SPEECH

SVERIGES RIKSBANK
SE-103 37 Stockholm
(Brunkebergstorg 11)

Tel +46 8 787 00 00
Fax +46 8 21 05 31
registratorn@riksbank.se
www.riksbank.se

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■ Communication - what demands are made of an independent central bank?

Introduction

I shall begin by thanking you for the invitation to the Swedish Economics Association. It has become a recurring and pleasant task for the Governor of the Riksbank to discuss the Riksbank's activities with this knowledgeable assembly.

Since I was last here, a year ago, quite a lot has happened in the monetary policy field. We at the Riksbank have, for instance, implemented a number of changes to make our communication clearer. We have replaced the earlier Inflation Report with a Monetary Policy Report. We intend that this change of name should signal that the report now contains a description of the considerations we have made when we have taken our interest rate decisions. Another new element is that we have now begun to present the forecast for the repo rate that we consider will provide well-balanced monetary policy ahead.

There is nothing strange about our methods of working changing over time. We are constantly trying to improve and develop our methods. After all, monetary policy is also to a large extent a learning process. In part, this is a case of gradually discovering shortcomings in our methods of working and trying to remedy them. However it is also because we live in a changing world, where we must adapt as demands on our operations change – demands that may come from various directions.

My theme today is that a modern, independent central bank needs to take many considerations in its monetary policy work, not least in its communication. There are above all two aspects that we must always take into account. The first is that we have a responsibility as an authority towards the Swedish people and their political representatives. The second is that we must communicate and interact with the financial markets when we implement our monetary policy.

I intend to devote the major part of my speech to illustrating some different aspects of the demands made of us. The areas I intend to talk about are *transparency*, *signalling* and *the future interest rate path*. There are no sharp dividing lines between these areas. How we regard the future interest rate path is, for instance, part of our signalling, and the quality of our signalling in turn has significance for how transparent we are. Transparency in itself is part of our role as a public authority. But I nevertheless consider it worth discussing them under separate headings.

The role as authority and interaction with the market

Let me before I do so say a few more words about our role as public authority and our interaction with the market. I intend to begin with the latter aspect. The interplay between the Riksbank and the market is of central significance for monetary policy. It is a question of mutual dependence. For example, the Riksbank is to supply an efficient payment system – a financial infrastructure. We also oversee the stability of the system. Moreover, we are responsible for providing Swedish banknotes and coins. However, at the same time we are dependent on the financial markets to implement monetary policy measures.

The game rules for our interaction with the financial markets have changed quite a lot over the past 25 years. The most dramatic changes took place in connection with the deregulation of the credit and foreign exchange markets that begin in the 1980s. The deregulation has contributed to more efficient pricing which better reflects demand and supply conditions. The efficiency of the financial markets has considerable importance for the impact of monetary policy via the transmission mechanism.

The impact of our policy also depends on how well we succeed in communicating our intentions to the market. The more open and clear we are, the better chance we have of influencing interest rate setting in the way we want, not just in the short term, but also over a part of the so-called yield curve. This makes some demands of our actions.

The other aspect – that we are a public authority with responsibility towards the general public and their elected representatives – also makes a number of demands of us. The public authority role means that we are at the end of a delegation chain. The people have elected a parliament which has legislated on the Riksbank's objective and appointed the General Council of the Riksbank. The General Council in turn appoints the Executive Board with six members who are to make the monetary policy decisions.

This type of delegation may be appropriate when political decisions risk leading to time horizons that are too short. This problem is dealt with in monetary policy by the Riksbank having a high degree of independence and a clear statutory task. Delegation may also be appropriate if there is a question of technically complicated activities. Monetary policy is such an activity. There are also many other authorities, for example, the Swedish Nuclear Power Inspectorate and the Swedish Civil Aviation Authority, who are responsible for technical issues that have considerable importance to society. Most people probably think that, for instance, the length of a runway at an airport or the design of the cooling system in a nuclear power station should be determined by experts and not through political voting.

