is provided for in the Treaty, was considered to be potentially insufficient to guarantee fiscal discipline over time. The economic rationale for the rules-based approach embedded in the Maastricht criteria for fiscal policies and the SGP stems from historical experience: In the past, excessive public

⁸ All the EU countries except for Denmark, the UK, Sweden and Greece. While the first three decided for political reasons not to join EMU at this point, Greece was unable to join as it did not fulfil all the convergence criteria. On 1 January 2001, the euro was introduced in Greece, following a report by the ECB and the EU Commission that Greece had then fulfilled all the necessary requirements.

⁹ The basic tasks of the Eurosystem are: (i) to define and implement the monetary policy of the euro area; (ii) to conduct foreign exchange operations; (iii) to hold and manage the official foreign reserves of the euro area Member States; and (iv) to promote the smooth operation of payment systems.

¹⁰ Moreover, the Treaty envisages the possibility of conferring specific tasks to the ECB in the area of prudential supervision of credit institutions and other financial institutions with the exception of insurance undertakings. This option has, however, so far not been used.

deficits have led to, inter alia, a) the crowding out of private sector issuers of debt instruments, b) strains on the exchange rate, and c) financial sector vulnerabilities, given potential overexposure of investors to unsustainable government debt.

Further provisions of the Treaty have a bearing on the working of European financial markets. Some of these provisions have had to be respected since the second stage of EMU, i.e. 1 January 1994, and will have to be complied with by acceding countries from the time of accession. These include:

- The prohibition of monetary financing of the public sector by the ECB or national central banks, which implies that no credit facilities may be granted to EU institutions, central governments or public undertakings, and that no public debt instruments may be directly purchased by the ECB or the national central banks.
- The prohibition of the privileged access of the public sector to financial institutions.
- The establishment of central bank independence. Members of the decision-making bodies of the ECB and national central banks shall neither seek nor take instructions from any other outside bodies like Community institutions or national governments. The Treaty's requirement for central bank independence reflects the view that the achievement of price stability is best served by an institution whose independence would be limited only by the need for transparency and accountability and by the precise definition of its mandate.

3. Impact on financial sector development and macroeconomic performance

The launch of the euro in 1999 was a historic event that boosted the integration of financial markets in the euro area and will undoubtedly continue to have an impact on the structure of the euro area economy in the years to come. With irrevocably fixed exchange rates, the wholesale money, banking and capital markets switched to the euro on 1 January 1999, whereas the retail financial markets continued to operate in national currencies until the physical introduction of euro notes and coins three years later.

Section 3 is structured as follows: the next sub-section reviews the link between financial integration and financial development. Then, the impact of European integration on the financial sector is briefly analysed; a more detailed description of the banking sector and individual market segments - namely the money market, the bond markets and the equity markets - is provided in the annexes. Finally, the last sub-section offers some evidence on the macroeconomic effects of financial market integration in the EU.

3.1 Effects of financial integration on financial sector development and overall economic performance

Financial integration can be expected to enhance the development of the EU's financial system which, in turn, will result in improved economic performance.¹¹ Empirically, the benefits from financial integration are difficult to disentangle from other factors, but integration is likely to enhance the overall performance of the EU financial system through two main channels, first, the exploitation of the scale and scope effects inherent in financial activity, and second, increased competitive pressure on financial intermediaries.

First, much of the benefit from financial integration will stem from scale effects emerging through an increased number of actual and potential users of financial instruments for a declining number of service providers. The increase in the breadth and depth of financial markets should lead to a reduction in transaction costs and – assuming an adequate level of competition – should translate into lower cost of capital for borrowers and higher returns for investors. By expanding the pool of liquidity in markets, financial integration provides greater scope for diversification, and should permit a more efficient pricing of risk. Enhanced ability to hedge risks in an integrated financial market provides an incentive for agents to invest in more long-term, risky and specialised projects, which on average tend to be more profitable.

Second, financial integration will also improve the efficiency of intermediation by intensifying competition among market intermediaries. Competition among intermediaries eliminates quasi-rents, improves the allocation of savings to investment, and finally delivers benefits to investors in the form of the highest possible returns and to borrowers in terms of the lowest possible cost of capital. Moreover, enhanced competition among intermediaries provides greater scope for financial innovation.

Looking at the effects on countries in an integrating area, financial integration is likely to spur the efficiency of financial intermediaries and markets in less financially developed countries. To the extent that this greater efficiency stimulates the demand for funds and for financial services, this should also translate into an increased size of domestic financial markets. The main channel through which this effect should operate is increased competition with more sophisticated and cost-effective foreign intermediaries. Competitive pressure from these intermediaries should reduce the cost of financial services to the firms and households of countries with less developed financial systems, thus expanding the size of local financial markets. A second reason why financial integration may be associated with local financial development is that the process of integration generally requires better national regulation (e.g. accounting standards, securities law, bank supervision, corporate governance, etc.) to bring the latter into line with best practice regulation in the integrating area. Convergence towards a level playing field in regulation may result in an improvement in the regulatory standards of less developed financial markets.

¹¹ Financial development can affect growth via three channels: (i) it can raise the proportion of savings channelled to investment through the reduction of the costs of financial intermediation; (ii) it may improve the allocation of resources across investment projects, thus increasing the social marginal productivity of capital; and (iii) it can influence households' saving rate. While in the first two cases the effect on growth is generally positive, in the third the direction of the effect is ambiguous. (Pagano, 1993).

This improvement may help promote their development by reducing adverse selection and agency costs, as well as distortions generated by inadequate regulation.

Financial integration has important implications for financial stability. On the one hand, as discussed above, financial integration should contribute to the development of financial systems, thus making them more resilient to potential shocks. On the other hand, new vulnerabilities may arise, as intensified competition among financial institutions tends to erode profit margins and may induce individual institutions to restore profitability by accepting higher risk exposure. In addition, cross-border activities by the banks themselves, and international economic and financial linkages in general, can also lead to contagion effects, i.e. the transmission of a foreign financial crisis to the domestic financial system. The EU is looking into the challenges brought about by financial integration for the regulatory and supervisory arrangements (see Section 4).

3.2 Features of today's financial markets in the EU/euro area

The Single Market and the introduction of the euro have both fostered financial market integration in the EU/euro area. To assess progress made so far in integration, one simple measure would be to establish whether the law of one price holds in the individual asset markets of the area. The law of one price states that assets with the same risk characteristics should have the same expected return, regardless of the location of the issuer or the holder of the asset. According to this definition, complete financial integration implies that assets which generate identical cash flows should be traded at the same price in all euro area countries. However, it is not feasible to identify sufficiently comparable assets in all the markets. In the money and government bond markets, assets are often sufficiently comparable so that price differences can serve as good indicators of the level of integration. In the equities market, however, it is more difficult to find assets with similar cash flows and risk characteristics. In this case, integration measures need to estimate the relative importance of factors common to the euro area in the pricing of assets (“systematic risk”), as opposed to idiosyncratic factors (notably country-related factors).

Annexes 2 – 5 provide a more detailed assessment of the developments over time and the degree of integration in the different financial markets, namely money markets, banking sector, bond markets (government and corporate) and equity markets. The main results can be summarised as follows:

The liberalisation process in the **banking sector** has led to increased competition, which in turn has induced a trend towards consolidation, as highlighted by a continuous decline in the number of banks and growing merger and acquisition activities. With the introduction of the euro, cross-border activities increased significantly. As a result, wholesale banking markets have become substantially more integrated across the EU. By contrast, the retail banking sector is still less integrated, partly owing to the fact that proximity to customers is a decisive factor for a number of products. While there are still significant differences in lending and deposit margins across the euro area, some convergence can be observed, which mainly concerns household lending margins.

In the **euro area money market**, the unsecured lending market exhibited a high level of integration immediately after the introduction of the euro. This is illustrated by the very small spread in unsecured

lending rates across individual euro area countries. A market segment that is of particular interest to the ECB, owing to its role in the implementation of monetary policy, is the market for unsecured overnight lending, where a high degree of integration is also prevailing. Other segments, such as the repurchase agreement (repo) and short-term securities markets, still have some way to go before reaching a similar level of integration. The continued fragmentation in these segments reflects difficulties in integrating the securities market infrastructure in such a way that collateral can be used smoothly and swiftly on a cross-border basis in the euro area. The Eurosystem has already taken steps, in co-operation with EU securities regulators, to ease these obstacles to a better integrated and more efficient secured money market.

Integration in the **government bond market** is already well advanced. Spreads of 10-year euro area government bonds relative to German bonds have fallen continuously since the mid-1990s and have become very small already since 1998. It seems that the euro has also played a role in stimulating the development of the **corporate bond market**.

Equity markets also show increasingly signs of deepening integration, as the performances of the various euro area equity markets are gradually determined by events common to all investors and less by country-related factors.

3.3 Evidence of the macroeconomic effects of financial integration in the EU

Few studies have analysed in detail the effects of financial integration in terms of growth and employment in the EU. In this section, we focus on the analyses conducted by the European Commission as well as on a recent work on the effects on growth of deregulation in the EU financial markets.

The Commission has recently published a staff working paper titled “Tracking EU Financial Integration”¹². The document states the need “to monitor the progress of financial integration in a systematic way in order to develop a policy tool to provide guidance in prioritising further actions” in those financial services/markets where integration is not yet deemed sufficient.

The results presented by the Commission are based on four reports carried out by external researchers¹³. Starting with the assumption that integration has proceeded at different speeds in different sectors (as shown in the previous section and the annexes), these studies estimate the impact of further integration on specific market segments. The results are therefore partial but nevertheless show that there is room for significant further benefits in terms of growth and employment.

