

# NBS Monetary Operations





## 3 NBS Monetary Operations, Foreign Exchange Operations and Investment Activities in Foreign Exchange Reserve Management

### 3.1 Monetary policy operations

Monetary policy implementation underwent several changes in 2005. They mainly applied to the decision-making process used in monetary policy operations and the terms and conditions of specific NBS transactions.

The first significant change introduced by the NBS in February 2005 was target-based decision-making on monetary policy implementation. Decisions are taken at dates fixed in advance according to the plan of Bank Board meetings. This method is based on the directed monitoring of economic and monetary developments, including the price transmission mechanism and its impact on domestic financial markets. The qualitative evaluation of data obtained from such monitoring and the causes of changes in price developments on domestic financial markets are decisive factors in the process of decision-making by the Bank Board of the NBS.

arising from ESCB membership, the NBS decided to modify the rules governing the conduct of monetary policy operations and the payment and securities settlement of such operations (with effect from January 2005). Subject to change were, for example, the selection of banks or other financial institutions for selected monetary policy operations and the selection of financial assets that are eligible in operations for monetary purposes. The NBS also decided to change the rules of risk management, including the rule prohibiting monetary financing of the public sector (Articles 101 and 102 of the EU Treaty). All these changes were published in NBS directives No. 1/2005 and 2/2005. With effect from 2005, the NBS also decided to make adjustments affecting the quality and price of services related to the central register of short-term securities, which is kept at the NBS.

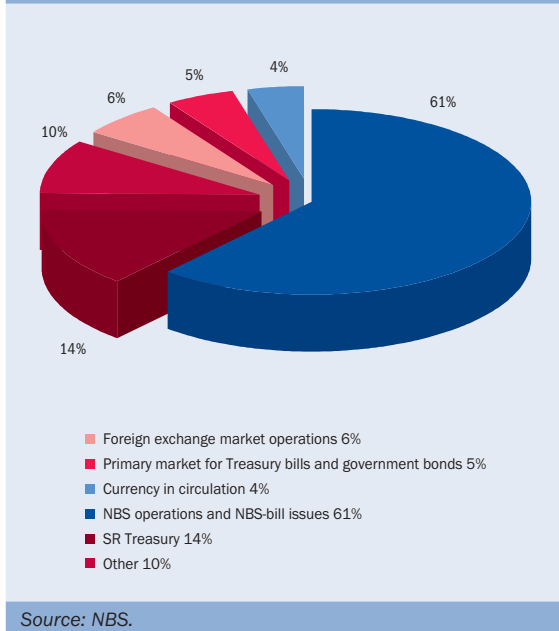
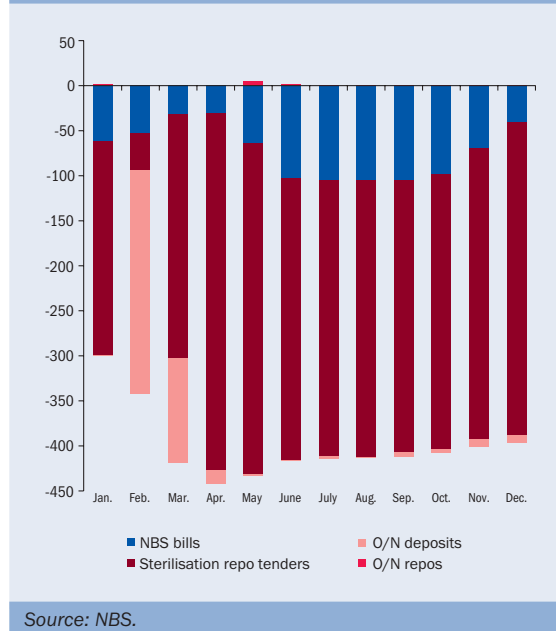
### Banking system liquidity management

The monitoring of supply and demand in the banking sector in connection with operations with the central bank is subject to daily liquidity assessment in this sector and is also subject to the decisions of the Bank Board concerning the scope of interventions and the types of operations. Required reserves, currency in circulation, and autonomous factors – financial flows within the SR Treasury and net foreign assets – influence the daily volume of liquidity in the banking sector. In 2005, as in the previous year, the banking sector had a marked excess of liquidity. Its average daily amount sterilised through monetary policy operations stood at SKK 399.2 billion. This liquidity surplus was SKK 172.6 billion higher than in 2004. The average monthly amount of excess liquidity ranged during the year from SKK 298.6 billion to SKK 442.1 billion. The most significant increases in excess liquidity were caused by foreign exchange market interventions, the transfer of funds managed by the SR Treasury from the NBS to commercial banks, and the value of redeemed government securities exceeding the value of new issues.