Some of the demands made of us on the basis of our role as authority are fairly obvious. We must, for instance, to the best of our ability try to meet the price stability target we have been allocated. We must also be able to explain in a good way to the general public why we act in the way we do. This is particularly important as the Riksbank has such a high degree of independence. This independence means that it is important to be able to evaluate how we are carrying out our duties. To make it possible to evaluate us, we must be open and clear in everything we do.

But it is perhaps not as self-evident that the responsibility of public authority makes a number of other demands on our actions. This applies, for instance, to the forms for how we make our interest rate decisions and how we communicate our monetary policy intentions. The latter is usually called "signalling" in central bank language. I shall return to this.

Transparency – being open and clear

It was long common for central banks to be secretive and a little mysterious. One example, which today may sound fairly strange, is that the Federal Reserve, the US central bank, did not begin publishing the interest rate changes it had decided until 1994.[1]

However, over the past fifteen years, central banks have in general become increasingly open and clear with regard to their actions and intentions. This applies both in inflation-targeting countries like Sweden and in countries that have not quantified a target, like the United States.

Democratic reasons for transparency…

There are several reasons for the increased openness and clarity, or transparency, as it is usually called. The most important one is probably that the central banks have become more independent in relation to the political system. As I observed initially, it is the general public who, via the political system, are the central bank's ultimate principals. As the central banks became independent, it became more important that the general public should have an insight into their operations. It was quite simply not compatible with good democratic tradition for an authority allocated a high degree of independence to remain closed and secretive. Increased transparency was a means of creating legitimacy among the general public for the new system.

…and efficiency reasons

But there are not only political reasons as to why the central banks have become more open and clear. Another explanation is that many central banks have seen greater transparency as a means of more easily attaining their objectives and of making monetary policy more efficient. This applies in particular in the countries that have begun applying inflation targeting. One could call this an economic argument in favour of transparency. This is partly connected to the fact that if monetary policy is transparent it will become easier for economic agents to know that the interest rate decisions made are really aimed at achieving low and stable inflation. Openness and clarity can thereby contribute to increased credibility and anchor inflation expectations around the target. This was an important reason why the Riksbank began to publish its forecasts and other material on which decisions were based early on in the new inflation-targeting regime. I am convinced that we would not have been able to build up confidence in the price stability target as quickly as we did if we had not been as open as we were regarding our work and our decisions.

The economic argument in favour of transparency is also linked to the fact that openness and clarity are today considered an important part of the monetary policy in itself. According to economic theory, there is a correlation between interest rates with different times to maturity. Expectations of short-term interest rates, which the central bank governs, are important to the long-term interest rates. By influencing expectations of short-term interest rates, a central bank can therefore also *indirectly* affect interest rates with longer maturities. Greater influence over rate-setting for all maturities – the yield curve – will raise the degree of impact of monetary policy. This is sometimes called conducting monetary policy by "management of expectations". Monetary policy is to a large degree about influencing expectations. And the best way to do this is to provide good information.

The most obvious way for a central bank to influence expectations of monetary policy is to present the future path for the policy rate that the bank itself considers most reasonable. This is what the Riksbank began doing with effect from the first Monetary Policy Report published this year. I will talk about this a little more in a moment.

Let me take up a final argument in favour of transparency that I believe should not be underestimated. It is that by being open and clear towards the outside world we also become better in our analysis within the walls of the Riksbank. As transparency makes it easier to evaluate how well monetary policy functions, it quite simply increases the incentives for us to do a good job.

