NÁRODNÁ BANKA SLOVENSKA

Financial Stability Report

2004

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Imricha Karvaša 1
813 25 Bratislava

Public Relations Department
tel.: +421/2/5787 2142
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Introduction and Executive Summary

1. Objectives of the Financial Stability Report of the SR for 2004

The Financial Stability Report represents an evaluation of financial system stability in the country. The definition of the country's financial system may vary. As construed in praxis, it includes the domestic financial sector institutions, mainly the banking sector, the payment system and the domestic financial markets. Within the financial system there is a growing role for the system of public finance management – performed largely by the Debt and Liquidity Management Agency (ARDAL) and the State Treasury (ŠP) – due to the importance of public finances for the financial markets and their mutual links with the financial sector. The foreign economy and foreign financial system are exogenous vis-à-vis the financial system in Slovakia – though they significantly influence its operation and stability, they are not strongly impacted by it. In the case of the domestic economy, the situation is different: developments in the financial sector and in domestic financial markets exert a significant influence on the domestic economy. In unfavourable situations, the real economy may serve not only as a source of disturbances in the financial system but also as an accelerator and multiplier of financial instability.

What is financial stability?

Financial stability is understood as the ability of the financial system to do the following at the same time:

1. effectively allocate financial resources and assist in the effective allocation of other funds in the economy;
2. allocate and manage financial risks;
3. effectively provide for payments;

and to do so even when the economy and the financial system are impacted by external shocks or accumulated imbalances.

In other words, the financial stability of the economy is understood as the ability of the economy's financial system to handle shocks and imbalances, without the operation of the system becoming less effective and without the economy suffering negative impacts.

Ineffective functioning of the financial system results in the ineffective functioning of the economy as a whole. Inability to handle the shocks and growing imbalances in the financial sector may lead not only to disturbances and volatility of the financial system parameters, but also to impairment and excessive volatility of the economy. Ultimately, they could lead to an overall financial and economic crisis.

An evaluation of financial stability includes:

1. An evaluation of external conditions – an evaluation of the external environment, the size and scope of risks, shocks and imbalances which affect or will affect the economy and the financial system. Compared to the (domestic) financial sector, the external environment includes foreign economies and markets (commodity and financial);

2. An evaluation of the domestic conditions, particularly the domestic real economy, public finance, non-financial corporations, households, goods and commodity markets and markets in non-financial assets;

3. An evaluation of the performance and effectiveness with which the financial system performs its functions; an assessment of whether the financial system has the ability to manage and distribute risks as well as possible, whether it generates sufficient resources for absorbing risks and potential losses resulting from them, whether these resources enable the elimination of shocks and

imbalances, and conversely, whether low performance and effectiveness are causing disturbances or creating risks, and whether the financial system tolerates a concentration of risks possibly leading to local imbalances which have implications on the effectiveness, balance and stability of the economy;

4. An evaluation of robustness – an evaluation of the financial system's ability to mitigate the effect of risks and shocks, reduce cumulated imbalances and manage and distribute the risks as well as possible, without negative impacts on the economy. The opposite of robustness is sensitivity to shocks, and an intensification of risks and imbalances;

5. Establishing the risk of a financial imbalance – determining the probability that disturbances or cumulated imbalances of the financial system will in future lead to ineffective functioning of the financial system and the economy, and/or to excessive volatility of the parameters of the financial market and economy, and/or financial crisis.

2. Executive Summary

Chapter 1. External environment

The economy of Slovakia is characterized by a high level of openness in foreign trade. The value of foreign trade in goods and services was a 1.57 times greater than the gross domestic product. Therefore, the evaluation of the financial stability in 2004 and its outlook for the next years requires a description of the internal and external assumptions for economic and financial stability. Given the ownership relations of companies, banks and other financial institutions operating in the territory of Slovakia with financial corporations having their seats mainly in the euro area but also outside the euro area and the EU, it is important to assess the financial situation in the financial services sector in the relevant external environment, particularly in the euro area. Lastly, it is necessary to evaluate the situation and the expected development in foreign financial markets. It is increasingly obvious that large movements in the global financial markets will affect the stability of the regional (V4) and domestic financial markets. Therefore it is necessary to assess whether such movements and instability in the external environment of the Slovak economy and financial system has occurred and may occur in the future, whether the existing stability is not simply the consequence of favourable external conditions, and whether the stability of the domestic financial system is jeopardised by any turbulences and disturbances in the external environment.

Considering the situation in 2004 and its potential development in the forthcoming years, the following assessments are obvious:[1]

- in 2004, external economic prerequisites for financial stability improved; economic growth accelerated and conditions were created for stabilizing the financial situation of non-financial and financial corporations, government finance in the world economy, in the countries of our business partners and in our environs;
- financial stability in the financial sector improved, particularly in the banks and in the countries with which the domestic financial sector is strongly integrated;
- uncertainty regarding the future development of the USD exchange rate against the EUR, low interest rates on US government bonds and rising crude oil prices represented the major uncertainties in the global financial and commodity markets;
- the key risks for the future development and stability of the economy and the financial system in Europe, Slovakia and around the world include unbalanced development in the United States, the low renminbi rate and overheating of China's economy, slow reforms of the euro area economies and slower than expected economic growth in the EU and euro area, and high crude oil prices.

Chapter 2. Domestic economic environment

The financial stability of the economy is the result of the mutual interaction of the situations in the

[1] *ECB: Financial Stability Review, December 2004; European Commission: Economic Forecasts Spring 2005; IMF: Global Financial Stability Report, April 2005.*

real economy, the financial sector, the financial markets and the payment system. At the same time the role of the domestic economy is crucial. It is determined by the stability in individual sectors of Slovakia's real economy – in the public sector, the non-financial corporations sector, the households sector and international trade sector. The basic question with regard to financial stability is whether these sectors were in balance and whether the operating results created conditions for the generation of necessary reserves and coverage of financial risks, or conversely, – whether financial operations included tensions, problems in meeting obligations, and risks of disturbances and default. These questions arise not only in relation to the current situation, but also with regard to future potential development in connection with the sustainability of their current operating parameters.

Crucial to assessing the real economy in terms of its impact on financial stability is the role played by the overall performance of the economy, mainly the growth rate and its relation to the potential output. The second significant aspect is the evaluation of effectiveness. A prerequisite for stability is the ability to generate operating surpluses, which are not only a condition for continued effective growth but also a source of reserve generation (stabilisation). The third element of evaluation is the achieved equilibrium, since a disproportionately high imbalance represents a threat of its unwinding. The evaluation of the periods of tension and overheating is a part of this.

In terms of creating conditions for overall economic and financial stability, Slovak economic development in 2004 was very favourable. The economy started to experience the effects of a tax reform that decreased the tax burden of companies and improved the way foreign investors perceive the business environment in Slovakia. Further reforms, such as pension reform and health-care system reform, should contribute to the long-term sustainability of public finances. The consolidation of public finance is in progress. The adopted reforms and measures contributed to increasing the interest of foreign investors in Slovakia. Economic growth accelerated without any signs of overheating. The current account deficit increased, but a large part of it was financed by foreign direct investments inflows, thus creating conditions for further growth of exports and strengthening of external economic stability. Although the exchange rate came under appreciation pressure during the year, there were no situations that would signal monetary instability.

Economic growth also laid a basis for the growth of incomes and profits. Because unit wage costs (wages as share of gross domestic product) did not grow, there were greater profits for financial and non-financial corporations and thus an increase in the resources for stabilizing their financial situation. Faster strengthening of the exchange rate represented a problem for some non-financial corporations, mainly those which lacked a developed financial management and which in the past had been slow to restructure.

Household consumption growth was supported by fast growth in lending to households. So far in this sector, the coverage of payables by revenues is high and the coverage of the sector liabilities by assets is at a standard level. At present, therefore, current household indebtedness does not represent a problem in terms of stability.

The outlook for the future economic and financial stability in Slovakia is favourable. Specific risks include upcoming parliamentary elections and the political cycle connected with them. But as long as the objectives of the Convergence Program are observed, potential changes in government policy should not represent any risk to economic and financial stability. It will be also important to restrain wage growth. Currently it is held back by the high unemployment rate. Given the significant differences in unemployment rates across regions, it is necessary to take care that regional labour markets do not become centres of imbalance.

Chapter 3. The banking sector

The evaluation of the situation in the banking sector represents the basis for assessing the stability in the financial sector.

In 2004 the domestic banking sector was favourably influenced by the economic environment. This is related to external factors such as global

economic growth and the continuation of positive trends among banking groups in the EU, in addition to domestic factors, particularly the macroeconomic development in the Slovak Republic. Slovakia's accession to the EU did not significantly affect the business of Slovak banks, nor did it bring the greater competition pressures that some banks feared.