Chart 36 Required reserves and autonomous liquidity factors in 2005 (SKK millions)



Source: NBS.

**Chart 37 Structure of effects on daily changes in required reserves in 2005 (%)****Chart 38 Developments in open market operations in 2005 by type (SKK millions)**

### Main monetary policy operations

In 2005 the main monetary policy operations continued to be 14-day sterilisation repo tenders held on a weekly basis. The volume of these operations, aimed at sterilising the excess liquidity in the banking sector, was high throughout the year. The only exception was February 2005, when the NBS decided to accept no bids from banks at sterilisation repo tenders and thus prevent the Slovak koruna from appreciation, including impact of the exchange rate on interest rates on the domestic money market. Developments in BRIBOR rates were rather volatile over the course of January 2005 and the yield curve became markedly inverse. After the NBS had intervened in the foreign exchange market and rejected the bids of banks at sterilisation repo tenders at the beginning of 2005, money market rates ceased to have an adequate expressive power about this market. They regained this power in March 2005, after the NBS had lowered its basic interest rates (including the refinancing and sterilisation rates for O/N operations) and renewed its main monetary policy operations – sterilisation repo tenders.

### Longer-term operations

During 2005 the NBS issued central bank bills (NBS bills) with a maturity of 84 days. The only time when there were no auctions of these bills was a period at the beginning of the year when the NBS reacted to the excessive appreciation of the Slovak koruna. The NBS issued bills with the aim of directly sterilising the excess liquidity of banks. At the same time, however, the NBS also issued these instruments for

its own portfolio and used them in main monetary policy operations for sterilisation purposes. In total, the NBS held 11 auctions of NBS bills on the primary market and issued NBS bills in the total amount of SKK 290.0 billion.

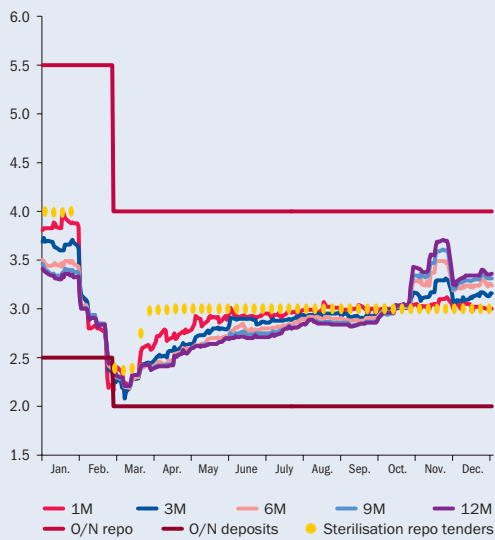
### Standing facilities

With regard to the character of the banking sector's liquidity position (ample liquidity), overnight deposit operations with the NBS were frequent, though in terms of value less significant than the main operations. The only exceptions were February and March, the months in which the NBS decided to accept no bids from banks at sterilisation repo tenders. On the other hand, overnight refinancing operations with the NBS were sporadic. For example, an average monthly volume exceeding SKK 1.0 billion was registered only in three months within the first half of 2005. In the following months, the average monthly value of overnight refinancing operations did not exceed SKK 0.6 billion. A supplement to overnight refinancing operations was the possibility to draw intra-day credit via the money reserve account within the SIPS payment system. This possibility was utilised in 2005 by 8 counterparts of the NBS.

### Reserve requirements

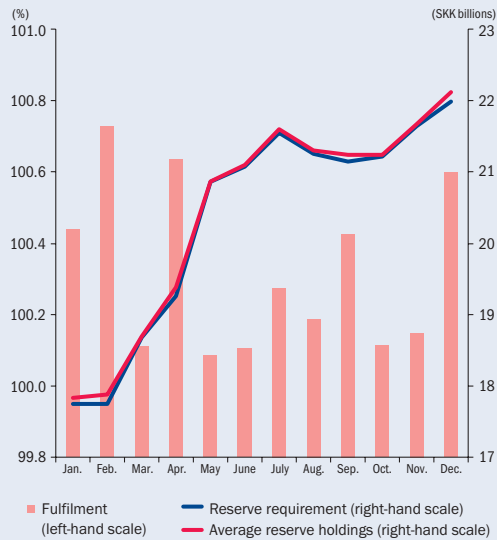
Required minimum reserves are held, in accordance with the relevant NBS decrees and EC directives, by banks, branches of foreign banks, and electronic money institutions. The function of the minimum re-

**Chart 39 BRIBOR in 2005**  
(in % p. a.)



Source: NBS.

