Ladies and gentlemen,

Let me thank Governor Corbo for his kind invitation to speak at this Second Summit Meeting of Central Banks on Inflation Targeting, hosted by the Central Bank of Chile. It is for me a privilege and a great pleasure to be here in Santiago and to have the opportunity to address this distinguished audience.

I would like to begin my intervention today by recalling two important events that took place in 1999. In that year, the Central Bank of Chile adopted a full-fledged inflation targeting strategy with a floating exchange rate. This monetary regime has served Chile well, providing a coherent and transparent framework that is credible in society at large because all the economic agents clearly understand the policy objectives and the rationale for decisions.

1999 was the same year that the Governing Council of the European Central Bank took up the responsibility for conducting a single monetary policy for the entire euro area, after a prolonged period of intensive preparations and successful economic convergence. A few months earlier, in October 1998, the Governing Council of the newly-created central bank had dismissed the adoption of either inflation or monetary targeting and had decided instead to develop its own strategy, which aims at maintaining price stability over the medium-term.

Today I will provide you with an overview of the monetary policy strategy of the Eurosystem. I will comment on some of the core principles of sound monetary policy that our respective strategies share and will point out some specific aspects in which they differ. And let me just note at this point that the Eurosystem’s monetary policy strategy – combined with its strong institutional set-up – has provided the right foundations for an effective and successful monetary policy in the euro area. I will conclude my remarks with some brief comments on the challenges ahead which have been brought about by the recent episodes of turbulence in financial markets.

Needless to say, my remarks today reflect my own views and not necessarily those of the ECB’s Governing Council.

Introduction

In June 2006 – just a few days before I took office as Governor – Banco de España hosted an International Conference on "Central Banks in the 21st Century", to mark the 150th anniversary of the adoption of its current name. At the Conference – which discussed the main challenges facing central banks today – Professor Allan Blinder provided a survey of relevant questions around monetary policy. His paper "Monetary Policy Today: Sixteen Questions and About Twelve Answers" followed up on a previous assignment he discharged in the form of a key-note dinner speech in Frankfurt in 1999, at what was the first research conference organised by the then brand-new European Central Bank. What I found noticeable from Professor Blinder’s 2006 presentation was that the list of issues had grown longer rather than shorter since 1999 (from 15 to 16), although he noted that this should not be misinterpreted as lack of progress. It was the result of dropping four issues from his list – because, in his view, they were either resolved or had moved out of the radar screen – and
adding five. Most remarkably, among the issues that had been dropped were low and stable inflation as the central goal of monetary policy, and central bank independence.

I think Professor Blinder was right to remove these issues from his list. There is a broad agreement among academic economists and policy makers alike that maintaining price stability is the best contribution that monetary policy can make to support sustainable growth and job creation. This consensus reflects the fundamental tenet that, as the rational expectations literature has helped us understand\(^1\), there is no trade-off between growth and inflation at horizons longer than the short run, and that the real effects of monetary policy are short-lived and uncertain. It is also now conventional wisdom that the public good of price stability is best safeguarded by delegating monetary policy to independent central banks\(^2\), which are not subject to interference from short-sighted political concerns. These consensual points – which are laid down in the Maastricht Treaty and, hence, have a constitutional character in the case of the EU – are a reflection of the painful, central bank led disinflationary processes that in many countries followed the so-called “Great Inflation” era of the 1970s and early 1980s\(^3\). They are also a sign of a more general dissatisfaction with the experience during those years of stop-and-go policies, where policy-induced booms proved later on to be unsustainable and short-lived.

In keeping with the primary objective of price stability, a number of central banks – following the lead of the Reserve Bank of New Zealand – adopted a strategy of inflation targeting during the 1990s. The key element is the public announcement of an inflation rate to be maintained over a more or less defined time horizon. Pioneers of inflation targeting were joined later on by a number of developing countries (for example Brazil, South Africa and Thailand) as well as by some East European transitional economies (such as Poland, the Czech Republic and Hungary). With hindsight, the policies pursued within this framework have been a success, particularly in those countries which – starting from a relatively high inflation level – needed to bring inflation expectations back into line with the central bank’s objective. But also other countries (like Norway) with no particular difficulties in terms of anchoring inflation expectations have moved in this direction, presumably because their central banks were convinced of the benefits per se of the strategy. At present some twenty central banks have adopted an inflation targeting framework\(^4\), and some observers would add a few more to that number.