Development on the liabilities side of the banks' balance sheets included significant structural changes. The share of household deposits decreased and the share of corporate deposits (partially connected with household savings in mutual funds) and public sector deposits increased. The State Treasury and the Debt and Liquidity Management Agency played a significant role in this regard. The volume and share of interbank deposits increased, which was mainly determined by inflow from the international interbank market. Mortgage bonds remained an expensive source of funding for the banks and their share increased only slightly. On the other hand, the volume of issued bills increased, possibly reflecting efforts to reduce deposits insurance costs. In general, the development of liabilities can be characterized as a movement towards lower costs and higher concentration (as far as depositors are concerned). On the asset side, there was fast growth of bank assets at the central bank (sterilization), Slovak koruna loans to households and foreign currency loans to corporations. Lending to households is currently concentrated in three banks. The growing volume of interbank assets is related to expected exchange rate developments.

Off-balance sheet items of banks operating in Slovakia are permanently growing, and in several banks, the off-balance sheet part is larger than the balance sheet part. Among the most significant characteristics of the off-balance sheet developments are the growth of the pledged receivables accepted by banks in deals with the NBS or clients, the high value of the interest-rate and foreign-exchange instruments, the dynamic growth of option transactions and the constant growth of receivables on future loans.

The net profit of the banking sector increased by 14% year-on-year. The main profit item, interest income, increased slightly despite a decline in interest rates. The growth of interest income was recorded mainly by banks active in lending to households. Within the banking sector the interest income from the NBS also increased; at the end of 2004, the share of net interest income from NBS transactions represented 25% of the total net interest income of the banking sector. In 2004, the growth of non-interest income on total revenues from banking activities continued. As for lending to households, the growth in activity was positively reflected by the banks' higher revenues from client fees. The banks significantly increased their year-on-year revenues from trading, especially from securities trading. Increased labour intensity for lending to households was reflected in growth of wage costs and operating costs. However, despite increased operating costs, the banking sector reported higher operating efficiency in 2004. The net profit of some banks, compared to 2003, was reduced due to lower revenues from released reserves.

In 2004, the banking sector reported a relatively high capital adequacy, which at the end of the year reached 19%. High capital ratios in the banking sector thus created the conditions for growth of risk-weighted assets. This trend was confirmed in the second half of 2004 when the volume of risk assets grew significantly, the value of risk-weighted assets indicator grew, and the capital adequacy of the banking sector decreased. In 2004, several banks reported changes in the capital adequacy indicator caused by the changes of risk-weighted assets on the one hand, and changes in own funds on the other.

In 2004, the share of loans in the banking sector increased but it was accompanied by an increase in the share of zero risk weighted assets. The credit risk of the banks was influenced mainly by the high growth of loans to households and foreign exchange loans to corporations. With the growth of loans to households, the volume of classified loans to households also increased.

During the year the imbalance in the banking sector between interest-sensitive assets and liabilities decreased, which led to lower interest-rate risks at the end of 2004. On the assets side of the balance

sheet, this was caused by the shortening of the interest rate fixation period for loans and securities and the growth of NBS assets. The results from the stress scenarios suggest that the debt-sensitive structure of interest-sensitive items was putting the banking sector at risk in the event of interest rate increases.

The foreign-exchange position of banks was changing mainly under the influence of foreign-exchange funds from international banks. These funds were decreased in the first half of 2004, and began to rise again from May, causing a short balance-sheet position at the end of the year. While in some banks, mainly branches of foreign banks, the increase in short-term foreign exchange bank deposits was mainly connected with the growth of assets in the local currency, in other banks the growth of bank deposits in foreign currencies was largely due to growth in foreign-exchange loans. Banks engaged in term transactions and options used off-balance sheet transactions to actively manage the foreign-exchange risk. Smaller and medium-sized banks predominantly had a slightly closed balance-sheet position and, under the influence of selected transactions, an open position in the off-balance sheet.

Liquidity risk remains the risk most difficult to quantify in the banking sector. However, it can be generally stated that the disparity in maturities of assets and liabilities in the banking sector widened in 2004. This is connected with the growth of long-term loans and the transfer of deposits from savings and term accounts to current accounts. The interbank market was characterized by growth in deposits of foreign banks and an increase of active deals with the NBS. This increased the sensitivity of several banks to the potential withdrawal of interbank deposits by a foreign bank. The liquidity of government bonds also remains questionable.

With regard to liquidity management in Slovak banks, three groups of factors are apparent. The first is an orientation towards typical banking activities. The granting of long-term loans, mainly to households, and the growth of current-accounts balances accompanied by falling demand for savings accounts increased the disparity in maturities between assets and liabilities. The second factor is the influence of parent banks on the domestic banks' liquidity positions, when manipulating with the short-term capital. The third factor is the growth of the NBS sterilization position.

The preparation of a deeper evaluation of households credit risk is made necessary by the fact that household loans represent a significant share of the total loan portfolio of the banks and that loans in this sector have grown sharply in recent years. The growing exposure of banks towards households is raising the issue of the ability of households to repay their debts. The ability of households to repay loans can be adversely affected by growth of interest rates, since a large portion of household loans was contracted at short interest rate fixation periods.

Mortgage banking is one of the steadily growing areas within the banking sector. The provision of mortgage loans grew in all the banks for most of the year. The high concentration of the mortgage market gradually decreased for the second consecutive year. In several banks the character of mortgage deals changed slightly in terms of credit risk. The increased risks may now be seen with lower risk premiums in reduced interest rates and the higher ratios between the amount of the loan and the value of the collateral. Credit risks, on the other hand, could be offset by a lower average instalment and a shorter loan maturity.

Chapter 4. Domestic financial markets

The characteristics of the financial market of the Slovak Republic are similar to those in the developing markets. It is small and often perceived by foreign investors as part of the V4 regional market. The most important segments – the money market, the foreign-exchange market and the government bond market are able to ensure the expected functions. The stock market is stagnant and underperforming. We expect that the potential of the capital market will be reinstated in connection with the pension reform. In 2004, pension administration companies and respective supervision institutions started to be established. We expect that this will facilitate the expansion of services and investment opportunities in the form of combining different investment products.

On the other hand, thanks to the successful restructuring and privatization of banks and Slovakia's membership in the EU and orientation towards the euro area, Slovakia is integrated into the broader EU and the euro area market. In 2004, the development in the financial market was characterized by the strengthening of the foreign exchange rate of the Slovak koruna and the growing volume of free liquidity. This changed and complicated the conditions for conduct of monetary policy. The stability of the features of the domestic financial market decreased, albeit slightly, and the predictability of the development became more difficult. It is increasingly impacted by the events and conditions of the external market and the foreign and global financial markets. As the domestic financial market is small and marginal from the point of view of financial players, it is exposed to the effects of external influences which appear to be random and unpredictable. This is one of the reasons the Slovak Republic gives preference to its orientation towards the euro area.

The decisive events which influenced the development in the domestic financial market were Slovakia's accession to the EU in May 2004, acceleration of the inflow of foreign direct investments and the decision on the orientation towards the euro area with a planned date of accession as of January 1, 2009. These facts, together with the regional factors of the V4 market, significantly contributed to the appreciation pressures on the Slovak koruna and the growth of free liquidity. The second key event was the intensified activity of the State Treasury and the Debt and Liquidity Management Agency. Large funds were concentrated in the State Treasury accounts, mainly after the integration of the tax authorities. ARDAL became a powerful entity in the money market. The banks became dependent upon the funds managed by ARDAL, which significantly impacted the price conditions on the government bond market. The government securities market was also influenced by the changed tax legislation.

In 2004, the NBS decided to apply cut downs or rejections of the demand of the banks in NBS government bond auctions against the appreciation of the Slovak koruna. A one-off application of such a procedure is not problem free, however, the recovery of money market functioning was fast. Trading with options can be clearly considered as a qualitative change in the interbank foreign exchange market. The market of foreign exchange conversion did not report any significant growth in 2004 and it is assumed that the foreign exchange conversion market will be rather linear in the next years. The use of derivatives in the money market started to provide important information on the interest rate expectations of its participants. In addition, more sophisticated transactions are an important factor in the maturity of the domestic market and its integration.

Chapter 5. Institutions and economic agents in the capital and insurance markets

In spite of the fact that it is possible to do business in the Slovak capital market within standard legal and institutional environment, the market continues to be lacking sufficient liquidity and performance, and offers a limited choice of investment tools for the conclusion of deals and hedging exposures. The capital market entities reported improved financial results and good financial stability. The functioning of the capital market in 2004 was also affected by shortcomings which arose when the Securities Centre was transformed into the Central Depositary of Securities.

As for financial stability, 2004 was a successful year for the insurance companies, which are supervised by the Financial Market Authority. The profitability of the sector as a whole continued to improve, the volume of trade increased and the loss ratio slightly decreased. The solvency indicators of individual insurance companies reported positive values. In 2004, the situation in the domestic insurance sector supported the overall financial stability.

