Jean-Claude Trichet:The process of European financial integration: where do we stand?

Speech by Mr Jean-Claude Trichet, President of the European Central Bank, at the Campus for Finance 2006, WHU Otto Beisheim School of Management, Vallendar, 13 January 2006.

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Introduction

Ladies and gentlemen, dear students,

I would like to start by thanking the organisers of Campus for Finance 2006 for inviting me to speak here today.

The turn of the year is always a good opportunity to assess the past and glance at the future. Today, barely two weeks into the New Year, I will do precisely this with a topic that is of interest to market participants, policy-makers and academics alike. And it is a topic that is also of the utmost interest to the ECB: namely, the process of European financial integration. I would like to give you my assessment of where we stand at present, and also highlight those aspects where financial integration could be enhanced further.

I will structure my remarks as follows. First, I would like to explain why financial integration is important for the welfare of European citizens. I will then briefly explain the conceptual background underlying our assessment of the state of financial integration. Finally, I will elaborate on the current state of financial integration in the euro area, based on the indicators recently published by the ECB. I will organise my assessment according to the different segments of the financial markets. In doing so, I will also mention some specific Eurosystem activities that aim to foster financial integration, and I will touch upon some of the EU policy issues in this field.

Why is European financial integration important?

In 2006 Campus for Finance is focusing on the topic of "Fixed income – lending, borrowing, and taking risk". Financial systems in general serve not only to channel funds from those who have a surplus to those who have a shortage of savings, but they also serve to trade, hedge, diversify and pool risk.

These functions help us to understand the economic benefits that can be derived from financial integration. There are two widely accepted economic benefits of financial integration: first, the better sharing and diversification of risk; and second, the increase of the potential for higher economic growth. Let me explain this in more detail.

First, the better diversification and sharing of risk brought about by financial integration helps to fulfil the conditions for the optimality of a currency area. In recent years, an interesting development in the theory of optimal currency areas has been the idea that the optimality of a currency area is not necessarily something that needs to be achieved fully before monetary union; but something that may also be the result of monetary union. The introduction of the euro clearly fostered financial integration. With the euro, economic agents from a given region can, by being able to invest more easily in other regions of the euro area, diversify the risk of potential shocks. Steps towards increased financial integration reduce the risk of local factors impacting on the income and consumption of a given region within the area, thereby helping to fulfil the conditions for an optimal currency area.

Second, financial integration is a key factor in the development of the financial system, which, in turn, increases the potential for greater and more sustainable non-inflationary economic growth. By making markets deeper and more liquid, financial integration creates economies of scale and increases the supply of funds for investment opportunities. The integration process fosters competition and the expansion of markets and intermediation, thereby leading to further financial development. Financial development, in turn, leads to lower intermediation costs and a more efficient allocation of capital. Allocating resources to the most productive investment opportunities will ultimately increase the potential economic growth. For example, a research study estimates the benefits from the integration of European bonds and equity markets to be around 1% of GDP growth over a ten-year period, or

approximately €100 billion.[1] While these figures can be subject to estimation error, economic reasoning suggests that the overall benefits of financial integration will remain significant.

As you know, Europe urgently needs to strengthen growth and increase employment, which are the two main goals of the recently renewed Lisbon programme. The need to proceed with structural reforms in Europe is not confined to the "real" side of the economy, like the necessity to enhance flexibility in the European labour markets, but applies also to financial integration. Financial markets that are not yet fully integrated imply a cost in terms of foregone economic growth.

Furthermore, as a central banker, I am very conscious of the fact that a well-integrated financial system is essential for the implementation of our monetary policy, as it enhances the smooth and effective transmission of monetary policy impulses throughout the euro area. Indeed, if the financial system were not fully integrated, the single monetary policy decisions may have an asymmetric impact on the different regions of the euro area. The degree of financial integration is therefore important in determining the effectiveness of this transmission: the higher the degree of financial integration, the more effectively this transmission will work in practice.

Finally, I would also like to mention that financial integration is relevant for our task – as provided for by the Treaty – of contributing to the safeguarding of financial stability.[2] Financial system stability requires the financial system's principal components to be jointly capable of absorbing adverse disturbances. It also requires that the financial system is facilitating a smooth and efficient reallocation of financial resources from savers to investors, that financial risk is being assessed and priced accurately and that risks are being efficiently managed. Inefficiencies in the reallocation of capital or shortcomings in the pricing of risk can compromise future financial system stability. A lack of financial stability can therefore be related directly to inefficiencies that may arise from a non-integrated financial system.