The objections are not convincing

However, not everyone is agreed that transparency is a general blessing. Academic research shows both advantages and disadvantages with transparency. A theoretical result from this research that has received much attention is that more public information from central banks and other authorities can in some cases be a negative element.[2] However, this result is based on the public information being of low quality. If the economic agents attach greater importance to poor public information than to their own better private information, the economy as a whole may suffer losses. However, this assumes that the public information is *much* poorer than the agents' own information – an assumption that is hardly true in practice.[3] A more reasonable assumption, in any case with regard to central banks and monetary policy, is that public information is not poorer than the assessments made by private agents. Central banks probably invest greater resources than any individual agent into studying the economy, assessing the economic situation and making forecasts. Reasonably, central banks should also know more about their own intentions than any other agent.

It is therefore possible to construct theoretical cases where a lower degree of transparency is preferable to a higher degree. But on the whole the research appears to indicate quite clearly that a high degree of transparency is something the central banks should aim at. It is easy to agree with this conclusion. Here I think that the demands on a public authority in a democracy have great importance. Then I believe that in practice there are limits as to how transparent a central bank can be. In some respects it is quite simply difficult to be open and clear. This applies, for example, to how much emphasis the central bank places on stabilising the real economy relative to stabilising inflation. In theoretical models this is usually represented by a special parameter in the central bank's so-called goal function. However, placing a value on this parameter which is then published would probably be very difficult in practice. The step from theory to practice is probably too great in this case, at least for now.

The interest rate path

An important part of the transparency concerns the central bank's communication of its monetary policy intentions. So, how open and clear should a central bank be with regard to its own assessment of the future interest rate path? I would like to reply "as open and clear as possible". And I believe that we at the Riksbank work in this way today. But the road to this standpoint has been very long and lined with various requirements and considerations.

With regard to the assumption of the future interest rate, central banks use three different approaches. The first is that the policy rate will remain unchanged throughout the forecast period. According to the second approach, the policy rate is instead assumed to follow market expectations. The third approach means that the central bank works on the basis of its own forecast for the development of the policy rate.[4, 5] The Riksbank has moved away from the first of the three approaches, via the second, to now publish and build its forecasts on the basis of our own view of what we consider to be a reasonable development in interest rates in the future.

Why did we take this step and why did we not take it before this year? Well, the easiest answer is probably that "everything has its place". A solution that at one point in time matches the requirements made of us will perhaps not work at all when conditions change. And the world around us is of course anything but static. Then there is also a measure of "learning by doing" in this.

From unchanged repo rate…

Up to October 2005 our inflation forecasts were made under the assumption that the policy rate would not change during the forecast period. The advantage of this method was that it illustrated in a simple manner when there was reason to change the policy rate. If the forecasts showed that inflation two years ahead would be lower than two per cent, this was a signal that the interest rate needed to be cut. If inflation would be higher, the interest rate usually needed to be raised.

This rule was easy to understand and was therefore a good educational tool. This characteristic was particularly important when the rule was introduced. It was a question of winning back confidence in monetary policy and anchoring inflation expectations around the new target of two per cent. To succeed in this it was necessary for households, companies and the financial markets to understand the motives behind the monetary policy decisions. Here the simple rule probably played an important role.

However, there were also considerable disadvantages. For instance, it is not a particularly realistic scenario for the policy rate to remain unchanged a couple of years ahead. It was therefore difficult to make forecasts that were totally coherent. The assumption also made it difficult to assess our forecasts and to compare them with those of other forecasters.

Moreover, it gradually became clear that this rule could sometimes be an obstacle to our communication. Too much focus was on the current interest rate decision and the inflation forecast exactly two years ahead. On the other hand, neither the general public nor the financial markets received any clear guidance as to how we viewed interest rate developments further ahead. As our credibility increased, we gradually gained greater scope to conduct more flexible monetary policy. This also led to a greater need to show that it is the entire expected sequence of events for inflation and the real economy a few years ahead that is important to monetary policy decisions, and not merely the levels we foresee two years ahead. And the focus should be on not only current interest rates, but also expectations of future interest rate changes.[6]

…to market expectations…

We left most of these problems behind us when we changed over in October 2005 to making forecasts based on market expectations of the future development of the policy rate. Compared with the assumption of an unchanged repo rate, market expectations normally provide a much more realistic forecast. This was one thing that made it easier to evaluate us.