The main findings of the report “*Quantification of the Macro-economic Impact of Integration of EU Financial Markets*” are the following:

- The study evaluates the impact of integrating EU equity and corporate bond markets on trading costs (as measured by bid-ask spreads) and on the cost of capital. To the extent that a cost of capital effect could be discerned, it would determine the associated impact on investment, GDP and employment.
- The potential reduction in the cost of equity capital is estimated on the basis of relationships between this variable and the equity-specific features and characteristics of the stock market on which the equity is quoted. London Economics estimates that, on average, financial integration would lead to a 40 basis points decline in the cost of equity financing.
- The study estimates the potential reduction of bond finance costs, relying on the assumption that the structure of European financing is moving towards what is currently observed in the US (i.e. a relatively greater reliance on markets for investment funding, with a lower share of funding from banks than currently observed in Europe).
- The report assumes (on the basis of observations in the US) that bank lending rates will fall by 20 basis points.
- Using macroeconomic simulations, the positive impact of integration is estimated to amount to approximately 1.1% of GDP, spread over ten years (the period over which the simulations were run).

¹² “Tracking EU Financial Integration”, Commission Staff Working Paper, SEC(2003) 628.

¹³ ‘Quantification of the Macroeconomic Impact of Integration of EU Financial Markets’, by London Economics (November 2002); ‘Financial market integration, corporate financing and economic growth’, by CEPR (November 2002); ‘Analyse, Compare and Apply Alternative Indicators and Monitoring Methodologies to Measure the Evolution of Capital Market Integration in the European Union’, by CESF and the University of Salerno (December 2001), and ‘The Monitoring of Structural Changes and Trends in the Internal Market for Financial Services’, by IVIE (January 2003).

The level of employment would increase by 0.5% in the same period. (For other ratios, please see Table 1).

Table 1. Impact of financial integration on the economy		
Impact on the economy in terms of ...		
... GDP	Reduction in the cost of equity	+ 0.5 %
	Reduction in the cost of bond finance + increased share of bond finance	+ 0.3 %
	Reduction in the cost of bank finance + reduced share of bank finance	+ 0.3 %
	Total	1.1 %
... business investment		6.0 %
... private consumption		0.8 %
... employment		0.5 %

Source: EU Commission services

The impact varies somewhat across European countries, but is economically significant in all of them. The estimated increase in the level of real GDP stemming from the integration of financial markets ranges from 0.3% (in Belgium) to 2.0% (in Greece).¹⁴

The report “*Financial Market Integration, Corporate Financing and Economic Growth*” assesses the likely impact of financial market integration on the ability of European countries to grow faster. The main conclusions of the report are as follows:

An alternative definition of integration is used: integration is defined as a state in which the degree of financial development in Europe converges with that of the United States.. If the EU manufacturing industry were given access to a financial market similar to that of the United States, the output of this sector would increase at an annual rate of 0.8 to 1.0%¹⁵. Even though the additional growth that this could generate would be unevenly distributed among Member States depending on the stage of development of their financial sectors and the existing financing possibilities for manufacturing firms, all parties would benefit.

¹⁴ Of course, the precise results are contingent on a number of assumptions. The main criticism to be addressed to the report concerns the quantification of the expected reduction in trading costs, which is considered too optimistic and led therefore to inflate the reduction in the cost of equity capital. Moreover, it is well known from market microstructure research that daily bid-ask spreads are an extremely imprecise measure of actual trading costs. In addition, the estimates consider only the static effect of financial market integration on trading spreads (“implicit” trading costs), and do not consider possible reductions in “explicit” trading costs (i.e. brokerage commissions or exchange fees), which can be expected to accompany increased competition between intermediaries and exchanges and lead to further economic benefits. Total trading costs (explicit and implicit) in the EU and the US are more or less the same. However, whereas implicit trading costs in Europe are roughly equal to ¼ of US levels (which can be attributable to more efficient order-matching structures), explicit costs are roughly three to four times higher (being the result of less efficient trading intermediation). Clearing and settlement processes result in the most substantial costs for the European securities markets.

¹⁵ This translates approximately into permanent 0.2% increase in annual rate of GDP growth per annum, given the weight of the manufacturing sector in economy-wide value-added.

Perhaps the strongest policy conclusion implied by the results is related to the very strong effect of the accounting standards variable. If taken literally, the improvement of accounting standards should be at the top of the EU's agenda for further financial market reforms. Recently, a paper analysed the effects that the process of financial deregulation and harmonisation of banking laws at the EU level has had on growth over the past 40 years (De Avila, 2003). Using data on the implementation dates of the main EU directives affecting the financial services industry as well as of the liberalisation of capital controls and full deregulation of interest rates in the EU, the author has provided evidence of the finance-growth nexus. In this respect, the experience of the EU may constitute an ideal scenario that may be relevant to emerging market economies. The analysis indeed finds evidence that the process of capital controls lifting and the harmonisation of banking laws at the EU level have brought about important benefits in terms of increases in the growth rate of the economy. To quantify these effects:

- the growth impact from the liberalisation of capital controls is found to be equivalent to 0.21% of the averaged growth rate of per capita output experienced in the EU over the period 1960-2001;
- the estimates of the growth effect from the harmonisation of banking regulations show that the implementation of directives equivalent to 10 points¹⁶ has brought about an increase in output growth by at least 1% per year.

The analysis has also investigated the mechanisms through which these policy changes may have influenced the growth performance of EU economies. In this respect, it was found that while the harmonisation process has had an impact on growth through the increase in the level and efficiency of financial intermediation, the liberalisation of capital controls has primarily affected growth through improvements in the degree of efficiency in financial intermediation.

¹⁶ The index of harmonisation covers values from 0 (no harmonisation) to 20 (full harmonisation). Before the 1980s, the harmonisation index typically showed values of lower than 2, by 1990 these reached 4, with the index generally reaching levels greater than 12 by 1995 as a result of the quicker adoption of Council directives at the national level. By 2001 the index reached values close to 20 since this was the period in which the number of directives adopted by most EU countries was equal to or greater than 85%.

-

4. Further steps in institution building following the introduction of the euro

As discussed in the previous chapter, a number of structural trends have begun to affect the EU's financial landscape after the introduction of the euro. The most important structural changes in EU countries include consolidation in the banking sector, increasing concentration, intensified competition, internationalisation of financial activities within and outside the EU as well as the new establishment of mixed financial groups and conglomerates. The introduction of the euro has further intensified such changes with the increasing integration of capital markets and closer links between financial institutions in the euro area. Since the onset of EMU, therefore, financial regulators and supervisors in the EU have been confronted with a rapidly evolving environment and a two-fold challenge in particular: First, the need to update the EU financial rulebook to keep pace with financial market developments and to improve regulatory and supervisory convergence across Member States; and second, to strengthen cross-border co-operation in the areas of prudential supervision, financial stability and crisis management.

4.1 Modernising the EU financial rulebook and improving regulatory and supervisory convergence

After the introduction of the single currency, EU Member States realised that the remaining legislative, administrative and fiscal barriers to cross-border financial transactions were seriously hampering the full reaping of the benefits from monetary integration. At the same time, they considered that the EU financial rulebook was not sufficiently flexible to be adjusted to rapidly unfolding financial market developments and financial innovation. Both problems were especially prominent in the securities sector, where the protection of local investors hampered the workability of the home-country principle. The two major steps to address these shortcomings have been the adoption of the Financial Services Action Plan, and the implementation of the Lamfalussy framework for financial regulation. Both measures also aim at achieving the regulatory and supervisory infrastructure that could underpin a truly integrated market for financial services in the EU.

The *Financial Services Action Plan (FSAP)* was launched in May 1999, and sets out a detailed programme of 43 legislative initiatives within four areas: First, the regulation of EU wholesale markets shall be brought up to par with the modernisation of markets driven by monetary integration and financial innovation in order to complete a single wholesale market in the EU. Second, the integration of retail financial markets shall be given further impetus by facilitating retail cross-border transactions and by promoting enhanced information, transparency and security on retail financial markets. Third, the prudential regulation and supervision of banks, securities and investment firms shall be developed so as to keep pace with new sources of financial risk and state-of-the-art supervisory practice. In addition, the co-operation of authorities both across sectors and across Member States shall be stepped up. Fourth, in order to achieve an optimal single financial market, market conditions shall be improved in more general

terms, such as by promoting good corporate governance practices and by addressing the tax distortion effects of financial competition (see Annex 6).

The Lisbon European Council in 2000 and the Stockholm European Council in 2001 reaffirmed the importance attached to completing the internal market for financial services. In this context, a deadline for the full implementation of the FSAP was set, in Lisbon, for 2005. In Stockholm, EU Heads of State and governments urged an acceleration of the regulatory measures for securities and risk capital markets, setting the end of 2003 as the target date.

Another important area of recent financial institution building designed to contribute to EU financial market integration was the major overhaul of the EU's legislative techniques, as proposed by the Committee of Wise Men in February 2001¹⁷ and endorsed by the European Council at its 2001 Stockholm summit. This took place against the background of growing concerns that the EU's legislative decision-making process was too slow and burdensome, that it was too inflexible to keep up with market developments and, finally, that the implementation of joint rules across Member States was not sufficiently consistent.

The "*Lamfalussy report*", named after the chairman of the Committee of Wise Men, proposed a new framework for the regulation of the securities market, distinguishing between four levels of financial legislation and implementation. At Level 1, the basic principles of the legislation, which are expected to remain relatively stable over time, would be laid down via the normal legislative process. At Level 2, implementing measures for Level 1 legislation would be adopted, including technical measures that would need to keep in step with market and supervisory developments. The process would benefit from the input of a special regulatory committee, comprising the relevant national and European authorities. Level 3 would encompass initiatives by national supervisors designed to ensure a more consistent and timely implementation of legislation at the national level; a committee of supervisors would assist in this process. Finally, at Level 4 the EU Commission would verify the compliance of Member State laws with EU legislation in order to strengthen the enforcement of Community legislation within Member States. The Lamfalussy framework is already being applied in practice to securities market legislation.

