### Hermann Remsperger: Stabilising the economy and the financial system – lessons and challenges for monetary policy and supervision

Keynote speech by Professor Dr Hermann Remsperger, Member of the Executive Board of the Deutsche Bundesbank, at the 16th Central Banking Seminar of the Bank of Korea on "Global Stagflation Threat and Monetary Policy", Seoul, 21 October 2008.

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#### I Introduction

Governor Lee,

Members of the Governing Board of the Bank of Korea,

Ladies and Gentleman,

It is a great honour for me to be invited to deliver the keynote speech at the 16th Central Banking Seminar of the Bank of Korea on "Global Stagflation Threat and Monetary Policy". Given the ongoing turmoil in the global financial system and the related risks for the world economy, the topic of this seminar is well chosen and timely. Three closely interlinked developments are currently shaping events.

The public focus is, of course, first and foremost on the financial crisis. Starting from the United States in August 2007, the global financial system has been repeatedly shaken by new waves of heavy turbulence. These were driven by rapid and dramatic changes in market sentiment. Investors and lenders have moved from trusting anybody to trusting nobody. A situation in which liquidity was simply assumed to be given has turned into a situation in which funding markets are frozen and dysfunctional. Emergency measures have been taken by central banks and governments in many countries. These measures were often unprecedented in scale and unconventional in nature.

With the financial storm intensifying in recent weeks, an increasing number of financial institutions in advanced economies have been encountering severe difficulties. What started as a liquidity crisis is turning out to be more and more of a solvency crisis. It represents a growing danger to the supply of credit and the proper functioning of the economies in advanced economies. Moreover, the effects of the crisis are being increasingly felt in emerging markets, too. Many of these economies are faced with capital outflows and reduced export demand. Hence, we are confronted with a truly global challenge.

This brings me to my second observation. Surging commodity prices, until very recently, and the current financial market turmoil have resulted in a marked slowdown of global economic activity. With the financial crisis deepening, uncertainty about the outlook for the global economy is increasing, while growth risks are biased strongly to the downside. Following a roughly 5% increase in each of the past few years, the IMF now expects global economic growth to slow to close to 4% this year and to 3% in 2009. The economic slowdown is especially marked in the advanced economies. In these countries, the word recession has re-entered the public debate.

Third, with global economic activity weakening, inflation worries have abated. However, I would caution against the temptation to "declare inflation dead", as some observers have done. We saw a sharp rise in inflation worldwide, in particular from the end of 2007 up to the middle of this year. For the current year, the IMF is forecasting a rise of 3.6% in consumer prices in advanced economies and an increase of as much as 9.4% in the emerging markets.

Fortunately, the crest of the current wave of inflation seems now to have broken due to falling oil and commodity prices, reflecting weaker global growth. But it should not be overlooked that inflation in a whole number of countries has doubled within a relatively short space of time. In more than half of the emerging market economies, inflation spiked to double digits only recently. And, more importantly, at the moment inflation is diverging considerably across individual countries and regions. If this divergence were to persist or even widen, it is likely to complicate monetary and exchange rate policy for emerging markets with an exchange rate peg.

At this point, it might be useful to mention the so-called impossible trinity: Countries that peg their exchange rates to an anchor currency either have to control capital movements or cope with the interest rate policy of the anchor currency. Fixed exchange rates are sustainable only as long as there is no major divergence in inflation and growth vis-à-vis the anchor currency. This was the case during the period of the "great moderation". The risks posed by exchange rate pegs are now becoming increasingly obvious and in many emerging markets are rendering a stability-oriented monetary policy more difficult.

In my view, in an increasingly integrating world, the global economy needs more exchange rate flexibility in dealing with large shifts in relative prices that affect advanced and emerging countries differently. While interest rates in advanced economies are at comparatively low levels, significantly higher interest rate levels are required in emerging markets, given their still relatively high rates of growth. At the same time, history tells us that capital controls are a short-term solution at best. Therefore, interest rate differentials corresponding to different macroeconomic circumstances at home and abroad can be achieved only through sufficient exchange rate flexibility.