However, an assumption that the policy rate will develop in accordance with expectations in the financial markets has its disadvantages. This perhaps applies above all to the difficulties in communicating the interest rate path when market agents' assessments differ substantially from those of the Riksbank. Another problem that could lead to a lack of clarity in communication is how market expectations of the development of the policy rate should actually be measured. It may be difficult to estimate and adjust for different premiums – the compensation for differences between securities with regard to the maturity, credit risk and degree of liquidity required by an investor. There are also different ways of doing it.

…to our own interest rate path

These problems disappeared or at least were much alleviated when we chose to present our own forecast for the interest rate path. One important reason why the new interest rate assumption was introduced was so that it would become easier to understand the motives behind our decisions. This creates better opportunities to evaluate monetary policy. It thereby provides good conditions for accountability and legitimacy for an independent central bank like the Riksbank. To refer back to what I said earlier this evening – I believe that the new system will enable us to better meet the requirements for openness and clarity made of us in our interaction with the general public and the financial markets.

As I mentioned earlier, it is probably difficult a central bank to be much clearer than this with regard to what they consider to be well-balanced monetary policy. We gain an even better tool for influencing expectations among households, companies and agents in the financial markets. This is a precondition for monetary policy to function well.

One aspect that may not have been given so much attention is that it has become simpler for households planning their private economy to form an impression of which direction the interest rate will take. Previously, many people were probably forced to rely entirely on financial advisers to understand how the Riksbank envisaged interest rate developments a couple of years ahead. Now this information is available in our Monetary Policy Report. In general, it can be observed that many people, particularly in the financial markets, put a lot of effort into making forecasts for the repo rate. If we can contribute to reducing uncertainty over how we ourselves view the future, this should be positive for everyone.

Manageable difficulties

But of course there are also some difficulties that need to be managed when a central bank presents its own forecast of the interest rate path. As you know, the Riksbank's monetary policy decisions are taken by an Executive Board consisting of six people. While the decisions we make concern the level of the repo rate applying until the next monetary policy meeting, we must also agree on what we consider to be a reasonable development for the repo rate throughout the forecast period. There may, of course, be occasions when the members of the Executive Board have different opinions. For instance, the members may disagree as to how quickly inflation should be returned to target after a shock. This type of situation may be complicated. But after all, we have managed to agree earlier on interest rate messages that have contained information on our future intentions.

Other arguments have also been put forward against publishing one's own forecast for the development of the policy rate. One is that it could damage our credibility and make communication with the general public and the financial markets more difficult. Let us assume that the central bank first notifies a particular interest rate path but that new information is received afterwards, which leads to a policy rate decision that differs from the path published earlier. According to this argument, the deviation could be perceived as a failure by the central bank and could impair the bank's credibility.[7]

However, I am fairly convinced that it is the other way around – that communication will now be clearer and more efficient. I believe that there is currently widespread understanding among households, companies and market participants that monetary policy must be adjusted when the prevailing conditions change. A forecast is by nature uncertain and this applies even more the further ahead it stretches. We have also been clear on this point. Our assessment of the development of the repo rate, as presented in the Monetary Policy Report, is a forecast. It is not a promise! When new information changes the economic outlook, we must of course reconsider our view of how the repo rate should be set in the future. But this is hardly a reason to refrain from being as open and clear as possible about what we currently believe will happen. As I have said on previous occasions – it would be roughly like the Swedish Meteorological Institute refraining from publishing five-day forecasts because conditions might change in the meantime.

Another argument against publishing interest rate paths is linked to the way the market functions. This means that in principle the financial market agents could stop looking for other information if they have access to the central bank's forecasts for interest rates in the slightly longer term. How the market views economic prospects is normally reflected in the long-term market rates. This source of information could thus be lost and this would impair the functioning of the market.