**Chart 40 Required reserves in 2005**



Source: NBS.

serve system ensure the maintenance of short-term liquidity within the banking system. The averaging provision enables banks to adequately regulate the volume of their transactions on the domestic money market within the reserve maintenance period. In 2005 minimum reserves were held by 18 banks and 5 branches of foreign banks, including 2 branches that commenced banking operations in Slovakia on the basis of a single banking licence valid in the EU Member States. The conditions for holding of required reserves remained unchanged in 2005, at the 2004 level, i.e. a reserve ratio of 2% of specific liability items, a reserve maintenance period of one month, and interest at a fixed rate of 1.5%. The value of the total reserve requirement showed a rising trend during the year: it increased by SKK 4.2 billion from January to December 2005. Although there were large fluctuations in the actual reserve holdings in some of the months (e.g. May, June, September, and December 2005), the reserve requirement was fulfilled by the banking sector in each month.

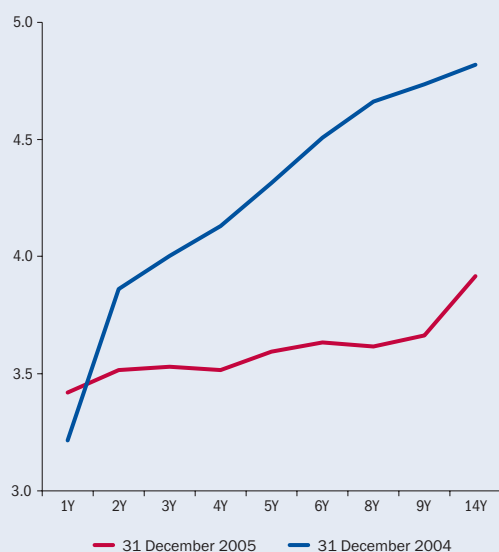
**Risk management**

Credit, market, and operating risks are monitored and managed within the central bank according to standard risk management practices. These practices refer primarily to the counterparts involved in monetary policy operations and the financial assets used by these parties in such operations. As other central banks belonging to the ESCB, the NBS sets and applies rules for risk management in accordance with the statutes of the ESCB and the ECB. Although the system of credit risk assessment has not yet

been fully harmonised with the criteria of the ECAF (Eurosystem Credit Assessment Framework), the NBS has developed an appropriate method, which was used effectively during 2005. Since not only the counterparts of the central bank, but also their financial assets must be eligible in terms of risks, the NBS applies a system for the selection of eligible assets, including a system for their market-based valuation (from 2004 onwards). In refinancing operations, the NBS also applies the system of reduction (haircuts) to market prices. In addition, the NBS is making preparations for the harmonisation of procedures to be followed in selecting and valuing financial assets so as to comply with the conditions imposed by the Eurosystem. This mainly includes preparations for the actual use of assets, which will be included in the so-called Single List, for monetary policy operations. These assets are expected to be used starting from the year when Slovakia enters the Eurosystem. The Single List will be introduced by the ECB in 2007. It will mainly cover debt securities and bank loans classified as eligible by both national central banks and the ECB.

**Benchmark bond yield curve**

In 2005 the NBS continued to coordinate the quotations of prices for benchmark government bond portfolios by commercial banks and to create a benchmark yield curve from these quotations. This project, aimed at obtaining more reliable information on price developments on the domestic bond market, was launched in 2004 on the background of the low volumes of price-setting transactions on bond markets and the

**Chart 41 Benchmark government bond yield curve (%)**

Source: NBS.