Being aware of the links between financial integration and financial stability is therefore essential. These links are twofold. On the one hand, integrated financial markets offer better opportunities for financing and risk diversification. As the pool of available assets for investment is broadened, potentially enhancing the heterogeneity of financial institutions' portfolios, the ensuing wider spread of portfolio-related risks should reinforce the resilience and shock-absorption capacity of financial intermediaries, thus improving the soundness and robustness of the financial system. On the other hand, financial integration implies a structural transformation of the financial system, including the creation of intensified cross-border financial links and therefore calls for new appropriate measures to ensure financial stability in a renewed integrated financial system context.

To summarise, the effects of financial integration on the stability of the financial system can be expected to be positive in the long run. The structural transformation of the financial system through enhanced financial integration requires that we closely monitor the financial integration process.

The conceptual background for the ECB's assessment of the state of European financial integration

I would now like to discuss the conceptual background for our understanding and assessment of the process of European financial integration.

Under the Treaty, the Eurosystem acts "in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources".[3] This general principle also determines the Eurosystem's view that financial integration is first and foremost a market-driven process.

In addition to this, the Eurosystem sees it as a basic task of public authorities to create a framework that is conducive to fostering financial integration. If the opportunities thus created have been

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[1] London Economics (2002), "Quantification of the macro-economic impact of integration of EU financial markets", Report to the European Commission.

[2] The ECB publishes the outcome of its monitoring of euro area-wide financial stability in its Financial Stability Review. See the ECB's website at http://www.ecb.int/pub/pdf/other/financialstabilityreview200512en.pdf for the December 2005 Financial Stability Review.

[3] See Article 105(1) of the Treaty establishing the European Community.

exploited by market forces, true financial integration will have been achieved and its benefits been reaped fully.

To make these concepts operational, the ECB has adopted the following definition of financial integration: we consider the market for a given set of financial instruments or services to be fully integrated when all potential market participants in such market (i) are subject to a single set of rules when they decide to deal with those financial instruments or services, (ii) have equal access to this set of financial instruments or services, and (iii) are treated equally when they operate in the market.

While, in practice, we are facing a process of financial integration, this definition describes a state of full, or perfect, integration. By providing a benchmark against which we can assess the state of financial integration, this definition underpins our analytical and empirical analysis.

A natural basis for the development of quantitative measures of financial integration is to check the validity of the law of one price. The law of one price states that assets with identical risks and returns characteristics should be priced identically regardless of where they are transacted. The law of one price is in fact an implication of our definition of financial integration: if all agents face the same rules, have equal access and are treated equally, any price difference between two identical assets will be immediately arbitraged away.

Still, there are cases where the law of one price is not directly applicable. For instance, an asset may not be allowed to be listed on another region's exchange. While the law of one price has little to say about this case, we would consider this to be an obstacle to financial integration. Our wider definition of financial integration in fact also encompasses such obstacles to financial integration.

The current state of European financial integration, including some selected Eurosystem activities and EU policy issues

This background information leads me now to the main part of my speech, namely to illustrate the current state and the evolution of financial integration in the euro area.

Last September, the ECB published, for the first time, a set of indicators regarding the state of integration of euro area financial and banking markets, along with an explanatory report. With this publication, the ECB aims to regularly measure and monitor financial integration in the euro area.[4]

We consider two broad categories of indicators. Price-based indicators measure discrepancies in asset prices based on their geographic origin. Quantity-based indicators are used to investigate the extent to which investors engage in cross-border asset portfolios. Such quantitative measures offer the advantage of being able to assess both the current level of financial integration and its evolution over time, i.e. whether integration is progressing, stable, or even regressing.

A number of previous speakers at the Campus for Finance 2006 have looked at specific financial market segments, inter alia the government bond market, corporate bond markets, equity markets, securitisation markets and debt markets. I will now cover all these major market segments from the point of view of the state of their integration. I will also touch upon selected Eurosystem activities that aim to foster financial integration, and highlight some of the EU policy issues in this field.