But I find it very difficult to imagine that the market agents would stop making independent assessments because we are now publishing our own view of interest rate developments. They know as well as we do that we are living in an uncertain world and that the forecasts we make are constantly being revised. They have strong reasons for continuing to look for information via other channels than the Riksbank and for assessing this information, even when we publish our forecast of the future interest rate path. In the long term, there are of course more factors than expected monetary policy which are significant for interest rates. Although we have as yet only had time to present one repo rate forecast, there has been no sign that the market has become “passive”. On the contrary, it has become clear that we and other market agents have had slightly differing views as to what would be a reasonable future development for the repo rate. In a way, this is a good sign. It is in the nature of things that forecasters make different forecasts, particularly in the slightly longer term. That it how it is when one works with economic forecasting.

Our assessment is therefore that any difficulties arising from the new assumption are manageable. But different types of interest rate assumption also make different demands on our communication. One important aspect of what the publication of our own interest rate path means is our method of signalling.

Signalling

Let me therefore go on to talk about the Riksbank’s signalling. By this I mean, quite simply, how we communicate our monetary policy intentions. In brief, the Riksbank’s practice can be described as follows. Between the monetary policy meetings the individual members of the Executive Board have often held speeches on the theme of "the current situation" or similar. In these speeches we have given our views on economic developments and sometimes also indicated, with varying degrees of explicitness, how we consider the interest rate should be set at the next meeting. It has on these occasions been clearly understood that the Executive Board members are expressing their own personal opinions. One could call this a sort of “signalling by degrees”. That is, when the interest rate decision has been taken at the monetary policy meeting enough information should have already been signalled by degrees so that economic agents are not taken by surprise. And on the whole, our signalling policy appears to have worked quite well.

But, like many other things, the demands made of our signalling have changed over time. Things look quite different today from when the inflation target was new and confidence in monetary policy was low. This is partly linked to the fact that for some years we have been an independent authority, with the demands for insight that this entails. It is also, as I have just implied, connected to the important changes we have recently made in our communication. Moreover, there may be some potential problems in the way we have signalled previously, although as I said it has worked fairly well.

I intend to mainly focus on the time aspect of the signalling, that is, when or how often we signal or should do so. I would like to point out that what I say here is my own personal reflection after just over one year as Governor of the Riksbank.

It is not an expression of the general view of the Executive Board. At present we are discussing the issues I am taking up here. And it is quite natural that we should discuss this. Since the inflation target was introduced we have been constantly working on refining and developing our methods of conducting monetary policy in general. There is hardly any reason to believe that signalling should have reached its final form and it is therefore not something that should remain outside of the general change process.

Reduced need for signalling

The changes we have made in our communication recently have significance for the need to signal. We now publish the path of the future repo rate that we consider most reasonable in our new Monetary Policy Reports. The reports also explain why we have chosen this particular path. These forecasts for the repo rate will be presented three times a year. At the meetings where no Monetary Policy Report is published we will make a qualitative assessment of whether the most recently published path "holds good", given the new information received. We can then communicate, for instance, that our assessment has not changed or that we now believe that the interest rate may need to be raised or cut slightly faster than we had previously assumed. This will make our intentions regarding future monetary policy as clear as they can be. In my opinion, this new way of working reduces the need for signalling prior to the monetary policy meetings.

Objections of principle…

It is also possible to raise issues of principle regarding when and how one should signal. The signalling has sometimes been a question of wanting to communicate that we have had a slightly different view of how the interest rate should be set at the next meeting than the market has expected. In these situations one can say that we have preferred to prepare the market by signalling a few weeks before a monetary policy meeting rather than to risk surprising them when the decision is announced. But it is not necessarily the case that much can be gained by "fine tuning" expectations over the course of a few weeks. Although this system has meant that we have sometimes been able to avoid strong reactions and indignant comments in connection with the actual interest rate decision, we have nevertheless had roughly the same reactions when we have signalled the probable interest rate decision a few weeks earlier. The question is then what value the signalling has had.

