CHAPTER 3

NBS MONETARY POLICY OPERATIONS, FOREIGN EXCHANGE OPERATIONS AND INVESTMENT ACTIVITIES IN FOREIGN RESERVE MANAGEMENT

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

3.1 MONETARY POLICY OPERATIONS

The year 2008 was the last year, in which NBS continued to implement its independent monetary policy using the unchanged instruments. The essential parameter of the monetary policy in the medium-term outlook was to set the target value for inflation, defined as inflation targeting under the conditions of ERM II. The main instruments of NBS in relation to this medium-term target were the key interest rates, namely the interest rate limit for two-week repo tenders and interest rates for O/N refinancing and sterilization operations. Národná banka Slovenska conducted its monetary policy using the basic set of instruments comprising operations with banks and branches of foreign banks, in particular open market operations including the issuance of short-term securities and O/N operations.

Liquidity of the banking sector

The banking sector had a marked liquidity surplus at its disposal in the recent ten years. The average daily amount placed by banks in sterilization operations with NBS in 2008 was SKK 377.5 billion (EUR 12.5 billion); in comparison with 2007 it increased by SKK 17.2 billion (EUR 0.6 billion). Compared with the sterilization amount of SKK 371.6 billion (EUR 12.3 billion) at the beginning of 2008, the highest sterilization position was recorded in November, in an amount of SKK 386.7 billion (EUR 12.8 billion). The increase in the total sterilization amount was caused mainly by a decrease in currency in circulation related to the planned euro introduction in Slovakia.

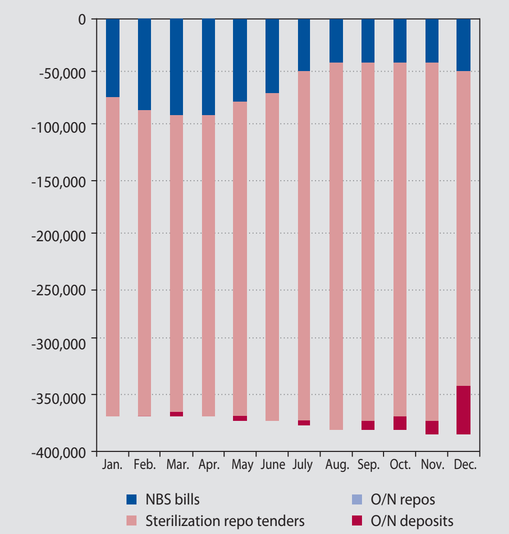
Main monetary policy operations

The open market operations were again dominated by standard sterilization repo tenders with a maturity period of 2 weeks, held on a regular weekly basis. On average, 81% of liquidity surplus was absorbed through this instrument, whereas its highest share was recorded in August (88%) and the lowest share was in March (74%). A total of 54 sterilization repo tenders were held during the year and NBS accepted full demand in all cases. In all cases, the average interest rate matched NBS current interest rate limit for two-week repo tenders, since the banking sector did not expect any changes in monetary policy settings. Until October 2008 the NBS Bank Board left the key interest rate for two-week repo tenders unchanged at 4,25%. At its October meeting it decided to lower the key interest rate by 0.5 of a percentage point. This reduction was followed by two further cuts in November and December, by 0.5 and 0.75 of a percentage point, respectively. By this gradual easing of monetary policy the NBS key interest rate for two-week sterilization tenders was harmonized with the ECB key interest rate for one-week refinancing tenders.

Longer-term monetary policy operations

Regular auctions of NBS bills represented a supplementary monetary instrument that NBS also used in 2008. In total, 13 auctions were conducted. The first 10 auctions were held with a standard 84-day maturity and the maturity of the last 3 auc-

Chart 31 Open market operation by type (monthly average, SKK millions)



Source: NBS.

tions was brought into line with the requirements of the market resulting from the euro changeover. NBS bills offered in the last auction matured in the second half of January 2009. During the year, the share of funds absorbed through this three-month instrument reached 17%. Though, with the end of the year approaching, the demand in the auctions of NBS bills gradually decreased along with the increased banks' preference for short-term sterilization. In the first half of 2008, the NBS bills' share in the sterilization position was around 20%, and, towards the end of the year, NBS absorbed just 11% through this instrument, since banks were transferring funds from NBS bills to two-week repo tenders and O/N deposits.

