

Jean-Claude Trichet: European financial integration and the management of inflation expectations by the European Central Bank

Remarks by Mr Jean-Claude Trichet, President of the European Central Bank, at the conference "The euro: one currency, one financial market" organised by the European Commission, New York, 19 April 2005.

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1. Introduction

Ladies and gentlemen,

It is a great pleasure to speak at this conference.

I would like to share with you today some thoughts on two important topics. First, I would like to address the process of European financial integration, this important European endeavour to which the ECB contributes in many different ways. And then, I would like to address an issue of mutual relevance for the ECB and for market participants, i.e. the monitoring and the management of inflation expectations by the ECB.

2. The process of European financial integration

Turning to the process of European financial integration, my remarks will focus on two main issues. The first relates to the reasons why financial integration should be pursued, i.e. what are the economic benefits of financial integration. The second issue to which I would like to draw your attention concerns the state of play, i.e. where does the European financial system stand in the process of integration.

2.1 *Why financial integration should be pursued*

As we all know, financial systems - composed of financial institutions, markets and the infrastructure - serve some basic purposes: among other things, to trade, hedge, diversify and pool risk, to allocate resources and to mobilise savings.

These functions determine the economic benefits that can be derived from financial integration. Two widely accepted economic benefits of financial integration are: the better sharing and diversification of risk and the potential for higher economic growth. Let me explain this in more detail.

Financial integration increases the opportunities to share risk and smooth consumption over time. The increase in the available set of financial instruments resulting from financial integration, as well as the increased cross-ownership of assets, offers additional possibilities to the agents to diversify portfolios and share idiosyncratic risk across regions.¹

As we know from theory, when risk is fully shared in an area, a co-movement in consumption results between agents belonging to different regions of that same area, while consumption does not co-move with region-specific shocks. The evidence suggests that consumption growth rates in the euro area are less correlated than are GDP growth rates, which means that the opportunities to share risk could still be further exploited in the euro area, thereby creating opportunities for further economic benefits from enhanced financial integration.²

Let me now turn to the second economic benefit of financial integration. Financial integration increases the potential for higher economic growth. To explain this, I need to introduce the concept of financial development.

¹ See, for example, Kalemli-Ozcan, S., B. Sorensen and O. Yosha (2003), Risk sharing and industrial specialization: regional and international evidence, *American Economic Review*, 93, pp. 903-918.

² See, for example, Adjaouté, K. and J.-P. Danthine (2003), European Financial Integration and Equity Returns: A Theory-Based Assessment, in V. Gaspar, P. Hartmann and O. Sleijpen Eds., *The transformation of the European financial system*, ECB, Frankfurt.

The link between financial integration and economic growth is typically derived by first establishing the link between financial development and economic growth, and then the link between financial integration and financial development. If we were to describe it with the picture of a chain reaction, the sequence would be: financial integration positively impacts on financial development that in turn has a positive impact on economic growth. But let us look at each individual element separately.

There is strong evidence to suggest that financial development, i.e. the level at which the financial system fulfils its respective functions, which I mentioned earlier, is positively linked with economic growth.³ This link is established via two main channels: financial development can lead to a more efficient allocation of capital and it can reduce the cost of capital.

Let me give just one example for each of the two channels. As regards the efficient allocation of capital, economic growth is spurred by the fact that in a more developed financial system, the intermediaries are more effective in dealing with problems of asymmetric information, so more funds will be allocated to more profitable projects and the productivity of the economy will increase. As regards the reduction in the cost of capital, more developed financial systems can raise the fraction of savings channelled to investment.

So I now turn to the link between financial integration and financial development.

The economies of scale involved in financial intermediation can foster the expansion of the established intermediaries and markets of the financially developed regions, thereby leading to further financial development.

Financial integration will increase the supply of funds for investment opportunities in less financially developed regions of the integrating area. The integration process will increase competitive pressure, and thereby increase the efficiency of the financial system of less developed regions; it will reduce the cost of financial services, and thus expand the size of the local financial markets. In some cases, the additional supply of financial services may be provided by intermediaries entering the local market either by acquiring local banks or by merging with them.

