

# NBS Operations





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

### 3.1 Monetary policy operations

In 2007, NBS continued in monetary policy implementation using the same instruments. Goal-directed decision-making took place within the dates set out in the schedule of NBS Bank Board's meetings. The essential parameter of the monetary policy in the medium term was to set the target value for inflation, defined as inflation targeting in the ERM II conditions. The main instruments of NBS in relation to this medium-term target were the key interest rates. The Central Bank conducted its monetary policy using the basic set of instruments, which comprised operations with banks and foreign bank branches, in particular open market operations including the issuance of short-term securities and O/N operations. As in the previous year, NBS was interested in correcting increased volatility in the exchange rate of the Slovak koruna in the foreign exchange market.

#### Liquidity of the banking sector

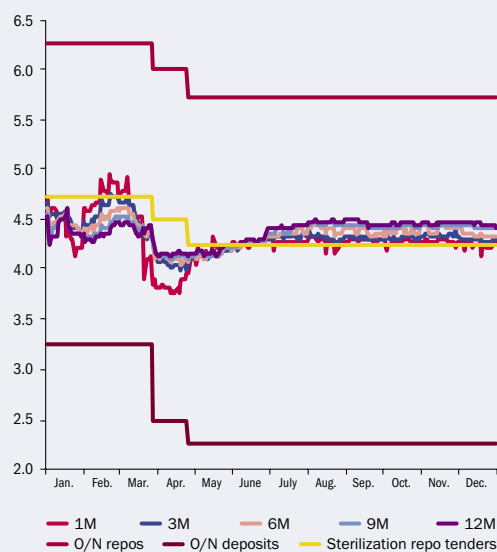
The banking sector had a liquidity surplus at its disposal in the recent nine years. The average daily amount placed by banks in sterilization operations with NBS was SKK 360.3 billion in 2007; in comparison with 2006 it increased by SKK 14.2 billion. In comparison with the sterilization amount of SKK 273.2 billion at the beginning of 2007, the highest sterilization position was recorded in June, in an amount of SKK 400.9 billion. The reason for this increase in the total sterilization amount was an inflow of funds from foreign exchange interventions.

#### Main monetary policy operations

Standard sterilization repo tenders continued to dominate the open market operations. This instrument's share in the total sterilization position was changing during the year, depending on the Central Bank's

activity in the domestic foreign exchange market. 84% of liquidity surplus was absorbed on average through this instrument (sterilization repo tenders). Nevertheless, its share fell to 74% in March. Likewise in the previous period, sterilization repo tenders were held on a regular weekly basis and their 14-day maturity period remained also unchanged. A total of 52 sterilization repo tenders were held during the year, and NBS accepted the full demand in 39 cases. In 34 cases, the average interest rate matched NBS current interest rate limit for two-week repo tenders. This key interest rate was reduced by the NBS Bank Board several times during the year. After starting at 4.75%, it underwent two adjustments to stand at 4.25%. The first adjustment extended the spread for O/N refinancing and sterilization operations with NBS from the original 3% to 3.5%. The banking sector

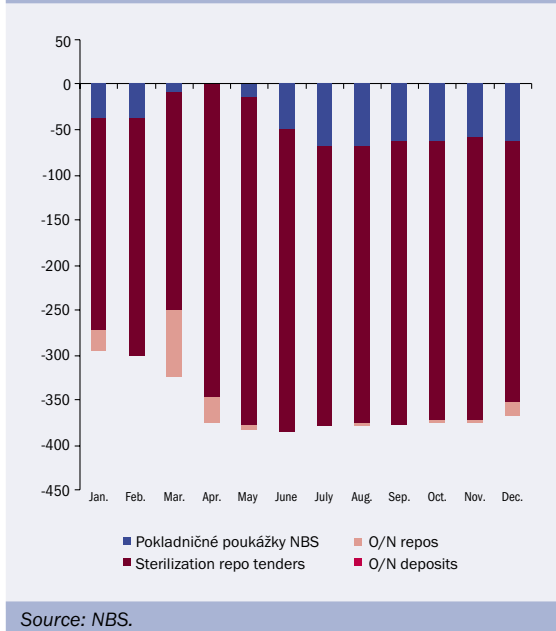
Chart 32 BRIBOR interest rates in 2007 (% p. a.)