To a European observer, this line of reasoning sounds familiar. It has been at the heart of the discussion on European monetary and exchange rate policies ever since the collapse of the old Bretton Woods system. And in the following 26 years that preceded the creation of the euro, European countries tried almost every possible exchange rate regime to cope with the challenge of conducting independent monetary policies on an increasingly integrated continent. In the end, the corner solutions prevailed: a hard peg among European countries, and the euro area itself operating an independent float.

I will not go further into exchange rate issues.<sup>1</sup> Instead, I would like to invite you to join me on a journey through recent economic history – a journey with three stops. Our first stopping place will be the period of stagflation in the 1970s and early 1980s (section II). I believe that a number of important monetary policy lessons can be drawn from that episode. We shall then move on to our second stopping place. It is the period of the "great moderation" (section III), which began in the early 1990s and now seems have come to an end with the recent increase in macroeconomic volatility. This episode has another set of interesting lessons to teach us. Third, and finally, our journey will end with the current financial crises and a discussion of the many challenges facing central banks and supervisors in stabilising the financial system (section IV).

### II Lessons of the period of stagflation: Anchoring inflation expectations at a low level by means of a credible monetary policy

Let us start our journey with some monetary policy implications of the period of stagflation in the 1970s and early 1980s, when high inflation rates and recessionary developments were simultaneously triggered by oil price shocks.

I do know that likening the recent past to the 1970s and early 1980s is an oversimplification. Currently, the global economy is faced with multiple shocks. And it is precisely the heavy turbulence in the international financial markets that sets the present situation apart from the period of stagflation in the 1970s and early 1980s. Even so, this episode provides some important monetary policy lessons for the present.

<sup>&</sup>lt;sup>1</sup> For an in-depth discussion, see H Remsperger and A Winkler (2008), Emerging Markets and the Global Monetary System: The Challenge of Rising Inflation, Intereconomics (5), pp 268-277.

I believe these lessons can be summed up in one key message: anchoring inflation expectations at a low level is crucial for monetary policy to be successful. Anchoring both inflation and inflation expectations is essential in order to contain the risk of second-round effects induced by the oil price shocks and thus to counter the emergence of wage-price spirals. However, the first-round effects of oil price shocks – in other words, the direct increase in consumer prices due to the higher cost of energy – impose costs that have to be borne. The real transfer of wealth to the oil-exporting countries cannot be compensated by loose monetary policy.

With firmly anchored low inflation expectations, risks to price stability can be averted with a less tight monetary policy than would be the case with higher inflation expectations. Once high inflation expectations have become entrenched, monetary policymakers have to respond with high interest rates. The real economic costs of a disinflation process, which is inevitable sooner or later, are correspondingly high. Here, I would like to point to the experience of the Fed in the 1980s under Chairman Paul Volcker, known as the "Volcker disinflation".

And perhaps I may also recall that monetary policy was the subject of in-depth discussion during the period of high inflation in the 1970s and early 1980s. Concurrently, there was a growing willingness – or perhaps I should rather say "a growing necessity" – to implement newly developed monetary policy strategies. The Bundesbank and the Swiss National Bank were among the first central banks – following the collapse of the Bretton Woods system – to enter uncharted monetary policy territory with the introduction of monetary targeting. Although the road to price stability under the new strategy was bumpy at times, the final track record was convincing. The gearing of monetary policy to a quantitative objective and resolute interest rate responses pushed inflation in Germany down from a peak of nearly 8 % in the beginning of 1974 to 2  $\frac{1}{2}$  % by the end of 1978.

With this monetary policy strategy, the Bundesbank also mastered the second oil price shock very well: at just over 6 % in the spring of 1980, inflation in Germany remained below the 1974 peak, while inflation in the USA went up to 14  $\frac{1}{2}$  %. The rapid lowering of inflation expectations to a low level meant that Germany succeeded in "opting out of the great inflation" at an early stage.<sup>2</sup>

Put in a nutshell, the success of monetary targeting was based on the explicit, transparent and credible commitment to a quantitative objective. To be sure, institutional conditions and supportive measures also played a crucial part. These include the central bank's independence, a flexible exchange rate and, not least, an active communication policy. But the be-all and end-all of a successful monetary policy remain the three "C"s – credibility, credibility and credibility.

