



■ Monetary policy in Sweden

Introduction and summary

This memorandum provides a description of the goal and strategy of the Riksbank's monetary policy. The strategy has evolved gradually in the years since the inflation target was formulated in 1993, in response to practical experiences in Sweden and other countries and to new findings in academic research. The most important aim of this description is to explain how the Riksbank, when setting its interest rate, has scope to take into consideration both developments in inflation and in the real economy (growth, unemployment, employment, etc.). The memorandum can be summarised in the following points:

- The statutory objective of monetary policy is to maintain price stability.
- The Riksbank has specified an explicit inflation target whereby the annual change in the consumer price index (CPI) is to be 2 per cent with a tolerance interval of plus/minus 1 percentage point.
- Monetary policy is also guided by various measures of "underlying inflation". There is no single measure of inflation that consistently indicates the appropriate stance of monetary policy.
- Monetary policy acts with a lag and is normally focused on achieving the inflation target within a two-year period. The two-year time horizon also provides scope for taking fluctuations in the real economy into consideration.
- The Riksbank routinely takes into consideration changes in asset prices and other financial variables (exchange rates, house prices, share prices, household and corporate indebtedness, etc.) in monetary policy decisions.
- The Riksbank's forecasts are constructed assuming the repo rate (the policy rate) develops in accordance with market expectations.
- Openness and clarity in monetary policy are prerequisites for the successful combination of credibility for the inflation target and a flexible application of the target in the short term.

■ Background

The description of the Riksbank's monetary policy strategy in this memorandum is a further development and replacement of the clarification of the inflation targeting policy that the Riksbank's Executive Board made in 1999.¹ In comparison with that clarification, there is here a more detailed discussion of how the Riksbank has scope in its setting of the interest rate to take into consideration both developments in inflation and in the real economy (growth, employment, unemployment, etc.).²

In discussions of monetary policy in recent years, the question has been posed as to what possibilities the Riksbank has of taking other considerations into account besides the development of inflation. This question has primarily arisen in connection with the recent macroeconomic development in Sweden, where high growth, rising house prices and credit expansion have been seen along with low inflation and a weak labour market. This shows that there are reasons to further clarify the Riksbank's view of the principles that guide the conduct of monetary policy.

Furthermore, it is important to regularly restate the effects that monetary policy can, and cannot have on macroeconomic development. Even though the conduct of monetary policy is of crucial importance for the development of inflation a few years ahead, repo rate changes are a blunt instrument for controlling inflation in the short term. It is impossible to completely counteract all disturbances that affect inflation, the real economy and the financial markets. Also, monetary policy does not have the task of, and cannot be used for, achieving lasting higher employment or growth. What monetary policy can achieve, however, is to ensure an inflation rate which over a number of years is well in line with the inflation target and to contribute to dampening the fluctuations in the real economy. In this way, monetary policy can create good conditions for an efficiently functioning economy and a favourable, stable macroeconomic development.

The Riksbank's task and independence

The Riksbank is responsible for monetary policy. The statutory objective of monetary policy is to maintain price stability, which was established in the changes in the Sveriges Riksbank Act that came into force in 1999.³ The previous Act contained a more general formulation that the Riksbank was responsible for "foreign exchange and credit policies". According to the Riksbank Act, the Riksbank shall also promote a safe and efficient payment system. In the preparatory works for the Act, it was stated that the Riksbank, without prejudice to the price stability target, should furthermore support the goals of general economic policy with a view to maintaining a sustainable level of growth and high rate of employment.

These legislative changes also increased the independence of the Riksbank. Experiences in Sweden and other countries show that independence creates better conditions for maintaining price stability. Repo rate decisions are now made by the Riksbank's Executive Board. Interest rate decisions were previously made by the Governing Board, whose successor, the General Council, now has the main task of appointing the members of the Executive Board. According to the Instrument of Government, no other

¹Memorandum "Riksbankens inflationsmål – förtydligande och utvärdering", 4 February 1999, registration no. 1999-00351 DIR, or Heikensten, L., "The Riksbank's inflation target – clarifications and evaluation" Sveriges Riksbank Quarterly Review No. 1, 1999.

² Monetary policy of this kind is referred to as "flexible inflation targeting" in academic research on monetary policy and the Riksbank therefore sometimes also describes its strategy using this terminology.

