Ewald Nowotny
Governor
Oesterreichische Nationalbank

Opening Remarks

Dear Chancellor Faymann,
Dear President Trichet,
Ladies and gentlemen:
In the name of the Austrian central bank I would like to welcome you to this year's Economics Conference. We are especially grateful that Chancellor Faymann and President Trichet are with us this morning, given their heavy workload. Let me also use this occasion to thank the Austrian government under the leadership of Chancellor Faymann and Vice Chancellor and Finance Minister Pröll publicly for the good and respectful cooperation between the Austrian government and the Austrian central cank during very challenging times. I would also like to use this occasion, President Trichet, to express my full admiration and trust in your leadership of the ECB during these years of crises and especially also over the past few weeks. We all had to navigate, as you always say, in unchartered waters – and it was extremely important during these times to have such an experienced captain in command. My own life experience has taught me, that also in big-policy issues one should never underestimate the human factor.

Thus, it is essential for the ECB to have as a President a personality who, due to his life-long achievements, is able to convey full credibility that the ECB is and remains fiercely independent and inflexibly attached to price stability, our primary mandate. We are indeed proud that price stability has been fully maintained in the euro area since the inception of the euro more than 11 years ago.

Ladies and gentlemen,
This year's Economics Conference is entitled: "Central Banking after the Crisis: Responsibilities, Strategies, Instruments."

The term "after the crisis" seems somewhat premature and obviously needs some clarification: It refers to the specific role of central banks and the lessons to be learned from the experience of the last three years. But we have to be aware that there is a typical sequencing of crises – as Professors Reinhardt and Rogoff have shown (again) recently: A banking crisis tends to evolve into a general crisis of the financial sector. Via financing channels and wealth effects this then may trigger a crisis of the real sector of the economy. And this in turn via automatic stabilizer-effects and additional measures may lead to a crisis of public finances.

The big challenge is to prevent a vicious circle, where a crisis of the public sector then may again lead to crisis developments in the financial and real sectors of the economy. The prevention of such a vicious circle was indeed the main motivation for the actions taken by European governments and by the ECB this month.

At this conference, however, we do not intend to discuss primarily current crisis management, but will try to gain some insights – or at least some feeling – into underlying longer-term developments.

Those of you who know me from my academic profession know that I am a great believer in the importance of the knowledge of economic history, especially to understand economics as disequilibrium economics – to follow the approach of my academic teacher and friend, Kurt Rothschild.

So I ask you for your understanding that I will use these opening remarks to introduce some historical perspectives.

I will give you two citations and let you guess who made them and when. Both citations comment on the link between monetary policy and financial

stability, in particular on how central banks and monetary policy should deal with financial imbalances and ensuing financial crises.

Here is citation number one:

"[N]othing short of a sharp increase in short-term rates that engenders a significant economic retrenchment is sufficient to check a nascent bubble. The notion that a well-timed incremental tightening c[an be] calibrated to prevent [a] bubble is almost surely an illusion. Instead, we [...] need to focus on policies to mitigate the fallout when it occurs and, hopefully, ease the transition to the next expansion."

And here is citation number two:

"The idea that banks of issue can thwart financial crises – in the sense of preventing their occurrence – is absolutely wrong; however, large and solidly governed central banks can contribute crucially to alleviating a crisis as their strength and unquestioned credibility provide a safe recourse in a climate of general unsteadiness and eases the return of confidence."[1]

Now, for the solutions:

The first citation – and I am sure many of you have got this one right – is from Alan Greenspan. It is drawn from a 2002 speech of the then Chairman of the Federal Reserve before the annual central bankers' meeting in Jackson Hole. In his opening remarks, Greenspan discussed the recent experience of the sharp increase in the price of technology stocks – the dot-com boom – that had burst two years before in 2000. Greenspan argued that central banks stand no chance when it comes to preventing bubbles. First, they would have to be able to recognize a bubble when everyone else was still thinking that prices were driven up by technological progress or increased future earnings. Second, and this is the argument made in the citation that I have just given, the policy tool of the central bank, the short term interest rate, is very blunt: an increase in the interest rate is either too small to affect the targeted asset prices, or so large that the entire economy is hurt. So instead of using the interest rate preemptively, what central banks should do is to mop up the mess after the crisis, in fact what the Fed did after 2000/2001 by keeping the interest rate at very low levels for quite some time.