In December 2002, the Council of Economic and Financial Ministers (Ecofin) endorsed the Economic and Financial Committee's (EFC) report on "EU Arrangements for Financial Regulation, Supervision and Stability" in Europe, which proposed extending the Lamfalussy framework to the other financial sectors, namely banking, insurance and pension funds, and financial conglomerates legislation. The EU is currently setting up the infrastructure of regulatory and supervisory committees for these sectors.

¹⁷ See "Final Report of the Committee of Wise Men on the Regulation of European Securities Markets" Brussels, February 2001

4.2 Strengthening co-operation in the areas of financial stability and crisis management

With the onset of EMU, euro area-wide systemic risks have potentially grown in importance. While deeper financial integration reduces risks associated with financial instability in the sense that the financial system can more easily absorb potential shocks, new sources of vulnerability have emerged, such as the exposure of domestic banking sectors to common shocks, and the increased risk of cross-border contagion. This prompted the EU to undertake a thorough review of the existing arrangements for financial stability and crisis management within the euro area. As a result of this process, the EFC adopted two reports, the first on financial stability (April 2000) and the second on financial crisis management (April 2001), known as the “Brouwer reports I and II”. These were subsequently endorsed by the Council of Economic and Finance Ministers.

The two reports highlighted two principal challenges for European co-operation in the areas of financial stability and crisis management. First, the exchange of information and the co-operation between supervisory authorities and central banks should be enhanced, irrespective of central banks’ roles in financial supervision at the national level. This involvement of central banks acknowledges their specific expertise in the area of financial stability and their composite nature as both members of the Eurosystem and, at the same time, national institutions. Closer co-operation and exchange of information would be required in particular with a view to macro-prudential and structural monitoring of financial market developments, as well as in the area of financial crisis management. Second, cross-sector co-operation at the European level should be strengthened, in order to respond to the greater degree of integration of financial products, markets and intermediaries across the traditional boundaries of the banking, securities and insurance sectors. So far, arrangements for international supervisory co-operation have been primarily designed to cope with sectoral issues.

The EU has already taken several steps to implement these recommendations. In order to address the need for closer co-operation between central banks and supervisors, the work of the Banking Supervision Committee (BSC), the forum for co-operation between central banks and banking supervisors within the Eurosystem, has been stepped up. First, three important multilateral arrangements were agreed in the first part of 2003 under the auspices of the BSC. A first Memorandum of Understanding (MoU) defined arrangements for co-operation between banking supervisors and payment system overseers; a second MoU dealt with co-operation between central banks and supervisory authorities in crisis situations; and a third MoU between seven EU central banks (Austria, Belgium, France, Germany, Italy, Portugal and Spain) managing credit registers set out principles for exchanges of information. Second, the BSC has been developing a framework for structural and macro-prudential analyses for the whole EU, based on a pooling of data from supervisory and central banking sources. This allows getting an overall picture of the trends in banks and financial markets and of possible threats to financial stability, thus supporting the development of common views and dialogue on the policies undertaken by national authorities.

With a view to strengthening cross-sectoral co-operation, the EU has established an informal Cross-Sector Roundtable of Regulators, which acts as a co-ordinating forum for all EU sectoral regulatory and

supervisory groups. Cross-sectoral issues of financial regulation and supervision are also addressed by the reconfigured Financial Services Policy Group, the Financial Services Committee, which has been mandated to provide strategic guidance on financial sector policies.

4.3 The regulatory and supervisory implications stemming from the emergence of large and complex financial institutions

The trend towards consolidation in the financial industry and the erosion of boundaries between financial sectors have given rise to the increasing emergence of large and complex financial institutions, which operate both on a cross-border and a cross-sectoral basis. Given that the behaviour of large and complex financial institutions is likely to affect money and capital markets as well as payment and settlement systems, adequate monitoring of the financial risks incurred by such institutions is highly important from a systemic stability point of view. This creates the following specific challenges for regulators and supervisors:

- Large and complex financial institutions typically include regulated entities subject to different supervisory authorities within each Member State, or undertakings based in different Member States. Therefore, a high degree of co-ordination between all authorities involved is necessary, which involves measures to facilitate the exchange of information between supervisors and the appointment of a co-ordinating supervisory authority.
- Sectoral Community legislation should be amended in order to ensure a level playing field between financial conglomerates and financial groups that are engaged in just one financial sector, as well as to reduce the incentives for regulatory arbitrage within large and complex financial institutions.
- Capital adequacy regulation and supervision concerning large and complex financial institutions involves specific issues, such as addressing the risk of double gearing and excessive leveraging as well as monitoring intra-group transactions and large exposures.
- Large and complex financial institutions should meet more advanced organisational requirements, such as highly sophisticated internal risk management and control devices and mechanisms in order to address possible conflicts of interest within the institution.
- To ensure adequate market discipline, a high level of transparency and disclosure on the part of large and complex financial institutions needs to be ensured.

In order to address these issues, in 2002, the EU introduced a new piece of Community legislation, the Financial Conglomerates Directive. In addition, a new EU committee on regulatory issues regarding financial conglomerates was established earlier this year.

4.4 The new capital adequacy regime for banks

In April 2003, the Basel Committee on Banking Supervision issued its third Consultative Paper for a new accord on the capital adequacy of banks. Once finalised, this rulebook will replace the current capital accord, which was agreed in 1988. The overall goal of the capital accord revision is to make capital

requirements more risk-sensitive, while keeping overall capital levels within the banking sector unchanged. The proposed framework is based on three mutually reinforcing pillars: refined minimum capital requirements; an ongoing supervisory review process of banks' capital adequacy and internal assessment process; and disclosure requirements designed to ensure effective market discipline. The finalisation of the new accord is envisaged in the fourth quarter of this year, and its implementation is planned for the end of 2006.

The Basel II package will go a long way to meet the needs of the EU as a whole. However, it is not a perfect fit and the Commission will propose appropriate modifications where necessary. This is important to meet the objective of ensuring that the new EU framework is suitable for application to the full range of institutions in the EU. The requirements of the Internal Market in financial services, together with the demands of fair competition, make it essential that the same rules applies to all banks and investment firms in the EU.

A new EU regulatory framework will be put in place under a revised EU Directive on capital requirements, a proposal which the Commission aims to present in early 2004 for approval by the Council and the European Parliament, so that it can be implemented in Member States by the end of 2006 in parallel with Basel II. Given the extension of the new EU regulatory and supervisory framework designed for the securities segment to the banking sector (see section 4.1), the implementation of the Directive will be supported by newly set-up regulatory and supervisory committees comprising the relevant authorities.

5. Policy implications

Important questions to be addressed in the context of the case studies undertaken by the G20 relate to the extent to which globalisation has been a driving force behind institution building and in how far institution building can help to contain potential risks of globalisation. Though the EU experience is a unique case of institution building stretching over several decades, it nevertheless could provide some relevant answers to both questions. First, EU integration can be seen as a globalisation process, which has taken place at the regional level at a faster pace and with a broader scope as compared to the world level. Second, EU countries have adopted an approach to regional integration with a strong institutional component.

EU integration through harmonisation and mutual recognition has prompted a learning process among Member States about 'best practices', which has, in turn, generated momentum for continuous improvement of institutions. This process has provided benchmarks and speeded up institutional reforms in individual Member States, especially those at the periphery of the EU where financial development was initially lagging behind. This approach is to some extent comparable with the standards and codes initiatives promoted by the international financial community, which define internationally accepted best practices in various areas. There is, however, a major difference between the two approaches, in that the EU standards are of a binding legal nature and overrule national law while international standards and codes have to be adhered to on a best effort basis.

The EU experience shows that financial integration on a regional level, based on the principles of private sector competition, regulatory best practice and public sector co-operation, can help small emerging market economies to benefit from well-functioning regional financial markets. A large number of emerging market economies are small countries, which also implies small financial systems. These tend to underperform because they suffer from a concentration of risks. The smaller the financial system, the more vulnerable it is to external shocks, and the more difficult it is to insulate it from or hedge it against those shocks, unless it is itself fully integrated into the world financial system. Such integration might, however, be a dangerous route if not well sequenced. Financial integration on a smaller, i.e. regional scale, can by contrast help to deepen and broaden domestic financial systems without being exposed to the same level of risks.

As noted above, financial integration benefits the countries concerned mainly through scale and scope effects and increased competition. The increase in the breadth and depth of financial markets should translate into lower cost of capital for borrowers and higher returns for investors and should permit a more efficient pricing of risk. In addition, integration has implications beyond the integrating area, as this area is likely to become more attractive to non-resident investors and issuers. Reduced cost of capital and improved allocation of resources should lead to better macroeconomic performance. The positive impact of EU integration has been estimated to amount to approximately a 0.2% increase in the annual rate of GDP growth per annum in the EU.

The European experience also illustrates that the institutional underpinnings of financial markets are never complete and new challenges and opportunities surface constantly. Regulators and governments must take opportunities as they arise and there is only a limited amount of reform that can be implemented at one point in time. This study has exemplified that institution building is essentially an iterative process. It has shown that the major initiatives like the Single Market Programme and the introduction of the euro did not target primarily the financial sector, but nevertheless had an important direct or indirect impact on its working. The Single Market Programme was mainly concerned with the micro infrastructure for the free movement of goods, persons, services and capital, whereas the Treaty provisions related to EMU aimed mainly at macroeconomic stability. Both initiatives contributed to a market-driven process of increased integration in financial markets and of structural changes, such as increased competition, concentration, and the establishment of mixed financial groups. This market-driven process has, in turn, prompted a new phase of institution building. Following the introduction of the euro, which left national competencies for supervisory and regulatory unchanged, EU Member States have realised the need to improve supervisory and regulatory convergence between themselves and to strengthen cross-border co-operation in the areas of financial stability and financial crisis management.