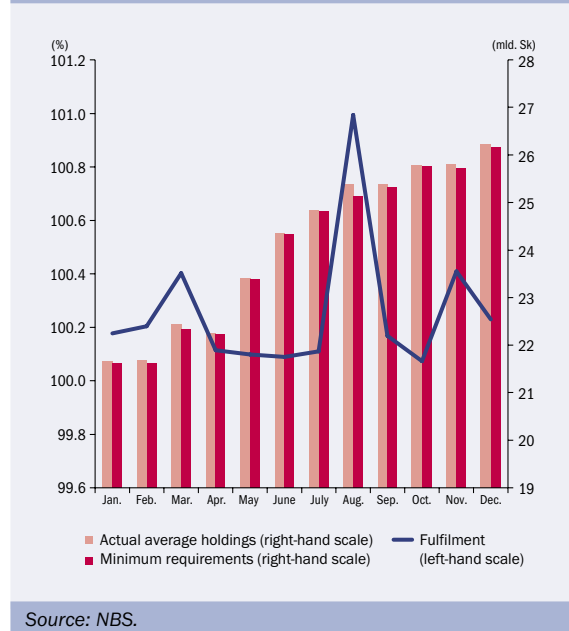
Source: NBS.



**Chart 33 Open market operations by type (monthly average) (SKK billion)**



**Chart 34 Required minimum reserves in 2007**



reflected the key interest rate cut in money market interest rates. Under the effect of interest rate movements as well as persisting expectations for further rate cuts, the money market yield curve acquired an inverse shape during the first three months of the year. The emergence of a standard shaped curve approximately in April reflected the market expectations of stable NBS interest rates until the end of 2007.

### Longer-term monetary policy operations

Regular auctions of NBS bills represented a supplementary monetary instrument that NBS also used in 2007. In total, 11 auctions with a standard 84-day maturity were held. An interest in this form of sterilization in the first half-year was mainly related to the expectation of the banking sector for a reduction in the NBS key interest rates. In the first two months of 2007, the share of funds absorbed through this three-month instrument reached 12% of the total NBS sterilization position on average. In March and April, banks held no NBS bills in their portfolios; thus, their share was zero. With the return of the Central Bank to standard monetary policy operations, the sterilization through this instrument started to grow. In the second half of 2007, the share of NBS bills in the overall sterilization was 16.3%.

### Standing facilities

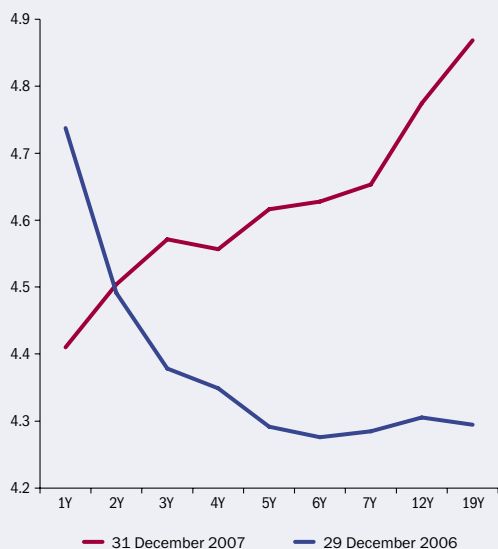
O/N standing facilities, which take the form of deposits with NBS, if there is liquidity excess, or repo transactions, if liquidity is insufficient, were used by

banks to adjust their current liquidity positions. Both forms were applied in a standard way with a one-day maturity. They were typically used at times when banks incorrectly estimated their liquidity needs for meeting the minimum reserve requirements. Towards the ends of months, especially on the last days, bank's recourse to these facilities accelerated. In the second half of March, the share of O/N deposits in the overall sterilization reached as much as 50%. Sterilization operations were a dominating factor of entire monetary policy; they also dominated standing facilities. Nevertheless, banks made also use of overnight credit from time to time. Another line of financing consisted of drawing intra-day credit. In comparison with standing facilities, this method was used only to ensure smooth operation of the payment system and did not have any monetary effects.