Given that greater efficiency stimulates the demand for both funds and financial services, this should also result in financial markets increasing in size.

Let me conclude this review of the benefits of financial integration with an empirical result regarding the link between financial integration and economic growth. While acknowledging the difficulty of measuring empirically the effect of financial integration on financial development and growth, the overall conclusion of such studies is that the effects are significant. Let me mention here a study that estimated additional growth - resulting from financial integration of the European bond and equity markets - of 1.1% over a period of ten years.⁴ Despite all caveats that apply to the model underlying the simulations, this result is impressive.

Having laid down the general economic benefits of financial integration, I would now like to discuss the reasons for fostering financial integration which are specific to the ECB and which explain why we attach the highest importance to this process.

First, financial integration has implications for monetary policy. Since monetary policy is implemented through the financial system, this system should be as efficient as possible in order to guarantee the smooth and effective transmission of monetary policy throughout the euro area. The degree of financial integration is therefore important in determining how effectively this transmission will work in practice. In this regard, I also mention the ECB's task of promoting the effective operation of payment systems, as well as its interest in the smooth running of securities settlement systems.

As to the contribution to financial stability, the interconnection between financial integration and financial stability has to be addressed. I will not discuss in detail here the link between financial integration and financial stability: this fascinating issue deserves a speech of its own!

Let me just highlight the following.

³ See, for example, Pagano, M. (1993), Financial markets and growth: an overview, *European Economic Review*, 84, pp. 613-622, and Levine, R. (1997), Financial development and economic growth: views and agenda, *Journal of Economic Literature*, 37(2), pp. 571-608.

⁴ London Economics (2002), "Quantification of the macro-economic impact of integration of EU financial markets", Report to the European Commission.

There is no simple, clear-cut answer to the question on the link between integration and stability. There are complex interrelations, the net impact of which is difficult to gauge. Deeper financial integration, on the one hand, widens the possibilities for financial institutions to manage their relevant risks. On the other hand, it can change the interplay of vulnerabilities and the way in which systemic risk stemming from contagion or moral hazard problems spreads in the financial system.

Clearly, competition emerges as a relevant intermediary in the link between financial integration and financial stability. On one side, financial integration brings about the unleashing of competitive forces. On the other side, too fierce competition can also lead to less prudent risk-taking behaviour by financial institutions.

As you may know, in 2004, the ECB started to publish its financial stability review. In this report, we summarise our monitoring and assessment of the stability of the euro area financial system.

So, to conclude on the process of financial integration, it is generally agreed that deepening financial integration is beneficial on the whole. Given the overall economic benefits, as well as the additional reasons specific to the euro area, the ECB and the Eurosystem as a whole support and complement the private actors' and public authorities' actions in the process of financial integration, and I will give you a number of specific examples in this respect.

Given the economic benefits that result from financial integration, but also given its implications for and interaction with financial stability, it is of the utmost importance that we monitor the process of financial integration closely and understand what is happening. And this is what the ECB does. As one of our main contributions, we invest resources, on the theoretical side, in research on all aspects of European financial integration, and we invest resources, on the empirical side, in monitoring the process of European financial integration.

2.2 *Integration of the European financial system*

Let me turn now to the second issue, namely where do we stand in the process of European financial integration.

In addition to the research, monitoring and measuring I have already mentioned, there are three other kinds of possible actions on our side: first, we contribute to financial integration by providing specific central banking services; second, we give advice on shaping of the legislative and regulatory framework of the financial system and we act as a rule-maker by issuing regulations; and, third, we can act as a catalyst for private-sector activities.

These are the multi facets contribution of the ECB to European financial integration.

I would like to start by giving you my summary assessment of the process of European financial integration. I would say that quite considerable progress has been made over the recent years although a lot of works remains to be done.

Let me elaborate on this by reviewing the process of integration for the various components of the financial system: financial markets and related infrastructures on the one hand, and financial institutions and the regulatory framework on the other hand.