³ The Act was adopted by the Riksdag (the Swedish parliament) through two decisions rskr (written communication from the Riksdag to the Government) 1997/98:147 and rskr 1998/99:11.

■ authority may decide how the Riksbank is to act in matters relating to monetary policy. The independence of the Executive Board is also emphasized in the Sveriges Riksbank Act, which states that the members of the Executive Board may neither seek nor take instructions when fulfilling their monetary policy duties.

One reason for the changes in the law that placed increased importance on stable prices and the independence of the Riksbank was for Sweden to comply with the requirements of the EU treaties. However, underlying these requirements – as well as the changes in monetary policy that took place in many countries outside the EU – were also the stabilisation policy experiences of the 1970s and 1980s, which clearly indicated that low, stable inflation was an essential prerequisite for the efficient functioning of the economy and a favourable and stable macroeconomic development.

Over the years, central banks have attempted different ways of providing the economy with a “nominal anchor”, for instance, maintaining a fixed value of the currency in relation to gold or some other currency or aiming at a particular rate of growth in the money supply. However, since neither a fixed exchange rate nor a money supply target has proven able to prevent excessively high rates of inflation, it has become increasingly common since the early 1990s for the “nominal anchor” for monetary policy to be formulated in terms of an explicit inflation target. Countries that have introduced an inflation target have also often introduced changes that have implied increased central bank independence.

The formulation of the inflation target

The Riksbank has formulated an explicit inflation target according to which the annual change in the consumer price index (CPI) is to be 2 per cent. One reason for the target not being set at zero is that it is difficult to achieve reductions of nominal prices and wages in those situations where such would be justified to achieve a good development of employment. A low rate of inflation can therefore facilitate necessary relative price and wage adjustments. Another reason often put forward is the difficulty of measuring prices correctly, in particular with regard to the proper handling of quality changes. A relatively high level of consensus has been established internationally that an appropriate level of inflation is around 2 per cent. Countries with inflation targets have therefore often adopted targets that entail that inflation should be around 2 per cent.

Inflation can be measured in many different ways, and a key issue is therefore which price index should be used when formulating the target. A decision must also be made regarding the time horizon within which the target is to be met once a deviation has occurred. The reason for this is that monetary policy lacks the speed and precision necessary to guarantee that prices in the economy at a particular point in time are exactly 2 per cent higher than a year before.

The need for a “nominal anchor” is an argument in favour of the inflation target being specified in terms of a price index that represents ordinary purchases and that is well-known to the public. This is the most important argument for the Riksbank specifying its inflation target in terms of CPI, which Statistics Sweden calculates and reports every month. To emphasize that it is not within the power of monetary policy to continuously achieve the target exactly, the Riksbank has specified a tolerance interval around the target of plus/minus 1 percentage point. At the same time, this tolerance interval serves to underline that excessively large deviations are unacceptable if the target is to remain credible. To further enhance clarity, monetary policy is guided by a principle according to which the aim is normally to bring inflation back to target within two years after a deviation has occurred.

■ The exact formulation of an inflation target cannot be derived directly from economic theory. An appropriate formulation will depend on each country's historical experiences, the nature of the central bank's independence in relation to the government, etc. The fact that the Sveriges Riksbank Act does not contain any detailed specification of the meaning of "price stability" and that this has been delegated to the Riksbank may be assumed to reflect such insights.

The role of different measures of inflation

Monetary policy is also guided by different measures of "underlying" inflation. There is no single measure of inflation that at each point in time indicates the proper stance of monetary policy. Nor is the question of which price index that is most relevant for monetary policy at a particular moment in time a purely technical matter of what is the "correct" measure of inflation. Different measures of "underlying inflation" are therefore often used to describe the development of inflation and to justify monetary policy decisions. These measures of underlying inflation have, in different ways, been adjusted for price components that tend to fluctuate sharply but which are not judged to affect the trend rate of inflation.

The Riksbank has specified a target in terms of the broadest measure for consumer price developments, CPI, but has also given a particular measure of underlying inflation a special status. This measure is called UND1X and is constructed by removing from the CPI the direct effects of changes in indirect taxes and subsidies and mortgage interest expenditure. The difference between increases in the CPI and UND1X is small in the long run although UND1X evolves more evenly in the short term than the CPI. Statistics Sweden also calculates and publishes UND1X. This measure is used because changes in indirect taxes and subsidies (due to fiscal policy) and in mortgage interest expenditure (due to monetary policy) often have effects on the CPI which should not give rise to any monetary policy response.