**The monetary policy strategy of the Eurosystem**

The Eurosystem has not followed the same route. In October 1998, the Governing Council of the ECB dismissed the adoption of either inflation or monetary targeting and decided instead to select a strategy of its own, which aims at maintaining price stability over the medium-term. The idea was to develop a credible and flexible, tailor-made strategy that would allow for timely responses to a changing environment, while keeping in clear focus the objective of price stability. And it was necessary to take account of two key factors of that time: the regime shift implied by Economic and Monetary Union (EMU) and the heightened uncertainty that surrounded the introduction of the single currency. Whilst it was important to build on

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state-of-the-art economic research and on other central banks’ successes (including the best European monetary tradition), it was also crucial to recognise that the available strategies had been tried and tested in completely different contexts.

The Eurosystem’s monetary policy strategy consists of two main elements. First, the core feature is a quantitative definition of its Treaty mandate of price stability, to be maintained over the medium term. Price stability is defined as a year-on-year increase of below 2% in the Harmonised Index of Consumer Prices (HICP) for the euro area. In May 2003, after a thorough public evaluation of the strategy, the Governing Council of the ECB confirmed this definition and clarified that it will aim to maintain inflation rates below but close to 2% over the medium term. The clarification of May 2003 underlined the need to provide a safety margin against the risks of deflation as a result of monetary policy becoming ineffective due to the zero bound constraint on nominal interest rates, should the economy be hit by adverse shocks.

The second element of the strategy is a comprehensive analysis of the risks to the outlook for price stability, according to two perspectives: economic analysis and monetary analysis. These two perspectives offer complementary analytical frameworks to support the Governing Council’s overall assessment of risks to price stability. The economic analysis aims at identifying those factors that have a bearing on risks at short- to medium-term horizons. It includes, inter alia, projections of key macroeconomic variables and an analysis of shocks hitting the euro area economy. In turn, the monetary analysis – which has been broadened and deepened over time – draws on a wide range of tools, techniques, models and frameworks, complemented by the use of informed judgment, in order to identify risks at longer horizons. After the evaluation of the strategy in 2003, the Governing Council of the ECB explained that the monetary analysis mainly serves as a means of cross-checking the short to medium-term indications coming from the economic analysis.

When compared to the strategy of inflation targeting, the Eurosystem’s Monetary Policy Strategy shares the essentials: that is, the importance of price stability and the need for monetary policy to act pre-emptively and make comprehensive use of all available information. The strong belief that institutional independence must necessarily be supplemented by high standards of accountability and transparency is also shared by both camps. This is reflected in the growing weight that central banks, in industrial countries and beyond, place on the importance of communication. Emphasis on communication has also been boosted by central bankers becoming increasingly aware that effective communication facilitates the transmission of monetary policy decisions to the economy, thereby making their jobs easier.

Nonetheless, the Eurosystem’s strategy has some differences when compared with the inflation targeting strategies. Let me focus my comments in this respect on two particular issues: the relevant horizon for policy and the role of macroeconomic forecasts in policy-making and in communication.

The relevant horizon for policy

Inflation targeting is often described as a framework where monetary policy responds to deviations between a conditional inflation forecast at a specific time horizon, typically of around two years, and the inflation objective. From a welfare perspective, however, focus on an ex-ante fixed horizon is problematic for a number of reasons. In particular, economic theory suggests that the relevant horizon for monetary policy depends in a significant way on the size and nature of shocks affecting the economy, as well as on the prevailing circumstances (i.e. the initial state of the economy). Moreover, taken at face value, this approach neglects the implications of policy for price stability at longer horizons.
In connection with this last point, a number of researchers (and notably research at the BIS\(^5\)) have been arguing quite convincingly that that short-term inflation control is not enough to prevent the emergence of imbalances, which may lead later on to costly episodes of macroeconomic instability. They point to the “Great Depression” in the 1920s and to Japan’s “lost decade” as cases in point. And they argue that big policy mistakes surrounding those episodes would have been avoided had the Federal Reserve Board and the Bank of Japan paid closer attention at the time to credit developments and, more generally, to financial conditions. These lessons from economic history are even more relevant nowadays, when a range of innovations in financial markets have enhanced the possibilities for intermediaries to take and trade risk, thereby challenging the ability of prudential authorities to guard against excessive risk taking.