The argument of the second citation sounds very much like Greenspan: Again it is argued that central banks cannot (and should not) prevent bubbles from arising. Instead they should throw their weight behind a swift restoration of stable conditions after the outbreak of a financial crisis. However, the citation is not from Greenspan. You might have suspected from the somewhat archaic wording – like for instance the *"strength of the solidly governed central bank"* or the *"climate of general unsteadiness"* – that the citation is older. This is true. In fact it dates from 1870 and is drawn from a testimony of the then Secretary General of the Austro-Hungarian central bank (Oesterreichische Nationalbank), Wilhelm von Lucam, to the Hungarian Parliament. Lucam was a widely regarded expert in economic and monetary matters. In late 1869, the Hungarian Parliament called for a parliamentary commission on monetary reform. One of the subjects to be dis-

[1] *"Die Ansicht, daß Notenbanken Krisen entgegenwirken, muß ich unbedingt als eine unrichtige bezeichnen, wenn darunter die Verhütung von Krisen gemeint ist. [...] Dagegen können große und solide geleitete Notenbanken, namentlich auch in Handels- und Creditkrisen, zu einer milderen Abwicklung der Krisen wesentlich beitragen, indem ihre Kraft und ihr unbezweifelter Credit in dem allgemeinen Schwanken einen sicheren Rückhalt bietet und die Wiederkehr des Vertrauens erleichtert." Neue Freie Presse, 22 May 1870, p. 14.*

cussed was the Hungarian stock market crash of 1869.

Following the "Ausgleich" – the compromise that saw the creation of a largely autonomous Hungary within the dual monarchy of Austria-Hungary – the newly gained political independence and a series of bumper harvests fuelled optimism. New banks, railroads and other companies sprouted in Budapest, the period was named the famous "Gründerzeit" or "founder years". And in fact, at the Ringstraße in Vienna and in the center of Budapest you still see the marvellous buildings, giving testimony of the optimism of this period.

However, excessive speculation in Budapest led to a crash in 1869. In 1870, the disappointed members of the Hungarian Parliament were looking for the culprit, and the Oesterreichische Nationalbank (that issued money for both the Austrian and the Hungarian parts of the monarchy) was among the natural candidates. It is in this context that Lucam testified before the parliamentary commission, arguing that the Oesterreichische Nationalbank had been neither in there for the creation of the speculative bubble nor responsible for its eventual bursting.

He also argued that not only in the specific case but as a matter of principle, the Oesterreichische Nationalbank had no means at its disposal to prevent a bubble from arising but could only do its utmost in the period following the crash in order to restore confidence in the financial system and the economy at large.

Note a last interesting parallel in terms of timing between the statement by Greenspan in 2002 and the one by Lucam in 1870: both came a year after a heavy fall in the stock markets; in both cases the much larger financial crisis was only to come a couple of years later: Greenspan advanced his ideas of "mopping up" after the burst of the dot-com bubble in 2001, the true shock hit in 2007/2008. And it was in the year 1873, three years after Lucam's testimony, on the infamous 9 May – the Black Friday at the Vienna Stock Exchange – that ushered in a prolonged period of economic stagnation.

I hope these two examples have convinced you that the interactions between monetary policy and financial stability are barely new questions for central bankers. In fact, the debates were at the centre of the process that saw the emergence of modern central banking in England in the early 19th century.

At those times monetary stability had a slightly different meaning from today, mainly being understood as a stable price of precious metal (silver, gold, or both) in terms of the domestic currency. When talking about price stability today we look at a broader set of goods; in the euro area for instance the basket of goods included in the Harmonised Consumer Price Index (HCPI). However, both then and today monetary policy was principally guided towards monetary stability, and the questions about the implications of monetary policy actions and their interaction with financial stability do resemble each other quite a bit.

Is monetary stability a *necessary precondition* for financial stability? That is, do we need an environment of stable prices for a healthy financial sector? Or to put it even stronger: Is monetary stability *sufficient* for financial stability?

That would mean that having a monetary policy that successfully keeps prices stable is also by itself already a guarantee for stability in the financial system?

Or is the contrary true: that monetary stability, instead of ensuring financial stability, could lead to financial instability (a point made by BIS economists not too long ago). At first, it might seem paradoxical that something good – stable prices – could bring about something bad – financial instability. The idea here is that policies narrowly focused on price stability might miss arising imbalances in the financial area or even set in motion processes that put financial stability at risk. For instance, some have argued for the recent crisis that low inflation rates, low interest rates and a general sense of confidence in the ability of central banks to deal effectively with any shock to the economy that might come – all positive things, I would argue – have led economic agents to underestimate risks and to take positions that in the end turned out to be unsustainable.