Our first publication covers the money market, the government and corporate bond market, the equity market and the banking markets. While the euro generally acted as a major catalyst for the integration of all these markets, the degree of integration differs between market segments, with integration being more advanced in those market segments that are closer to the single monetary policy, above all the money market. So let me start with the money market.

Our indicators for the euro money market measure integration on the basis of the dispersion of lending rates for actual transactions or rates offered by EONIA, EURIBOR and EUREPO panel banks.[5]

The unsecured interbank deposit market was almost perfectly integrated right at the start of Monetary Union. The cross-country standard deviation of the average overnight lending rates among euro area

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[4] The ECB report is available at http://www.ecb.int/pub/pdf/other/indicatorsfinancialintegration200509en.pdf on the ECB's website. Updates will be published annually.

[5] Data referring to the time before the introduction of EONIA and EURIBOR are average overnight, one-month, 12-month rates, respectively, of euro area countries.

countries was as low as three basis points in early 1999 and has since then decreased to just one basis point. Just to give for comparison a figure from the time before Monetary Union, let me mention that in January 1998, i.e. one year before the start of Monetary Union, the cross-country standard deviation was still higher than 130 basis points.

In fact, such integration is a sine qua non for monetary policy implementation, since only an integrated interbank market ensures an even distribution of central bank liquidity and a homogeneous level of short-term interest rates across the euro area. And this rapid integration has been mostly supported by the establishment of the related payment system infrastructure, i.e. our TARGET system, which has been operational since the first day of Monetary Union. The launch of the single shared platform, TARGET2, planned for November 2007, will enhance financial integration even further, as it will provide a harmonised level of service and a single price structure for domestic and cross-border payments. The running of this large-value payment system is a very concrete example of how we provide central banking services that are conducive to fostering financial integration.

Our indicators for one-month and 12-month maturities also consistently show a highly integrated unsecured money market, with the respective cross-country standard deviation of EURIBOR lending rates among euro area countries standing, since early 1999, at values not higher than, and normally below, one basis point.

Finally, our indicators also confirm a relatively high degree of integration for the repo market. The EUREPO index was launched in March 2002, and since then, the euro area cross-country standard deviation of the one-month EUREPO rates has been around, and normally below, one basis point. The indicator for the 12-month maturity shows a standard deviation of around, and normally below, two basis points.

The decisive role of the euro in enhancing financial market integration is also visible in the interest rate derivatives markets. A particularly important segment is the euro interest rate swap market (including, for example, the euro overnight index swap market). This has, in fact, become the largest interest rate swap market in the world![6]

The least integrated money market segment is the short-term securities market. The European commercial paper and certificates of deposit markets are segmented in several market places. But I expect that the current fragmentation will be reduced in the future as a result of the Short-Term European Paper (STEP) initiative, led by ACI – The Financial Markets Association. The purpose of this initiative is to promote the convergence of standards and practices prevailing in the European short-term securities markets, which is expected to provide an impulse towards integration, thereby increasing the market's depth and liquidity. The promoters of this initiative expect the first STEP-labelled programme to be issued early this year. The Eurosystem acts as a catalyst and supports this market-led initiative. In particular, it will provide technical support for the labelling process for some time and will produce and publish STEP statistics on yields and volumes.

I will now move on to the government bond market. Government bond markets have achieved a very high degree of integration, mainly due to the disappearance of intra-euro area exchange rate risk and the convergence of inflation expectations across countries by the time the euro was introduced. Since then, government bond yields in different euro area countries have been driven mainly by euro area-wide factors and news.

A simple way to quantify the degree of integration in this market segment is to look at developments in the standard deviation of yield spreads over time: the lower the dispersion, the higher the degree of integration. Our respective indicator shows a significant drop in the run-up to the start of Monetary Union and, since then, the standard deviation has remained close to zero.

Another indicator is the "beta-convergence", that is based on the economic intuition that the more integrated the market is, the more bond yields should react to common factors instead of local factors. The "betas" represent the estimated correlation of changes in a government bond yield of a given country with changes in a respective benchmark bond. It results that the betas varied substantially up to 1998 and converged afterwards towards the integration level.