In recent years, the global economy has experienced the strongest sustained period of growth since the early 1970s. This impressive expansion has taken place, despite significant commodity price increases, against the background of relatively subdued global inflation and, throughout most of this period, a benign outlook within the horizons typically covered by forecasts. Better monetary policy has in turn been praised for its contribution to this formidable setting. It has been argued that firmer anchoring of long run inflation expectations was responsible for the marked decline in inflation persistence and the more favourable short-term Philips curve trade-off. With inflation expectations well anchored, any given shock to inflation – coming from aggregate demand, energy prices, or the foreign exchange rate – would have a smaller effect on expected inflation and hence on trend inflation.

However, this favourable set of circumstances has co-existed until recently with numerous signs of over-abundant monetary and market liquidity: robust money and credit growth; high transaction volumes and small bid-ask spreads; low credit spreads and term premia; and reduced volatility across virtually every asset class. Those vulnerabilities have not gone unnoticed by central banks, as testified by past analyses in the ECB Financial Stability Review publication. Although market sentiment had proved extraordinarily resilient to events which in the past would have triggered sharp corrections (including the shift to less accommodative monetary policies in the major economies), the analyses identified the risk that the prolonged period of low rates might have created incentives for excessive risk taking and that a sudden tightening might leave, using Rajan’s words\(^6\), “a number of participants stranded on a limb of illiquidity”.

In my view, all of this warns against excessive focus on a fixed, excessively short-term time horizon for inflation targets. The Eurosystem’s monetary policy strategy abstains from specifying a fixed time horizon for policy. Through its diversified approach, it also accords due importance to assessing medium- to long-term risks to price stability. It is therefore well equipped to deal with the perils of short-termism, the temptations of excessive fine-tuning and the risks of asymmetric responses during upswings and downturns. It also permits appropriate account to be taken of the endemic pro-cyclical characteristics of the financial system and of boom-bust cycles in asset prices, and to consider under very specific, exceptional circumstances a policy of carefully leaning against the wind, despite the well-known intrinsic difficulties of identifying misalignments in real time.

The role of forecasts in policy making

Inflation forecasts are at the centre of inflation targeting strategies. Policy discussion and communication are organised around the forecast process, and decisions are often explained on the basis of deviations of the inflation forecast from an inflation target at a


\(^6\) Remarks at the Conference on Central Banks in the 21st Century, Banco de España, 8-9 June 2006.
specific time horizon. The numbers, including the baseline scenario and risks, are owned by the policy-setting committee.

The Eurosystem also produces macroeconomic projections. These are based on a combination of models and experts’ technical judgments and are owned by staff, rather than by the Governing Council. Twice a year, in June and December, projections are produced by the staff of the Eurosystem under the responsibility of the Monetary Policy Committee, which is one of the Eurosystem Committees composed of senior staff from the ECB and the national central banks.

The process leading to these broad exercises involves close interaction between staff of the ECB and the national central banks to ensure that the euro area projections draw on all available expertise – both at the country and euro-area levels – and reflect the consensus view of the staff. There are three main steps: First, initial assumptions underlying the exercise and covering interest rates, exchange rates, the international environment and fiscal variables are set, although they are reviewed and can be changed in the course of the exercise; second, the projection numbers are derived and agreed upon, following a process of peer review of the individual country projections, consistency checks and integration within the euro area framework; the third and final step is the preparation of a report for the Governing Council. In addition to the numbers themselves, the staff also produces a number of background analyses on relevant issues. In March and September, the projections are updated by the staff of the ECB. Summary reports of both the Eurosystem’s and ECB Staff’s projections exercises are released on the ECB’s web-site on the same day that the detailed projections are presented to the Governing Council. They are also published later on in the ECB’s Monthly Bulletin. Publication is intended to make clear the information set which is available to the Governing Council when taking its decisions, and not to explain the decisions themselves.

Due to the forward-looking orientation of the Eurosystem’s monetary policy, forecasts constitute necessarily a very important input into the decision-making process. They are particularly useful because they are able to summarise a vast amount of information and analyses within a coherent and internally consistent accounting and economic framework. However, unlike in the case of inflation targeting strategies, they do not constitute the main vehicle around which the policy process and communication are organised. The Governing Council of the ECB bases its policy judgment on these and many other inputs, which include inter alia competing forecasts from other private and public organisations as well as other pieces of information that, for a number of reasons, are difficult to integrate within the framework of the projections.