In 2004, the first phase of pension reform (conceptual and legislative preparations) began. Its objective was to establish privately managed pension funds, the so called 2nd pillar of the pension system. The estimate of their total size is approximately 50% of the GDP. Thus significant changes will occur in the financial system of the Slovak Republic. New financial, information and legal links within the financial system and the new segment of financial

market – the pension savings market with its market participants, will be created. Their activity, as well as their relations within the financial system, will be subject to independent supervision.

Chapter 6. Payment system of the Slovak Republic

Changes in the operation of the payment system represent a continuation of the process started by the National Bank of Slovakia, when on January 1, 2003, the new SIPS payment system was established and began operation. The National Bank of Slovakia concludes standardised payment system contracts, which are also available on its web page. Currently, 28 participants actively operate within this transparent system. The functions of SIPS were enhanced by the real-time settlement of payments (final and irrevocable). The NBS supported the smoothness of the interbank payments through provision of intraday credit. In addition, the security of the interbank payment system was strengthened by the introduction of emergency data transfer.

The volume of payments increased (at approximately the same rate as the nominal GDP growth rate) by 9.8%, while 44% of the payment volume represents priority payments. The use of credit cards is growing rapidly. The volume of payment card transactions reached 16% of GDP, of which 90% represented withdrawals. Legislative and institutional changes occurred in the payment system of the Slovak Republic in 2004. Activities for its integration to the single internal EU market continued.

Changes in the payment system were supported by the ongoing analysis which was elaborated by the NBS within its supervision activity over the payment system. Its objective was to increase the effectiveness of the payment system and limit its operating risks.

1. The External Environment

The economy of Slovakia is characterized by a high degree of openness in foreign trade and strong proprietary inter-relations between companies, banks and other financial institutions operating in the territory of Slovakia with international financial corporations mainly located in the euro area. Large movements in the global financial markets are reflected in the development of regional (V4) and domestic financial markets. Significant movements or instability in the external environment of Slovakia's economy and financial system may potentially lead to the transfer of shocks to the domestic economy and financial system. The favourable situation in the external environment, on the other hand, is improving the conditions of financial stability in Slovakia.

From this perspective the situation in the external environment of the Slovak economy in 2004 can be viewed as favourable. In 2004, economic growth in the world, the EU and the V4 countries accelerated and thus prerequisites for the stabilization of the financial situation of non-financial and financial corporations and the government finance in the countries of Slovakia's business partners have been established[2]. Similarly, the conditions for stability in their financial sectors have improved.

Future development will be influenced by the development of relations within the triangle of the United States, Asia and the EU. The major uncertainty stems from the imbalance in the United States, the rapid growth and potential overheating of China's economy, the slow progress of reforms in Europe and the resulting global imbalances. Further uncertainties are connected with the development of the USD exchange rate, low returns on US government bonds and crude oil prices.

1.1 Growth of economies in the main regions of the global economy

The key regions of the global economy grew fast. Growth should continue in the forthcoming period, albeit at a slower rate.

Accelerated growth of the global economy and global trade

According to current estimates, in 2004, the growth rate of the global economy reached 5%, which represents the highest value in almost 30 years. The establishment of macroeconomic policies had a significant stimulating effect on economic activity. Real interest rates dropped to a historical low. In some countries the effect of wealth had a pro-growth effect, evoked by the development of prices in real estate markets. The fast growth of the global economy was influenced also by the growth of some developing economies, mainly those of China and India. In 2005 and 2006 a continuation of the growth of the global economy at the level of 4.2% is expected.

According to estimates, global trade in 2004 grew by more than 10%. In 2005, it is expected that growth will slow to 8% and even lower in 2006.

The growth of the US economy is perceived as unsustainable. A slowdown and stabilization of the trade balance deficit is expected

In 2004, the US economy growth rate reached 4.4% thanks to the strong incentives of the monetary and fiscal policies and solid productivity growth. Due to the large and growing double deficit, such growth rate is perceived as unsustainable. There-

[2] *ECB: Financial Stability Review, December 2004; European Commission: Economic Forecasts Spring 2005; IMF: Global Financial Stability Report, April 2005.*

Table 1.1 **International environment, growth of GDP and global trade**
(actual year-on-year changes in %)

	2001	2002	2003	2004[1)]	2005[1)]	2006[1)]
Real GDP growth						
United States	0.8	1.9	3.1	4.4	3.6	3.0
EU-25	1.8	1.1	1.0	2.4	2.0	2.3
Euro area	1.6	0.9	0.6	2.0	1.6	2.1
Japan	0.2	-0.3	1.4	2.7	1.1	1.7
Asia (except Japan)	5.3	6.2	7.6	7.8	7.1	7.1
of that China	7.5	8.3	9.3	9.5	8.6	8.4
ASEAN 4 + Korea[2)]	2.9	5.3	4.6	5.3	5.0	5.3
Commonwealth of Independent States	6.3	5.2	7.7	8.0	6.5	5.8
of that Russia	5.1	4.7	7.3	7.1	6.0	5.3
Latin America	0.4	-0.2	1.7	5.6	3.9	3.6
Africa	1.3	4.4	3.8	4.2	5.7	6.1
World	2.3	2.8	3.7	5.0	4.2	4.1
World except EU-25	2.4	3.2	4.5	5.7	4.8	4.6
Global trade						
Global imports growth	-0.6	4.6	7.0	10.7	8.2	7.4
Global imports growth except EU-25	-2.1	6.8	9.5	12.8	9.1	7.7
Global exports growth except EU-25	-	-	-	12.1	9.1	7.7

Source: European Commission: Economic Forecasts Spring 2005.
1) Forecast.
2) ASEAN 4: Indonesia, Malaysia, Philippines, Thailand.

fore, a decrease in the US economy's growth rate to 3.6% in 2005 and 3% in 2006 is expected. The growth rate of exports should exceed the growth rate of imports due to the delayed impact of the effects of the dollar depreciation from 2002 to 2004. Stabilization of the trade balance and current account deficits is expected in 2006.

In 2004, the growth in the euro area came close to its potential, in spite of the negative impact of crude oil prices and the strong euro. The inability to achieve the expected future economic growth represents the largest risk for financial stability

After the performance of the economies in the *EU and the euro area* recorded satisfactory growth in the first half of last year, a slowdown occurred in the second half of the year. As a result, the European Commission (EC) revised its forecast ("spring 2005 forecast") of the EU economy performance downwards against the autumn 2004 forecast. This downward revision meant that the expected strong recovery of economic growth had been postponed. The decrease of the performance in the second half of 2004 was attributed to high crude oil prices, the delayed effect of euro appreciation and weak consumer confidence as a result of the ongoing structural reforms. Nevertheless, for the first time after four years, growth in the EU and the euro area in 2004 came close to its potential. According to recent Eurostat data, last year the euro area grew by 2.1% and the EU-25 recorded GDP growth of 2.3%. Compared to 2003, when the euro area grew by 0.5% and the EU by 1%, this is a significant improvement. Similarly, in the upcoming period, the growth should be at the level of the potential. In its spring prediction, the EC expects a recovery of growth on the basis of the gradual improvement of investor and consumer confidence. In 2005, it should reach 2% in the EU and 1.6% in the euro area and in 2006 2.3% in the EU and 2.1% in the euro area. The main factors in this forecast include an accommodative stance of macroeconomic policies, a low inflation rate, favourable financial conditions, growing profit margins, a continuation of the positive development in the financial sector, progress in structural reforms and a favourable global environ-

Table 1.2 **Assumptions regarding the development of the external environment (annual average)**

	Assumption for the year				
	2004	2005		2006	
			change[1)]		change[1)]
Interest rates (in % p.a.)					
Euro area: short-term (3-month money market rates)	2.1	2.2	-0.4	2.7	-0.8
Euro area: long-term (10-year government bonds, the lowest ones in the euro area)	4.0	3.8	-0.8	4.3	-0.5
United States: short-term (3-month money market rates)	1.6	3.7	+0.8	4.1	+0.5
United States: long-term (10-year government bonds)	4.3	4.6	-0.1	5.2	-0.1
Exchange rates ("-": devaluation)					
USD/EUR (level)	1.24	1.31	0.07	1.32	0.08
Nominal effective exchange rate of the euro area (percentage change)	3.2	1.2	+0.6	0.4	+0.1
Nominal effective exchange rate of the EU (percentage change)	6.3	2.4	+1.6	0.1	0.0
Commodity prices					
Crude oil (in USD/barrel)	37.8	50.9	5.8	48.0	

1) Change against the final Autumn 2004 forecast assumptions.
Source: European Commission: Common External Assumptions, April 2005.

ment[3]. A major risk for the financial stability of the euro area rests in a sudden and unexpected decrease of the economic growth dynamics.