…not least because we are several members who must agree

Many questions regarding the signalling are connected to the fact that we are a group of persons making interest rate decisions. The Executive Board of the Riksbank is what is usually known as an individualistic committee.[8] This means, quite simply, that the members act as individuals. This applies both when we are out speaking and when the interest rate is set. The interest rate decisions are made through voting and the members can publicly state whether or not they share the majority view. In the case of so-called collegial committee, there is instead an agreement that the individual members' views are subordinate to the group's overall opinion. If there are internal differences of opinion, they are often concealed from the outside world and once a decision has been taken, all of the members officially support it.

The combination of making interest rate decisions in a group and signalling between the monetary policy meetings is not entirely problem-free. If we assume, for instance, that an individual member is to hold a speech a few weeks prior to a monetary policy meeting where he or she gives signals that the interest rate should be changed. Regardless of whether or not the Executive Board is an individualistic committee, I believe that sometimes there may be uncertainty as to who is actually sending the signal. Is it merely the individual member who is describing his or her view, or is he or she expressing the majority's opinion?

If different members were to send out different signals as to what should happen at the next meeting, it may also cause uncertainty as to which of them one should believe in the most. This is also a problem raised in academic research as one of the dangers of individualistic committees – the communication risks becoming a "cacophony of voices", without any clear message.[9]

A decision following the correct procedure

Here a potential conflict might arise with regard to the demands made of the Riksbank as an independent authority. The responsibility as an authority means that interest rate decisions must follow the correct procedure. It is important that our principals – ultimately the general public – have insight into the decision-making process. One expression for this is that minutes are taken at the monetary policy meetings, which are then published soon afterwards. Another is that the Chairman and Vice Chairman of the General Council have the right, according to the Sveriges Riksbank Act, to attend the Executive Board's meetings, which they usually do.[10] One might say that they are monitoring, on behalf of the general public, that everything is done properly, that the decision-making process follows the correct procedures. This means, for instance, that interest rate decisions may not be "mortgaged" in advance, as I described earlier.

This shows that at least in theory there are some problems in signalling prior to the monetary policy meetings. There is a risk of confusing the market or of "tying up" both the discussion at the monetary policy meeting and the actual interest rate decision. As the need for signalling has also declined with the changes made in our communication, as I see it there is good reason to reconsider the forms for signalling.

What conclusion do I reach then? Well, as I see it, it should normally be enough to give clear signals in connection with the seven monetary policy meetings held every year. Only in exceptional cases is there a need to signal prior to the monetary policy meetings. And this is the way it has functioned in practice in recent years. In the cases where we nevertheless choose to signal prior to a meeting, it should in my opinion be clear who is behind the message, for instance, the entire Executive Board. This method of working also guarantees the principle of following correct procedures and observable decision-making that in my opinion is required in our role as public authority.

Let me point out that what I have said should not be interpreted as advocating a transition from an individualistic to a collegial committee, or "putting a lid on" internal differences of opinion. Of course the individual Executive Board members should continue to be able to express their own opinions publicly. But as I see it, this should be more a question of afterwards clarifying and explaining personal deliberations made in connection with the monetary policy meetings. Differences of opinion within the Executive Board will also, as before, be made clear in the minutes of the meetings. Here I think, as I have said on earlier occasions, that there is also reason to consider further increasing insight by naming the members as they take part in the discussion, not merely if they have entered a reservation against the interest rate decision. This way, we would both follow the correct procedure for decision-making and everyone would know who stands for what.

Conclusion

Let me round off. Our method of working has changed considerably over time. But this is how monetary policy is conducted. The world around us is anything but static and the external demands made of our activities change. Within the bank we try to learn from our practical experiences and we always work to develop and improve our methods. This is always a question of finding suitable methods to manage both the authority role and the interplay with the financial markets.

