

1 Concept

The monetary policy of the National Bank aims at allowing the economy to make full use of its production potential without jeopardising price stability in the medium term. Stable prices are an important prerequisite for the smooth functioning of the economy. An exceedingly low interest rate level leads to an excessive supply of money and triggers an inordinate demand for goods and services. Overall economic capacity is stretched, which may cause prices to rise. An excessively high interest rate level, by contrast, hampers production. The economy suffers losses of output and possibly a decline in the price level.

Price stability and full use of production potential as goals of monetary policy

The National Bank needs indicators to determine whether a chosen monetary policy course is appropriate in view of the goal of price stability. Between 1980 and 1999, it used the seasonally-adjusted monetary base as monetary target and as an indicator. In 1999, the National Bank fundamentally reviewed its monetary policy concept after it had been shown that the monetary base had lost its indicator value to some extent. The adjustment of the monetary policy concept as from the beginning of 2000 brought three innovations with it: first, the National Bank explicitly states what, from its vantage point, constitutes price stability in order to improve the transparency of its monetary policy in this respect. Second, it bases its monetary policy decisions on a medium-term inflation forecast. Third, it sets an operational target range for a reference interest rate, the three-month Libor rate (London Interbank Offered Rate). The National Bank no longer announces a growth target for a monetary aggregate; monetary aggregates, notably M_3 , however, continue to play a significant role as monetary policy indicators since they provide important information on the long-term course of inflation.

Adjustment of the monetary policy concept as from the beginning of 2000

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

Definition of price stability

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

As a rule, no smoothing of short-term price fluctuations

In mid-year and at year-end, the National Bank publishes a forecast for the development of inflation in the three ensuing years. The period of three years takes account of the time required for the transmission of monetary stimuli. Forecasts over such a 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 stance and to react at an early stage to any threats to price stability. The inflation forecast is normally based on the assumption that the reference interest rate will remain constant during the forecasting period.

Regular publication of an inflation forecast

Indicators of relevance to the inflation forecast

In the long term, price development depends to a decisive degree on the course of the monetary aggregates. Notably the money stock M_3 therefore remains a useful indicator. In the short term, by contrast, other indicators are significant, the most important among them being indicators of the cyclical state of the economy and exchange rates. The National Bank comments the development of major monetary policy indicators of relevance to the inflation forecast on a regular basis.

Review of monetary policy based on the inflation forecast

If the inflation forecast deviates from price stability as defined by the National Bank, monetary policy needs to be reviewed. Should inflation threaten to exceed 2%, the National Bank will tend to tighten the monetary reins. Conversely, it is ready to relax the monetary reins if there is a danger of deflation.

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

In implementing its monetary policy, the National Bank focuses on the interest rate level in the money market. It fixes 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, and publishes this band regularly. The National Bank reviews its monetary policy during its quarterly assessment of the situation. If circumstances require, the National Bank also adjusts the target range for the three-month Libor rate between regular publication dates. Reasons are stated for any changes made.

Steering technique

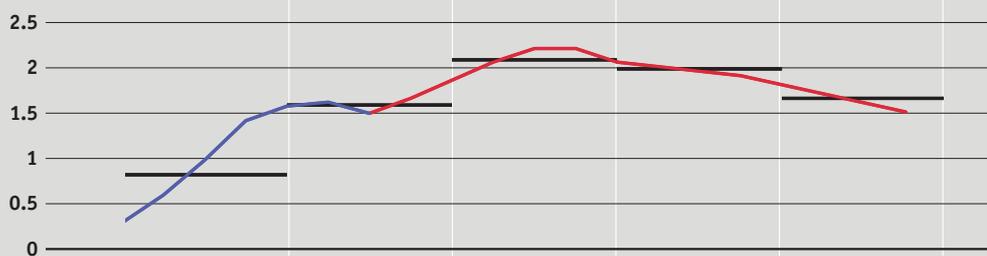
As a rule, the National Bank influences the Libor via short-term repo transactions. It can prevent an undesirable rise in the three-month Libor rate by supplying the banks with an increase in liquidity through repo transactions and tending towards a reduction of its repo rates (creation of liquidity). Conversely, by injecting less liquidity or increasing repo rates the National Bank induces an upward interest rate movement (siphoning off of 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 interbank payment transactions has all but ceased, notably in the case of the large banks. In normal circumstances, repos have a maturity of between one day and several weeks. Short-term fluctuations in repo rates frequently have no connection with the monetary policy course, but rather, among other things, with the distribution of liquidity in the system.