For me, the key lesson from the experience of the 1970s and 1980s is that a resolute, forward-looking and credible monetary policy can anchor inflation expectations at a low level. And let me add that the ECB was well advised to take due account of the monetary policy lessons of the 1970s and 1980s. According to survey data, average long-term inflation expectations since the introduction of the euro were broadly in line with our target figure of close to, but below 2%.

<sup>&</sup>lt;sup>2</sup> A Beyer, V Gaspar, C Gerberding and O Issing (2008), Opting Out of the Great Inflation: German Monetary Policy after the Break Down of Bretton Woods, paper prepared for the NBER Conference "A Retrospective on the Great Inflation", September 2008, available at https://nber15.nber.org/c/2008/gif08/beyer.pdf.

## III Lessons of the period of the "great moderation": Increasing globalisation calls for a long-term, symmetric interest rate policy based on a broad monetary policy analysis

And with this remark I would like to turn to the second part of our journey through recent economic history. From the early 1990s, low inflation rates were accompanied by an accelerated globalisation of the world economy. Cheap imports from emerging market economies with low production costs have dampened the rise in consumer prices in the industrial countries. This is supported by a number of empirical studies covering the period from the mid-1990s up to the middle of this decade.<sup>3</sup>

However, I would caution against drawing premature conclusions. We have been witnessing a reverse development, in particular since the middle of last year. The fact that the emerging market economies are becoming more closely integrated into the global economy means that their demand for commodities is also growing. This additional demand – along with some supply-side constraints – is playing a crucial role in the steep increase in global oil and commodity prices. The global surge in inflation until the middle of this year should teach us to regard the globalisation dividend of low inflation rates as not being permanent.

Moreover, I would like to emphasise that shifts in supply and demand in individual markets – either nationally or on a global scale – merely lead to a change in relative prices. Even in an increasingly globalised world, a broad-based increase in the general price level is and remains a monetary phenomenon. This generally accepted fact of monetary policy seems to have been overlooked somewhat in the period of the "great moderation", when globalisation kept inflation down for quite some time.

I would, in fact, like to go one step further: Central bankers can never afford to sit back and relax – even in periods of low inflation. It seems that price stability based on a credible monetary policy is not, by itself, enough to ensure financial stability. There are even some observers who advance the hypothesis that a credible monetary policy which anchors inflation expectations at a low level actually sows the seeds for a build-up of imbalances in the financial sector later on. In the literature, this is described as the "paradox of credibility".<sup>4</sup>

Has credibility – the be-all and end-all of a successful monetary policy – unintentionally become a risk to financial stability? In order to throw more light on this, I would like to explain briefly how financial imbalances could arise in the period of the "great moderation" despite stable prices – imbalances that ultimately became a threat to the real economy.

The years prior to the outbreak of the current financial crisis were marked by low nominal and real interest rates and abundant liquidity. The main driving forces were the accommodative monetary policy stance around the world in combination with excess savings in parts of the emerging world, in particular in emerging Asia – the so-called saving glut.<sup>5</sup>

In this environment, investors intensified their search for yield and increasingly underestimated underlying risks. This is suggested, at least, by the low and steadily falling cost of insuring against credit risk, in particular in the period from 2005 to mid-2007. High risk appetite boosted the demand for complex financial products: The risks of these financial instruments were not recognised or were ignored in many cases. At the same time, we observed a credit boom and strong output growth which neared the point of overheating, while the benign impact of globalisation kept consumer inflation in check.

<sup>&</sup>lt;sup>3</sup> See Deutsche Bundesbank, Globalisation and monetary policy, Monthly Report, October 2007, pp 15-33.

<sup>&</sup>lt;sup>4</sup> C Borio, and I Shim (2007), What can (macro-)prudential policy do to support monetary policy?, BIS Working Papers, No 242.