Ever since the inflation target was introduced, transparency has been a guiding principle for us. We are currently considered to be one of the most open central banks in the world.[11] But getting where we are today has been a gradual process. The most recent step has been the decision to publish our own forecast of how the repo rate will develop. Hopefully this means we will become even better at explaining to the general public and the financial markets how we reason when making monetary policy decisions.

But the process does not stop here. We will continue to seek ways of increasing our openness and clarity. One area where I myself feel that it might be time to move on is the forms for our signalling. This applies even more after the changes we have made recently. In my opinion, the Riksbank should only in exceptional cases signal before formally making a decision at the monetary policy meetings. As I have said on earlier occasions, I also believe that it may be appropriate to name the members in connection with their comments in the minutes of the monetary policy meetings.

The purpose of the changes we make is of course essentially to become clearer and more efficient in our communication. The fact that we are constantly striving to achieve this is something that both financial market agents and the general public expect of us.

Thank you!

Footnotes

[1] See, for instance, Chapter 1, "Through the Looking Glass: Central Bank Transparency", in Blinder, A.S., (2004), *The Quiet Revolution: Central Banking Goes Modern*, Yale University Press or Geraats, P., (2006), "Transparency of Monetary Policy: Theory and Practice", *CESifo Economic Studies* 52, 111-152. Both of these are examples of good reviews of transparency in central banks.

[2] Morris, S. and H.S. Shin, (2002), "The Social Value of Public Information", *American Economic Review* 92, 1521-1534.
[3] Svensson, L.E.O., (2006), "Social Value of Public Information: Morris and Shin (2002) Is Actually Pro Transparency, Not Con," *American Economic Review* 96, 448-451.
[4] See, for instance, Blinder, A.S., (2006), "Monetary Policy Today: Sixteen Questions and about Twelve Answers", paper presented at the Banco de España Conference on "Central Banks in the 21st Century, Madrid, June 8-9, 2006 and Kontulainen, J., D., Mayes and J., Tarkka, (2004), "Monetary Policy Assumptions in Central Bank Forecasts", Bank of Finland Bulletin 4, 2004.
[5] However, the monetary policy decisions made by the central banks always apply to only the current level of the policy rate, that is, the level that will apply until the next decision is taken. There are some expectations. One example is when the Japanese central bank committed itself during a deflation crisis to keeping the policy rate at a low level during a certain period. For another example, see the press release from the Federal Reserve Board of Governors on 12 August 2003.
[6] See Jansson, P., and A. Vredin, (2004), "Preparing the Monetary Policy Decision in an Inflation Targeting Central Bank: The Case of Sveriges Riksbank", in the conference volume Practical Experiences With Inflation Targeting, Czech National Bank, Woodford, M. (2005), "Central-Bank Communication and Policy Effectiveness", essay presented at a symposium organised by FRB Kansas City 'The Greenspan Era: Lessons for the Future', Jackson Hole, Wyoming, 25-27 August and Faust, J., and D. W. Henderson, (2004), "Is Inflation Targeting Best-Practice Monetary Policy?", Federal Reserve Bank of St Louis Review, 86(4), 117-143.
[7] See, for example, Giavazzi, F. and F. Mishkin (2006), "An evaluation of Swedish monetary policy between 1995 and 2005", Reports from the Riksdag 2006/07:RFR 1, Committee on Finance.
[8] See, for example, Blinder, A.S., (2007), "Central Banking by Committee: Why and How?" *European Journal of Political Economy* 23, 106-123.
[9] Ibid
[10] Sveriges Riksbank Act (1983:1385), Chapter 3, Article 3.
[11] See, for instance, Eijffinger, S. and P. Geerats, (2006), "How transparent are central banks?" European Journal of Political Economy, vol. 22, 1-21.