By way of example, information (i.e. data, indicators, analyses, etc.) that becomes available after the cut-off date for the projections cannot, by definition, be incorporated in the exercise. At a more fundamental level, we should acknowledge that even the state-of-the-art macro-econometric models of the kind used nowadays by leading central banks are, as yet, unable to fully incorporate a richer description of the economy’s financial structure. Wealth effects, swings in asset prices, credit and liquidity constraints and other financial frictions are not sufficiently taken into account. That results in an over-simplified view about the channels through which monetary policy can affect economic activity and inflation. It also affects the ability of such models to identify, and hence estimate with any degree of precision, the potentially significant role of financial variables and financial intermediation in the monetary transmission process.

Academic research is progressing on this front and, hopefully, at some point in time, workable and operational models will be developed that allow for more realistic settings where the complex interactions between the real and financial sectors of the economy are acknowledged in full and where financial variables (notably money and credit) play an active role in the monetary transmission mechanism. When this has been achieved, it will be possible to turn the two pillars of our analysis into a larger, single pillar as Vice President
Lucas Papademos has put it. Or, if you prefer another metaphor, we could join the two pillars with an arch, thus forming a solid bridge to support our monetary policy decisions.

But policy is an ongoing activity. Policy-makers cannot afford the luxury of waiting for research advances to happen. Empirical evidence supporting these advances is itself frequently uncertain and provisional, open to revisions. Constantly confronted with the burdens of judgment, we are very much like sailors in Neurath’s boat. And, in this respect, I believe that the Eurosystem’s monetary policy strategy has been particularly useful in helping us navigate through the deep waters of pervasive uncertainty and to make decisions in real time. In my view, the Eurosystem’s concept has clear strengths. It permits a diversified approach to the assessment of economic developments and the outlook for price stability. It encourages cross-checking between different forms of analysis. It is a pragmatic and robust approach intended to help avoid major policy errors.

The monetary policy strategy of the Eurosystem in retrospect

The ECB Governing Council had three main objectives in mind when it decided to announce a new monetary policy strategy for stage three of EMU in October 1998. First, the strategy should facilitate transparency and accountability, helping the public to understand and assess monetary policy decisions. Second, it also should promote credibility and confidence among euro area citizens that the Eurosystem would keep a clear focus on its constitutional assignment of maintaining price stability. And third, the monetary policy strategy was important for internal decision-making. It should constitute a conceptual framework for structuring information and provide guidance and consistent decision criteria to policy-makers, who are constantly confronted with alternative paradigms, limited information and difficult views about the current state and prospects of the economy.

Next year will be the 10th anniversary of the creation of the ECB and the announcement of the monetary policy strategy of the Eurosystem. In retrospect, the monetary policy strategy – together with a strong institutional set-up- has provided the right foundations for an effective and successful monetary policy in the euro area. The Governing Council of the ECB has demonstrated that it is well-equipped to take prompt and swift action in order to secure price stability over the medium-term. At the same time, it has retained the appropriate degree of flexibility to respond to shocks and to take into account the unique uncertainties facing the euro area. The average annual increase in the HICP since the launch of the euro has been very close to 2%, despite the sizeable adverse price shocks during this period. Moreover, long-term inflation expectations have been stable and well anchored at levels broadly consistent with the definition of price stability, as shown by the evidence coming from surveys or from indicators derived from index-linked bonds. The 318 million citizens of the euro area believe that price stability is here to stay. This is a considerable achievement that could not be taken for granted a few years ago. And the Governing Council of the ECB can claim credit for it.

Concluding remarks

But monetary policy is constantly confronted with new challenges and, certainly, developments since this summer (winter in this hemisphere, of course) indicate that we are not currently short of such challenges. At the beginning of July, the ECB Governing Council pointed out the risk of a potential abrupt shift in market sentiment. This risk materialised in August, although through somewhat unexpected channels. Growing default rates in the US market for subprime mortgages resulted in a loss of confidence in the valuation of structured

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credit instruments and the disruption of the asset-backed commercial paper (ABCP) market. As a consequence, conduits and structured investment vehicles (SIVs), which were borrowing in this market to finance their holdings of asset-backed securities, started facing difficulties to refinance themselves. Tensions spread to the interbank markets of most OECD countries, as banks began hoarding liquidity to meet their liquidity support commitments with conduits and to put the underlying assets on their balance sheets. Moreover, banks curtailed interbank lending because of uncertainty surrounding the potential exposures of their counterparties.