2.2.1 *Financial markets and related infrastructures*

Assessing the state of integration is probably rather straightforward for the financial markets component of the financial system. Normally, a price exists for a financial instrument or financial service, so one can also use quantitative indicators, based on the law of one price, to measure the degree of integration. I should like to mention here that ECB staff is doing substantial research and statistical work in this area.

Indeed, the euro has acted as a catalyst for financial integration. The degree of integration distinctly differs between the market segments, with integration being more advanced the closer the market segment is to the single monetary policy. As we all know, the unsecured interbank deposit market was almost completely integrated right at the start of Monetary Union. A good example of the ECB acting as a catalyst for private sector action is its calculation and publication of the EONIA rate.

And I would also like to mention the related infrastructure, i.e. the TARGET system, which now represents around 90% of the total traffic in large-value payments in euro. With EUR 1.7 trillion settled every day, TARGET is already one of the two largest wholesale payment systems in the world, alongside Fedwire in the United States. TARGET is a good example of where we have taken direct

action by providing central banking services that foster European financial integration. We are currently building TARGET2, which is due to go live in 2007 and which will replace the current decentralised system with a single technical platform. With the functionalities that will be introduced in TARGET2, we also expect it to be one of the most sophisticated payment systems in the world.

TARGET2 will also further improve financial integration. It will increase cost effectiveness. It will allow for the provision of a harmonised level of services across Europe, supported by the implementation of a single price structure for domestic and cross-border payments. And finally, it will offer new functionalities enabling banks to better integrate their euro liquidity management.

Moreover, to also mention a retail aspect, the ECB, and the Eurosystem as a whole, fully support the establishment of a Single Euro Payments Area (SEPA) from 1 January 2008. This means that citizens and enterprises will be able to make payments throughout the euro area from a single bank account using a single set of payment instruments, as easily and safely as today in the national systems. In addition, national infrastructures should progressively migrate towards a pan-European payments infrastructure with a view to achieving it by the end of 2010. Consequently, decisions related to the next generation of national systems should be made from a pan-European perspective to ensure compliance with the SEPA. The ECB is in a regular contact with the banking industry to seek market participants' support for these objectives. So, this is another example of where we are acting as a catalyst for private sector action to foster financial integration.

Let us now review the money market. The growing repo market is still somewhat less integrated than the unsecured segment which is fully integrated, but integration progresses. The creation of the EUREPO index - the benchmark for secured money market transactions in the euro area - three years ago was an important market initiative for promoting the repo market's integration. Anecdotal evidence collected via market survey from counterparties active in the repo market suggests that the share of euro area cross-border transactions increased further to around 30% in December 2004.

The least integrated segment of the money market is the short-term paper market. Indeed, this market is not only much smaller than its counterpart in the United States, but it is also segmented along national borders in the EU. In the United States, there is a single and very well developed market for commercial paper, with an outstanding volume of almost USD 1.5 trillion. In the EU, the market for comparable instruments is amounting to around EUR 750 billion. Fragmentation of short-term paper market reduces its depth and liquidity as well as the diversification opportunities for issuers and investors.

But I can also give you an example of the ECB's approach to fostering financial integration by acting as a catalyst for private sector initiatives. The Short-Term European Paper - the so-called STEP - initiative was set up by the ACI Financial Markets Association. It aims to promote the convergence of the practices through market players' voluntary compliance with the standards set out in the STEP Market Convention. The Governing Council of the ECB has decided to support in principle the activities pertaining to the introduction of a STEP label for the first two years after its launch and to produce and publish related statistics.

After the money market, the market segment closer to the implementation of monetary policy is the bond market. As regards government securities, a high degree of integration has also been achieved. Yields are driven by common news - euro area-wide shocks - and only a very small fraction can still be explained by local risk factors, although this also varies between the maturity segments. Local shocks play the smallest role in the highly liquid ten-year maturity segment, but there is scope for further integration, particularly in shorter maturity segments.