Finally, the European experience confirms that institution building in the financial sector and the broader macroeconomic policy framework need to go hand in hand and be consistent. A well functioning and sound financial system is preconditioned on a stable macroeconomic policy framework, which in the European case builds upon, *inter alia*, central bank independence and rules for budgetary discipline. Likewise, deregulation and enhanced competition in the financial system generate pressures for reforming

the underlying monetary and fiscal framework in order to minimise policy-generated shocks. This interrelationship between financial sector and macroeconomic policies implies that reforms in either sphere need to be co-ordinated at an early stage, also to reap potential synergies between the two.

6. References

Acemoglu, D. (2003), “Root Causes—A historical approach to assessing the role of institutions in economic development”, *Finance and Development*, June.

Adjaouté, K. and J.-P. Danthine (2003), “European Financial Integration and Equity Returns: A Theory-Based Assessment”, in: Gaspar, V., P. Hartmann, and O. Sleijpen (ed.), *The transformation of the European financial system*, Proceedings of the Second ECB Central Banking Conference, ECB, Frankfurt.

Barr, D.G. and R. Priestley (2002), “Expected Returns, Risk and the Integration of International Bond Markets”, *Journal of International Money and Finance*, Forthcoming.

L. Baele, A. Ferrando, P. Hordahl, E. Krylova, and C. Monnet (2003), “Measuring the integration of euro area capital markets”, mimeo.

D.R. De Avila, (2003), “Finance and growth in the EU: new evidence from the liberalisation and harmonisation of the banking industry”, Working paper No. 266, the European Central Bank.

Devereux, M., Smith, G. (1994), “International Risk Sharing and Economic Growth”, *International Economic Review*, 35(3).

Duisenberg, W. (2000), “The euro as a catalyst for legal convergence in Europe”, Speech held on the occasion of the Annual Conference of the International Bar Association, Amsterdam, 17 September 2000.

European Central Bank (2003), “The integration of the European financial markets”, the ECB’s Monthly Bulletin, October 2003.

EU Commission (2001), “The EU Economy Review, Chapter 4 Financial market integration in the EU”, Brussels, http://europa.eu.int/comm/economy_finance/publications/european_economy/2001.

EU Commission (2003), “Tracking EU financial integration”, *Commission Staff Working Paper SEC(2003) 628*, 26 May 2003, http://europa.eu.int/comm/internal_market/en/finances/cross-sector/

Favero, C.A., A. Missale and G. Piga (2000), "EMU and Public Debt Management: One Money, One Debt?", *CEPR Policy Paper* No. 3, London.

Galati G. and Tsatsaronis K. (2001), "The impact of the euro on Europe's financial markets", *BIS Working Paper* No.100, Basel, July.

Giannetti M., Guiso L., Iappelli T., Pagano M. (2002), "Financial development, corporate finance and growth", *Economic Paper* No. 179, November, European Commission, Brussels, http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers179_en.htm.

Hartmann, P., A. Maddaloni and S. Manganeli (2003), "The euro area financial system: structure, integration and policy initiatives", *Oxford Review of Economic Policy*, 19(1), 180-213.

Hentschel, L., J. Kang, and J.B. Long (2002), "Numeraire Portfolio Tests of International Government Bond Market Integration and Redundancy", mimeo, <http://www.ssb.rochester.edu/fac/Hentschel/>

North, D.C. (1991), "Institutions", *Journal of Economic Perspectives*, Vol. 5 (Winter), p. 97-112.

Pagano M. (1993), "Financial markets and growth: An overview", *European Economic Review*, Volume 37, Issues 2-3, April 1993, Pages 613-622.

Pelkmans, J. (1997), "European Integration -Methods and Economic Analysis", Oxford.

ANNEX 1: MAJOR EU DIRECTIVES ON FINANCIAL REGULATION AND SUPERVISION

In the banking sector, the basic foundation of Community legislation is the Consolidated Banking Directive (Directive 2000/12/EC), which consolidated most of the EU directives concerning the taking up and pursuit of the business of credit institutions by combining them in a single text. The aim of the Consolidated Banking Directive is to achieve sufficient legislative harmonisation to secure mutual recognition of authorisations and prudential supervision systems, enabling the granting of a single licence and the application of the principle of home country control. In order to achieve this, the Consolidated Banking Directive covers the requirements for authorisation, the freedom of establishment and the freedom to provide services, principles and technical instruments of prudential supervision, as well as relations with third countries.

In the securities sector, the single passport is based on two directives: First, the Investment Services Directive (Directive 93/22/EEC) sets out the conditions under which investment firms may be allowed to operate throughout the Community once they have obtained authorisation in their home Member State. It defines the permissible activities of investment firms, imposes minimum authorisation and operating requirements on investment firms, sets out principles concerning supervisory co-operation, and addresses access to regulated markets across the EU. Second, the Capital Adequacy Directive (Directive 93/6/EEC) is the key ancillary measure to the Investment Services Directive, setting out harmonised capital adequacy requirements that apply to investment firms and credit institutions in respect of their investment services activities.

ANNEX 2: EVIDENCE ON THE EFFECTS OF INTEGRATION ON THE BANKING SECTOR

The Single Market Programme acted as the first major catalyst for the development of the European banking sector, with the following effects:

- The liberalisation process driven by the minimum harmonisation of essential regulations led to a much greater degree of *competition* on banking markets. In the first instance, this trend primarily affected domestic markets, with a relatively limited expansion of cross-border business, either directly or via branches and subsidiaries. The effects of increased competition in the banking sector were visible in reduced net interest margins, lower operating expenses and staff costs, as well as in increasing pressure on profitability.
- Intensified competition, together with technological developments, has also set in motion a process of continuing *disintermediation*, whereby the share of banks in borrowing or saving activities within an economy has been significantly reduced in favour of institutional investors. This was evidenced by the fact that since 1985 the growth of assets managed by investment funds, insurance companies and pension funds has clearly outpaced the growth of assets managed by banks. Banks were however able to control the process, as most capital market -related activities were developed within structures either controlled by or connected to banks.
- Another important effect of increasing competitive pressures was the trend towards *consolidation*, as highlighted by a continuous decline in the number of banks and growing merger and acquisition activities within the banking sector.

The introduction of the euro has accelerated these structural developments set in motion by the Single Market Programme, resulting in the following:

- EMU has intensified *competition* in banking markets, resulting in the decline of bank fees for bond and equity intermediation and syndicated lending in particular. Several factors account for this development. With prices quoted in the same currency, price transparency has been enhanced significantly. The greater degree of market integration across borders has also triggered further competition. Finally, the competitive advantages previously enjoyed by local banks as a result of currency risk and local expertise on national monetary policy have been removed.
- The advent of the euro has also reinforced the trend towards *consolidation* within the banking industry, with an increasing number of mergers and acquisitions (M&A). The rapid integration of the wholesale and capital market-related banking markets, the removal of currency segmentation, as well as the integration of large-value payment systems have all been factors opening up opportunities for greater economies of scale in banking activities and facilitating cross-border deals. Greater consolidation has also been a response to increased competitive pressures. As shown in Table 1, 70% of M&A activity between 1990 and 2001 occurred after 1997, as measured by transaction values. The average transaction size also sharply increased, which suggests that large

banks are increasingly becoming involved in merger activity (see Table 2). The majority of mergers and acquisitions have taken place within the banking industry. However, there is also a notable trend towards the creation of financial conglomerates involving banks, securities firms and insurance companies. Over the entire period, roughly 30% of the total M&A value was the result of cross-sectoral transactions. Throughout the decade, M&A were predominantly domestic (78% of the total, of which 60% between banks and 18% between banks and other sectors). However, a clear increase in M&A activities can be observed in 2000, when within-industry/cross-border transactions reached 42% of the total value of M&A.

Table 1. Value of M&A's involving banks in the euro area

(Billions of euro)

	Total value	% total	Within industry (%)		Across industry (%)	
			Domestic	Cross-border	Domestic	Cross-border
1990	15.35	5	45	7	45	3
1991	8.66	3	76	2	10	12
1992	5.16	2	16	4	19	60
1993	12.02	4	22	3	17	58
1994	6.06	2	73	5	22	0
1995	11.02	3	39	25	32	3
1996	6.44	2	74	1	6	18
1997	27.86	9	74	2	5	19
1998	72.43	23	70	3	18	10
1999	70.87	22	79	13	3	4
2000	49.74	16	38	42	11	8
2001 (August)	31.33	10	31	0	67	1
1990-2001	316.94	100	60	11	18	11

Source: ECB Occasional Paper, December 2002 (Percentages are rounded).

Table 2. Average size of M&A deals in the euro area

(Millions of euro)

	1990-97	1998-01 (August)	1990-01 (August)
Average size	273.5	1116.9	549.6
of which: Domestic/Within industry	315.4	1279.5	648.8
Domestic/Cross-industry	205.8	1075.3	413.5
Cross border/Within industry	163.6	1011.7	456.8
Cross border/Cross-industry	38.5	575.2	429.5

Source: ECB Occasional Paper, December 2002.