Similarly, the economies of Asia, mainly China, have been growing fast. A slowdown of their growth, due to reduced foreign demand and adopted measures to prevent the overheating of China's economy, is expected

The growth of *Japan's* economy (2.7%) and *other Asian countries* (7.8%) was slightly faster in 2004 than in 2003. The growth was supported by the recovery of the global economy and growing domestic demand. An expected weakening of the demand for production from this area, mainly in the IT sector, will probably slow the growth rate of this region in 2005 and 2006 to 7.1%. Very fast growth at the level 9.5% was achieved by *China* in 2004. Due to fears of overheating and over-investment in some sectors, the Chinese government adopted certain administrative measures to reduce the investment activities in these sectors (steel, aluminium, cement, automobile production and property). The source of growth has been slightly shifted from investments to net exports and consumption. In 2005 and 2006 the European Commission is expecting a relaxation of the Chinese growth rate to the level 8.6% or 8.4%.

1.2 Growth of important partner economies of Slovakia, including the V4 region

For an evaluation of the external environment risks for domestic financial stability, it is useful to monitor economic development in the countries representing our major business partners and where the parent companies of the largest banks operating in the territory of Slovakia have their seats.

Accelerated growth of the economies of Slovakia's key business partners in the euro area

The most significant partners of Slovakia's economy in the euro area are Germany, Italy and Austria.

Growth of the German economy accelerated thanks to decreased labour costs and the higher

[3] *In this connection, developments in the euro area since the end of 2004, mainly in respect of the development of the business and consumer confidence indicators in the three largest economies of the euro area (Germany, France and Italy) are disappointing.*

number of working days – in spite of the strong euro. However, the growth is fragile. The problem is represented by low household consumption

In 2004, Germany achieved GDP growth of 1.6%, which was the largest annual GDP growth for the last four years. Achievement of this value was supported by the effect of the number of working days, which is estimated at 0.5 percentage points. Germany mainly benefited from recovered foreign demand, while net exports contributed to the overall growth by more than one percentage point. Stagnation of the nominal wages helped to sustain the competitiveness of German exports despite the appreciation of the euro. On the other hand, wage stagnation and sluggish employment growth contributed to a slight decrease in final consumption of households, which was reflected in the drop in investments. As a result, growth is fragile and its sustainability is questionable, due to the low performance of the German economy in the last two quarters of 2004. There is no threat of falling into recession in 2005 and the economic growth will be renewed as early as the first quarter of 2005. Despite this economic revival during the year, it is not possible to expect high growth for the whole year. In 2005, the European Commission is expecting the German economy to grow by 0.8%. For the year 2006 the estimate of GDP growth is 1.6%.

In 2004, the Italian economy stagnated. Its growth has been low, and probably will remain so, mainly due to persisting structural problems and high crude oil prices

After two years of low growth at the brink of stagnation, Italy reported GDP growth at the level 1.2% in 2004. However, the acceleration is fragile. GDP growth in the last quarter of the last year was negative. In the background of the positive development of the external economic environment, a slight revival in the performance of the Italian economy in 2005 and 2006 is expected. However, the European Commission is expecting a very slight increase in the next period – below the average level of the euro area – due to persisting structural rigidities and negative supply shocks (mainly crude oil price).

The growth of the Austrian economy accelerated to 2% and it is assumed that this rate will continue over the next two years

In 2004, the Austrian economy grew by two percentage points, which is a better result as compared to the 0.8% growth in 2003. Net exports contributed to this by more than one percentage point. Interesting was also the growth of investment activity, stimulated by the mentioned foreign demand and fiscal investment premium. Private consumption also grew in connection with employment growth. Austria also experienced a slowdown of the growth rate at the end of the year. In 2005 and 2006 the economic growth should continue at a solid rate of 2.1%.

The growth of the V4 economies, including the Czech Republic, accelerated and additional positive development is expected. The risk is represented by the high level of this growth financed by foreign funds

The V4 countries economies grew faster in 2004 than in 2003 and it is assumed that they will maintain this fast growth in the following years. In 2004 the growth was driven by exports and investments (CZ, HU) and domestic demand (PL). For these countries, which characteristically run high fiscal deficits, its consolidation in the mid-term or even long-term horizon is expected thanks to the fast growth. However, consolidation is conditioned on the political will to implement structural reforms, whose social impact is unfavourable for the population in the mid-term horizon. The common feature of the above mentioned countries is the deficit in the current account payment balance. In 2004 this deficit was composed of a trade balance deficit (mainly PL, SR) and a negative income balance (mainly CZ, HU), which is connected with the repatriation of the profits from foreign investments to those countries.[4]

[4] *There exist fears that the development of the foreign sector, mainly in Hungary and the Czech Republic and partially also in Poland, is unsustainable due to the fact that the real exchange rate in these countries is inadequately strong and the fast economic growth is connected with unsustainable development of foreign debt. This applies despite the fact that the structure of trade balance deficit is favorable and increased imports are mostly connected with the imports of technologies as the result of FDI inflow, particularly green field investments.*

1.3 Global financial stability

The higher than expected growth of the global economy significantly contributed to further improvement of the conditions for the stability of the global financial system in 2004

In 2004, the profitability of companies and their ability to repay the debts improved. The increased profitability of non-financial corporations had a positive impact on the cash flow and strengthened their balance sheets. While the profitability of financial institutions was improving, their capital base became stronger. The systems of risk management in the financial institutions improved. As a result, the financial system and its ability to resist potential future shocks became significantly sounder.

The high and constantly growing deficit of the US current account represents a significant risk for the global financial stability. The reason behind it is the high debt level of US households along with the increasingly relaxed fiscal policy

The growing US external debt evokes fears about its sustainability in the medium-term horizon. These fears are strengthening and have been influencing development since 2000. There is a growing probability of achieving equilibrium via the substantial weakening of the US dollar and/or large movements of capital. Sustainability of the development in the US current account mainly depends on maintaining the demand for the tools of public sector debt financing, as net foreign investment in the United States has been negative since the last quarter of 2001. So far, no serious indications of problems with the financing of the growing government debt have been observed because Asian monetary authorities have largely contributed to its financing. Recently, however, a change in the structure of financial flows in the United States has occurred; the inflow of government resources from abroad is increasingly replaced by foreign private demand for US corporate bonds and stocks. The continuing decrease in the inflow of government resources from abroad may result in the removal of a significant source of support for the US government bonds market.

The main source for the growing US current account deficit to its record levels (both in absolute and relative figures) in 2004 (5.7% of the GDP in the second quarter) was the progressive relaxation of the US fiscal policy in the period after 2000. Nor is there any reason to expect that there will be a significant reduction of the budget deficit. Another important source of the growing current account deficit is the strong indebtedness of households. Simultaneously, due to the fact that the debt of the US household sector is higher than in the past, this phenomenon represents another important risk factor for financial stability. This mainly applies under the circumstances of expected interest rate growth, or in the case of employment dips. On the contrary, the corporate sector was the net provider of funding, but due to the favourable economic conditions, its growing demand for external funds can be expected.

The relaxed US policy is complementary to the strict policies of Asia and Europe

Compared to the external imbalance of the United States, Asian countries (Japan and developing Asian economies) have recorded large current account surpluses, with the euro area recording a slight surplus. The exchange rate policies of some Asian countries are set to support their export oriented strategies of economic growth. The result is the accumulation of a large volume of foreign exchange reserves in the Asian central banks and their placement in US Treasury and other agency bonds, thus compensating for the drop in net direct investments to the United States and the decrease in the foreign private investments in the US stock markets. Even though the net capital inflow to the United States has been maintained, this development evokes fears and postpones the movement towards a balanced and sustainable status.

High and growing crude oil prices and its availability in the long-term perspective remain a significant risk for global economic and financial stability

The threat to the economic and financial stability in the future continues to be the high crude oil prices. After a 32% increase in the price of Brent oil (in USD) in 2004, the European Commission

is expecting a further increase of 34% in 2005 and a subsequent drop of 6% in 2006. In the first quarter 2005, the crude oil prices reached new historical highs. The high growth of crude oil prices (from approximately 20 USD per barrel in the beginning of 2002 to approximately 50 USD per barrel in October 2004) and a continuation of the high crude oil prices may unfavourably influence the real disposable income in the case of households. This may, subsequently represent a risk for the growth of the demand and growth of the global economy. As a result of high crude oil prices, deeply indebted households may run into problems in repaying their debts. Non-financial corporations, which have high energy consumption, may experience shrinking profit margins. The disrupted cash flow may lead to the weakening of their ability to repay debts.

The risk for the euro area economy resulting from crude oil price growth is lower than in the 70's. However, it should not be underestimated

According to the ECB, The impact of high crude oil prices on the growth of the euro area (our most significant business partner) need not be as dramatic as the impact of high crude oil prices on the global economy in the 70's. This results from three factors: (i) less demanding economic activity based on crude oil consumption than in the past, from which it is possible to assume a lesser impact on the balance of the companies than in the past, (ii) better availability of financial tools for hedging against the risk of crude oil price growth may contribute to a better protection of company revenues against unexpected crude oil price increases, and (iii) compared to previous periods, in addition to fears of development on the supply side, another important factor is the strengthening of the global demand for crude oil supported by the high dynamics of the global economic growth. In general, the current crude oil price growth, compared to the previous oil shocks, has less impact on the economic growth of the EU and the euro area, and their financial stability. However, this evaluation is based on considerable uncertainty regarding future crude oil price development.

