

# Monetary policy of the Swiss National Bank

# 1 Concept

Stable prices are an important prerequisite for the smooth functioning of the economy, and they enhance prosperity. The National Bank's monetary policy aims to maintain price stability in the medium term, i. e. to prevent both inflation and deflation. In so doing, it creates a favourable environment allowing the economy to make full use of its production potential. In order to ensure price stability, the National Bank must provide adequate monetary conditions. If interest rates are too low, the supply of money to the economy is too high, thus triggering an inordinate demand for goods and services. Although this will boost production initially, production bottlenecks will occur in the course of time and aggregate economic capacity will be stretched. As a result, only prices will rise, and the production situation will deteriorate again. By contrast, if interest rates are too high, this will reduce the flow of money to the economy and, consequently, lead to a demand shortage. Prices for goods and services will come under pressure, hampering economic growth.

**Significance of price stability**

A country's economy is subject to numerous internal and external influences, leading to fluctuations in its economic cycle. Such fluctuations are inevitable. The National Bank's monetary policy, however, which is aimed at medium-term price stability, helps to limit these fluctuations. If production capacities are underutilised, upward price pressures subside. During a period of economic overheating they intensify. The National Bank will thus tend to ease monetary policy in the former case and tighten it in the latter. In so doing, it takes account of the economic situation, promoting the balanced development of the economy.

**Economic situation taken into account**

The National Bank needs indicators to determine whether or not its monetary policy course is appropriate in view of the goal of price stability. Until the end of the 1990s, the development of the monetary aggregates was of prime importance. Today, the National Bank bases its decisions on a broad range of real and monetary indicators. The monetary policy concept in force since the beginning of 2000 consists of three elements: first, the National Bank states how it defines price stability. Second, it bases its monetary policy decisions on a medium-term inflation forecast. Third, it sets an operational target range for its chosen reference interest rate, the three-month Libor rate (London Interbank Offered Rate).

**Monetary policy concept**

The National Bank equates price stability with a rise in the national consumer price index of less than 2% per annum. With this definition, the National Bank also takes into account that inflation cannot be measured with complete accuracy. Measuring problems may, for example, arise when the quality of goods and services improves. Such changes tend to overstate the actual inflation rate slightly.

**Definition of price stability**

Up to now, the National Bank has published a forecast of inflation trends for the three ensuing years in mid-year and at year-end. In future, it will publish such an inflation forecast after every quarterly assessment of the economic situation. The period of three years corresponds to the time required for the transmission of monetary impulses. Forecasts over such a long time horizon are, however, fraught with considerable uncertainties. By publishing a medium-term forecast, the National Bank emphasises the need to adopt a forward-looking

**Regular publication of an inflation forecast**

stance and to react at an early stage to any inflationary or deflationary threats. The inflation forecast is based on the assumption that the reference interest rate will remain steady during the forecasting period. It thus illustrates future price trends on the assumption of an unchanged monetary policy environment and cannot be compared with the forecasts of other institutions.

**Indicators of relevance to the inflation forecast**

In the long term, price trends depend primarily on the course of the monetary aggregates. These thus continue to play a significant role as monetary policy indicators. In particular, the money stock  $M_3$  provides useful information. In the short term, other indicators are relevant, the most important being measures of economic activity and exchange rates. The National Bank comments on a regular basis on the evolution of the most important monetary policy indicators that it uses in its inflation forecasts.

**Review of monetary policy based on the inflation forecast**

If the inflation forecast deviates from the band that constitutes price stability, monetary policy needs to be reviewed. Should inflation threaten to exceed 2%, the National Bank will consider tightening its monetary stance. On the other hand, it is ready to loosen the monetary reins if there is a danger of deflation.

**Generally no smoothing of short-term price fluctuations**

The National Bank must accept that there may be unexpected price fluctuations in the short term, for example as a result of marked swings in oil and other import prices or in exchange rates. It only reacts to such swings, however, if there is the danger of a protracted inflationary or deflationary phase. Smoothing short-term movements in the price level would entail the threat of stronger cyclical fluctuations, which would place a significant burden on the economy.