As regards the euro corporate bond market, despite the exceptional growth it has witnessed since 1999. In terms of new issuing, the gap with the United States as regards the outstanding volume is still large. For example, the outstanding volume of bonds issued by non-financial corporations, for example, is now around USD 2.9 trillion in the United States, compared with EUR 600 billion in the euro area. The degree of integration of the corporate bond market is, however, fairly high. The yield differential between corporate bonds is explained predominantly by the rating and by common, maturity and coupon effects, whereby the yield variance explained by the country of issuance is close to zero.

One measure for the integration of equity markets is the cross-sectional dispersion of the country and sector returns. For the euro area, the dispersion of country-specific returns remains non-negligible, but it has become relatively less important in recent years, suggesting a higher degree of integration. This development is also supported by the increasing share of investment funds applying a euro area-wide

investment strategy - or, in other words, we are observing a decreasing “home bias” in their investment strategy. This share stayed at the still moderate level of 29% at the end of 2003 and there is still considerable room for it to increase.

I mentioned earlier the money market and its payment systems. Full integration of financial markets will call for appropriate integration of securities trading, clearing and settlement infrastructures. A significant process of consolidation has taken place since the introduction of the euro, although the European securities infrastructure remains fragmented.

The ECB has a particular interest in an integrated securities infrastructure because it uses it for collateralisation in the context of its monetary policy implementation and for intraday credit operations for payment system purposes. In addition, a major disruption in a securities settlement system could undermine the stability of the financial markets.

Let me give you an example of the contribution of the ECB, and the ESCB as a whole, to financial integration in the field of securities infrastructure. This time, I will refer to our responsibility of giving advice to the shaping of the legislative and regulatory framework of the financial system.

The ESCB and the Committee of European Securities Regulators (CESR) have jointly drawn up the “Standards for Securities Clearing and Settlement in the European Union”. Should a framework directive on clearing and settlement be adopted, which we support in principle, this directive would stipulate high-level principles to be further developed by implementing measures. We agree with the European Commission that the ESCB/CESR standards might form the basis of such implementing measures. In this respect, we also invite the Commission to explicitly recognise the overall responsibilities and tasks of the ECB, together with the national central banks, and in particular their role in the oversight of the securities clearing and settlement infrastructure.

Let me now address financial integration from the stand point of financial institutions.

2.2.2 Financial institutions and the regulatory and supervisory framework

Given its pivotal role in channelling funds into the EU economy, a well-integrated banking sector is a prerequisite for achieving a truly single financial market. I would like to describe the degree of integration in the euro area banking sector along three dimensions: first, cross-border consolidation or ownership; second, magnitude of cross-border activities; and, third, cross-border competition (i.e. the price component), where I would like to look at aspects of retail banking.

As regards the integration in ownership of euro area banks, banking consolidation has mainly taken place at the domestic level, and it witnessed peaks in the late 1990s when around 80% of all M&As in the EU banking sector involved domestic banks only. However, between 1999 and 2001 in particular, cross-border banking consolidation increased in both absolute and relative terms.

As regards cross-border activity of banks in the euro area, cross-border holdings of securities and inter-bank loans have experienced substantial growth. For example, at the end of 2003, around 45% of the securities issued by non-banks were held cross-border, twice as many as five years earlier. Around 25% of all interbank loans were granted cross-border, also up from around 20% in 1998. In contrast, cross-border loans to non-banks remained unchanged and low at less than 5% of all loans to non-banks.

This brings me to a third indicator of banking integration, cross-border competition and, in particular, the pricing of retail bank products. Of course, I fully acknowledge that the process of integrating retail markets is bound by some persistent home biases in lending to and borrowing from non-financial corporations and households. I also see some similarities to the observed lack of full cross-state penetration in the United States, after restrictions on cross-state banking were removed in the 1970s and 1980s.

The research findings are widely known: in the euro area, retail banking markets remain predominantly local. Apart from geographical barriers, there are many other reasons for cross-country interest rate differentials, such as economic, structural and institutional factors. These factors relate, for example, to differences in regulation, competition, bank-customer relationships and the overall development of the financial system.