1.4 The euro area and the EU financial sector

After two years of decline and a turnaround in the year 2003, further improvement of the euro area banking sector profitability has occurred

Based on the publicized data of several large banks, there has been continued improvement in profitability in the first quarter of 2004. At the same time, a significant reduction of the number of large banks in the euro area has occurred, with ROE less than 5%. From interest-bearing assets, 50% of the activities of the banks was represented by loans to clients. The environment of low interest rates further supported the growth of loans to households and the banks increased the holding of government bonds and private sector bonds. The share of non-interest income on total income grew. This is probably the result of the growth of income from fees and commissions resulting from the growth of consumer loans. Banks further managed to improve their effectiveness, which contributed to the growth of profitability. Factors that improved the effectiveness included downsizing and reducing the number of branches. An aggregate reduction of staff costs was reported in spite of one-off severance payouts.

Profits also grew thanks to the lower creation of provisions. The coverage of risks by provisions may appear insufficient in the future

The flow of provisions in 2003 decreased, which contributed to the improvement of profitability. In many cases, the provisions reached record-breaking low levels. However, the adequacy of the volume of created provisions with regard to the phase of the economic cycle in the euro area is questionable. The persisting shortcomings in the balance sheets of small and medium-size companies may represent a credit risk, particularly with regard to weaker domestic demand in the euro area. The coverage of bad debts by reserves, measured against total loans and credits or bad and doubtful assets, has improved in the euro area. Aggregate values, however, hide significant differences. Write-

downs in the investment portfolios significantly influenced the profits of some large banks in the euro area. The increase in write-downs was created by the need to clean up balance sheets from the overvaluations of assets.

The level of capital adequacy, solvency and bank liquidity in the euro area improved. But the share of client deposits in banks' funding decreased

The overall solvency ratio and the capital adequacy ratio increased. On the assets side, a general improvement of liquidity occurred. On the liabilities side, the euro area banks are facing problems in acquiring primary funds. Client deposits continue to represent the largest share of the funds (47%), but the aggregate share of deposits among total assets slightly decreased. The general trend in the decrease of client deposits has forced the banks to fund themselves during the recent years with higher costs in the market. Generally, although the growth of deposits was weak, some banks recorded larger increases, which had a positive impact on their interest margins.

Some risks from decreasing effectiveness and the weakness of small and medium-size companies persist. However, the overall evaluation of the risk and stability of the euro area banking sector is favourable

In spite of the fact that the financial stability parameters have improved, some risks for the banking sector persist. The vulnerability of the banks in some countries, as a result of their decline in profitability, persists even though in the first quarter 2004 an improvement was observed. The forecast for further strengthening of the revenues and solvency of the banks is positive. Similarly, there is an optimistic forecast with regard to the total risk because of the expected development in the interest rates and the level of economic activity. Less favourable is the forecast for small and medium-size companies. The number of bankruptcies in this category in the euro area increased in 2003 and further slight increases were also expected in 2004. It is also possible that the banks face a higher risk due to the fast growth of mortgage loans to the households in the majority of the euro area countries in 2004; this may be supported by strong competition in the market of this credit type. In this respect, the risk is even strengthened by the current rapid growth of property prices in some euro area countries (Ireland, Greece, Spain). Their sudden drop would not only decrease the value of their collateral; decreases in the value of household assets would subsequently result in the reduced repayment ability of households. The indirect risk via a deterioration of the loan portfolio is represented by the sudden increase of long-term interest rates. The probability of this risk occuring, as implied by option prices, is low. Indicators based on asset prices suggest that the forecast for the euro area banking sector is favourable, especially compared to 2003. The banks' improved position for absorption of unfavourable events is supported by the fact that in the period from mid 2003 to mid 2004, the number of rating upgrades was higher than the number of rating downgrades.

The improvement of profitability in 2003 in the sector of life and non-life insurance in the euro area does not guarantee sufficient solvency in the future. The problem lies in the existing risk of the life insurance portfolio, low earnings from technical reserves and high competition in the non-life insurance sector

Positive results of the insurance sector in the euro area (profit growth of more than 20%) derive from the strong growth of net income from written premiums. The reinsurance sector, however, reported a drop in revenues from written premiums and the net income from investments was insufficient to ensure the previous profitability level. The solvency indicators in the non-life insurance and reinsurance sectors improved in 2003. However, the further unfavourable development of solvency in the life insurance sector was observed; this was connected with the inability to substantially increase income on investments under the circumstances of low interest rates. At the end of 2003, the life insurance companies decreased their risk exposures, including their withdrawal from the markets with a transfer of credit risks, and focused on strengthening their capital base. As the profitability of life insurance companies was not sufficient for the increase of capital, they tried to issue shares. The efforts to issue fresh capital was encountered by quite a low interest of investors, which did not allow

for improvement of their solvency. Indicators from the beginning of 2004 show that the market is expecting that some problems with regard to future risks will persist. The most important risk which non-life insurance companies in the euro area are facing is the inadequate pricing of the risk and the inadequate decline in premium rates, which may result in significant deterioration of underwriting income. This decrease is a consequence of strong competition within the sector.

Development in the banks of EU-15 countries outside the euro area was actually comparable with the development of the banking sector in the euro area

In general, the ROE indicators for the banks in the EU-15 non-euro area countries were higher and in 2003 they increased a bit more than in the euro area. For the same period ROA indicators in the EU-15 non-euro area countries also increased at the same rate as in the euro area.

The development in the banking sector in the new member countries is generally characteristic of strong performance and a good forecast for long-term growth

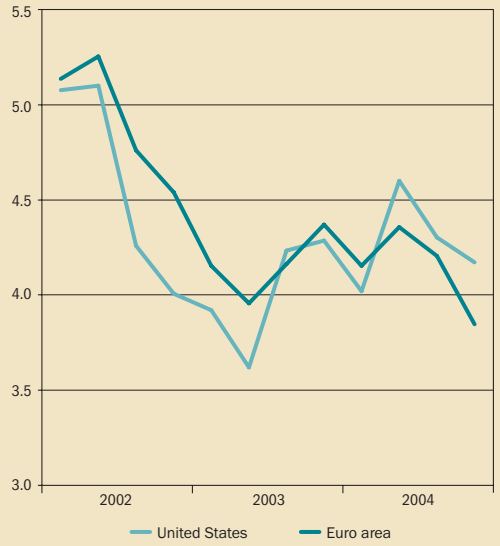
This good forecast is reflected in favourable ratings. High profitability was reported in 2004, asset quality improved and capital adequacy strengthened. The fast growth of loans, mainly in connection with the retail clients, in some cases with an annual rate exceeding 40%, may lead to problems in managing the risk and its pricing. The significant growth of loans in foreign currency in the absence of income in foreign currency increases the credit risk of the banking system evoked by exchange rate fluctuations. This is mostly related to the indirect risk for the banking system on the side of households, but mainly for companies with foreign currency debts. With independent banks, the currency mismatch between assets and liabilities are generally low. Due to the fact that a significant portion of the volume of loans granted to households represent mortgage loans, the banks increasingly face fluctuations of prices in the property market. The risk stemming from lending to households will (statistically) also increase if the current high rate of loan volume growth slows down. At that point, the volume of non-performing loans will grow faster than the total volume of loans, and thus drive up the share of bad loans. The benefit resulting from the significant share of foreign ownership in the banking sector of the new EU member countries is the transfer of the know-how and skills, including the improvement of risk management. Similarly, improvements were recorded in banking supervision legislation and other relevant areas (bankruptcy legislation). Effective enforcement of the legislation is still problematic in some countries.