**Steering concept for the money market – target range for the three-month Libor rate**

The National Bank implements its monetary policy by influencing interest rates on the money market. It sets a target range with a spread of one percentage point for the three-month Libor, the economically most significant money market rate for Swiss franc investments. The target range is published regularly. As a rule, the National Bank reviews its monetary policy during its quarterly assessment of the economic situation. If circumstances so require, the National Bank also adjusts the target range for the three-month Libor rate between regular assessments. Explanations are given for any changes to the target range.

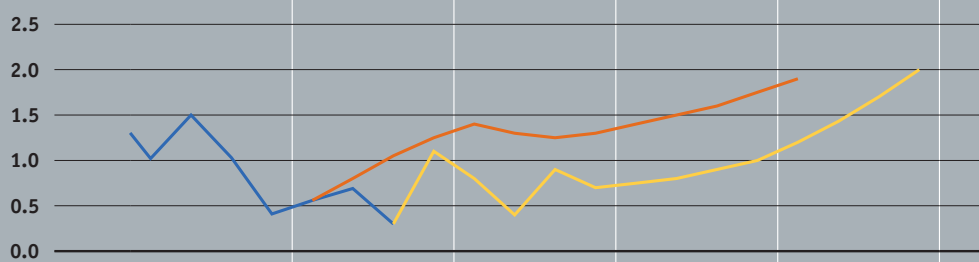
### Inflation forecast

Inflation

Forecast June 2002  
(three-month Libor: 1.25%)

Forecast December 2002  
(three-month Libor: 0.75%)

Change in the national  
consumer price index  
in percent compared with  
the previous year.



## Steering technique

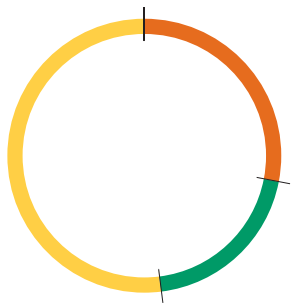
The National Bank influences the three-month Libor mainly through short-term repo transactions, its chief monetary policy instrument. It can prevent an undesirable rise in the three-month Libor rate by supplying the banks with additional liquidity through repo operations at lower repo rates (creating liquidity). Conversely, by injecting less liquidity or increasing repo rates the National Bank induces an upward interest rate movement (absorbing liquidity). The liquid funds of commercial banks in Swiss francs consist largely of sight deposits held with the National Bank. The banks' demand for sight deposits derives mainly from statutory liquidity requirements; by contrast, since intraday liquidity has been introduced demand for sight deposits stemming from inter-bank payment transactions has all but ceased, notably in the case of the large banks. In normal circumstances, the maturity of repos ranges from one day to a few weeks. Short-term fluctuations in repo rates hardly indicate a change in monetary policy. Rather, they reflect the National Bank's reaction to the uneven liquidity distribution in the banking system and other short-term influences.

## Repo rates and the three-month Libor

Repo rates cannot be directly compared with the Libor. As a rule, the three-month Libor is higher for two reasons: first, the Libor refers to an unsecured loan, whereas the repo rate is the price for a loan backed by securities. The Libor thus additionally contains a credit risk premium. Second, maturities for repo transactions are usually shorter than three months and therefore have a lower maturity premium than the three-month Libor.

## Repo operations

In a repo transaction, the cash taker sells its own or borrowed securities to the cash provider. At the same time, it is agreed that the cash taker will repurchase securities of the same type and quantity from the cash provider at a later date. From an economic point of view, the repo is a secured loan. In exchange, the cash taker pays the cash provider interest.



### Collateral from repo business in percent

Swiss franc bonds of domestic borrowers 28

Swiss franc bonds of foreign borrowers 20

Euro bonds 52

Total: Sfr 27.9 billion.  
End 2002

Apart from repo transactions, the National Bank can also employ foreign exchange swaps to regulate the money market. Furthermore, the National Bank has the option of placing time deposits held with it by the Confederation with the banks for its own account but at the Confederation's risk. In this way, it can balance shifts in liquidity between the banking system and the Confederation. The two latter instruments play no role in the current steering concept of the National Bank; since 2000, repo transactions alone have been used for regulating the money market.