Inflation forecast

Inflation
Forecast

Average annual inflation:
2000: 1.6%
2001: 2.1%
2002: 2.0%
2003: 1.7%

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

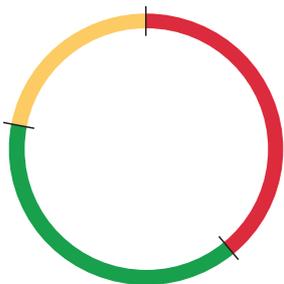


Repo rates and Libor

Repo rates cannot be directly compared with the Libor. The Libor rate tends to be higher for two reasons. On the one hand, it usually applies to maturities that are longer than those of repo transactions, on the other hand, it is based on unsecured credits between banks. The Libor thus contains a credit risk premium, whereas repo rates are riskless interest rates since repos are backed by securities.

Monetary policy instruments

Repo transactions are the National Bank's major monetary policy instrument. In a repo transaction, the cash taker sells his 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 vantage point, the repo is a secured credit. In exchange, the cash taker pays the cash provider interest. Aside from repo transactions, the National Bank also employs foreign exchange swaps for regulating the money market. Furthermore, the National Bank has the possibility to place time deposits held with it by the Confederation at the banks for its own account but at the Confederation's risk. In this way, it can balance the shifts in liquidity between the banking system and the Confederation. Both instruments play a subordinate role in the current steering concept and are only resorted to in exceptional cases.



Collateral from repo transactions in percent

CHF bonds of domestic borrowers 39

CHF bonds of foreign borrowers 39

Euro bonds 22

Total: Sfr 24.3 billion.
End 2000

Instruments for money market operations in Sfr billions

	1999		2000	
	Holding Average	Turnover	Holding Average	Turnover
Repo transactions (creation of liquidity)	16.9	722.9	18.9	768.7
less than 1 week			0.9	227.0
1 week			4.1	211.2
2 weeks			10.0	259.4
3 weeks			3.6	62.2
others			0.4	8.9
Confederation and postal investments¹				
new investments	17.8	244.5	11.4	112.8
onward placements	1.0	15.8	0.0	0.0

¹ As from November 2000 without postal investments (cf. p. 59)

Since the beginning of October 1999, the National Bank has been putting interest-free liquidity at the commercial banks' disposal during the day. These liquid funds are offered in the form of repo transactions. Intraday liquidity serves to facilitate the processing of payment transactions. It does not jeopardise monetary policy since the liquidity provided during the day may not be used to meet statutory liquidity requirements. Whether the liquidity requirements have been fulfilled is checked based on values resulting 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 clearly in excess of the Lombard rate.

If a bank has urgent liquidity needs which it cannot meet in the money market, it may obtain an advance against securities (Lombard loan) from the National Bank. A Lombard loan, however, is limited to the amount of the collateral provided in the form of securities and granted only at the official Lombard rate. The National Bank keeps this rate constantly 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 a short-term source of refinancing in exceptional cases

2 Implementation

Background

At the end of 1999, the National Bank for the first time published a medium-term inflation forecast and a target range for the three-month Libor rate. It fixed the target range at 1.25%–2.25%. This implied a tightening of monetary policy by the National Bank so as to ensure that inflation remained below 2%. The medium-term inflation forecast showed an average inflation rate of 1.5% for 2000 and a slight increase to 1.8% by 2002. This rise in inflation reflected the anticipated economic upswing, which – so experience has shown – would normally go hand in hand with upward price trends.