Standing facilities

O/N standing facilities, which took the form of the deposits with NBS in case of liquidity surplus, and repo transactions in case of a lack of liquidity, were used to adjust their current liquidity positions. Both forms were applied in a standard way, with a one-day maturity. Towards the ends of months, especially on the last days, bank's recourse to these facilities accelerated. The banking sector found itself systemically at liquidity surplus and monetary policy was of sterilization nature, which was reflected in standing facilities as well, though banks made also use of overnight credit. During the year the share of O/N deposits in sterilization position was around 1%. In December their share reached 11%, which reflected the interest of banks in shortest-term operations related to the approaching euro introduction. In order to ensure smooth conduct of their payments, banks were drawing intra-day credit, however, without apparent monetary effects.

Minimum reserves

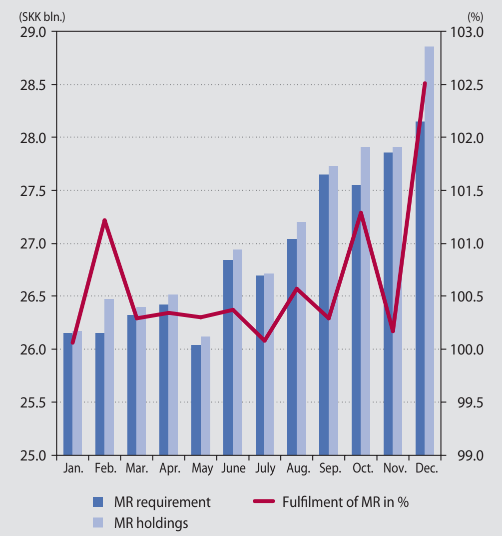
NBS applies the system of minimum reserves (MR) to banks, branches of foreign banks, building societies and electronic money institutions. A total of 26 financial institutions maintained minimum reserves in 2008, and one of them started holding MR during the year. The MR rate was set as 2% of the reserve base. An institution's reserve base consists of deposits and debt securities issued, except mortgage bonds, in the entire term spectrum. The reserve base increased by 7.65% compared to 2007, and the value of MR increased from SKK 26.1 billion (EUR 866.36 million) in January 2008 to SKK 28.2 billion (EUR 936.07 million) in December 2008.

By using this direct monetary instrument, NBS affects the level of banking sector's liquidity and, at the same time, maintains the minimum liquidity of financial institutions, to which the minimum reserves system applies, with regard to the needs of non-cash payment system.

Till the end of 2008 NBS applied its own MR system, which differed in some details from that applied by the Eurosystem. During previous year NBS prepared new set of rules for MR holdings, so that after Slovakia's entry into the Eurosystem they are in harmony with those applied by the Eurosystem. In the second half of 2008, NBS announced the new rules to all financial institutions operating in Slovakia and subject to MR requirements. The Slovak financial institutions started acting according to the new rules as of 1 January 2009, in the midst of the Eurosystem's maintenance period starting in December 2008 and ending in January 2009.

These changes were mainly related to the time structure of the reserve base, which consists only of primary deposits and debt securities issued with an agreed maturity of up to two years. In addition, a standardised one-off deduction of EUR 100,000 was introduced, which caused a decrease of calculated MR in comparison with 2008 by 18.8%. These changes affected maintenance period durations, which are defined by the an-

Chart 32 Minimum reserve survey in 2008



Source: NBS.

nounced maintenance period calendar, and the MR remuneration rate.

Risk management

The system of risk management, which NBS introduced in 2005, was applied also in 2008. The system covered the assessment of counterparties eligible for monetary policy operations and the selection, assessment and valuation of financial assets eligible for monetary policy operations, including application of valuation haircuts. In 2008 NBS accepted as collateral in its monetary policy operations or for outright sale all government securities (Government bonds and Treasury bills) and bills issued by NBS. Due to the prevailing liquidity surplus in the banking sector, NBS bills were mostly used. In November 2008, consecutively to anticipated financial crisis effects, NBS decided to accept commercial bank's mortgage bonds as additional type of eligible assets as collateral for refinancing operations with NBS.