**Chart 42 Exchange rates of the Slovak koruna against the euro and the dollar in 2005**

Source: NBS.

inadequate frequency of trading. The NBS monitors and duly updates the structure of the benchmark portfolio in cooperation with commercial banks. Such an update of the benchmark bond portfolio was applied at the beginning of June 2005. It aimed at broadening the term structure of listed government bonds. One of the criteria for the inclusion of a bond in the benchmark portfolio is a minimum issue-amount of SKK 5 billion. At present, the portfolio includes bonds with a maturity of 1 to 9 years, as well as 14-year bonds. The prices are quoted by eight commercial banks that are active on the market. The publication of indicative bond prices via REUTERS (SKBMK page) takes place on a daily basis, always at 15:00 CET on the relevant trading day. As commercial banks, the NBS also uses indicative benchmark curve prices for the theoretical valuation of financial assets. In the case of the NBS, subject to valuation are assets classified as eligible for use in monetary policy operations.

Movements in the benchmark curve were less volatile in 2005 than in the previous year. Price movements were mostly influenced by developments in the euro area, information about reduced need for government borrowing through bond issues, the ratings of Moody's, fluctuations in the exchange rate of the Slovak koruna, and the decisions of the NBS concerning the basic interest rate. In addition, the Slovak bond market was significantly affected by the entry of the Slovak koruna into the Exchange Rate Mechanism II (ERM II), which attracted the interest of foreign investors in Slovak financial assets, while positively influencing the stabilising level of bond market yields at the end of 2005.

## 3.2 Foreign exchange operations

### Foreign exchange market operations

During 2005, the exchange rate of the Slovak koruna against the euro appreciated by 2.44 percentage points (from SKK/EUR 38.796 at 31 December 2004 to SKK/EUR 37.848 at 31 December 2005). The average exchange rate was SKK/EUR 38.593, representing an appreciation of 3.6 percentage points compared with the figure for 2004. During last year, the exchange rate of the koruna against the US dollar weakened by 12.11 percentage points (from SKK/USD 28.496 at 31 December 2004 to SKK/USD 31.948 at 31 December 2005). The average exchange rate was SKK/USD 31.022, representing an appreciation of 3.8 percentage points compared with the figure for 2004. In relation to the Czech koruna, the Slovak koruna depreciated by 2.9 percentage points.

With regard to the rapid changes in the exchange rates of the Slovak koruna, the NBS intervened on several occasions in 2005 to dampen the unreasonably fast appreciation of the domestic currency. Since the interest of investors in the Slovak koruna, arising from certain facts (e.g. the expected smooth fulfilment of the Maastricht criteria in 2008, strong economic growth, and gradual improvement in the trade balance that began as early as at the end of 2004), continued in the first quarter of 2005, the NBS made further interventions against the excessive strengthening of the domestic currency. These interventions had so far been the most extensive in the Slovak foreign



exchange market. During two months (at the end of 2004 and the beginning of 2005), the NBS purchased EUR 3.62 billion (ca. SKK 138 billion) on the foreign exchange market. The fragility of the Slovak foreign exchange market and its correlation with the markets of neighbouring countries became apparent during the period of weakening of the Polish currency. The warning of the NBS that the appreciation of the Slovak koruna at the beginning of the year was unreasonably fast, also proved justified. During 2005, the NBS purchased EUR 3.02 billion and sold EUR 535 million through foreign exchange market interventions, which resulted in a balance of EUR 2.49 billion.

The expectation that the Slovak foreign exchange market would break away from its strong correlation with the Polish and Czech currencies was not confirmed, even after the entry of Slovakia into ERM II. Such expectations may become more realistic in the period before the country's entry into the euro area.

### **Investment activities in foreign exchange reserve management**

In 2004 the NBS approved an update for the investment strategy pursued in the area of foreign exchange reserve management. The updated strategy delimited the range and limits of investment in international financial markets with respect to the credit, interest rate, and exchange rate risks, as well as the liquidity risk. As a part of investment policy, the structure of decision-making in foreign exchange reserve management was defined. This set of rules continued to be applied in 2005.

The marked appreciation of the Slovak koruna at the beginning of the year led to an increase in foreign exchange reserves. Thus, the intervention and investment portfolios increased in volume. The value of foreign exchange assets at the given exchange rates and market prices increased, from USD 14.9 billion at the end of 2004 to USD 15.5 billion at the end of 2005. In the area of foreign exchange reserve management, the yields ranged from 2.074% for euro-denominated investment portfolios to 3.120% for dollar-denominated investment portfolios. Interest yields earned in the area of foreign exchange reserve management totalled approximately SKK 10.6 billion in 2005.