Tightening of the monetary reins in the first half-year

For 2000, the National Bank forecast real economic growth of 1.8%. Very soon after the turn of the year, it became evident that the economic upswing in Switzerland would be considerably boosted by the strengthening international economy. At the same time, the continuing weak trend of the Swiss franc led to an undesirable easing of monetary conditions in Switzerland. In order to ward off the associated threat of inflation, the National Bank rapidly tightened the monetary reins. Until mid-year, the National Bank increased the target range for the 3-month Libor rate by a total of 1.75 percentage points to 3%–4%.

Two-fold increase in the interest target band in the first quarter

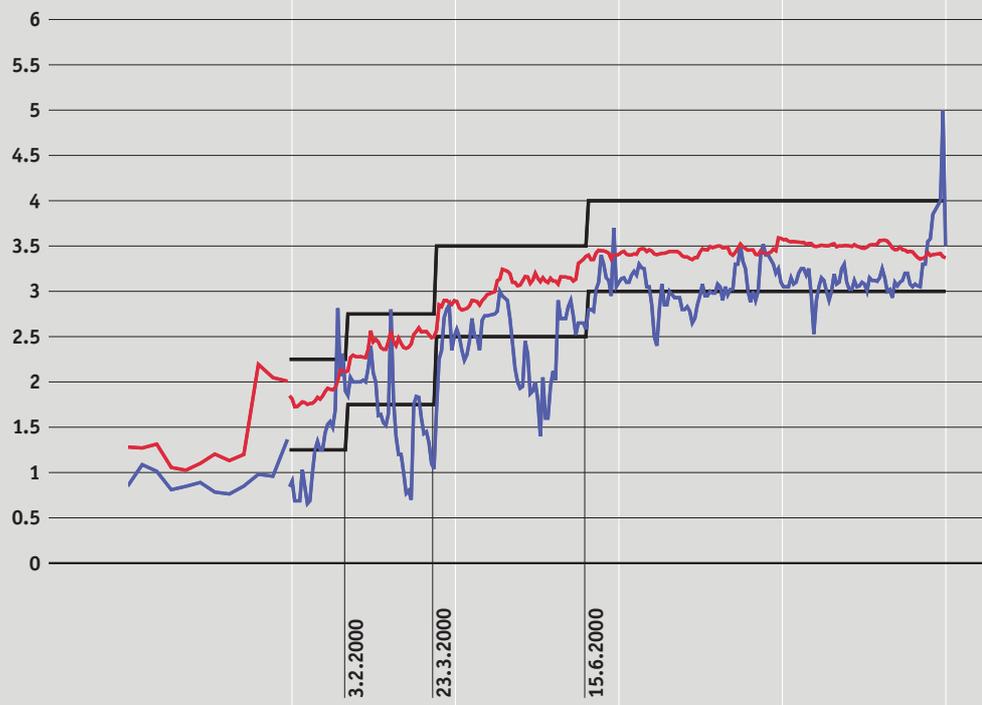
As a first step, the National Bank increased the target range by half a percentage point to 1.75%–2.75% on 3 February after already having moved towards the upper part of the target band in the second half of January. On 23 March, on the occasion of its quarterly assessment of the economic situation, the National Bank decided once more to tighten monetary policy considerably and increased the target range for the three-month Libor rate by 0.75 percentage points to 2.5%–3.5%. The data published after the interest rate adjustment in early February showed that the Swiss economy had gained quite drastically in momentum in the second half of 1999. Shortages in the labour market were increasingly in evidence. Additional inflation risks emanated from the further decline of the Swiss franc, notably vis-à-vis the dollar.

Further interest rate step in mid-June

On 15 June, the National Bank increased the interest rate target range by another half a percentage point to 3%–4% after having permitted the three-month Libor rate to rise to the upper part of the target band at the beginning of the month. A review of the inflation forecast issued at the end of 1999 had led to the conclusion that the tightening of monetary policy implemented so far would not suffice to maintain price stability in the medium term. At the same time, the National Bank pointed out that despite a further interest rate hike a temporary increase in inflation in 2001 to more than 2% was unavoidable.