1.5 Developments in global financial markets and stability risks

The low interest rates of the US government bonds represent a risk of instability in the financial market

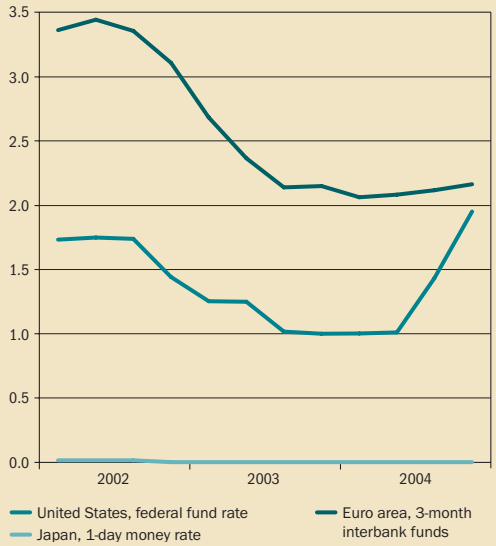
Interest rates on US government securities were low again in 2004, due to expectations of the long-term growth of the US nominal GDP. The reason behind this overestimation may be the high crude oil prices in 2004, which evoke uncertainty in the market with regard to future global economic growth. Even a more probable factor affecting the interest rates in this case is the high and continuously growing inflow of funds (mainly government funds) from Asia to the US government and the agency bond market, which is a by-product of persisting global imbalances (see above). Another important factor which impacted the level of bond earnings was the investment of borrowed short-term funds into bonds – the realization of "carry trades". At the same time, in the futures securities market the investors were increasingly entering into long positions, building on the fact that the long rates will not grow, or will even drop, which may reflect the decrease in fears regarding inflation growth and expectations about a merely gradual growth of rates. Due to the large financial leverage, which is part of the above mentioned carry trades, and given the large accumulated volumes of these trades, the bond market is becoming vulnerable. It is also obvious that in the event of stopping the purchase of bonds from abroad, a movement in their prices will occur. Therefore, the major risk for stability in the financial markets is the upward correction of the inadequately low yields.

Chart 1.1 **Development of yields on government bonds** **(%)**



Source: International Financial Statistics, IMF.

Chart 1.2 **Development of representative money market rates** **(%)**



Source: International Financial Statistics, IMF.

In the event of sudden disruptions in the US government bonds market, it is unlikely that the financial system of the euro area will remain unaffected

The vulnerability of the entire global financial system may increase as a result of high concentration in the market with interest derivates. The risk may spread through other channels in the form of a contagion. One represents the high correlation between yields on long-term bonds of the euro area and the US in the event of turbulences on the market. Other possible channels of financial contagion include the un-hedged exposure of the interest rates of some financial institutions in the euro area.

Stock markets demonstrated characteristically low volatility

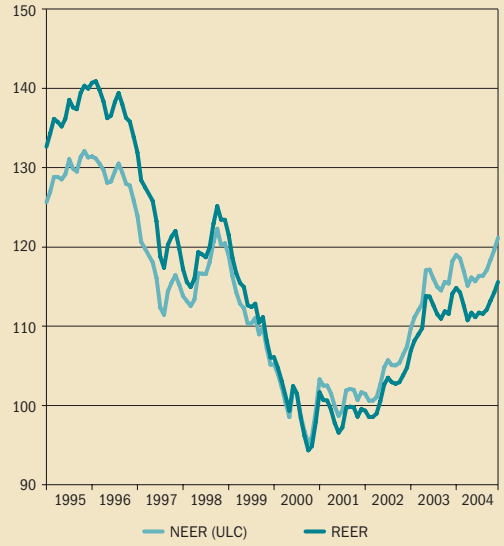
Stock markets, both in the euro area and the US, benefited from the improved economic forecast, relatively low interest rates and low risk premiums, thanks to successful efforts of companies to improve their balance sheets. The uncertainty regarding the future movements of the US stock market, which persisted in 2002 and the beginning 2003, has disappeared. The correlation of stock prices in the euro area, expressed through the Dow Jones EURO STOXX index, with the prices of stocks in the US market measured through the S&P 500 index, was relatively high. The actual and implied market volatility of asset prices was at historically low levels.

The spread of government bonds and corporate bonds in developing countries continued to decrease. Developments in the financial markets were substantially determined by "hunting for yields", when investors created increased demand for riskier assets (see above). The growth of US interest rates may reverse this development so that investors will become more sensitive to risks and review their positions. In recent weeks this fact has been proven by a slight increase in the volatility indices in the stock and bond markets, and by an increase in spreads in corporate debt and developing countries debt markets.

The US dollar exchange rate has been fluctuating. Its overall weakening throughout 2004 was caused by the cessation of BOJ interventions for the weakening of the yen and fears from the growing external imbalance of the US

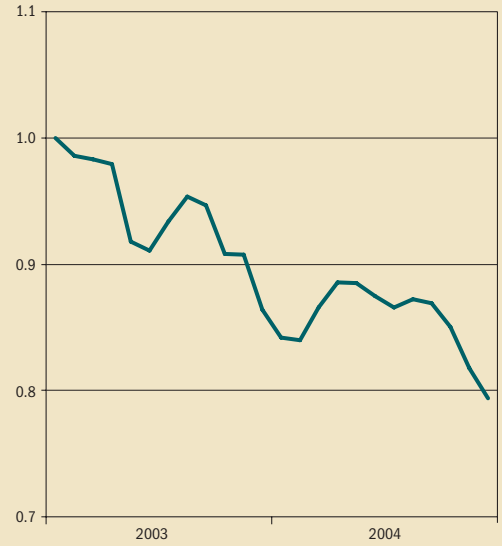
In spring 2004 the US dollar temporarily gained in value against the euro as a result of announcement of the positive forecast for the US economy

Chart 1.3 **Effective nominal and real exchange rates of the euro against USD (index, year 2000 = 100)**



Source: International Financial Statistics, IMF.

Chart 1.4 **Development of nominal exchange rate of the euro against the USD (monthly averages, January 2003 = 1)**



Source: International Financial Statistics, IMF.

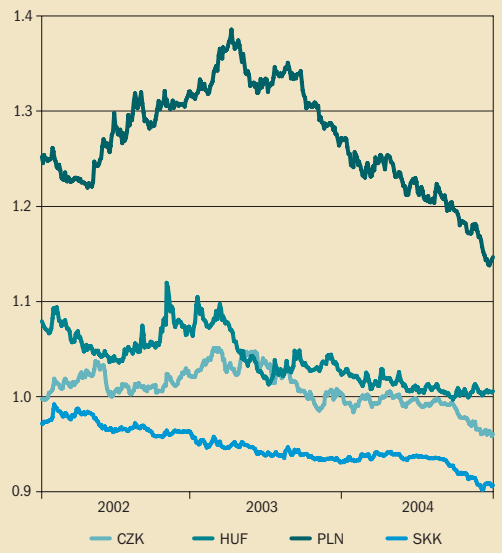
performance and in the expectation that the Fed would tighten its monetary policy. In March, however, the Japanese monetary authority terminated its intervention activity aimed at maintaining the yen value at undervalued level against the USD, and at the end of 2004, fears of the high and growing external imbalance of US revived. The subsequent drop of the dollar value was accompanied by a strengthening of the euro. The expected volatility of the key currencies, implied in the prices of options, decreased almost continuously throughout the whole last year.

Exchange rate strengthening was characteristic of the developments in the financial markets of Poland, Hungary and the Czech Republic

The government believes that this region (V4) is perceived by the international financial market players as one whole. As a result, potential disruptions in the macroeconomic and financial balance within one of the countries of this region may have an impact on Slovakia as well. The largest player is Poland and for this reason the behaviour of investors in this market predominantly influences developments in the financial markets of the other V4 countries.

In 2004, the V4 currencies strengthened. The strongest appreciation against the euro was recorded by the Polish zloty, as the Polish central bank did not manage its development. The exchange rate of the zloty against the euro appreciated by 13.5%

Chart 1.5 **Development of the nominal exchange rates of V4 countries against the euro (daily data, 1 January 2002=1)**

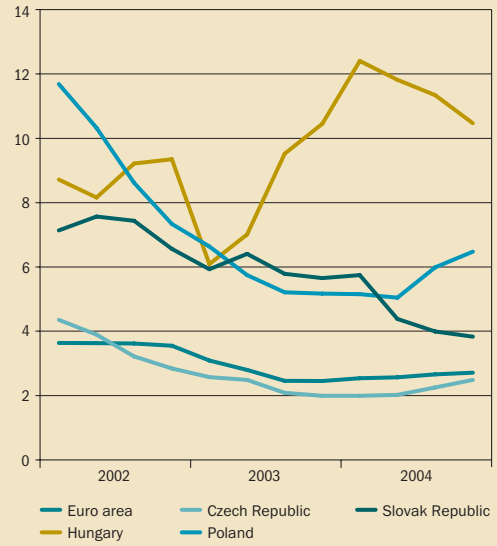


Source: Eurostat.

during the year. The exchange rate of the Czech koruna strengthened against the euro by 6.0%. The Hungarian forint appreciated against the euro by 6.2% during the last year. The exchange rate of the Slovak koruna against the euro appreciated by 5.8% during the year (from 41.161 SKK/EUR to 38.796 SKK/EUR). With regard to all of the V4 currencies (except the HUF, where a stable level is expected) the European Commission expects a strengthening against the euro this year and a slight weakening in 2006.