It is important to distinguish between the measure of inflation that is the target for monetary policy and those measures that have proven to be useful when making analyses and forecasts of inflation. The goal of the Riksbank's monetary policy is to stabilise the rate of increase of CPI at 2 per cent. To achieve this goal and to help explain the conduct of monetary policy the Riksbank sometimes highlights the development of other measures of inflation. The need to draw attention to alternative measures of inflation has, however, decreased now that the Riksbank has extended its forecast horizon from two to three years. The extended forecasting horizon makes it possible to show that there may be temporary effects on inflation during a two-year horizon that subsequently disappear relatively quickly.

The targeting horizon and real stability

Monetary policy is normally focused on achieving the inflation target within two years. One reason for this is that the effects of monetary policy appear with a time lag. Another reason is that the Riksbank, by aiming at this horizon, can contribute to dampening fluctuations in the real economy while at the same time maintaining the credibility of the inflation target.

The working group that produced the new Sveriges Riksbank Act discussed whether the target of price stability should be complemented with targets for, for instance, GDP growth and employment (Ds 1997:50). The working group considered that the Riksbank should support the targets for general economic policy with a view to

■ achieving sustainable growth and high employment without prejudice to the objective of price stability. When the Act was processed in the Riksdag (the Swedish parliament) it was considered that this followed from the Riksbank being an authority under the Riksdag and that no statutory provision was therefore necessary. Targets of this kind would moreover be difficult to reconcile with the regulatory framework of the EU and inappropriate bearing in mind the fact that monetary policy cannot affect growth and employment in a lasting way.

Permitting temporary deviations from the inflation target can be justified on the grounds of consideration to developments in the real economy. By not aiming to restore inflation to target as quickly as possible, scope is created to conduct monetary policy in such a way as to dampen real economic fluctuations. At the same time, it is important that this flexibility does not decrease the long-term credibility of the inflation target. The two-year horizon can be interpreted as a restriction as to how much consideration can normally be given to real economic developments, a restriction which – like the specified inflation target – the Riksbank has imposed on itself to make the target of maintaining price stability credible.

In certain circumstances, deviations from the inflation target can be so large that it is reasonable to allow inflation to return to target beyond the normal two-year horizon, provided that this does not undermine confidence in monetary policy. The Riksbank will make it clear in connection with the monetary policy decisions when it considers that a situation of this kind has arisen. The pace at which it is desirable to bring inflation back to target after a deviation depends on the disturbances the economy has been affected by. Accordingly, it is not possible to describe the monetary policy strategy by any mechanical rule of action. To determine whether, and if so, how the repo rate needs to be changed, an analysis must be made of the causes of the deviation of inflation from the target and also how the interest rate, inflation and the real economy interact.

Monetary policy and financial markets

Developments in the financial markets affect, and are affected by, variations in inflation and the real economy. Changes in asset prices and other financial variables (exchange rates, house prices, share prices, household and corporate indebtedness, etc.) are therefore routinely taken into consideration in monetary policy decisions. This should not be interpreted as introducing targets for different asset prices or other financial quantities, nor as attempts to manage potential problems in the payment system by means of interest rate changes.

The Riksbank does, of course, also have the task of promoting a safe and efficient payment system. In order for the payment system to be perceived as safe and efficient, it is required, among other things, that the banking system in turn is safe and efficient. The banks' activities are closely interwoven with the rest of the financial sector. The responsibility of the central bank for the payment system is therefore often expressed as a task to maintain financial stability. However, the repo rate is not an effective instrument for avoiding or solving serious problems in the payment system. Quite different measures must be taken if there is a threat of problems of this kind arising or, in the worst case, if they have already arisen. Monetary policy is thus designed taking into consideration the outlook for inflation (and the real economy) and not by taking financial stability into consideration.