<sup>&</sup>lt;sup>5</sup> B Bernanke (2005), The Global Saving Glut and the U.S. Current Account Deficit, remarks at the Sandridge Lecture, Virginia Association of Economics, Richmond, Virginia, 10 March, reprinted in BIS Review 16, pp 1-10.

In addition, the propensity to lend normally follows a cyclical pattern. The quality of credit is generally better in an upturn than in a downturn. During the period under consideration, this contributed to the emergence of asset price bubbles. Developments on housing markets in a number of countries, including the United States, the United Kingdom, Spain and Ireland but also some emerging market economies, are a case in point. Higher house prices lifted the value of real estate collateral, which, in turn, made lending easier. In countries where mortgage equity withdrawal played a role, rising house prices also created an income illusion. This explains at least part of the over-consumption in the United States.

Recent events make us painfully aware of the fact that asset prices do not rise forever. Asset price corrections, too, can generate risks to sustainable growth. Falling asset prices tend to reduce the value of collateral and to increase banks' holdings of bad loans, thus reducing their scope to provide new credit.

The fact that adverse financial developments have a huge negative impact on the real economy is shown not only by the current events. A recent comprehensive study by the IMF demonstrates for the long period from 1960 to 2007 that recessions last longer when they are accompanied by tensions in the financial markets and the collapse of asset prices.<sup>6</sup> Although a build-up of tensions can remain unnoticed or deliberately be ignored for a long time, financial imbalances do have a destabilising impact in the end.

This brings me to an important lesson regarding the monetary policy decision-making process. Monetary policy analysis should be broad in design in order to detect financial imbalances at an early stage. It is precisely in a setting characterised by uncertainty that a diversified analytical approach is of particular value. For that reason, it is essential to enhance and strengthen both the monetary analysis and the analysis of financial market developments. I believe that it is necessary to interpret particularly pronounced price developments in the asset markets as a "leading indicator of financial instability".

The fact that financial sector imbalances are reflected in the development of various monetary indicators applies especially in the longer term. Recent empirical work tends to confirm the view that the correlation of medium and especially longer-term trends in monetary developments and inflation was underestimated in the period of the "great moderation".<sup>7</sup>

If the underlying monetary dynamics signal price risks in the medium to long term, monetary policymakers have to respond, for at least two reasons. First, a monetary policy that "feeds" asset price developments in an upturn may amplify the dynamics of the financial markets and encourage procyclicality. Second, the monetary policy response to downturns in the asset markets has an impact on market participants' risk perception in the following upturn. This is especially evident where monetary policymakers lower rates asymmetrically in times of severe financial market downturns and, at the same time, more than is warranted by the baseline outlook for prices and growth. Monetary policy should be applied symmetrically.

In the words of Axel Weber, Bundesbank President and member of the ECB Governing Council: "A more symmetric approach would treat boom and bust episodes not as isolated events but would try to look through the financial cycle in order to steady policy. To be more specific, a more symmetric policy would also realise implicit risks in times when money and credit growth is dynamic, asset prices go up and risk perceptions decline. This can create the need to act despite sufficiently low current inflation rates.

<sup>&</sup>lt;sup>6</sup> S Claessens, M A Kose and M E Terrones (2008), What Happens During Recessions, Crunches and Busts?, forthcoming IMF Working Paper, available at http://www.aei.org/events/ eventID.1759/event\_detail.asp.

<sup>&</sup>lt;sup>7</sup> K Assenmacher-Wesche and S Gerlach (2008), Interpreting euro area inflation at high and low frequencies, European Economic Review (52), pp 964-986.

This, however, does not mean that monetary policy should downgrade the price stability objective for the sake of other objectives. Rather, it means that central banks should take a longer-term perspective which takes into account the future inflationary consequences of such unfavourable developments."<sup>8</sup>

# IV Challenges for the stabilisation of the financial system: refining and implementing the Basel II framework, addressing procyclicality, and strenghtening the institutional setup of supervision<sup>9</sup>

The last part of our journey brings us right up to the present day, where we are facing a financial crisis of historic dimensions. While my topic is not crisis management but rather long-term crisis prevention, let me nevertheless begin with a few general remarks on the measures that have been undertaken so far by the central banks and governments in response to the deepening financial crisis.