Let me give a specific example of a retail banking market: the mortgage market. There is some evidence that mortgage rates are less correlated in the euro area than in the United States. Taking into account the size of the mortgage credit market, which in the EU represents an outstanding volume of around EUR 4 trillion, the costs incurred, through incomplete integration, cannot be ignored. In this

regard, the ECB supports initiatives from both the private sector and the European Commission to encourage further integration.

So what we need to do is to remove the remaining obstacles to effective cross-border banking in order to foster cross-border competition and further banking integration. Let me mention a few examples.

In the area of financial regulation and supervision, a key objective is to achieve a high degree of regulatory and supervisory convergence across countries. This will help to reduce the compliance burden on financial institutions, thus addressing one of the largest remaining obstacles to enhanced cross-border activities.

The extension of the Lamfalussy approach to the banking sector and the establishment of the Committee of European Banking Supervisors (CEBS) are milestones in this respect. The work of the CEBS is crucial to develop common benchmarks and best practices for the consistent implementation of EU Banking Directives as well as principles for cooperation between home and host supervisors. In addition, the forthcoming revision of the Codified Banking Directive will enhance cross-border co-ordination between supervisors and, in particular, it will provide an enhanced role for the authority responsible for consolidated supervision. Such an enhanced role will encompass co-ordination in the information exchange and a decision-making process for approving advanced approaches at group level under the Basel II framework.

More generally, the ECB welcomed the extension of the Lamfalussy approach to regulation and supervision to all financial sectors.⁵

The ECB Governing Council also provided its view on the European Commission's recent review of the Lamfalussy process.⁶ These are further important examples of where we have contributed to financial integration by giving advice to the shaping of the legislative and regulatory framework of the financial system.

And here I come to the preparation of the "post-FSAP strategy" that will soon be formally initiated when the European Commission issues its Green Paper for public consultation.

A promising framework has been established through the completed FSAP measures. And I clearly see the post-FSAP period as a "window of opportunity" for further enhancing financial integration. The ECB will certainly make its contribution in this respect. Let me already now mention three important elements.

First, the focus of the post-FSAP strategy should be on the effective and consistent implementation of the FSAP measures at the national level, with new legislation being kept to the strictly necessary minimum. In this respect, the implementation of the Lamfalussy framework represents a unique opportunity to achieve a consistent regulatory and supervisory framework for financial services. Second, the policies relating to the regulatory and supervisory framework should be complemented by and closely coordinated with other relevant policies for financial services, for instance competition policy. And, third, incentives should be provided for the private sector to play its role in exploiting the opportunities offered by the public action.

3. The role of inflation expectations in the ECB monetary policy strategy

Let me now turn to the second topic I would like to address today, namely the role of inflation expectations in the ECB monetary policy strategy.

3.1 Why do central banks care about inflation expectations?

The notion lying at the core of modern economics is that the expectations held by private agents or market participants about the future economic developments may have an immediate and eventually significant impact on actual economic outcomes. For example, focussing on inflation, which is the primary concern of a modern central banker, in many standard models used for quantitative policy analysis there is a direct impact of inflation expectations on the dynamics of actual inflation. It is easy

⁵ See the ECB Opinion on a new EU financial services committee organisational structure, extending the Lamfalussy process to all financial sectors (CON/2004/7) OJ C 58, 6.3.2004, p. 23.

⁶ See the ECB press release of 18 February 2005.

to rationalise this mechanism by thinking about the effect of, say, higher expected inflation on workers' wage claims, which will be increased today in order to compensate for the expected loss of purchasing power tomorrow. More generally, one may also think of the effect of higher expected inflation on firms' current pricing decisions: these will tend to push up the price of their output in order to compensate for the expected increase in marginal costs of production. In both examples, the outcome is that when inflation is expected to increase in the future, it may immediately put upward pressure on prices.

Hence, a modern central bank with a public mandate of maintaining price stability must take into account, among other indicators, those related to inflation expectations in order to evaluate at any point in time the overall risks surrounding the attainment of its objective.