[6] With a daily turnover of around €250 billion, the euro interest rate swap market is about one third larger than the equivalent US dollar segment (around €160 billion). The total of euro interest rate OTC derivatives contracts reaches a daily turnover of around €380 billion, and is thereby larger than the US dollar segment (a daily turnover of around €290 billion). See BIS Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004 (March 2005).

Let me stress here an important point. In assessing the indicators of the financial integration of European government bond markets, it of course has to be borne in mind that movements related to changes in the credit risk perceptions by the market do not signal a variation in the degree of integration. Such "local news" will continue to have an impact on bond yields in different countries. Integration of European government bond markets means that yields converge across countries to the extent that the underlying bonds have identical risk-return characteristics. A government bond of a country with a higher fiscal deficit is riskier than a government bond of a country with a lower deficit. Consequently, it is to be expected that yields in the first case are higher than government bond yields of the country with the lower deficit, even with perfect integration of government bond markets. There is, therefore, no contradiction between European financial integration, as promoted by our published indicators, and the ECB's view that markets should accurately price different budgetary policies into bond yields. And, let me mention this by way of digression, as a result of the still existing different fiscal positions of Member States, we continue to observe the market participants' perception of differences in credit risk. Let me mention finally that ensuring the proper functioning of the overall fiscal framework would be an effective way of contributing to enhance the growth prospects of the euro area.

I will now turn to the euro corporate bond market, which has grown considerably since 1999. While this market had been predominantly open to the highest quality credits, it has since broadened to facilitate the funding needs of riskier issuers. The degree of integration of the euro corporate bond market is reasonably high. Typically, the yield on a corporate bond depends on a number of factors, such as the credit rating, time-to-maturity, liquidity and cash flow structure. Our indicators for the state of integration of the euro corporate bond market are based on (econometric) models, investigating whether or not risk-adjusted yield spreads have a systematic country component. Our studies suggest that this market segment is fairly integrated in the sense that the country of issuance is only of marginal importance in explaining yield differentials.

Other market segments have even more potential for greater integration. In fact, the euro area equity markets are still quite fragmented, but a gradual integration process is ongoing. For example, our indicators show that stock prices across the euro area increasingly react to euro area-wide factors and news. Another indicator to measure the degree of integration in euro area equity markets is the relative importance of sector versus country-based investment strategies. The indicator is derived by calculating and comparing the cross-sector dispersion with the cross-country dispersion of equity returns. The more integrated the euro area equity market, the greater the benefits of spreading investments across sectors as opposed to country-based equity investment strategies. Our statistics show that the elimination of intra-euro area currency risk has encouraged integration in the sense that the "home bias" in the equity holdings of institutional investors has been significantly reduced. Yet, the country effect is still too important for it to be concluded that the euro area equity market is fully satisfactorily integrated.

As regards the further integration of securities (i.e. bonds and equity) markets, a prominent role should be attached to the securities clearing and settlement infrastructure. The Eurosystem strongly supports further integration in the securities infrastructure, the lack of which has also been identified by the so-called Giovannini Group as a barrier to integration that should be removed. To this end, the ECB takes part in the work of respective expert groups set up by the European Commission. Furthermore, in the central bank's role as a catalyst for collective private-sector activities, meetings are held with representatives from the banking and securities settlement industry of the euro area to discuss the further integration of the euro securities settlement industry. I would also like to highlight the work that we have been carrying out in cooperation with the Committee of European Securities Regulators (CESR): last October we published standards for securities clearing and settlement systems in the EU that aim to adapt international recommendations to the European context.[7] These ESCB-CESR standards are conducive to the integration of EU capital markets, placing emphasis on common solutions and interoperability between systems.

Finally, I will move on to the banking markets. Here, the degree of integration differs for the various types of banking activities, i.e. capital market-related activities, interbank (or wholesale) activities, and retail banking.

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7 See the ECB's website at http://www.ecb.int/pub/pdf/other/escb-cesr-standardssecurities2004en.pdf.

Cross-border interbank loans and holdings of securities have, in relative terms, experienced substantial growth. While securities issued by non-monetary financial institutions of another euro area country accounted for only 16% of the securities held by euro area monetary financial institutions (MFIs) at the end of 1997, this share has now reached almost 40%, pointing to a higher degree of capital market integration in the euro area. In addition, although loans granted between domestic MFIs still account for more than 50% of the total EU MFI loans, the respective euro area cross-border activity has increased from just 15% at the end of 1997 to around 23% at present (the remaining ones consist of cross border loans to non-euro area EU countries).