How were these questions answered in 19th century England? In the 1820s and 1830s the English economy was rocked by several financial crises. In 1844 the Bank of England received new statutes, the famous Peel's Act, that put severe constraints on the ability of the Bank of England to issue banknotes.

In particular, all notes issued in excess of a fixed amount had to be backed 1:1 in gold. Compared to earlier practice, this rule was extremely strict. The hope of the authors of the law was that the monetary stability brought about by strict limits on the amount of banknotes in circulation would also prevent speculation in financial assets. This hope was disappointed only four years after the Peel's Act was signed into law, when the severe financial crisis of 1848 triggered a run on the Bank of England and forced the suspension of the convertibility of bank notes in metallic coin. The episode forced to recognize that the monetary target in itself was not enough to keep financial crises at bay. Instead, financial emergencies created a need for central bank action over and beyond the simple and automatic rules of a metallic currency. In the second half of the 19th century, the Bank of England implicitly assumed this responsibility and became the de facto "lender of last resort" for the financial system, a concept explicitly spelt out by Walter Bagehot in his 1873 book "Lombard Street".

Central bankers today are therefore in good company with their historic predecessors. Does this mean that nothing has been learned since Lucam's testimony in 1870?

I would strongly disagree. What it means is that there are some constants

in the basic challenges that monetary policy makers face. However, the possibilities that we have today are quite different from the possibilities 150 years ago. The financial system has evolved significantly since then, and so have the resources available to policy makers.

Lucam himself did not argue that speculative bubbles are benign and could be ignored. In his view, the inaction of monetary policy is rather grounded in a *helplessness* of policy.

Central banks cannot prevent speculative bubbles from arising because – I cite again from the Hungarian Parliamentary Commission – *"the only means [to prevent the emergence of crises] would be moderation in the entrepreneurial spirit and one cannot count on such moderation as the pursuit of quickly gained wealth will always be one of the prime moving forces of mankind."*[2] You would probably agree that *"the pursuit of quickly gained wealth"* is still one of the *"prime moving forces of mankind"* today and the hope on *"moderation"* is as elusive these days as it was as back in the 19th century.

However, as economic policy makers today we do dispose of a set of tools that can be used to moderate or guide *"the entrepreneurial spirit"* in a way that prevents the emergence of financial imbalances and ultimately financial crises. The regulation and supervision of financial institutions and financial markets are powerful instruments that were unavailable to my predecessors 150 years ago.

This brings me to what is the sort of *leitmotif* of the conference. Reform and significant strengthening of financial regulation and supervision is generally considered as the prime lesson coming out of the crisis experience of the last two years. Before the crisis, we had trusted the discipline of financial markets combined with microprudential regulation, i.e. the regulation of individual financial institutions. Both have failed to address the risks arising at the system-wide level; risks that could not be seen by looking at individual institutions and individual markets alone.

There is broad agreement now that the focus of regulation has to turn the stability of the financial system as a whole, what is termed "macroprudential regulation".

Macroprudential policy is the use of prudential tools (often the same tools as in microprudential regulation like capital requirements) with the explicit objective of promoting the stability of the financial system as a whole, not necessarily of the individual institutions within it. To be able to do so, macroprudential regulation takes into account explicitly the interlinkages between financial institutions and financial markets as well as the procyclicality of the financial system.

There is also broad agreement that central banks will play a crucial role within the new regulatory framework, evidenced already in the central position that the ECB and EU central banks will take in the European Systemic Risk Board (ESRB), a newly created body set up to assess and prevent potential risks to financial stability in a wide range of areas, extending from the financial situation of banks to the potential existence of asset bubbles or the good functioning of the market infrastructures.

[2] *"Entstehen Speculations-Krisen und in Folge derselben vielleicht acute Geld- und Creditkrisen durch Ueberstürzungen des Unternehmungsgeistes, so können solche Krisen nicht von vornherein verhütet werden, weil das einzige Mittel im Maßhalten des Unternehmungsgeistes läge und weil auf dieses Mittel insoferne nicht gerechnet werden kann, als das Jagen nach rasch erworbenem Reichthume immer eine der Hauptleidenschaften des Menschen bilden wird." Neue Freie Presse, 22 May, 1870, p. 14.*

But the devil is in the details. What exactly should central banks be in charge of and how are they expected to fulfil their tasks? These are still very much open issues. In the next two days of the conference we will have the occasion to look at the intersections of monetary policy and financial stability from various angles. As the title of the conference indicates, we will do so at three different levels: responsibilities, strategies and instruments.