This implies assessing the possible effect of inflation expectations on actual inflation and measuring the degree to which the public regards the central bank's commitment to attain price stability credible and worthy of trust. Unstable inflation expectations dynamics might emerge because market participants do not believe that the central bank is truly committed to maintain price stability or that its assessment of the current, and most likely, development of the economy is not consistent with that objective. In such a situation, the task of monetary policy becomes very difficult. Reigning in inflation expectations will demand a tighter monetary policy stance than it would have been deemed necessary in case of full central bank credibility. In the end, in those circumstances, social welfare will suffer.

3.2 *Monitoring a wide range of expectation indicators*

The ECB does not rely on a single indicator when monitoring expectations but rather takes a comprehensive and pragmatic approach that balances off the information provided by various sources. By their very nature, inflation expectations are not directly observable or measurable. Furthermore, the way private agents form and update their view on the likely developments of an economic variable, including inflation, is likely to be different in important dimensions across different types of agents. From this perspective, relying on a single measure of expected inflation in the context of its assessment of the monetary policy stance may mislead the central bank, even if that measure is constructed on the basis of the central bank's own internal analysis.

It is for those reasons that the ECB makes constant use of several measures of inflation expectations that are either based on surveys, thus providing a direct measure of agents' expectations, or are based on the analysis of information contained in asset prices, which provide an indirect gauge of the inflation path expected by market participants.

To be sure, both measures only represent an imperfect gauge of inflation expectations thus requiring careful analysis and full awareness of the limitations inherent in the information they convey. The survey measures that are typically analysed by the ECB, like the ECB Survey of Professional Forecasters, the Consensus Economics forecast or the European Commission's monthly Business and Consumer Survey, suffer, like all survey measures from the inherent limitation that they are constructed on a restricted and heterogeneous sample of respondents and from the uncertainties linked to the design and the implementation of the survey.

Furthermore, also those indirect measures of inflation expectations extracted from asset prices, like the "break-even" inflation rates that are calculated from the yields offered by nominal and inflation-protected bonds with the same maturity present some limitations. In particular, several premia, like an "inflation risk premium" but also a "liquidity premium," are potentially embodied in their calculation. Changes in break-even inflation rates over time could therefore reflect changes in the level of expected inflation, but also changes in the perceived degree of uncertainty about future inflation, changes in the perception of the liquidity risk, or a combination of the three.

The information that we gather from these diverse sources at present is consistent with a picture of stability.

For what concerns the survey evidence, it has been extremely stable at the level consistent with the ECB's definition of price stability since 1999. In the most recent survey, conducted in the 1st quarter of 2005 the mean point estimate for HICP inflation indicated by the respondents to the ECB survey remained close to and below 2%, in line with the ECB's quantitative definition of price stability and with the Survey results for the previous quarter. This holds true for the expectations relating to the years 2005 and 2006, but also for the five-year period up to 2009. The comparison with the results of the Survey for the last quarter of 2004 confirms that the uncertainty surrounding these forecasts remains contained, and for the longer horizon has even slightly decreased recently.

Inflation expectations as embodied in asset prices have also been quite stable. The “ten-year” break-even inflation rate calculated from the index-linked both with maturity 2012 and issued by the French Treasury in 2001 has averaged approximately 1.9% since its issuing. This reflects a fairly sound anchoring of inflation expectations in the euro area around levels consistent with the ECB’s definition of price stability. We nevertheless observed an episode of transient instability occurring during the Spring and the Summer 2004, when the dynamics in oil prices caused global inflation expectations to increase. As a consequence, in the euro area, the break-even inflation rate peaked at 2.4%. Those movements proved to be short-lived and the break-even inflation rate has since returned to levels that are closer to our definition of price stability, albeit marginally above 2%, possibly owing to the recent renewed upward pressures on oil price, which have increased beyond the 50 US Dollar threshold since February 2005.

The slight discrepancy between break-even inflation rates and survey expectations does not suggest at the moment, that long-term inflation expectations are not correctly anchored in line with the definition of price stability: We must take into account, in particular, the “inflation risk premium” embedded in the break-even inflation - given the uncertainties prevailing in oil markets - and the tendency of that discrepancy to diminish over the last months. However, these evolutions of break-even inflations rates command continuous monitoring.