Central banks' main objective, from the very beginning of the financial turmoil, has been to address the liquidity squeeze in funding markets, first and foremost in the money market. Responses have varied among major central banks and have evolved as the crisis unfolded. Essentially, central banks have provided short term-liquidity on a massive scale, including in foreign currency. They have also increased the supply of longer-term funding, sometimes in an internationally coordinated manner.

In addition, central banks have extended both the range of eligible collateral for their lending operations and the range of eligible counterparties for collateralised lending. At the level of operational instruments and procedures, the crucial need for a central bank's monetary policy framework to be broad and flexible in design has been clearly confirmed.

Moreover, central banks have adjusted their monetary policy stance at various stages as the crisis unfolded, taking into account differences in their mandates and in the expected impact of the financial turbulence on inflation and growth in their respective countries and regions. The coordinated interest rate cut earlier this month has to be seen against the backdrop of escalating financial market stress. In addition, the global economic outlook had taken a distinct turn for the worse, with the possibility of a further deterioration, while inflation had become less of a concern in view of falling oil and commodity prices.

With the financial crisis deepening and liquidity strains turning into solvency problems for an increasing number of financial institutions, governments around the world have been forced to adopt a broad range of emergency measures. These include the creation of various kinds of funds and guarantees to keep ailing financial institutions afloat and help them clean up toxic assets from their balance sheets. In addition, provisions have been made to inject capital into banks and insurance companies to compensate for the asset losses that cannot be recovered. Furthermore, many governments extended and strengthened bank deposit guarantees. In all these cases, taxpayers' money is involved, or at least at risk.

Given the scale and range of the current crisis, these measures were indispensable in order to prevent worse damage from occurring. But once the dust of the current financial turmoil has settled, the underlying regulatory framework has to be carefully reviewed in the light of the current experience.

<sup>&</sup>lt;sup>8</sup> A Weber (2008), Financial Markets and Monetary Policy, speech delivered at the CEPR/ESI 12th Annual Conference on "The evolving financial system and the transmission mechanism of monetary policy", coorganised by the Bank for International Settlements, Basel, 26 September, reprinted in BIS Review 116, p 3.

<sup>&</sup>lt;sup>9</sup> In this section, I am drawing on my recent keynote speech "Fundamental issues of stabilising the financial system", delivered at the conference on "Determinants and implications of the financial crisis" of the Frankfurt School of Finance & Management Bankakademie, Frankfurt, 17 September, reprinted in BIS Review 115, pp 1-7.

The list of recommendations agreed by consensus and adopted by the Financial Stability Forum (FSF) is at the heart of the longer-term international response to the financial crisis. This includes, first, an improvement in the supervisory framework for capital and liquidity as well as risk management within the context of Basel II. Second, the role of ratings and rating agencies is under scrutiny. And, third, there has to be enhanced transparency of institutions and markets in order to strengthen market discipline. Let me comment briefly on these three issues.

Basel II, the new capital framework for credit institutions, was initiated long before the outbreak of the financial crisis. By tailoring capital requirements more precisely to the specific risk profile of the credit institutions, Basel II provides incentives to improve risk management. I regard it as essential that the capital framework be applied worldwide.

Nevertheless, the current financial market turmoil has once again highlighted that we have to continue working on increasing the capital requirements for complex securitisations and for credit risks in the trading book.

As you are certainly aware, however, the recent events have raised fundamental issues of regulation with regard to stabilising the financial system, not only in banking supervision and securitisation business, but also, say, in connection with hedge funds and, as an especially pressing issue, in the case of the rating agencies.

In the United States, rating agencies have to be registered with the SEC. Furthermore, it should be borne in mind that Basel II relies on ratings for classifying the riskiness of bank loans. In Europe there is therefore a procedure for authorising and mapping agencies' ratings in determining a bank's minimum capital.

Following the experience with ratings in the recent financial crisis, the current practice of having only a non-binding IOSCO code of conduct is generally perceived to be in need of reform. The rating agencies themselves are in the process of reviewing their internal procedures and rating methods.