Money market rates

— Three-month Libor
— Call money rate
 Target range
 Monthly averages (1999) and market values (2000).



Unchanged interest target range in the second half of the year

At the quarterly assessment of the economic situation in September, the National Bank left the interest target range unchanged. A review of monetary policy had shown that the implemented policy was sufficiently restrictive to prevent economic overheating and ensure price stability in the medium term. Important indicators led to the expectation that the broadly-based economic upswing would continue, albeit at a more leisurely pace than at the beginning of the year. In addition, the Swiss franc had appreciated even further against the euro, which was tantamount to a slight tightening of monetary policy.

No sign of a long-term price rise

The development of the monetary aggregates in 2000 did not point to a long-term threat to price stability. The broadly defined money stock M_3 , comprising currency circulation, sight and other transaction deposits of the nonbank public plus savings and time deposits, declined slightly in the course of the year. In the fourth quarter, M_3 fell short of the corresponding previous year's level by 1.2%. The aggregate M_3 was thus at the same level as three years earlier.

Small rise in the monetary base

The seasonally-adjusted monetary base rose by 1.1% in 2000, thus growing less markedly than in the previous year (2.4%). Banknote circulation, which comprises roughly 90% of the monetary base, increased by 2.4%. At the same time, the banks' sight deposits at the National Bank fell by 12%. The decline in demand for sight deposits was due largely to the introduction of intraday liquidity. The fluctuations of sight deposits, which were considerably stronger than in the previous year, reflect mainly the transition from the steering of sight deposits to the steering of interest rates.

Inflation forecast for 2001–2003

At its media news conference of 8 December 2000, the National Bank published its inflation forecast for the period 2001–2003. It projected medium-term inflation risks at approximately the same level as six months earlier. Consequently, it left the target range for the three-month Libor rate at 3%–4%. According to the inflation forecast for 2001–2003 published in December, the inflation rate in mid-2001 is likely to exceed 2%, albeit temporarily, to drop below the 2% mark again in the course of 2002 and to average 1.7% in 2003. The anticipated temporary deviation from the target of price stability can be largely explained by the massive rise in oil prices as well as by the acceleration of economic activity in 2000. The inflation forecast is based on the expectation that economic growth in 2001 and 2002 will slow to 2.2% and 1.6% respectively. Economic development abroad, notably in the US and in Europe, plays a key role in this scenario. The National Bank assumed that the stimulating forces in the United States would subside and that the dynamism in Europe was also likely to lose momentum. Moreover, compared with 2000, it expected a slightly higher real export-weighted Swiss franc rate. Finally, it assumed that the oil price would fall again in the next two to three years.

The experience gained with the new monetary policy concept has been positive. The undertaking to issue an inflation forecast on a regular basis promoted the internal debate of monetary policy and provided an incentive to make a broad-based analysis of all factors relevant to future price developments. Several different methods were applied to forecast inflation and real growth. The results were discussed internally and were subsequently integrated in a consensus forecast. The enhanced transparency of monetary policy associated with the publication of the inflation forecast was welcomed by financial markets. The fact that the decision-making process is based on all significant indicators was noted with particular satisfaction. The National Bank makes every endeavour to disclose, as far as possible, the analyses on which the inflation forecast is based. It consequently plans to publish various studies which will explain its forecasting activities in greater detail.

Positive experience gained with the adjusted monetary policy concept ...

In the operational field, the three-month Libor rate proved to be a useful target variable. After a short period of adjustment, the target range and the Libor rate as reference interest rate became firmly established in the monetary policy discussion. Moreover, the Libor rate was, on the whole, successfully steered by means of short-term repo transactions to the level aimed at in each individual case, and kept at this level. This also applies to the first half-year, when the National Bank increased the target range at short intervals. The fully automated repo trading and settlement platform, which permits the highest degree of operational flexibility, contributed significantly to the positive record of interest rate steering.

... also on an operational level