The development of the key interest rates varied in individual countries under the influence of individual conditions. The Czech National Bank increased its key fortnight repo rate in 2004 by 0.5 percentage points (from 2% to 2.5%) as a result of the expected increase of inflation dynamics due to faster growth in wages and credits. In Poland, the inflation measured by HICP sharply increased in 2004 to the average level 3.6% from 0.7% in 2003. The total inflation growth was mainly caused by the growth of food and crude oil prices and the growth of indirect taxes connected with the accession to the EU. Between June and August 2004, the Polish National Bank increased its key reference rate cumulatively by 125 basic points to 6.5% with the objective of preventing secondary effects. The Hungarian National Bank decreased its basic rate during the year seven times, by a total of 3 percentage points from the relatively very high 12.5% to 9.5%. The decreasing dynamics of inflation and its favourable forecast permitted this.

Chart 1.6 **Development of money market rates** **(%)**



Source: Eurostat.

2. The Domestic Economic Environment

Financial stability is a result of the interaction of conditions prevailing in the real economy, financial sector, financial markets, and payment system. The domestic real economy plays a crucial role in this.

Stability in the domestic economy and in its individual sectors – the public sector, the non-financial corporation sector, the household sector and the foreign trade sector – means that these sectors have been in equilibrium, their performance has created room for building up needed reserves and for the coverage of financial risks, that no stress has appeared in their finances, that they have had no difficulties in meeting their liabilities and have functioned without disturbances. In addition, stability means that preconditions exist for the continuation of such development in the future.

In terms of creating conditions for economic and financial stability, Slovakia performed well in 2004. Its economic growth accelerated, no signs of an overheating economy were present, the consolidation process of public finances continued, the current account deficit was low, and foreign investment created room for additional improvements in export capability and strengthening external economic stability. The exchange rate appreciated and no circumstances pointing to extensive speculative pressures on the exchange rate were identified.

In addition, the growth in the economy created preconditions for growth in income and profits. Unit labour costs (the share of wages in the GDP) followed a non-increasing trend. Profits in the financial and non-financial corporation sectors were rising. The exchange rate strengthening exerted pressure on companies for more rapid restructuring and, in certain cases, affected their profitability.

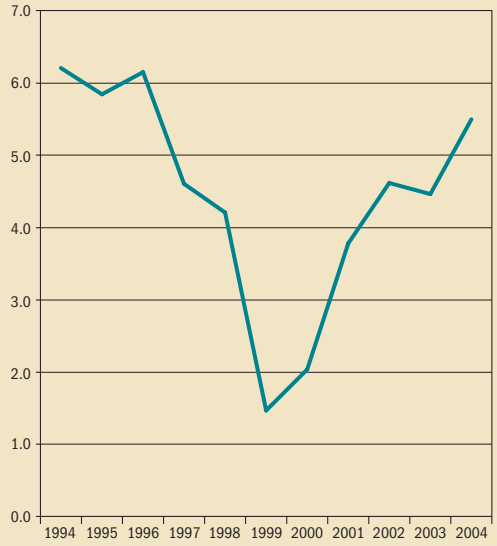
The increased consumption of households was supported by a rapid growth in loans to households. Nevertheless, up to now, the coverage of liabilities by income has been high in the household sector. Also the sector's coverage of liabilities by assets has been at a standard level. Thus, from the stability point of view, the debt burden of households does not presently pose a problem.

The outlook for economic and financial stability in the near future is positive. A specific risk for stability, especially for the stability of public finances, is posed by the political-electoral cycle. However, as long as the targets defined in the Convergence Program are adhered to, this risk is small. What is considered to be a risk for financial stability in the public and private sectors is the inadequate growth of wage costs. At present, however, these costs are held down by the high level of unemployment. However, any rapid fall, even of a regional nature, could ease conditions for wage increases.

Macroeconomic development was marked by accelerating economic growth

A revival in the global and EU economies in the first half of 2004 had a positive impact on economic growth in Slovakia, although, at present, this growth is not immediately dependent on the upswing in the EU. During the year, the GDP growth in constant prices did not sink below 5% and reached 5.5% in annual terms. This growth was primarily driven by the continued rise in household consumption and higher capital formation. Consolidation of public finances continued and the fiscal deficit fell to 3.3%. Compared to 2003, the higher deficit in the current account of the balance of payments (3.5%) was a result of accelerated household consumption and technology imports.

Chart 2.1 **Economic growth in the SR (annual GDP growth, constant prices, %)**



Source: Statistical Office of the SR.

Inflation increased as a consequence of price regulation measures. However, core inflation followed a declining trend

Headline inflation was high; it reached 5.9% in December 2004 and 7.5% in annual terms. However, it was influenced by the applied administrative measures and, presumably, it will be significantly lowered in the future. 2004 was the last year in which significant adjustments to regulated prices were made, and indirect taxes were increased in connection with the tax reform. By historical standards, core inflation in Slovakia stood at its lowest levels. It sank to 1.5% in December and to an annual average of 2.6%.

Monetary development was marked by the development of the exchange rate, as the Slovak koruna strengthened vis-à-vis the US dollar and the euro, and by a fall in interest rates

The decreasing trend in short-term and long-term interest rates continued. This provided evidence for a continuing convergence of interest rates to EU levels. The increased demand for the Slovak currency was supported by improved macroeconomic indicators together with positive expectations related to Slovakia's planned entry into the euro area. The Slovak koruna's appreciation vis-à-vis the US dollar and the euro accelerated.

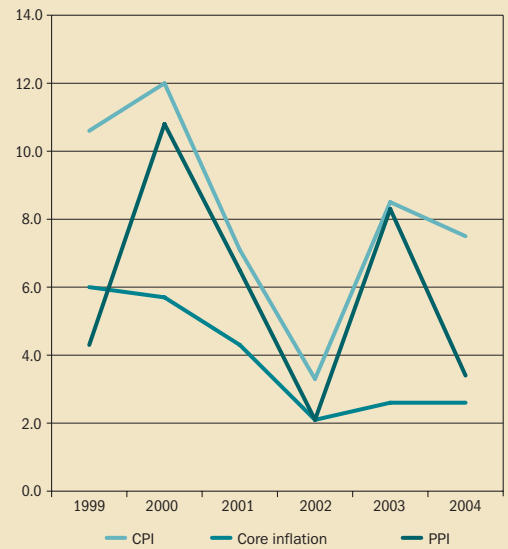
Positive assessments of the economic situation and positive expectations increased

The assessment of the economic situation by households also developed positively and was supported by a fall in unemployment and by an increase in real wages and the real income of households. The perception of the business environment on the part of the corporate sector (expressed in confidence indicators) saw no significant changes in 2004. Confidence in the construction sector increased. Practically in all important sectors of the economy from the point of view of the bank-loan structure, a year-on-year increase in revenue from the sale of own products and services was recorded in 2004.

The adoption of reform laws and continuing interest of foreign investors in the SR had a positive impact on economic development and related expectations

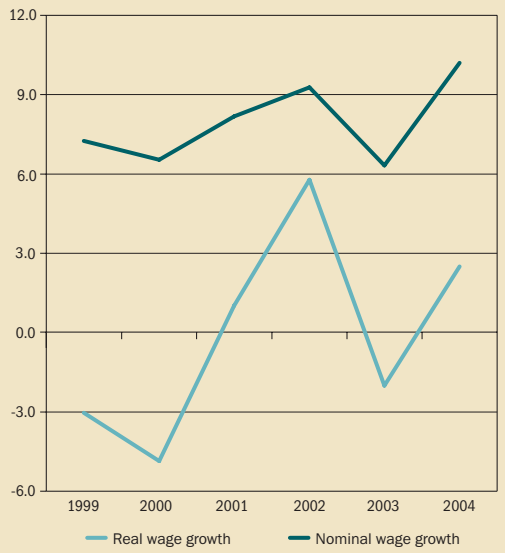
In 2004, favourable developments in foreign investment continued. In addition to large companies, a considerable number of smaller firms decided to

Chart 2.2 **Inflation in Slovakia (average annual growth rates, %)**



Source: Statistical Office of the SR.
Note: PPI – producer price index, CPI – consumer price index.

Chart 2.3 **Wage development (annual growth rates, %)**



Source: Statistical Office of the SR.

invest in Slovakia. The realization of their investment projects has created prerequisites for rapid growth in the economy in the future. On January 1, 2004 a tax reform entered into force. In addition, a pension reform was approved and pension management companies were founded. Starting from January 1, 2005, these companies have begun to create pension funds on the basis of pension savings. In order to avoid building up hidden and/or visible debts in the healthcare system, a healthcare reform was approved. The major rating agencies responded to these positive developments in Slovakia by upgrading its rating.

Long-term developments in the economy and economic expectations are anchored by the presumed date of entry into the euro area, January 1, 2009

The government of the SR approved a strategy for the adoption of the euro in the Slovak Republic and announced that January 1, 2009 is the presumed date of entry into the euro area. The adoption of this deadline provided investors with a relatively good idea regarding interest and exchange rates. Certainty about the future development in Slovakia has lowered the risks of longer-term investment in Slovak korunas and made it possible to apply the often-used convergence strategy presuming that the yield curve for government bonds (in Slovak korunas) will gradually converge with the yield curves of the euro area members, paralleled by the strengthening of the koruna's exchange rate. This factor has begun to influence the economy and domestic financial market in a significant manner.