- Owing to the fact that EMU has increased the depth and liquidity of the EU securities markets considerably the trends towards *disintermediation* has also been enhanced. The role of banks has

been increasingly challenged not only by non-bank financial institutions, but also by the increasing direct market intermediation of financial services. In order to contain the consequences of this development, banks have continued to expand into the asset management business

Furthermore, the onset of European Monetary Union (EMU) in 1999 gave decisive impetus for the integration and the growth of banking markets across borders, especially in the wholesale and capital – market-related segments of the sector. Owing to different risk-free yield curves, foreign exchange risk and currency matching rules, banking markets had been largely segmented before the introduction of the euro, with cross-border banking activity remaining subdued. Under single currency conditions, however, the obstacles to cross-border banking sector development have been largely overcome. Empirical studies have revealed a significant increase since the introduction of the euro in cross-border interbank transactions, subsidiaries and branches, merger and acquisition activities, minority shareholdings and joint ventures in the banking sector. As a result, wholesale banking markets have become substantially more integrated across the EU, which has been reflected both in price quotations and in trading volumes. At the same time, the scope, depth and liquidity of banking markets has greatly increased. In addition, the fading away of currency segmentation has brought about a pronounced reduction in the home bias of banks and institutional investors, with portfolio diversification being conducted on a sectoral basis for the whole euro area, rather than on a currency basis. As a consequence, the weight of non-domestic securities in the portfolio of institutional investors has been continuously increasing.

There are some indications that EMU could also enhance the integration of the retail banking sector, albeit at a much slower pace than in the wholesale and capital –market-related market segments. While there are still significant discrepancies in lending and deposit margins across the euro area, some convergence in margins can be noted, particularly in the area of household lending. Tables 3 and 4 show that between 1998-99 and 2001-02, differences across countries in household and corporate lending and deposit rates declined sharply in the euro area. This is because EMU provides incentives for retail market integration: prices are quoted in the same currency, which makes it easier for customers to compare product prices and assess value for money from financial services offered by banks in different Member States. In addition, the substantial links across local markets that have evolved through cross-border acquisitions, subsidiaries and branches as well as through strategic alliances also promote the integration of retail markets. However, it should be noted that for several retail products, proximity to the customer is still a very relevant factor, so that only a physical presence in another Member State can actually overcome the natural economic barriers established at the local level. This process can take some time, even within a single country, owing to the particular informational nature of traditional banking assets and the role of reputation in gaining shares in retail markets.

Table 3. Lending retail interest rates and margins

(%points)

	Household lending rates				Corporate lending rates			
	Average (May 98 - May 99)		Average (May 01 - May 02)		Average (May 98 - May 99)		Average (May 01 - May 02)	
	Rate	Lend. Margin	Rate	Lend. margin	Rate	Lend. margin	Rate	Lend. margin
Austria	6.33	2.35	6.42	1.70	6.11	2.69	6.07	2.21
Belgium	5.36	1.38	6.37	1.65	4.98	1.57	5.64	1.78
Germany	6.25	2.27	6.74	2.03	6.23	2.83	7.05	3.19
Finland	5.24	1.25	5.24	0.53	4.31	0.89	4.71	0.85
France	7.16	3.18	7.23	2.52	4.52	1.12	5.31	1.45
Greece	12.56 ⁽¹⁾	6.55 ⁽¹⁾	7.65	2.94	16.44	5.61	8.09	4.23
Ireland	7.49	3.43	6.84	2.12	8.68	5.28	8.67	4.81
Italy	6.71	2.67	6.31	1.60	6.13	2.50	5.64	1.77
Luxembourg	5.18	1.19	5.12	0.40	ND	ND	ND	ND
The Netherlands	5.29	1.31	5.81	1.09	3.67	0.29	4.35	0.49
Portugal	6.36	2.34	6.09	1.38	6.36	2.83	5.51	1.65
Spain	5.85	1.83	5.78	1.06	6.06	2.53	6.20	2.34
Euro area	6.65	2.48	6.30	1.58	6.68	2.56	6.11	2.25
Std. dev.	2.01	1.48	0.76	0.76	3.50	1.67	1.34	1.34

Source: ECB and Datastream. Retail bank interest rates should be used with caution since national interest rates are not harmonized in terms of their coverage, the nature of the data (nominal or effective) or the compilation method. Margins were calculated as the difference between average retail interest rates (using ECB monthly-adjusted country weights) and a reference market rate (obtained from Datastream), corresponding to the maturity distribution of the recorded retail business. Reported averages are unweighted. ⁽¹⁾ Jan99-May99.

Table 4. Deposit retail interest rates and margins

(%points)

	Average (May 1998 - May 1999)			Average (May 2001 - May 2002)		
	Rate	Deposit margin	Overall margin	Rate	Deposit margin	Overall margin
Austria	2.18	1.24	4.04	2.17	1.69	4.09
Belgium	2.31	1.10	2.81	2.37	1.49	3.57
Germany	2.46	0.94	3.78	2.49	1.37	4.39
Finland	1.20	2.21	3.60	1.59	2.27	3.40
France	2.65	0.75	3.04	2.68	1.18	3.48
Greece	8.48	2.35	7.77	2.06	1.80	5.89
Italy	2.26	1.37	3.94	1.72	2.14	4.02
Luxembourg	2.50	0.91	2.67	2.54	1.32	2.58
The Netherlands	2.33	1.06	2.55	2.32	1.55	3.18
Portugal	2.44	1.08	3.91	2.45	1.41	3.33
Spain	2.08	1.46	3.89	2.32	1.54	3.68
Euro area	2.81	1.32	3.82	2.25	1.61	3.78
Std. dev.	1.92	0.52	1.42	0.34	0.34	0.85

Source: ECB and Datastream. Retail bank interest rates should be used with caution since national interest rates are not harmonized in terms of their coverage, the nature of the data (nominal or effective) or the compilation method. Deposit margins calculated as a difference between average retail interest rates (using ECB monthly-adjusted country weights) and a reference market rate (obtained from Datastream), corresponding to the maturity distribution of the recorded retail business. The overall margin is the difference between the average lending and deposit rates. Ireland is excluded due to the very small coverage of the provided deposit rate. Reported averages are unweighted.

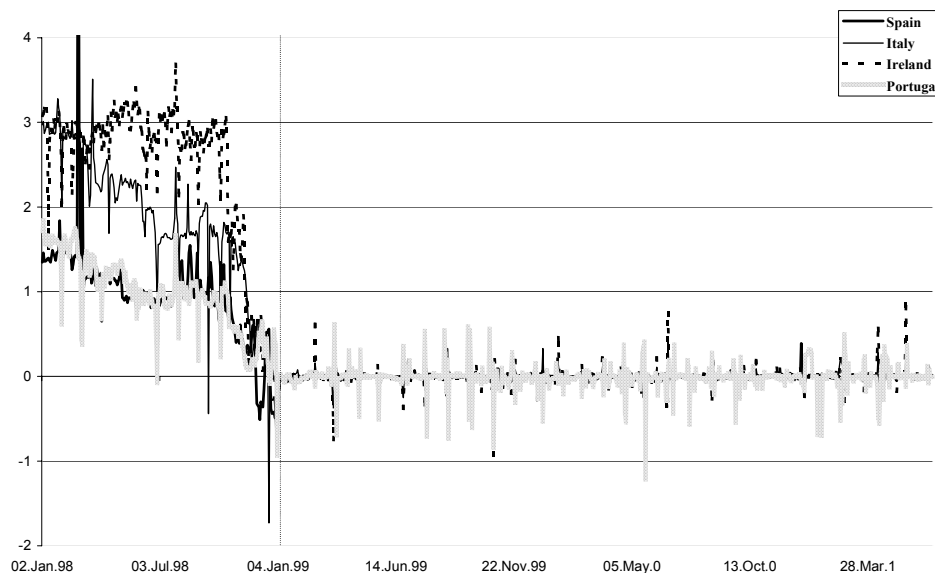
ANNEX 3: EVIDENCE ON THE EFFECTS OF INTEGRATION ON THE MONEY MARKET

In response to the introduction of the euro and the new monetary policy framework, the euro area money market has undergone a wide-ranging process of integration and standardisation. As ECB monetary operations are conducted only in euro, all money market transactions in the participating Member States were denominated in euro from 1 January 1999. To ensure the smooth functioning of the money market, market participants had to agree on certain conventions. One of these is for example the day count convention used for the calculation of interest on credits. European banks agreed to use the “ACT./360” convention according to which the calculation is based on a 360-day calendar year. In addition, the European banks considered that the introduction of the single currency necessitated the creation of new benchmarks for the money and capital markets in the euro zone: EONIA, an overnight interest rate reference, and Euribor, the Euro Interbank Offered Rate.¹⁸ Though, in principle, the establishment of a benchmark does not need central bank involvement, in practice, the ECB supported its establishment by playing the role of a “honest broker”: Eonia, for example, is calculated by the ECB at the request of banking associations. This ECB support ensured a better representativeness of the index (based on actual transaction rates rather than indicative ones) and its better acceptance.

Although the money market is functioning well, the degree of integration varies across the different segments. The unsecured inter-bank deposit market is completely integrated and there is virtually full convergence of very short-term interest rates across the euro area (see Chart 1). The high degree of convergence in these rates reflects the full acceptance of EONIA and Euribor as uniform price references by operators in this market segment. In parallel to the developments in the unsecured money market, the euro-area derivatives market is also highly integrated, which is reflected in very narrow bid-ask spreads and relatively large transaction sizes in the interest rate swap markets. For other segments of the euro area money market, such as the repurchase agreement (repo) market and the short-term securities markets (for Treasury bills, commercial paper and certificates of deposit) the integration process is less advanced. The continued fragmentation in these segments reflects difficulties in integrating the securities market infrastructure so that collateral can be used smoothly and swiftly on a cross-border basis in the euro area. These difficulties are mainly due to national differences in market practices and regulation and the tax/legal treatments applied to the securities used as collateral. In particular, these national differences—reflected in segmented national-based market infrastructures—can create important practical difficulties in cross-border clearing and settlement systems.

¹⁸ Eonia (Euro OverNight Index Average) is an effective overnight rate computed as a weighted average of all overnight unsecured lending transactions in the interbank market, initiated within the euro area by the contributing panel banks. Euribor is the rate at which euro interbank term deposits within the euro zone are offered by one prime bank to another prime bank. Both are sponsored by the European Banking Federation (FBE), which represents the interests of 3,000 banks in the 15 Member States of the European Union and in Iceland, Norway and Switzerland and by the Financial Markets Association (ACI).