During the second half of 2008, in connection with the expected entry of the Slovak Republic into the euro area, NBS prepared a new set of risk management rules, harmonized with those valid in the Eurosystem, since the provisions applied by the Eurosystem differed from those applied by NBS in 2008. For example, the structure of debt instruments accepted by the Eurosystem in its monetary policy operations was considerably wider. In addition to debt instruments registered and traded in the Slovak Republic, counterparties can use the eligible assets from other euro area countries including selected debt securities from G-10 countries, provided they hold them and the eligibility of the assets has been confirmed by their publication on the ECB website. Concerning asset types, for instance non-government bank and non-bank debt instruments and the financial institutions' credit claims can become eligible as collateral.

During the year NBS held several working meetings with the representatives of Slovak banks, in which the rules and procedures applied by the Eurosystem in its monetary policy operations in the Slovak conditions were presented and discussed. By the end of December, NBS conducted an eligibility assessment of assets registered and traded in the Slovak Republic. As of 1 January 2009, these assets will become part of the Eurosystem Eligible Assets Database. NBS prepared daily monitoring and updating procedures for the regular communication with the ECB as well.

In valuing assets, NBS applied in 2008 mainly the theoretical value of eligible assets based on benchmark curve data and BRIROR reference interest rates. The market price of assets was used exclusively in cases, where the given security was traded on the Bratislava Stock Exchange. NBS published actual prices on Reuters on a daily basis. After the entry of the Slovak Republic into the euro area, this mechanism is going to be changed to a certain extent. The set priority is to obtain single market or theoretical price for each individual asset used in Eurosystem's monetary policy operations.

During 2008 NBS completed the implementation of its new integrated information system for Eurosystem's monetary policy operations and foreign reserve management. Automated communication with external systems such as Burza cenných papierov v Bratislave, a. s. (Bratislava

Table 21 Slovak assets eligible from 31December 2008 by type

Debt securities	Number of issues	Value of the issues in SKK billions	Value of the issues in EUR billions
Government bonds	20	373.6	12.4
Treasury bills	1	45.2	1.5
Mortgage bonds	83	51.2	1.7
Non-government bonds	10	6.0	0.2
NBS bills[1)]	2	54.2	1.8
Total	116	530.2	17.6

Source: NBS.
1) Up to 20 January 2009.
Note: According to Eurosystem methodology.

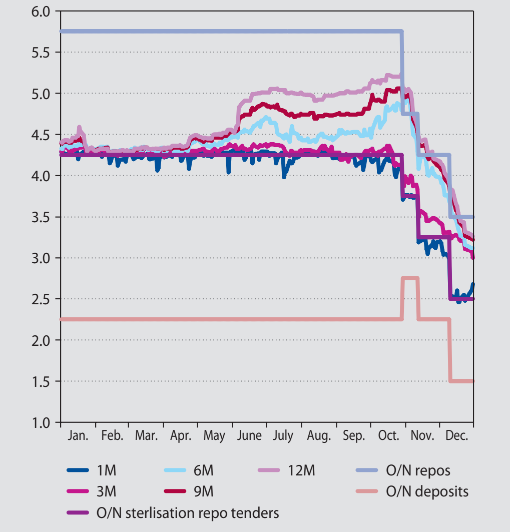
Stock Exchange), Centrálny depozitár cenných papierov SR, a. s. (Central Securities Depository), TARGET2-SK payment system, the ECB, other Eurosystem's NCBs and mainly with NBS's and Eurosystem's counterparties using the SWIFT system is a substantial part of this new information system.

Developments in the Slovak money market

In 2008, interest rates of domestic money market were predominantly influenced by the euro area money market rates. During the first five months of 2008, their development was relatively stable. In June 2008, deposit rates in the domestic market were influenced by the ECB's decision to increase its key rates, which resulted in an increase of deposit rates from approximately 4.35% to 4.75%. Over the next quarter, the domestic rates saw no substantial changes. Since the beginning of October, the euro area market rates have been significantly decreasing, due to the cuts in the ECB key interest rates. These cuts, followed by reductions of NBS key rates, are considered to be the essential factor of a significant decrease in domestic market rates from approximately 4.85% to 3.00%. Nevertheless, the Slovak rates remained above the euro area level till the end of 2008.