Furthermore, the European Commission has now put forward a proposal for consultation which envisages an authorisation procedure and the supervision of rating agencies – in other words, sovereign regulation. I would like to make two comments, which are of general importance beyond the European context.

First of all, every effort should be undertaken to ensure that solutions at the European or any regional level are consistent with a level playing field internationally. A common framework should be ensured by the IOSCO, since anything else might result in regional competitive disadvantages.

Second, emphasis should be placed on the investors' own responsibility when using ratings. Thus, for example, EU registration must not be seen as being "rubber-stamped in Brussels" and thus interpreted as a seal of quality for individual ratings.

Turning now to transparency, I would like to emphasise how crucial the market players and their behaviour are for financial stability. The key issue is the responsibility of the financial players themselves – both directly for their own actions, but also indirectly for the system as a whole. In order to reconcile the public interest in transparency with the marker players' individual preference for confidentiality, transparency has to be enforced by appropriate rules and regulations.

Beyond these specific improvements to be introduced into the regulatory framework, there is a crucial conceptual challenge for stability-oriented supervision. This is right at the top of the agenda internationally and, in my view, will also be under discussion for some time to come. Basically, the question is whether the regulatory framework for the financial system, as well as the provisions for accounting, act procyclically – and, if so, what can be done to counter that.

For the sake of simplicity, I shall interpret the term "procyclicality" quite narrowly for once, namely as a reinforcement of the natural cycle of the financial system. Procyclical policy and procyclical elements of regulation would amplify the natural upswings and downswings of the financial system. If this leads to boom-bust cycles, the viability of the financial system is jeopardised.<sup>10</sup>

Naturally, considerable caution is called for when dealing with the topic of procyclicality as we still know too little about the cyclical effects of regulatory provisions. To avoid any misunderstanding, I wish to stress that the current regulatory framework, with the risk-sensitive minimum capital requirements under Basel II and the use of fair value accounting under IFRS (or US GAAP), does contain cyclical elements.

As you know, the risk-sensitive minimum capital requirements under Basel II are based on probabilities of default, which fluctuate over the economic cycle. In a downturn, probabilities of default increase – along with the minimum capital requirements. Similarly, fair value accounting means that valuations fluctuate in tandem with market prices.

Let me start with possible procyclical elements in the Basel II framework. So far, it is unclear – and how could it possibly be otherwise so soon after the introduction of Basel II? – whether the cyclical fluctuations of the minimum capital requirements actually impact on the propensity to lend – in other words, whether they really have a procyclical effect. The extent to which this happens hinges on a large number of factors – for example, on how far the capital buffers exceed the regulatory minimum, on the willingness of the banks to expand or contract these buffers, and, naturally enough, on the use of alternatives, such as raising additional capital.

In addition, the potential antidotes to procyclicality have not yet been researched and tested in detail. This relates to components in the regulatory framework that dampen procyclicality, or even automatic stabilisers, which have an anticyclical effect and which are now being built into Basel II. For example, long-term averages are now to be used for the probabilities of default. And, by means of "prudential filters", the banking supervisors have ensured that fluctuations in the balance sheets do not impact fully on the level of regulatory capital.

Less than one year after the introduction of Basel II in Germany, the database is still very narrow. Knee-jerk responses, such as the general introduction of additional general capital buffers by means of Pillar 2, are therefore not appropriate in my view. What is called for instead is the close monitoring of developments and a careful analysis of the complex mechanisms of banks' capital management and of Basel II's impact over an adequate period of time. And if, but only if, procyclical effects are found to exist on a significant scale, they should be taken into account in a system-oriented supervisory approach.

I would also add that a possible procyclical nature of credit, in addition to its cyclical nature, would be an instability factor not only for the financial systems. It would also represent a further reason for focusing great attention on credit aggregates in the monetary policy analysis.