Since the summer, the global economy and the euro area have entered a period of increased financial market volatility, significant re-appraisal of risks and market nervousness. The Governing Council of the ECB is paying great attention to these market developments and, in particular, has acted swiftly to provide the liquidity that was needed to permit an orderly functioning of the money market, to reduce the volatility of very short-term interest rates around the minimum bid rate of the main refinancing operations, and to contain the risk that tensions in these markets would propagate through the banking system. The Eurosystem will continue to play its part to consolidate a smooth return to a normal functioning of markets.

The Governing Council is also monitoring very closely the macroeconomic effects that the recent episodes of financial unrest may have on the prospects for the euro area economy. Sound fundamentals and the expected robust global growth should support a relatively favourable medium-term outlook for economic activity. However, disruptions in financial markets have increased the uncertainty surrounding this outlook, which poses particular challenges for monetary policy. As a result, the Governing Council has indicated that it will need some time to fully grasp the consequences for its policy stance.

From today’s perspective, the modal scenario going forward is one of financial conditions normalising over a period of time, which could be protracted, although some low-probability, more challenging scenarios cannot be totally ruled out at the moment. Under this central scenario, the effects of financial market turbulence on borrowing costs would most likely be contained. In line with that, the consensus view that seems to be emerging among international organisations and private analysts is that, whilst some slowdown of growth may be expected, the overall effects would most likely remain moderate, with the euro area economy continuing to expand at rates close to potential going forward. Nonetheless, downside risks to growth have increased.

Other things being equal, a less dynamic growth picture could mitigate the risks to price stability. But, unfortunately, as often happens when we need other things to be equal, they are not. We are currently facing renewed inflation pressures, which come essentially from the dramatic increase of oil and food prices. The concern is that all this could lead to second-round effects in a context in which euro area labour markets have become tighter. It is true that in the recent past we have experienced various episodes of substantial increases in oil prices without negative consequences on underlying inflation. But pure extrapolation from this recent past may not be appropriate due to the possible existence of threshold effects. The persistence of the current inflation shock also entails the serious risk that inflation expectations could become unhinged and that, as a result, our credibility as central bankers could be significantly damaged. It cannot be forgotten that there is a two-way relationship between credibility and effectiveness of monetary policy. Effectiveness depends on the credibility of central banks. But, no less importantly, the credibility of central banks depends critically on the effectiveness of the monetary policy that they have applied.

The conduct of monetary policy has also been complicated over the recent period by sharp and abrupt moves in exchange rates, which might signal that the long-awaited correction of global imbalances is not proceeding in as orderly a fashion as we would have hoped. Against this background, the Governing Council is monitoring exchange rate markets closely. And, in this respect, the President of the ECB has repeatedly indicated that excess volatility and disorderly movements of exchange rates are undesirable for economic growth.
In summary, monetary policy is operating in an environment of heightened uncertainty. This is the result of the materialisation of some risks that we have been pointing out for a long time. First, the potential consequences of the turmoil in financial markets, which go beyond a sound reappraisal of risks and a less dynamic economic outlook. Second, renewed inflation pressures associated with the explosion of oil and commodity prices. And third, sharp and abrupt changes in exchange rates of late.

Academic economists like to put labels on economic periods. And I have referred to some of these labels earlier in my speech: the “Great Depression” of the 1920s, the “Great Inflation” era of the 1970s and early 1980s, and the “Great Moderation” we have witnessed since then. It is my hope that the increased uncertainty we are facing is conjunctural and does not become structural, and that we are not entering an era which, later on, academic economists could label as the “Great Uncertainty”. I believe that central banks are both willing and able to prevent this from happening.

Therefore, at this juncture it is particularly important that the Eurosystem remains focused on its fundamental mandate of maintaining price stability over the medium term. The Governing Council of the ECB has indicated in this respect that it is fully committed to acting in a firm and timely manner to ensure that any risks to price stability over the medium term do not materialise and that medium to longer-term inflation expectations in the euro area remain solidly anchored at levels consistent with price stability. Such anchoring is a prerequisite for monetary policy to make an ongoing contribution towards supporting sustained economic growth, well-functioning markets and job creation in the euro area. This is true now more than ever, when we are confronted with a panorama which is more uncertain than that which we have faced during recent years.

Thank you for your attention.