Expectations, as the main determinant of developments in long-term interest rates in the domestic money market, were being created and influenced by current and expected economic growth, the process of fulfilment of the convergence criteria for the adoption of the single European currency and the subsequent setting of the Slovak koruna/euro conversion rate, and by NBS acting as well. The foreign exchange market, or the exchange rate of the Slovak koruna, as the most sensitive indicator of interest rates changes, did not fulfil its mediation function in such a scale as it did in the previous years. The strengthening of the Slovak koruna against the euro recorded up to the setting of the new ERM II fluctuation band at the end of May 2008 was not reflected in a change, i.e. in a decrease in the domestic long-term rates. During this period, the interest rates were influenced by developments in euro area rates with the similar maturities. After the conversion rate of the Slovak koruna against the euro was set, the foreign exchange rate of the Slovak koruna against the euro remained rather stable; this development was to a certain extent

Chart 33 BRIBOR interest rates in 2008 (in % p.a.)



Source: NBS.

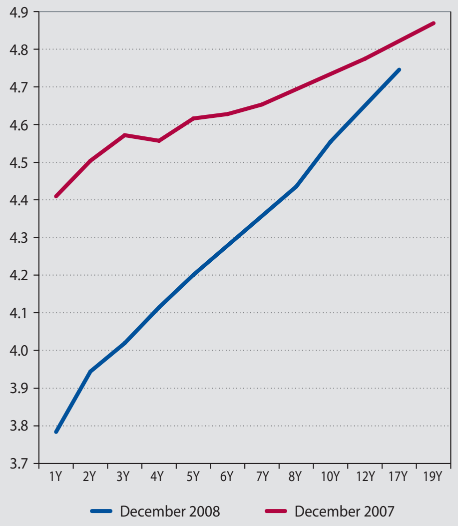
determined by the conversion rate set and the interest rate differential between the domestic rates and that of the euro area. The subsequent growth in rates, particularly in the third quarter, was solely an adjustment of domestic rates to euro area levels in the process of gradual convergence of interest rates.

Benchmark bond yield curve

NBS monitored the benchmark portfolio structure on a continuing basis, and updated it in cooperation with the banks. In 2008, the benchmark portfolio of securities was last updated in September. Towards the end of 2008, the portfolio included bonds with a maturity of 1 to 5 years, together with 8-year, 10-year and 17-year bonds. The prices were set by the daily processing of quotations given by seven banks active in the market, and they were published on the Reuters system. Like banks, NBS used indicative benchmark curve prices for the theoretical valuation of financial assets.

In the course of the year, the benchmark curve of government bonds was moving up. The initial decrease of the yield curve was corrected by the subsequent increases continuing till the end of the first half of 2008. In the following period, the yield curve shifted downwards, affected mainly by multiple cuts in NBS key rates. Other

Chart 34 Benchmark yield curve of government bonds (in % p.a.)



Source: NBS.

factors causing the decrease of domestic yield curve were the decrease in the yield curve of the euro area and increased interest of market participants to invest excess funds consisting of cash deposits of domestic households made in connection with the euro changeover. The last fact exerted mainly the downward pressure on yields at the short end of the yield curve. In the previ una against the euro was to a certain extent reflected in the development of government bonds in the secondary market. However, in 2008, the strengthening of the Slovak koruna against the euro did not caused a decrease in government bonds yields similar to that seen in the previous period.

3.2 FOREIGN EXCHANGE OPERATIONS

Operations in the foreign exchange market

During 2007, the exchange rate of the Slovak koruna against the euro appreciated by 10.4% (from SKK/EUR 33.603 to SKK/EUR 30.126). The average exchange rate was SKK/EUR 31.291, representing a change of 7.4% in comparison with 2007. The exchange rate of the Slovak koruna strengthened against the US dollar by 6.5% (from SKK/USD 22.870 to SKK/USD 21.385). The average exchange rate was SKK/USD 21.346 (appreciation by 13.6% in comparison with 2007). The exchange rate of the Slovak koruna strengthened against the Czech koruna by 10.4%.