The most general level is the question of *responsibility*.

Clearly, central banks are – if not by intention then at least by necessity – also responsible for financial stability. Yet, unlike in the domain of price stability, where central banks are solely in charge, the duty for financial stability is divided up among a larger number of agencies. This raises immediately the question how the responsibility of the central bank can be delimited optimally relative to the responsibilities of other public bodies like regulatory agencies? How can we ensure that necessary information flows freely?

How can we ensure that if there is a problem, there is someone who is responsible and is also in a position to act effectively? The issue of delimiting responsibilities between central bank, supervisors, regulation agencies and the government on the national level reappears on the international level. The crisis has clearly demonstrated the limits of national responses in dealing with cross-border, systemically important financial institutions, markets and instruments. This is particularly evident in the European Union where financial markets have integrated rapidly and cross-border entities have become much more important since the introduction of the euro, while at the same time the EU's supervisory framework has not kept pace, remaining fragmented along national lines.

The flip-side of responsibility is accountability. Given their responsibilities for financial stability what will be the criteria to judge the performance of central banks? This is very important for a public agency, in particular a public agency that enjoys a high degree of independence from daily political influence and can therefore not be held accountable at the ballot box. Accountability is relatively straightforward for the price stability target, even though we might debate whether headline inflation or core inflation or medium term inflation is the best target: a quick glance in the official statistics is enough to assess the success of monetary policy. With financial stability this becomes much trickier and even more so as the responsibility for financial stability – by its nature a much larger area than price stability – is held by several agents at once.

Independence is a crucial ingredient to monetary stability, this the success of the Eurosystem in keeping inflation low and stable since the introduction of the euro has well demonstrated. I would argue that independence is equally important in the area of financial stability, in particular macroprudential regulation (as has been argued by some authors e.g. at the IMF for quite some time). Like in monetary policy making, there will be occasions when determined action is called for that might in the short term hurt one or the other special interest in the economy.

In order to hold firm, independence will be indispensable. Underpinning the independence of central banks is crucial for their success in achieving the objectives which have been conferred upon us by the polity. Failure to achieve their objectives is a threat to

their independence. And rightly so: Independence is not an end in itself; it is a political mechanism helping that common political objectives such as price stability are attained. Central banks have to earn their independence every day. The introduction of new objectives for central banks therefore creates a host of issues in terms of the credibility of central banks. What if an objective and thus the measurement of success are not clearly defined? What if two objectives are in conflict? What if failure in one objective contaminates the credibility concerning another objective?

We will surely do our best to avoid failure, yet the question remains what to do if despite our best efforts results are not as we had hoped for. We will discuss central bank independence this morning and the issue is sure to reappear time and again throughout the conference.

Given the responsibility of central banks for price and financial stability, what should be the *strategies* employed and what are the instruments that we need?

Let us start with the traditional tool of monetary policy, the short-term interest rate. The Tinbergen principle states that one tool cannot serve two purposes; that is, interest rate policy cannot deal with both macroeconomic and financial stability at the same time. Still, events over the last years have implicitly revived the discussion of the interaction between monetary policy and asset prices. For many years the "mainstream view" was that monetary policy should not "lean against the wind" and/or should not include asset prices in the monetary policy objective function. We have seen that this was also the mainstream thinking in Austria in the 1870s.

However, there are strong indications that monetary policy does – at least indirectly – play an important role for financial stability by affecting the measurement of risk, risk perception and risk tolerance and has done so in the run-up to the current crisis.

Shall therefore financial imbalances be considered when deciding on the appropriate interest rate level? Or can we alternatively try to weaken the link between interest rate and risk perception and risk taking through technical improvement in the way risk is measured for regulatory purposes, and constrained through regulatory rules?

According to the Tinbergen principle we need two tools to deal with our two objectives of price stability and financial stability. Macroprudential regulation is this second tool. In the past, central banks have employed interest rate policy to achieve stable prices. When deciding on the appropriate level of the policy rate, we have taken the regulatory environment as given.

The question has been, for instance, given certain regulation on capital requirements for banks and on the working of securities markets, what is the impact of an increase or a lowering of the policy rate by a quarter percentage point. The mechanism through which a change in the policy rate influences the development of prices and the real economy – the so called transmission

mechanism – was seen as exogenous from the point of view of the central bank. This is in fact a sensible approach to microprudential regulation, which is concerned with the health of individual institutions. Microprudential rules, once agreed upon, are not altered frequently and certainly not in reaction to macroeconomic developments.