### Minimum reserve system

NBS applies the requirement to create and maintain minimum reserves to banks, branches of foreign banks, building societies and electronic money institutions. A total of 25 financial institutions maintained minimum reserves in 2007, and two of them started to hold the reserves only over the course of the year. The minimum reserve rate was 2% and was applied to the set basis valid since 2004. By using this direct monetary instrument NBS affects the level of banking sector's liquidity and also maintains the minimum liquidity in financial institutions to which the minimum reserve system applies, with regard to the needs of non cash payment system. The minimum reserves basis consisting of financial institutions' primary de-

**Chart 35 Benchmark yield curve of government bonds (% p. a.)**



Source: NBS.

posits in the entire term spectrum except mortgage bond issues, increased 19.3% compared to 2006. As a result, the value of minimum reserve requirements followed a growing trend during the previous year. The initial amount of minimum reserves (SKK 21.6 billion) increased to 26.2 billion as at the end of the year.

## Risk management

In 2007 NBS continued to apply the risk management system introduced in 2005. The assessment of counterparties, financial assets eligible for monetary policy operations and the valuation of financial assets including the application of haircuts follow the rules set in advance. However, NBS procedures applicable to assets were significantly simplified in 2007, for monetary policy operations were conducted using exclusively NBS securities. As of 2007, NBS started to implement an integrated information system for monetary policy operations, including communication with external participants, such as Burza cenných papierov v Bratislave, a. s. (Bratislava Stock Exchange), Centrálny depozitár cenných papierov SR, a. s. (Central Securities Depository), and, in selected parts, also with NBS's counterparties or with the Target2 payment system being in preparation. NBS plans to complete this integrated information system by the end of 2008.

## Benchmark bond yield curve

NBS monitored the benchmark portfolio structure on a continuous basis and updated it in cooperation with

the banks. The benchmark portfolio of securities was last updated in May 2007, with the aim to broaden the term structure of quoted government bonds. As at the end of 2007, the portfolio consisted of bonds with maturity from 1 to 7 years and 10, 12 and 19 years. The prices were set by processing of quotations by seven banks active in the market on a daily basis, and they were published on the Reuters system. NBS and banks use indicative benchmark curve prices for the theoretical valuation of financial assets.

Government bond yields were affected mainly by expectations for a cut in NBS key interest rates in the first months of 2007. Based on this fact, the entire benchmark curve shifted downwards, with yields on shorter maturities dropping most significantly. In May and June 2007, a marked rise of bond yields towards the European level was a typical feature. In the second half of 2007, the Slovak bond yield curve was affected mainly by the European benchmark. Moreover, the exchange rate of the Slovak koruna influenced this trend to a certain extent. This period of time was rather calm and the bond yields did not record significant changes.