Chart 1. Differences in average overnight rates vs. average German rates, %points



Source: ECB.

To ensure the smooth redistribution of liquidity across the euro area, the ECB and the national central banks operate the TARGET (Trans-European Automated Real-time Gross Settlement Express Transfer) payment system, which is composed of 15 national EU real-time gross settlement (RTGS) systems, the ECB payment mechanism (EPM) and the Interlinking system, which interconnects the RTGS systems and the EPM. All existing national currency areas had an integrated payment system at their disposal. The introduction of the single currency therefore necessitated the integration of payment systems in some form in order to establish a single “domestic” euro payment area, providing a level playing field for market participants and a tool through which the monetary policy operations between the NCBs of the Eurosystem could be carried out in a timely, secure manner, fostering the singleness of the money market. For example, the convergence of very short-term interest rates would not have been possible if credit institutions had not had the incentive and capability to manage their liquidity positions efficiently and arbitrage operations could not be executed easily and swiftly throughout the euro area. TARGET is now recognised as the standard system for the processing and settlement of large-value payments in euro.¹⁹ TARGET successfully fulfils three main objectives: (i) it provides a safe and efficient mechanism for the settlement of cross-border payments on an RTGS basis; (ii) it has increased the efficiency of cross-border euro payments; and, most importantly, (iii) it serves the needs of the monetary policy of the ECB. It is the only “tool” carrying out “cross-border” payments in euro which is directly accessible to all monetary policy counterparties.

¹⁹ In addition to TARGET, large-value payments in euro are processed by the EURO 1 system (operated by the EuroBanking Association), PNS (Paris Net Settlement) in France, SPI (Servicio Español de Pagos Interbancarios) in Spain and POPS (Pankkien Online Pikasiirrot ja Sekit) in Finland.

Besides operating TARGET, the Eurosystem fulfils its basic statutory task of “promoting the smooth operation of payment systems” via its oversight function. The oversight function of the Eurosystem covers all payment and settlement systems operating in euro with the aim to ensure their safety and efficiency. The ECB issued a policy statement on 21 June 2000 on the ‘Role of the Eurosystem in the field of payment systems oversight’. In line with the provisions of the Treaty and the Statute, the Governing Council formulates the common policy stance enforced either by the ECB or by the national central banks. In areas not specifically covered by a common Eurosystem oversight policy framework, policies defined at the NCB level apply within the framework of the objectives and principles defined at the Eurosystem level. The common oversight policy is based on a set of standards developed either at the international (G-10) level or within the Eurosystem. In this respect, the Governing Council adopted on 25 January 2001 the ‘Core Principles for systemically important payment systems’ and included them in the set of minimum standards used by the Eurosystem for its common oversight policy on payment systems. Furthermore, the Eurosystem’s ‘Oversight standards for euro retail payment systems’ (the ‘Retail Standards’) adopted by the Governing Council on 26 June 2003 and the ECB’s report on ‘Electronic money system security objectives’ adopted by the Governing Council on 23 May 2003 are part of the Eurosystem’s oversight policy stance.²⁰

Prior to the start of Stage Three of Economic and Monetary Union all large-value systems which were expected to operate in euro were assessed by the EU central banks against the Lamfalussy standards. In December 1998 the Governing Council agreed that all such systems could operate in euro as from 4 January 1999. Following the adoption by the Governing Council of the Core Principles in the list of the Eurosystem’s oversight standards, all euro large-value payment systems in the euro area were assessed against these “Core Principles”. Regarding the assessment of the TARGET system and the EURO 1 system by the IMF, the results are available to the public.²¹

In order to secure its credit operations and ensure a level playing field between its counterparties, the Eurosystem has also taken actions in the field of securities.

For the use of the securities settlement systems to receive the collateral related to the Eurosystem credit operations, the Eurosystem has defined standards for EU securities settlement systems (SSS), and links between them. The guiding principles of the Eurosystem are to ensure equal treatment of institutions located in the euro area when accessing central bank credit and to promote the soundness and efficiency of the securities settlement systems in the euro area.

These Eurosystem user standards for SSSs have significantly improved the soundness and efficiency of the euro area securities settlement systems. These standards – listed in the box 2 – address four main categories of risk covering legal, settlement, custody and operational aspects related to the use of SSSs

²⁰ These documents are published on the websites of the ECB (www.ecb.int) or the Bank for International Settlements (www.bis.org).

²¹ See: <http://www.imf.org/external/pubs/ft/scr/2001/cr01195.pdf>

within the context of the Eurosystem credit operations. Each SSS has been assessed against these standards and is reviewed annually.

Box 2. The Eurosystem standards for securities settlement systems in Eurosystem credit operations

1. Legal soundness
2. Settlement in central bank money
3. No undue custody risks
4. Regulation and/or control by competent authorities
5. Transparency of risks and conditions for participation in a system
6. Risk management procedures
7. Intraday finality of settlement
8. Hours and days of operation
9. Operational reliability and availability

These standards have triggered adjustments in the organisation of securities settlement systems, which are thus of benefit to all participants in their settlement activities. They have become a reference well beyond the scope of central bank operations. The idea of setting standards for securities settlement systems has been further developed in co-operation with securities regulators. First, the Eurosystem has been very active at the G10 level with the CPSS-IOSCO Joint Task Force which published in November 2001 recommendations for securities settlement systems and an assessment methodology in November 2002.

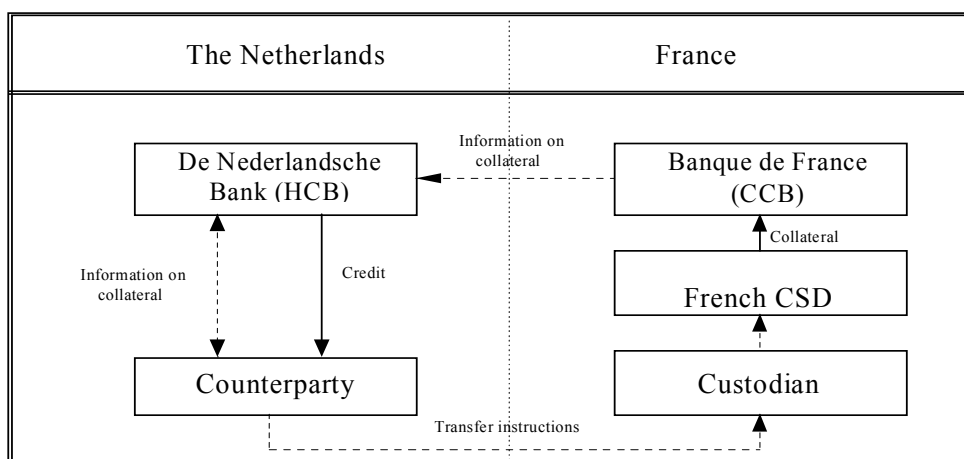
Second at present, the ESCB is co-operating with the Committee of European Securities Regulators (CESR) to define a EU regulatory framework for the securities clearing and settlement market infrastructure. In particular, the ESCB and CESR are jointly developing standards that will enhance the safety, soundness and efficiency of the European securities market infrastructure. Another reason for laying down standards is to foster integration within the EU by promoting harmonised rules for clearing and settlement activities. The standards address issues related to, among other things, pre-settlement, settlement, clearing, custody and operational reliability.

In addition to these standards, from the very start, the Eurosystem has ensured that all collateral eligible for use either in monetary policy operations or for obtaining liquidity in TARGET has been available to all market participants, regardless of the location of the collateral or the participants. Indeed until adequate alternative market solutions become available, the Eurosystem had to implement a medium-term solution to facilitate the cross-border use of eligible collateral within the euro area.

This solution is the correspondent central banking model (CCBM). The CCBM, which was developed as an interim solution, has been operating successfully since 4 January 1999. It is a mechanism whereby central banks act as securities custodians for one another. The CCBM can be used only to collateralise central bank credit, leaving the market to develop services to allow for the cross-border use of collateral in other types of operations. Almost 30% of all the collateral used by the Eurosystem counterparties for

their Eurosystem credit operations is now deposited through the CCBM, compared to less than 10% in the first year of the EMU.

Figure. Flow of information within the CCBM



Flow of information within the CCBM

*HCB = home central bank, CCB = correspondent central bank, CSD = central securities depository
(For further details, see the CCBM brochure on the ECB's website at www.ecb.int)*

The market is now developing alternative solutions such as links between securities settlement systems (66 links have been deemed eligible by the Governing Council for the transfer of securities in the Eurosystem's monetary policy and intraday credit operations), but these have not successfully replaced the CCBM for the moment (less than 20% of the cross-border use is done through links). Further market developments are in progress, in particular through the creation of more integrated securities settlement platform due to merged SSSs.

ANNEX 4: EVIDENCE ON THE EFFECTS OF INTEGRATION ON BOND MARKETS

Government bond market

The potential benefits of a fully integrated government bond market are considerable. First, by promoting integration, governments may considerably reduce the servicing costs of their debt. In a financially integrated government bond market, investors may reduce the risk of their bond portfolio by buying bonds across countries. That is, the integration of bond markets creates increased opportunities for diversification of financial portfolios, which can be a means to achieve a reduction in risk. The lower risk reduces the yield required by investors, and hence the total interest payments of the governments. Recently, Adjaouté and Danthine (2003) have estimated that the potential reduction in debt servicing costs for the euro area from further integration to amount to EUR 5 billion. Second, increasing integration of the bond market results in a more symmetric transmission across countries and more specifically, a more symmetric impact of monetary policy on the medium and long-term segment of the term structure, a finding backed up by considerable evidence (see Favero et al. (2000), for example).²² In other words, integration in the government bond market reduces the differences in the impact of the common monetary policy on the various euro area countries.