Macroprudential regulation, i.e. the use of prudential tools with the explicit objective of promoting the stability of the financial system as a whole, however, is per definition concerned with macroeconomic outcomes and much closer to the core monetary policy objective of the central bank.

The introduction of macroprudential tools is a game changer that raises very complex questions of interaction between, and coordination of, monetary policy and macroprudential use of (regulatory) instruments. I have already looked at this interplay in terms of central bank responsibilities and accountability.

In the daily handling of interest rate policy and macroprudential tools the existence of two tools raises tricky issues: Since monetary policy decisions may also affect financial stability, should central banks take into account the possible implications of their decisions on financial stability when making decisions targeted at future inflation risks? What would be the prescription when both goals conflict?

For the ECB, as I mentioned at the beginning, there is a clear priority for our statutory commitment to price stability. Therefore, the relevant strategy should be to avoid by pre-emptive action that conflicts of goals may arise. That means to have a strict regulatory regime that ex ante prevents the emergence of a financial crisis and that contains credible resolution mechanism in case of need.

But to prevent the sequencing of crisis, of which I spoke before, more fundamental changes will be needed. Austria fortunately has a rather conservative banking system, although there had been some unfortunate exceptions with which we had to deal in the past. But world-wide it is obvious that the financial sector, over time has become dramatically bigger and riskier. A striking example is the UK – with banking assets jumping from 50% of GDP to more than 550% over the past four decades – the main drivers being excessive leverage and often dubious so-called financial innovations.

The introduction of new macroprudential tools also raises the question of how these tools should be employed in practice. In particular, is it better to have fixed rules, for instance a formula linking capital requirements to loan growth, or should regulators be allowed to exercise discretion when setting capital requirements or leverage ratios?

Rules simplify life and resolve some of the problems of responsibility and accountability alluded to before: it is the rule that is responsible, not the regulator. On the other hand, the future cannot be perfectly foreseen and the prevention of future financial crises might necessitate different policies and

therefore significant discretion on the part of regulators and policy makers.

Ladies and gentlemen,

I am afraid, we have many open points here. But I believe it is the purpose of an event like the annual Economics Conference of the Oesterreichische Nationalbank to provide time and intellectual space to step back from the demands of everyday policy and look at the more fundamental questions behind policy making. This year we have slightly changed the format of the conference. All sessions and panels combine people with different backgrounds, thereby providing even more occasions for what I hope will be fruitful debates between academics, central bankers, commentators, practitioners and the public. I anticipate very productive discussions of these and other issues related to the future of central banking over the next couple of days.

Let me conclude:

Over the last months the dramatic events around Greece have reminded us that the crisis that began in 2007 is still far from over. Public finances in the entire euro area face significant challenges from the unexpectedly strong declines in GDP, leading to lower revenues while demanding higher public expenditures, coupled with structural problems in public finances that predate 2007. When turmoil in government debt markets reached unacceptable levels in early May, the ECB together with the national central banks of the Eurosystem intervened forcefully to stabilize markets, just as it did in August 2007 and in September 2008.

Providing liquidity in a moment of general uncertainty is a key role of central banks. We are the lenders of last resort. When banks stopped trusting each other in the wake of the collapse of Lehman Brothers, central banks stepped in to provide funds as long as it took to sort out the problems. We have acted similarly in the last month, though this time less in the interbank market but principally in the market for sovereign debt.

In both cases, however, the important point is that while central banks can calm *liquidity* crises, they cannot resolve *solvency* crises. For the banks after September 2008 this implied writing-off bad loans and raising capital, either in private markets or with the help of the public authorities. The central banks did provide crucial temporary relief; the long-run adjustments had to be made by the banking sector itself. In the current situation that means that the Eurosystem can ensure and will ensure that short-term volatility and speculation in financial markets do not derail the fiscal consolidation efforts in the euro area. Again, however, it is the governments that have to ensure that their public finances again become sustainable in the long run.

Within this context of uncertainty, the key ingredient to successful stabilization of the European economy is that the roles in economic policy remain clearly defined. The primary objective of the Eurosystem is price stability. The Treaty of Lisbon is very clear on that. Confidence in the long-run stability of the euro is a crucial precondition of economic stability and growth and thereby sustainable public finances. Be assured that the Eurosystem will stay the course.