And last but not least, integration in retail banking has, by contrast, not progressed to any great extent, as shown by both price and quantity-based indicators. For example, while the share of euro area cross-border MFI loans granted to non-MFIs stood at 2% at the end of 1997, this figure has risen to no more than 3.5% today. Moreover, as a price-based indicator, the cross-country standard deviation of interest rates on consumer credit has been rather high and constant, on average 0.9% over the past three years. To give a final indicator for the level of retail banking integration, the cross-country dispersion of interest rates on lending for house purchase amounts to, on average, 0.5% over the past three years, with no clear declining trend visible as yet, thus confirming the picture of the not very benign integration of the euro area credit market.

Following up on this final indicator regarding the cross-country dispersion of interest rates on lending for house purchase, let me also refer to a few initiatives regarding the further integration of the European mortgage market, which is important with an outstanding volume of more than €4 trillion in residential mortgage debt that corresponds to around 40% of EU GDP. As the European Commission announced in its recent White Paper on Financial Services Policy 2005-2010[8] where, among others, the further integration of retail markets in Europe has been targeted, it will release a White Paper this year on mortgage credit in the EU. With its earlier public consultation on this matter, the European Commission has launched a broad discussion about the possible benefits and ways of further integrating European mortgage markets.

The Eurosystem believes that this kind of investigation into the possible benefits of and obstacles to the further integration of European mortgage markets is warranted, and the Eurosystem published its observations in a recent contribution.[9] More generally, this contribution can also be seen as an example of the Eurosystem's role in providing advice on shaping the legislative and regulatory framework for the financial system to be conducive to financial integration.

And as with securities markets, retail markets also need an integrated infrastructure in order to reap the full benefits of financial integration. European citizens' cross-border banking activities, such as mortgage credit, also depend on the further developments in and costs of cross-border payments. In this respect, let me mention, as a final example of our contribution to fostering financial integration, the Eurosystem's support, together with the European Commission, for the banking industry's initiative to create a Single Euro Payments Area (SEPA), with which European citizens should be able to make payments throughout the euro area from a single bank account, and using a single set of payment instruments, as easily and safely as in the national context today. Acting as a catalyst for private-sector activities, the ECB actively supports this initiative by the European Payments Council. High-level coordination takes place between the Eurosystem and the banking industry, and the ECB has arranged a number of meetings involving SEPA end-users. A large amount of work still lies ahead, for which we count on the industry's commitment to deliver the results of the SEPA project as foreseen. In this respect, I recall that the first SEPA milestone is that, by 2008, in parallel to national instruments, banks should provide to customers also SEPA instruments. A second milestone involves that national infrastructures migrate to a pan-European payments infrastructure, via complete interoperability between SEPA compliant infrastructures, by the end of 2010, so that full competition applies to all euro area infrastructures.

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Ladies and gentlemen, dear students,

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8 See the European Commission's website at http://europa.eu.int/comm/internal_market/finances/policy/index_en.htm, dated 5 December 2005.

9 See the ECB's website at http://www.ecb.int/pub/pdf/other/eumortgagecreditconsultationen.pdf, dated 1 December 2005.

An analysis of the state of European financial integration and the monitoring of its progress over time are prerequisites for possible action in those fields where the analysis has identified gaps and shortcomings, in order to reap the full economic benefits from financial integration.

Given today's event and the number of students I see in the audience, let me also mention that the "raw" data and time series underlying our indicators are published on the ECB's website and can therefore be accessed and used by all interested parties who would like to work in this fascinating area.[10] I strongly encourage you to take advantage of this opportunity and to make your contribution to our understanding in this important area of research. Events such as the Campus for Finance are very important to enhance the dialogue between academics and practitioners. European financial integration, in which the ECB has such a strong interest, is indeed one area where academics and practitioners could usefully benefit from closer cooperation.

Thank you for your attention.

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[10] The statistics underlying the financial integration indicators can be accessed on the ECB's website at http://www.ecb.int/stats/finint/html/index.en.html. The indicators will be updated semi-annually. The set of indicators will also be further expanded in 2006, in particular by adding indicators related to market infrastructures and financial institutions.