#### Instruments for money market operations in billions of Swiss francs

	2001		2002	
	Holding Average	Turnover	Holding Average	Turnover
<b>Repo transactions (creating liquidity)</b>	17.1	923.5	21.7	967.6
Less than 1 week	1.1	250.4	0.8	213.5
1 week	9.3	482.0	8.5	445.6
2 weeks	5.2	139.2	10.2	258.6
3 weeks	0.9	16.0	1.7	36.6
Other	0.7	36.0	0.5	13.3
<b>Repo transactions (absorbing liquidity)</b>	0.0	12.4	0.0	0.5
Less than 1 week	0.0	12.4	0.0	0.5
<b>Confederation investments</b>	4.9	72.8	5.9	66.3

By means of repo transactions, the National Bank makes interest-free liquidity (intraday liquidity) available to the commercial banks and Swiss Post during the day to facilitate the processing of payment transactions in SIC (Swiss Interbank Clearing) and foreign exchange transactions in the newly introduced (Continuous Linked Settlement) CLS system. The liquidity provided exclusively during the day may not be used to meet statutory liquidity requirements. Whether the liquidity requirements have been fulfilled is established from figures calculated at the end of a business day, i. e. after repayment of the intraday liquidity. If a bank fails to repay the intraday liquidity on the same business day, it becomes liable to pay interest at a rate significantly higher than the Lombard rate.

If a bank urgently needs liquidity which cannot be obtained in the money market, it may receive an advance against securities (Lombard loan) from the National Bank. A Lombard loan, however, is limited to the amount of collateral provided in the form of securities and granted only at the official Lombard rate. The National Bank keeps this rate at two percentage points above the call money rate to discourage banks from using the Lombard loan as a permanent source of refinancing.

Intraday liquidity to facilitate payment transactions

Lombard loan as short-term source of refinancing in exceptional cases

## 2 Implementation

### Background

In December 2001, the National Bank lowered the interest rate target range for the three-month Libor to 1.25%–2.25% and published an inflation forecast assuming a constant interest rate of 1.75%. The forecast projected that inflation in Switzerland would temporarily drop to around 0.5% in the course of the year and would thereafter rise gradually to 1.5% by the end of the three-year forecasting horizon. As regards economic growth in Switzerland, the National Bank forecast a decline from an estimated 1.5% to approximately 1.0% in 2002. Initially, the National Bank therefore continued to implement its expansionary monetary policy; this was reflected, among other things, in the strong growth of the money stock  $M_3$ .

### Reassessment in view of unexpectedly weak economic growth and strong Swiss franc

During the year, two specific factors necessitated several reassessments of the situation. First, it became increasingly clear that there would be a delay in the expected recovery and that the original economic growth forecast of 1.0% would not be achieved. The second factor was the appreciation of the Swiss franc. The Swiss franc had already firmed markedly, both in nominal and real terms, in the wake of the terror attacks in the US of September 11. After the pressure had eased temporarily, the Swiss franc again appreciated slightly in April and July. The appreciation of the Swiss franc in conjunction with an unchanged interest rate would have had the same effect as a more restrictive monetary policy. This was undesirable against a background of unexpectedly weak economic growth and low inflation.

### Lowering of the target range in May and July

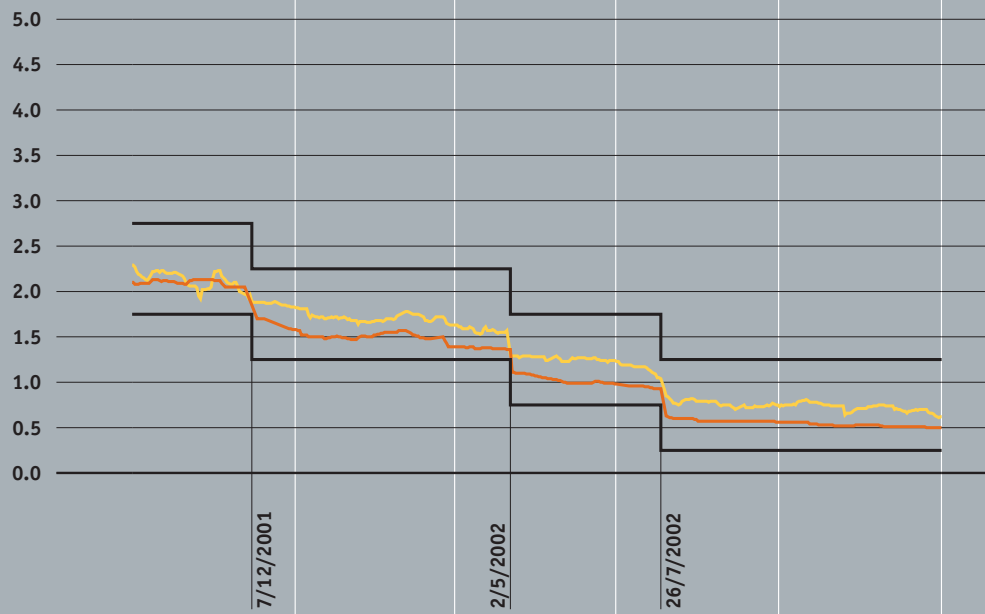
The National Bank responded to these developments by lowering the interest rate target range in two steps. On 2 May, it lowered the target range by half a percentage point to 0.75%–1.75%. On 26 July, it made a further reduction by another half a percentage point to 0.25%–1.25%. Declining economic growth and a low inflation rate of less than 1% provided leeway for this marked overall interest rate cut.