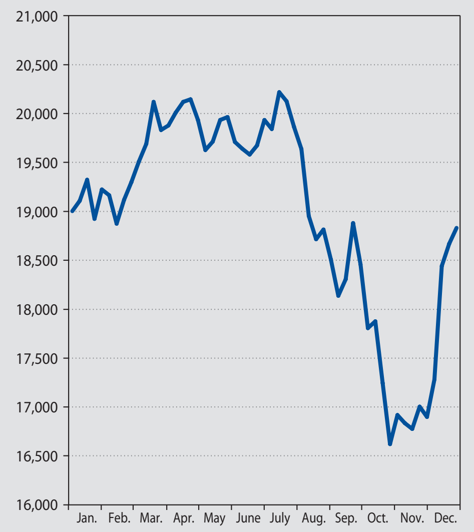
At the beginning of the year, the Slovak koruna hovered at SKK/EUR 33.600. Very good macroeconomic indicators (e.g. GDP growth in the fourth quarter of 2007 reached 14.3%, followed by 8.7% in the first quarter of 2008) along with positive statements by representatives of European institutions started to influence also the exchange rate of the Slovak koruna, and, as a result, its strengthening continued. Similar developments in the markets of neighbouring states (mainly V4 countries) and market speculations about the possible revaluation of the central parity brought the exchange rate of the Slovak koruna at a level of SKK/EUR 32.500. After reaching this level, the speculations about further strengthening of the Slovak koruna intensified, affected also by statements by Slovak representatives expressing their wish for as strong exchange rate as possible. The exchange rate was significantly strengthening in May, and approached the lower limit of the ERM II band (SKK/EUR 30.126). Upon agreement of the finance ministers of the euro area member states, President of the ECB and finance ministers and central bank governors of Denmark, Estonia, Latvia, Lithuania, and Slovakia, the central rate of the Slovak koruna in ERM II was revaluated by 17.6472%, with effect from 29 May 2008. On a given day the koruna strengthened and reached a historical high of SKK/EUR 30.080. The market interpreted this information of the central parity change in such a way that the conversion rate would not significantly differ from this new central parity, which was also emphasized by several politicians.

After the conversion rate was fixed, trading in the spot foreign exchange market slowed as well. The influence of speculative transactions significantly diminished, since the volatility of the Slovak koruna went down and the exchange rate of the Slovak koruna was derived from the interest rates in the Slovak and European money markets. This was due to the fact that in the case of more significant deviations a risk-free arbitrage could be applied. The exchange rate of the koruna fluctuated within a narrow band until the end of October, and then the koruna weakened to SKK/EUR 30.800; this weakening was influenced mainly by motivation to buy the euro in spite of possible losses in view of approaching convergence.

Chart 35 Exchange rates of the Slovak koruna against the euro and dollar in 2008

Source: NBS.

Chart 36 NBS foreign reserves (USD milions)



Source: NBS.

This motivation was based on the foreign banks' needs to have a prompt access to euro liquidity. At the same time the interest of Slovak banks in selling euros decreased because their credit lines were already drawn. The exchange rate at the level of SKK/EUR 30.800 had already been a sufficient motive for banks to enter arbitrage deals, and, therefore, they had started to buy korunas. In November and December, the exchange rate of the koruna fluctuated within a band in which the arbitrage opportunity was low, and the rate continually approached the conversion rate of SKK/EUR 30.1260.

Investment activities in foreign reserve management

In 2008, 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 was in line with NBS monetary policy and with the expected entry into the euro area, no interventions were conducted in the foreign exchange market. The value of foreign reserve assets at the respective exchange rates and market prices slightly decreased from USD 18.9 billion at the end of 2007 to USD 18.8 billion at the end of 2008. The return on foreign reserve assets was 7.1% for the euro investment portfolio and 5.0% for the dollar investment portfolio. In 2008, the combined return on foreign reserve assets based on the performance of individual portfolios reached approximately SKK 30.4 billion (EUR 1.0 billion).