However, situations may arise where the consequences for the real economy and inflation of the development of different financial variables threaten to become very unfavourable and serious without it being possible for that reason to quantify or

capture this type of risk in the normal analytical and forecasting work. For instance, the paths of asset prices and indebtedness can at times be either difficult to rationalize or unsustainable in the long term. This means that there are risks of sharp corrections in the future which in turn affect the real economy and inflation. It may be necessary to take these risks into account in monetary policy decisions in a different way than in the normal approach, where the forecasts for inflation and the real economy for the next two years serve as the foundation. In practice, taking risks of this kind into consideration can mean that interest rate changes are made somewhat earlier or later, in relation to what would have been the most suitable according to the forecasts for inflation and the real economy. However, the aim is as always to maintain price stability and dampen fluctuations in the real economy. The fact that the experiences of deregulated financial and foreign exchange markets are still limited to only a few economic cycles makes it difficult to establish any clear and simple principles for conduct of this kind.

The inflation forecast and interest rate decisions

During 2005, the Riksbank has shifted to making its forecasts assuming that the repo rate develops in accordance with market expectations (as reflected in implied forward rates). Previously, forecasts were based on the assumption that the repo rate would be unchanged during the forecast period. The new interest rate assumption is associated with certain advantages for forecasting. However, it is also important for how the interest rate decision is affected by the inflation forecast.

If inflation, assuming that the repo rate develops in accordance with market expectations, is expected to be close to target in a two-year perspective, the market's expectations about future monetary policy can normally be regarded as reasonable. However, to determine this more definitely, consideration must be given to the whole future paths for inflation and the real economy. If, for instance, inflation increases very rapidly during all of the forecast period, and real growth is high, it is possible that the assumed interest rate path will not be considered reasonable, even though inflation is close to 2 per cent after two years. In this case, the assumed interest rate path probably means that monetary policy is too expansionary. This, in turn, can lead to unacceptably large fluctuations in real activity. A desirable monetary policy is characterised by inflation normally being close to the inflation target in a two-year time perspective while at the same time the paths for inflation and the real economy do not exhibit excessively large fluctuations.

Previously, when the Riksbank based its forecasts on an unchanged repo rate, monetary policy was, somewhat simplified, described by a simple rule-of-thumb: the repo rate should normally be changed if the forecast inflation, given an unchanged repo rate, deviated from the target. Nowadays, when the forecasts assume that the repo rate develops in line with market expectations, this simple rule-of-thumb can no longer be applied. It is the developments over the whole forecasting period of inflation and the real economy that determine the desirable interest rate path. However, this does not mean that the Riksbank has changed its monetary policy strategy. Monetary policy is still normally focused on bringing inflation back on target within a two-year period.

Openness, clarity and communication

Openness and clarity in monetary policy make it possible to combine the credibility of the inflation target with a flexible application of the inflation target in the short term which is not perceived as arbitrary. The fact that the Riksbank has the task of specifying

independently the price stability target and the considerations to be given in relation to other goals for economic policy in the short term also make great demands on how these decisions are to be explained to the general public and to the Riksdag.

The Riksbank's strategy for carrying out these tasks successfully is to be as clear and open as possible concerning the information and the considerations on which monetary policy decisions are based. The fact that the Riksbank has chosen to specify an exact target for inflation (with a certain tolerance interval) and the principle that inflation should normally be brought back to target within two years can both be justified by the aim of creating clarity and credibility for the inflation target.

Analyses of the determining factors of inflation and forecasts for inflation and the real economy in the coming years are published in the Riksbank's Inflation Reports, which, accordingly, contain the most important data on which the monetary policy decisions are based. Every monetary policy decision is announced in a press release. Decisions on the repo rate are normally made seven to eight times a year. Three of these occasions coincide with the publication of an Inflation Report.⁴ The press releases and the Inflation Reports describe how the majority of the Executive Board has interpreted the information obtained since the last decision was made. Press conferences are normally held when an Inflation Report is published or when a decision has been made to change the repo rate. The minutes of the Executive Board's monetary policy meetings are published approximately two weeks after the respective meeting. An account is provided there of the arguments put forward and whether any reservations have been made against the majority's assessment of the economic situation and decision on the repo rate. The Governor of the Riksbank appears before the Riksdag Committee on Finance twice a year for a discussion on monetary policy. Moreover, members of the Executive Board hold speeches where monetary policy is explained and individual standpoints can be given. All this aims to facilitate reasonable expectations on future monetary policy being formed and external assessments of the Riksbank's previous monetary policy analyses and decisions.

⁴ On 9 March 2006, the Executive Board of the Riksbank decided to publish three Inflation Reports per year instead of the previous four. The decision is to apply from this year.