### No change in the target range at the scheduled assessments of the situation

At the quarterly assessments of the situation, the National Bank left the interest rate target range unchanged. In March there was no reason as yet to change monetary policy. Favourable data on economic activity in the US had even improved sentiment somewhat, which had also caused share prices to move up. In June and September account had to be taken of the fact that the interest rate target range had already been lowered twice, on 2 May and 26 July. At these two quarterly assessments of the economic situation, therefore, no need for additional measures emerged. In December, the National Bank again left the target range unchanged. It continued to implement its expansionary monetary policy in support of the expected upswing.

### Money market rates

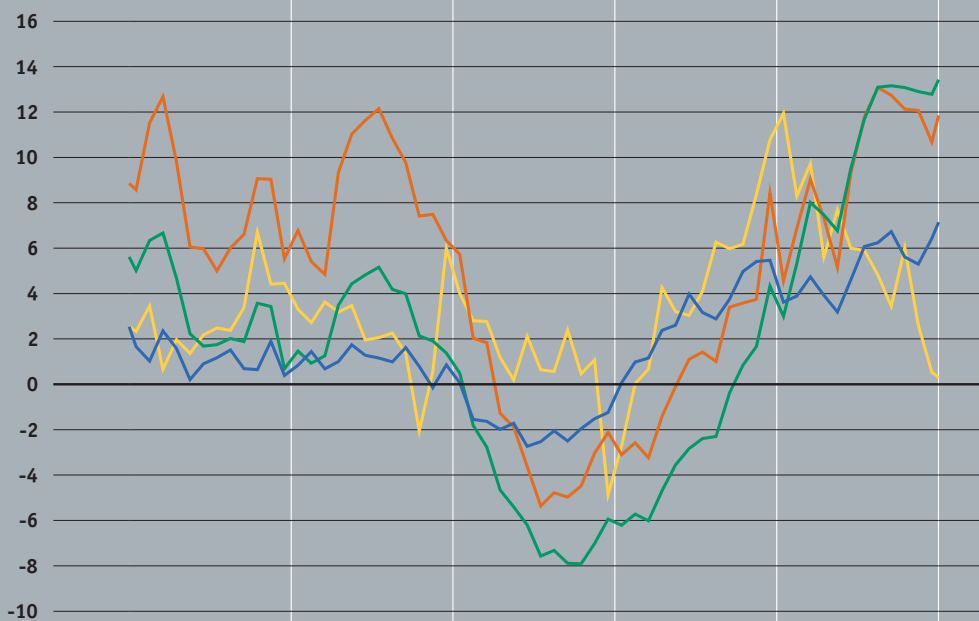
— Three-month Libor  
— Repo rate 1 week  
 Target range  
 Daily quotations.



The inflation forecast published in June 2002 indicated that, with an unchanged three-month Libor rate of 1.25%, inflation would rise rapidly and distinctly near the end of the forecasting horizon. Moreover, the inflation forecast published in December 2002, which is based on a constant three-month Libor rate of 0.75%, showed a similar development. Both forecasts thus signalled that the low interest rate level is appropriate for the time being but cannot be maintained in the long term without jeopardising price stability.

### Monetary aggregates

— Monetary base  
—  $M_1$   
—  $M_2$   
—  $M_3$   
 Change from previous year in percent.



### Money and capital market rates

— Three-month Libor  
— Yield on federal bonds  
- - - Spread in percentage points