The strongest measures of financial integration are those based upon the law of one price. Because government bonds are sufficiently homogeneous across the various euro area markets, the law of one price can be directly tested by comparing the yields on local government bonds across countries. To the extent that risk premia are identical across countries, as they should be in a state of perfect integration, yields on government bonds with the same maturity will be identical.

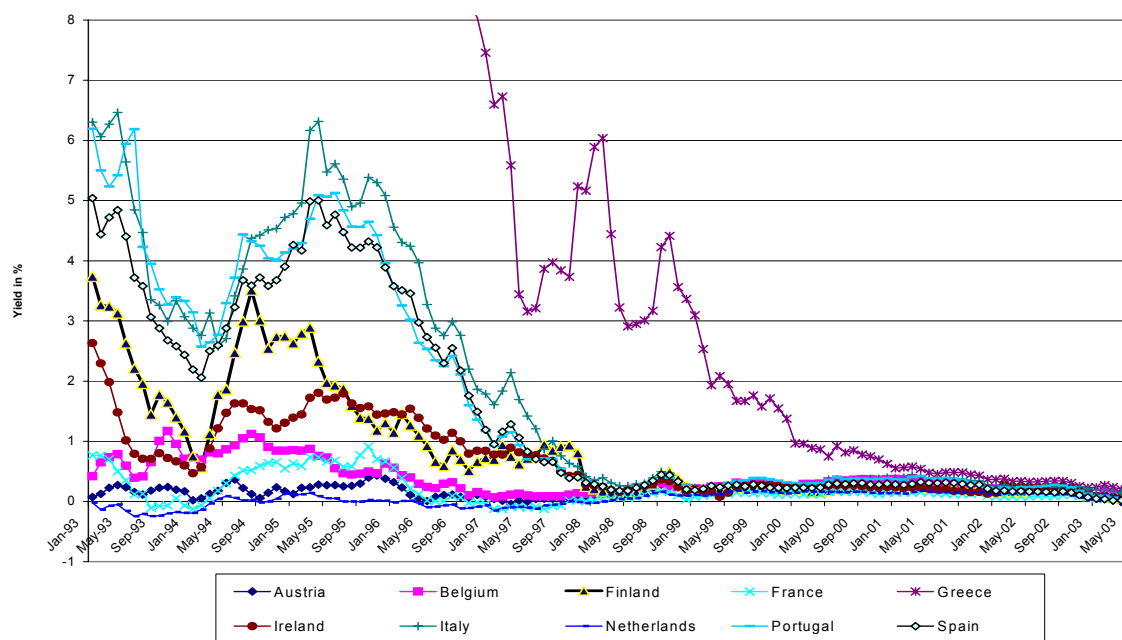
The difference between the government bond yield in one particular country and the yield that would prevail if markets were perfectly integrated is the cleanest measure of integration. As the latter is not directly available, most studies use the yield on German government bonds as a good alternative²³.

²² Favero et al. (2001) show that not only yields but also the maturity structure of government bonds are converging (in the longer term). They argue that the latter evolution also makes monetary policy more symmetric.

²³ Several studies have shown that the German government bond market is very well integrated into world capital markets (see also Barr and Priestley (2002) and Hentschel et al. (2002)). International investors are especially attracted by the high level of liquidity, as well as by the very well developed futures market attached. As a result, the yield on German government bonds should be reasonably close to the yield that would prevail in a fully integrated market.

Chart 1 plots the spread between yields in the various euro area government bond markets and in Germany from January 1993 to April 2003, focussing on bonds with 10 years to maturity. Except in Greece, government bond yield spreads have narrowed since the beginning of 1998. This is to a large extent owing to a convergence in fundamentals. First, exchange rate stability in the run-up to the single currency, and the eventual elimination of exchange rate risks with the introduction of the single currency, removed a major risk premium among bonds issued by governments with the same credit rating in the euro area. Second, the commonly agreed rules for fiscal policy as outlined in the Stability and Growth Pact should contribute to keeping levels of credit risk rather low. Last but not least, further economic convergence, as well as a unified monetary policy has led to a substantial convergence of inflation rates across Europe.

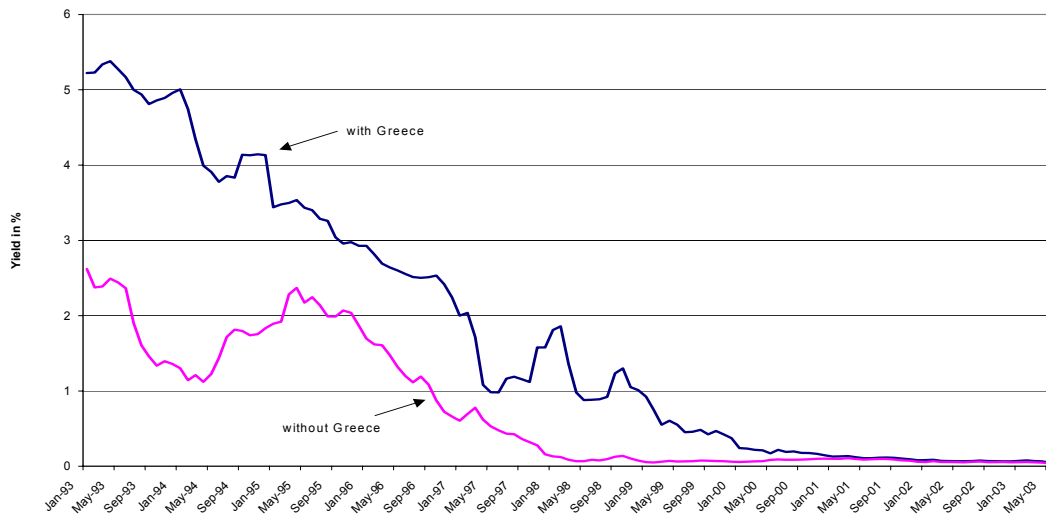
Chart 1. Yield spread for 10-year government bonds relative to Germany



Source: Baele et al. (2003).

A similar picture emerges from Chart 2, which plots the cross-sectional dispersion in yield spreads across countries. Dispersions in monthly yields have fallen from an average of 1.98 in 1993 to 0.06 in 2002, or by more than 97%. The chart also shows that yields on Greek government debt only converged when Greece joined the Monetary Union in January 2001. As was the case for spreads, dispersions decreased substantially up to 1998, but have stayed at roughly the same levels since then. This indicates that there are still some barriers to overcome before the government bond market is fully integrated.

Chart 2. Dispersion in yield spreads for 10-year government bonds relative to Germany



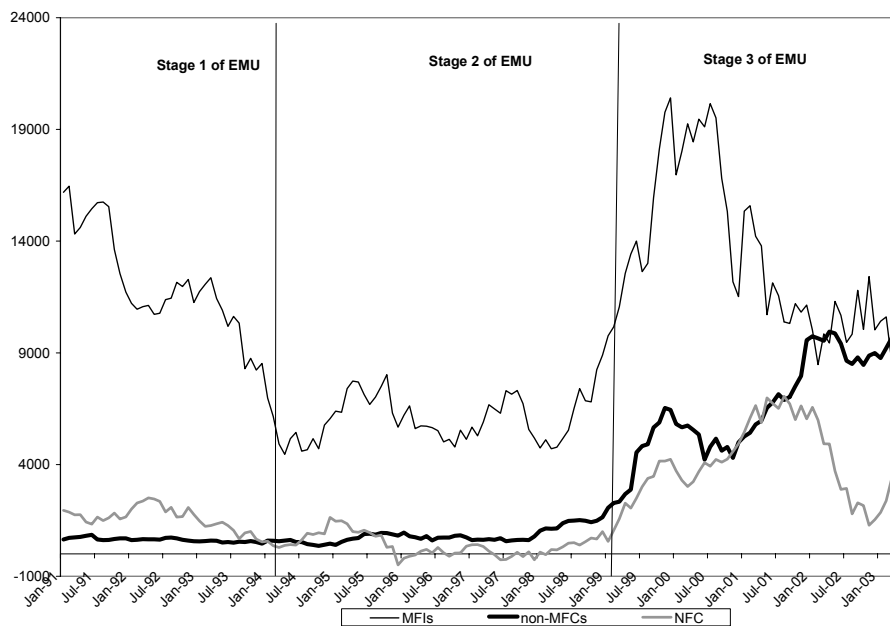
Source: Baele et al. (2003).

Corporate bond market

The evolution of the corporate bond market is regarded by some researchers as the most striking development since the introduction of the single currency (see, for example, Galati and Tsatsaronis (2001) or Peree and Steinherr (2001)). Chart 3 shows the boom in net issuance activity that occurred at the same time as to the introduction of the euro in 1999.