## 3.2 Foreign exchange operations

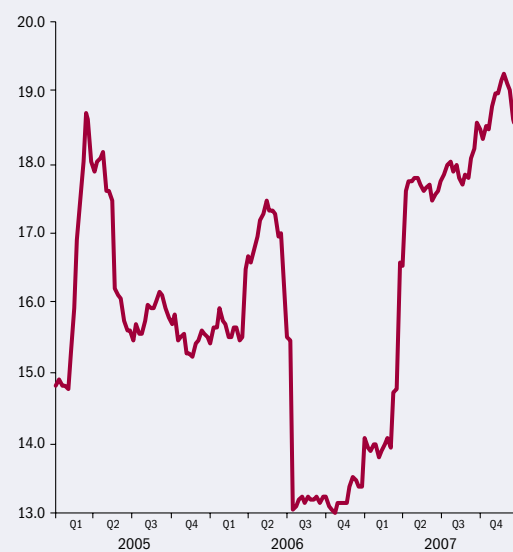
### Foreign exchange market operations

During 2007, the exchange rate of the Slovak koruna against the euro appreciated by 2.8% (from SKK/EUR 34.573 at 31 December 2006 to SKK/EUR 33.603 at 31 December 2007). The average exchange rate was SKK/EUR 33.378, representing an appreciation of 9.3% in comparison with 2006. Over the course of 2007, the exchange rate of the Slovak koruna against the US dollar strengthened by 12.9% (from SKK/USD 26.246 SKK/USD at 31 December 2006 to SKK/USD 22.870 at 31 December 2007). The average exchange rate was SKK/USD 24.713, representing an appreciation by 16.9% compared to the previous year. The exchange rate of the Slovak koruna against the Czech koruna weakened by 0.6%.

At the beginning of the year, the intervention made in the last days of 2006 faded out in the Slovak foreign exchange market, influencing the consideration and investment intentions of market players. However, the exchange rate of the Slovak koruna continued to move, and, on 8 March, the Slovak koruna approached the level of SKK/EUR 33.800. In this situation NBS intervened, and started to purchase the euro in the foreign exchange market. During the intervention, EUR 530 million was purchased. By this intervention NBS stabilized the exchange rate of the Slovak koruna only for a short period of time. On Friday 16 March a change was made to the central

**Chart 36 Exchange rates of the Slovak koruna against the euro and dollar in 2007**

Source: NBS.

**Chart 37 Foreign reserve assets managed by the NBS (USD billion)**

Source: NBS.

parity, from which the exchange rate of the Slovak koruna can deviate in the ERM II system. The original rate of SKK/EUR 38.455 was reduced by 8.5% to SKK/EUR 35.4424. During the following weekend, the exchange rate of the Slovak koruna changed by more than 100 haliers, to as little as SKK/EUR 32.710. On Tuesday 20 March, NBS entered the foreign exchange market again and purchased EUR 1,400 million, thus moving the exchange rate of the Slovak koruna to as much as SKK/EUR 33.650. At its meeting at the end of March, the Bank Board of NBS reduced the base rate by 25 basis points to 4.50%. In the following days, transactions with the Slovak koruna approached the level of SKK/EUR 33.100, and NBS reacted to this situation with the third and last intervention in 2007. On 4 April, NBS purchased EUR 700 million, and the exchange rate of the Slovak koruna moved to a level above SKK/EUR 33.600. Later on, at the end of April, the Bank Board of NBS reduced the base rate to 4.25%. The exchange rate of the Slovak koruna stabilized, and in the following months it was influenced mainly by regional or global market factors. The exchange rate of the Slovak koruna correlated markedly with the exchange rates of the comparable surrounding countries, except with the Czech koruna, and the movement of the exchange rate of the Slovak koruna was subject rather to a risk appetite or aversion of the world markets. Till the end of the year, the Slo-

vak koruna copied developments in the region and hovered at around SKK/EUR 33.500.

### Investment activities in foreign reserve management

In 2007, as in previous years, NBS followed, in foreign reserve management, investment policy in accordance with the rules set out in the long-term investment strategy approved in 2004. Since the trend of the exchange rate of the Slovak koruna against the euro had a markedly high volatility over the course of 2007, the subsequent interventions to correct it influenced the amount of total foreign exchange reserves. Over the course of 2007, NBS purchased a total of EUR 2,630 million in interventions. The value of foreign reserve assets at the respective exchange rates and market prices increased from USD 13.36 billion at the end of 2006 to USD 18.98 billion at the end of 2007. The increase in foreign reserve assets was mainly due to interventions. The amount of foreign assets denominated in US dollars was also affected by the strengthening of the euro against the dollar. The return on foreign reserve assets was 3.7% for the euro investment portfolio and 7% for the dollar investment portfolio. The total income from foreign reserve assets based on both portfolios reached approximately SKK 17.7 billion in 2007.