3.3 Concluding remarks: The role of the ECB monetary policy strategy in anchoring inflation expectations

Let me conclude my intervention with some remarks on the link between the ECB’s monetary policy strategy and inflation expectations over the few years since the launch of the euro.

It remains absolutely remarkable that the real progress made in reducing inflation expectations in the core currency area in the few months leading up to the final decision over EMU participation in May 1998 was fully preserved at the moment of the transition and afterwards. It is my opinion that much of this success is owed to the monetary policy strategy adopted by the ECB in October 1998. This is not to deny that since the mid-1990s inflation and its volatility have declined significantly worldwide. However, it would be very hard to overlook the fact that our strategy allowed us to materialise what few observers at the time had considered possible: that the new currency could inherit, from day one of its existence, the best anchoring properties that were available in Europe’s most revered monetary tradition. And that the solid anchoring of expectations which had been brought about by the completion of the transition to monetary union could be fully preserved all along the past six years.

The founding principles which I view as the distinctive necessary conditions to such a remarkable achievement can be summarised in some decisive factors of the institutional framework of EMU on the one hand and of the ECB’s monetary strategy on the other hand.

First of all, the Treaty clearly establishes that monetary policy in the euro area is conducted by an independent central bank. The Treaty itself guarantees for the independence of the ECB thereby ensuring that the ECB will have no impediment in pursuing its primary objective of price stability. Market participants in the euro area as well as social partners and the public at large know with certainty that the maintenance of price stability over time will not depend on short-term considerations of any nature. This is certainly a necessary pre-condition for the anchoring of long term inflation expectations.

Turning to the elements of the strategy that are more directly instrumental in helping long term inflation expectations to be firmly anchored to the ECB’s definition of price stability, I shall list first the clarity of the ECB’s objective. The ECB’s Governing Council aims at maintaining the euro area inflation rate at “below and close to 2%”. The wording is precise enough to provide a reference point for those individuals, social partners and market participants who need to take decisions based on the price outlook. At the same time, the definition of the inflation objective takes into account both the uncertainty that monetary policy has to face and the limits to its own actions. It is my opinion that inflation expectations in the euro area have proved to be consistently anchored in the medium term because everybody has appreciated the ECB’s honesty and transparency as well as its firm commitment to ensure price stability in the euro area. Furthermore, people have recognised in the quantitative definition of price stability complete continuity with the definition existing before in the national currency areas that had crystallized the highest level of confidence.

The second element of the strategy that, I think, provides a solid conceptual anchoring to inflation expectations is the comprehensiveness that characterises the macroeconomic analysis leading up to

the Governing Council's policy decisions. The ECB has always explained that its approach to organising, evaluating and crosschecking the information relevant for assessing the risks to price stability is based on two analytical perspectives, referred to as the "two pillars". The two-pillar approach is a way of conveying to the public the notion of a diversified analysis and of ensuring robust decision-making based on different analytical perspectives. In particular, by taking into account the two different, real and monetary, perspectives, the ECB is best equipped to assess the risk to price stability over the short-to-medium term and the long term, respectively.

It is my belief that our careful monitoring of monetary phenomena and our continuous vigilance upon to the developments in monetary aggregates is reflected in the stability of long term inflation expectations.

Finally, let me stress the importance of the medium term orientation of the strategy in anchoring inflation expectations. The ECB has always refused to give any specific definition of what it intends as "medium term". This reflects the awareness that monetary policy affects price developments with variable and uncertain time lags. And it rests on the notion that the optimal monetary policy response to shocks with a view to ensuring price stability always depends on the specific nature and size of the shocks affecting the economy. Hence, the medium-term orientation gives the ECB the flexibility required to respond in an appropriate manner to avoid that unnecessary volatility may, over the medium term, be detrimental to its own objective of price stability and, ultimately, to social welfare. The two pillar framework, in conjunction with the medium-term orientation of the ECB's monetary policy conduct has become a distinguishing feature of the strategy. The public's understanding of this approach has significantly improved over time and has contributed to preserve the high level of credibility that the ECB has been enjoying since its inception.

Thank you very much for your attention.