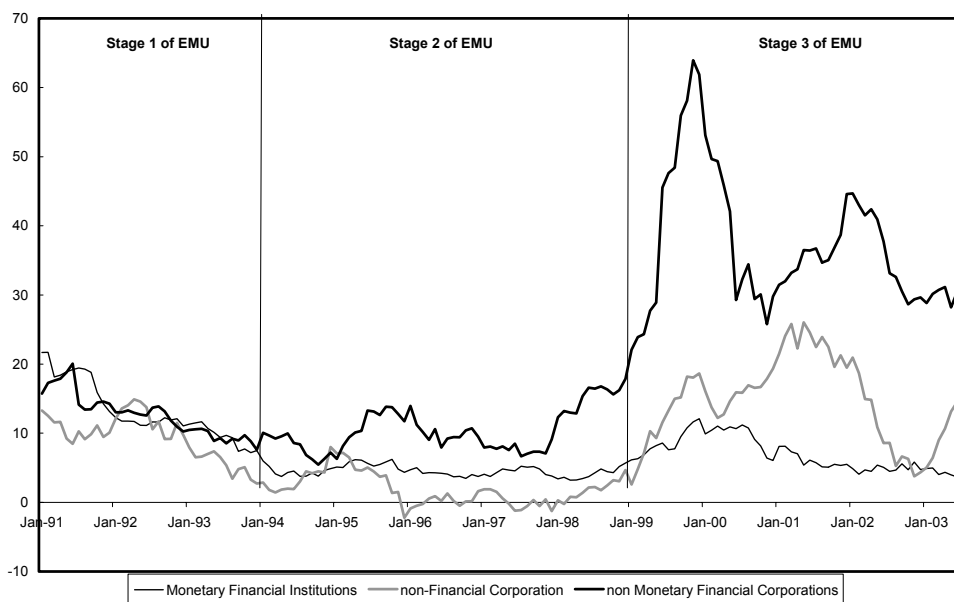
The coming of the euro coincided with a significant jump in the issuance of corporate bonds. However, total corporate bond issuance has recently declined, including the non-financial corporations component. One hypothesis advanced by Carnegie-Brown and King (2003) is that temporary corporate restructuring and telecommunications industry liberalisation, rather than the (permanent) introduction of the euro, were the main factors behind the increase in net issuance activity. Indeed, in 2001, corporate bond net issuance by non-bank institutions surpassed issuance by banks. This second development is even more striking given that before 1998 this market practically did not exist. The period 1999-2001 coincided with significant corporate restructuring, with large IPOs and the UMTS license auctions in the telecommunications sector.

Chart 3. Net issuance of debt securities in the euro area (net issuance, EUR billion, 12-month moving average)



Source: ECB.

Chart 4. Annual growth in debt securities issued by euro area residents (percentage changes)



Source: ECB.

Despite the significant recent decline in the issuance of debt securities by non-financial corporations, the net issuance by non-monetary financial corporations has remained at a sustained level. Chart 4 reports the

annual growth rates of the amount outstanding of debt securities in the corporate sector. The chart shows the very strong dynamics of the non-monetary financial corporations. This can mainly be attributed to so-called “special purpose vehicles” which for tax, credit rating and other reasons issue debt for financial and non-financial corporations. In other words, corporate debt financing is still growing in the euro area, but not in the traditional format. As this development started in 1999, it is likely that the advent of the euro played some part in stimulating the development of European corporate bond markets. The main reasons might be that the single currency has made corporate debt financing more attractive by creating a much larger home-currency investor base than was the case for any single country before the advent of EMU, and that it has encouraged the entry of euro-denominated corporate bonds into the international underwriting business, driving down fees as a result.

ANNEX 5: EVIDENCE ON THE EFFECTS OF INTEGRATION ON EQUITY MARKETS

Recent studies indicate a considerable increase in the degree of European equity market integration²⁴. The return that investors require on equity investments is now mainly determined by risk factors common to all European markets, and less by purely local factors. Moreover, at least within the euro area, the exchange rate risk component of the equity premium gradually decreased in the run-up to the single currency, vanishing entirely in January 1999. In addition, data from various sources indicate that the equity home bias²⁵ is gradually diminishing. Finally, further consolidation in the trading, clearance and settlement infrastructure constitute important steps in creating a truly integrated pan-European equity market. Since the introduction of the euro there have been many initiatives to form alliances or merge the activities of stock exchanges of individual euro area countries. Furthermore, one clear indication of the increasing integration of euro area stock markets is the development of a range of euro area-wide stock market indices, such as the Dow Jones EURO STOXX index.

Another explanation for increasing cross-country equity return correlation relates to the convergence in cash flows. Further economic and monetary integration, combined with the global trend towards synchronisation of business cycles, should make the determinants of cash flows more similar across countries. Recent evidence seems to support the hypothesis that European business cycles have become more similar²⁶. Furthermore, the strong increase in cross-country trade has made corporate profits more dependent upon the economic situation in other countries. To the extent that corporate profits are increasingly determined by common factors, one would expect, *ceteris paribus*, a structural rise in cross-country equity return correlation.

Equity returns across countries are correlated to the extent that they are driven by the same factors. Similarly, cross-country correlations will increase when local returns become progressively more sensitive to news common to all investors, and less to purely local risk factors. Full integration would imply the diminishing of country-specific factors, and only common news should drive local returns. A recent study has concluded that the performance of the various euro area equity markets is increasingly determined by events common to all investors and less by local news. The proportion of local variance explained by common European and US shocks has increased from 8% and 12% respectively in the first half of the 1980s to 24% and 20% in the 1990s (see table).

Table. Average proportion of local variance explained by European and US shocks

²⁴ See e.g. Adjouté, K. and J-P. Danthine (2002), European Financial Integration and Equity Returns: A Theory-Based Assessment, Second ECB Central Banking Conference.

²⁵ The home bias puzzle refers to the observation that domestic portfolios are much less internationally diversified than what one would expect given the large apparent benefits from international diversification

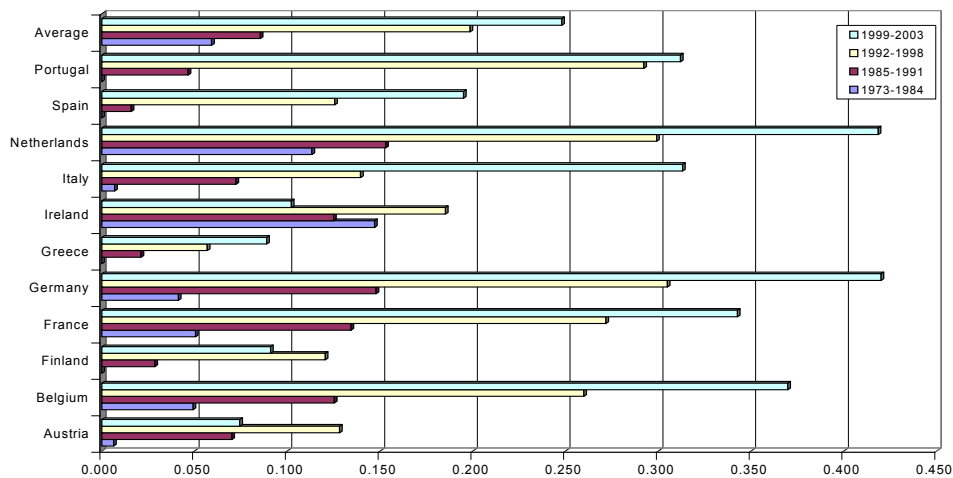
²⁶ See e.g. Artis, Michael J., Hans-Martin Krolzig, and Juan Toro (1999), The European Business Cycle, CEPR Discussion Papers 2242.

	1973-85	1986-91	1992-98	1999-03
EU shocks	8%	13%	23%	24%
US shocks	12%	14%	17%	20%

Source: Baele et al. (2003).

The chart below shows the proportion of local variance explained by euro area shocks for various euro area countries. It highlights the fact that the importance of common news has increased in all countries. Looking at the euro area average, during the period 1973-1986 only about 6% of local return variance was explained by common euro area shocks; this proportion then increased to about 20% and 25% in the periods 1993-1998 and 1999-2003 respectively.

Chart. Proportion of variance explained by euro area shocks (in %)



Source: Baele et al. (2003).

ANNEX 6: THE FINANCIAL SERVICES ACTION PLAN (FSAP): INITIATIVES FOR FINANCIAL MARKET REGULATION

Completing a single wholesale market:

- Removal of outstanding barriers to raising capital on an EU-wide basis (updating of the directives on reporting requirements and prospectuses)
- Common legal framework for integrated securities and derivatives markets (upgrading of Investment Services Directive; proposal for a directive to address market manipulation and abuse; clarification of protection rules for sophisticated and retail investors)
- Movement towards a single set of financial statements for listed companies (e.g. amendments to 4th and 7th Company Law Directives)
- Legal security to underpin cross-border securities trade (e.g. implementation of settlement finality Directive; proposal for a directive on cross-border use of collateral)
- Secure and transparent environment for cross-border restructuring (e.g. agreement on proposals for European Company Statute and directive on take-over bids; proposals for directives on cross-border mergers and transfer of company headquarters; requirements for disclosure of objective and stable criteria for authorisation of restructuring in the banking sector)
- Single market for investors (e.g. proposal for directives on prudential supervision of and tax arrangements for supplementary pensions as well as on closed-end collective investment funds)

Developing open and secure markets for retail financial services

- Promote enhanced information, transparency and security for cross-border provision of retail financial services (e.g. proposed directive on distance selling of financial services, Recommendation on mortgage credit information, proposed directive on insurance intermediaries, Action Plan to prevent counterfeiting and fraud in payment systems)
- Expedite the rapid resolution of consumer disputes through effective extra-judicial procedures (Communication on out-of-court settlements)
- Balanced application of local consumer protection rules (e.g. Communication on waiver from application of local consumer protection rules to business-to-business/sophisticated investor transactions; interpretative Communication on “general good” in the insurance sector).

State-of-the-art prudential rules and supervision

- Bring prudential legislation on banking, insurance and securities up to the highest standards (e.g. via the adoption of proposed directives on winding-up and liquidation of banks and insurance companies and on electronic money, amendment to the money laundering Directive; proposals to amend capital framework for banks and investment firms and solvency margins for insurance companies)

- Work on prudential supervision of financial conglomerates (proposal for a directive)

Wider conditions for an optimal single financial market

- Elimination of tax obstacles and distortions (e.g. adoption of a directive on savings tax; implementation of the code of conduct on business taxation; review of taxation of financial services; Commission proposal for a directive to co-ordinate tax arrangements governing supplementary pensions).
- Review of corporate governance within the EU