Regarding fair value accounting, the case for procyclicality is somewhat more obvious. In an environment like the current financial crises, where market prices are heavily influenced by fire-sales of assets as well as significant risk and liquidity premiums, an obligation to mark assets according to the mark-to-market principle can, in effect, exacerbate the downward trend of prices. Against this backdrop, international efforts to modify accounting standards with the aim of better reflecting the underlying value of assets are currently being

<sup>&</sup>lt;sup>10</sup> C Borio, C Furfine and P Lowe (2001), Procyclicality of the financial system and financial stability: issues and policy options, BIS Papers No 1; D VanHoose (2008), Bank Capital Regulation, Economic Stability, and Monetary Policy: What Does the Academic Literature Tell Us?, Atlantic Economic Journal (36), pp 1-14.

implemented in a number of countries. However, modified accounting rules should not induce banks to postpone losses.

I would now like to talk about a number of fundamental institutional questions relating to the stabilisation of the financial system and the allocation of competencies among the various sovereign regulatory levels. I am doing this because, during the financial crisis, it has become clearer to me than ever before just how much institutions matter. I am therefore focusing my attention on the institutional framework for the monetary, supervisory and regulatory infrastructure.

The US Treasury has presented an ambitious but cogent overall strategy for a longer-term reform of financial supervision. The "blueprint" addresses the current fragmented structure of financial supervision. It envisages a radically overhauled institutional structure, with a complete change of design in its tasks. I see one particularly important aspect of this blueprint in the fact that the Fed, in the role of a "market stability regulator", would, for the first time, institutionalise a primarily macro-oriented perspective on the financial system. I await the ongoing evolution of this debate with keen interest.

When I now look at the institutional structure for financial stability in Germany and in the Eurosystem, I would like to highlight the synergy effects between operational money market management and banking supervision. The financial market turmoil has shown us quite clearly that these synergy effects can indeed be very large. As the Bundesbank is closely integrated into banking supervision, we can also fully exploit such synergy effects. Our deliberations on the time profile of liquidity provision and, hence, our stance in the Eurosystem benefit from general information passed on from our banking supervisors. Conversely, the insights gained from regular contact with the banking industry in the practical conduct of refinancing operations and in payments are helpful to the banking supervisors.

Finally, I think that the international governance of the financial systems has to be subjected to critical scrutiny. If we are thinking about changes, I believe we should strengthen those institutional structures that did their job well during the financial market turbulence. For me, this means that, first and foremost, the FSF should continue to play a key role. Its membership drawn from central banks, ministries of finance, supervisors, regulators and international institutions means that the holistic assessment of the financial system is one of the main strengths of the FSF.

The International Monetary Fund should mobilise all its resources in the FSF, above all, with an in-depth analysis of the way the financial system interacts with the real economy. For the analysis of these interactions, the IMF can draw on decades of experience in Article IV consultations and a decade of financial sector assessments.

#### V Conclusions

Ladies and gentlemen, what are the key lessons and challenges that we should take on board from our journey through economic history, from the stagflation episode of the 1970s and early 1980s to the financial crisis of today?

One simple but fundamental lesson consists in knowing the strengths, as well as the limitations, of the various areas of policy. The primary mandate of the central banks is to safeguard price stability. At the same time, they often also have the task of contributing to financial stability. Price stability and financial stability are, in turn, necessary conditions for sustained growth and prosperity.

Regarding the primary mandate of central banks, three important lessons can be drawn from the past decades. First, anchoring inflation expectations at a low level is and remains of crucial significance. Here, credibility is the key to success. Second, monetary policy has to be symmetric. It is important to identify emerging financial imbalances at an early stage and, if necessary, respond accordingly. A broad-based monetary analysis turns out to be an important analytical device. Third, in a world of growing real and financial integration, a sufficient degree of exchange rate flexibility can help ensure price stability when macroeconomic conditions differ at home and abroad. While many advanced economies have learned that lesson – sometimes the hard way – it still poses a challenge for some emerging market economies.

This brings me, finally, to the challenges. It has become very clear to me that a lasting stabilisation of the financial system calls for a holistic approach, which links the microprudential perspective to the macroeconomic situation and the developments in the financial markets. I firmly believe that a stable financial system is not just a precondition for macroeconomic stability. Both are conditional on each other. Ultimately, stabilising inflation expectations finds its natural complement in the primacy of crisis prevention in the financial markets.

Thank you for your attention.