2.1 Economic growth and the cyclical position of the economy

The rapid growth in investment and in household spending, together with the decline in intermediate consumption, contributed to strong GDP growth. The economy was narrowly under its potential

Compared to 2003, the structure of economic growth changed. In 2004, final consumption rose 2.9% and household consumption 3.5%, whereas in 2003 final consumption practically stagnated and the level of household consumption even fell. The reversal in investments is important. In 2003, fixed capital formation (in constant prices) slowed by 1.5%. Its growth of 2.5% in 2004 means that in comparison with 2002, the volume of investment was also higher. The rate of investment in Slovakia has been gradually declining and moving towards

Table 2.1 **Expected development of the economy (according to a NBS prognosis[1])**

	2005	2006	2007	2008
GDP growth, constant prices, %	5.0	5.3	6.7	4.7
Balance of trade, % of GDP	-5.1	-5.0	-1.9	-1.5
Inflation, %, year-on-year average	2.8	1.9	2.0	2.0
Public finance deficit[2], % GDP	-3.8	-3.9	-3.0	-2.5

Source: NBS.
1) NBS medium-term prognosis, March 2005.
2) Budget assumptions for 2006-2008. Ministry of Finance of the SR, May 2005. Pension reform costs are included.

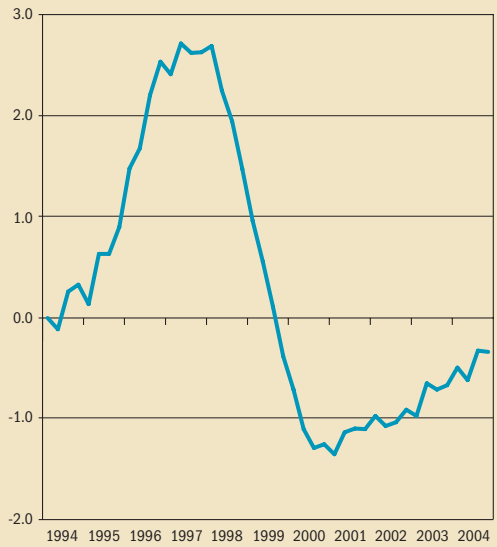
Table 2.2 **GDP creation and distribution in 2003 and 2004**

	current prices		constant prices	
	2003	2004	2003	2004
Output (SKK billion)	2,868.0	3,088.6	1,870.3	1,928.2
Growth (%)	110.5	107.7	105.1	103.1
Intermediate consumption (SKK billion)	1,785.5	1,891.8	1,164.2	1,181.1
Growth (%)	110.9	106.0	105.2	101.5
Gross domestic product (SKK billion)	1,201.10	1,325.5	783.4	826.5
Growth (%)	109.3	110.3	104.5	105.5
Final household consumption (SKK billion)	667.5	738.7	402.4	416.4
Growth (%)	106.9	110.7	99.2	103.5
Gross fixed capital formation (SKK billion)	308.4	327.2	197.8	202.8
Growth (%)	101.6	106.1	98.5	102.5

Source: Statistical Office of the SR.

the standard level in developed countries. Its actual level of 24.5% in 2004 (in constant prices) fell short of the extreme levels of approximately 30% reached in the past. It is important that the growth effectiveness of investments is increasing[5]. In 2004, the gross domestic product rose by 5.5% (in constant prices). This high rate of growth was achieved thanks to the high growth in output (3.1% in constant prices), and, in addition, thanks to the fall in the share of intermediate consumption in output by one percentage point (from 62.2% to 61.3%). The lower share of intermediate consumption and the higher rate of value added is a positive signal. In 2004, the increase in the growth rate of value added contributed to GDP growth by 1.3%. A potential output analysis confirmed that the economy of the SR was under its potential in 2004. The output gap was also gradually closing in 2004.

Chart 2.4 **Developments in the economic cycle of the SR – output gap** (%)



Source: NBS.

2.2 Fiscal and trade balance

In its link to reforms, public budget consolidation continued

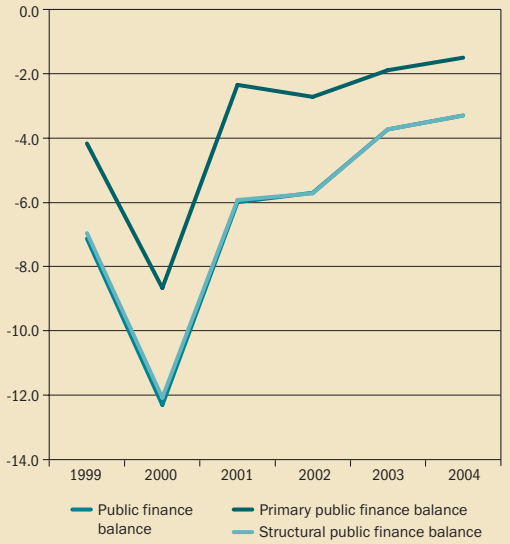
The government continued in its efforts for fiscal consolidation. In line with the Convergence Program, the government aims at reaching a nearly balanced budget in 2010. In 2003, the public finance deficit stood at 3.7% of GDP (according to ESA 95 methodology). In 2004 the deficit eased to 3.3% (according to preliminary estimates), and, at the same time, a radical tax reform took place and redistribution by means of public finances was reduced.

The current account deficit did not pose a problem. It increased only moderately, also due to technology imports

The rise in the export performance of the economy continued. In contrast to 2003, the trade and cur-

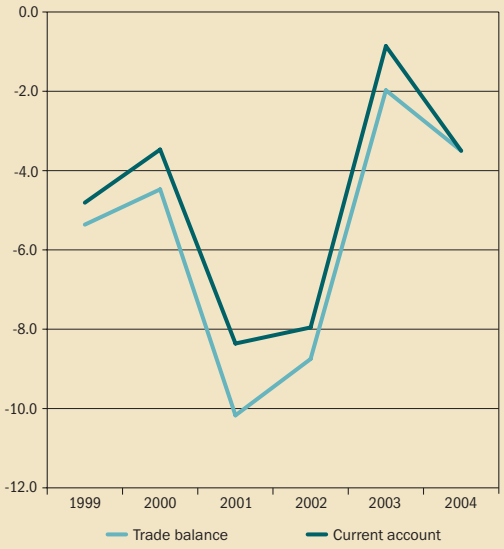
[5] *Growth effectiveness is defined as capability of an economy to reach high growth rates also at lower investment rates.*

Chart 2.5 **Public finance balance of the SR (share of the balance in GDP in current prices, %)**



Source: The Financial Policy Institute.

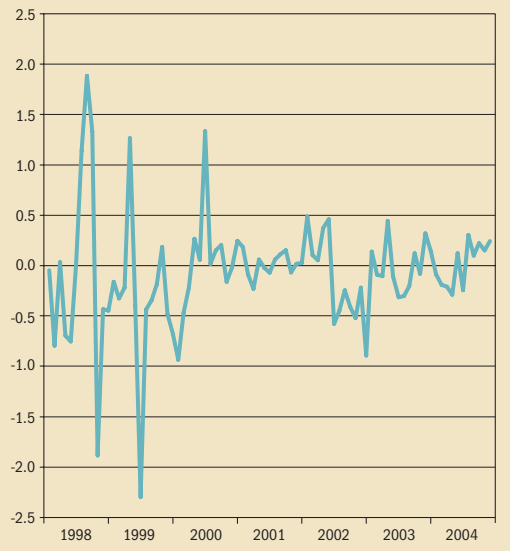
Chart 2.6 **The trade and current account deficits (share of the balance in GDP in current prices, %)**



Source: NBS.

rent account deficits deepened as a consequence of investments in preparation and related technology imports, together with a rise in household consumption. Export and import growth has accelerated in recent years. This is in part a consequence of the fact that foreign direct investment makes it possible to increase exports on the one hand, but, on the other hand, the production realized by such investment requires (temporarily) import increases (technology, intermediate products, construction parts, etc.). Approximately 90% of the current account deficit was covered by DFI.

Chart 2.7 **EMP (a measure of pressure on the koruna exchange rate)[1)]**



Source: NBS.
1) Weighted sum of normalized deviations from the real exchange rate (SKK/EUR), real interest rates (3M BRIBOR, CPI), and the volume of reserves (in SKK).
Notes: Standard deviation = 0.594. Critical value = the double standard deviation.

Influenced by appreciation pressures, the real exchange rate fluctuated within a band of moderate overvaluation vis-à-vis the equilibrium level

The real exchange rate fluctuated within a band of moderate overvaluation. This fact was supported by several NBS analyses making use of the BEER and FEER methods. During the year, no circumstances signalizing significant speculative exchange-rate attacks were observed. This is supported by the course of the EDP index, which did not leave the band of +/- 1 standard deviation.

2.3 Growth in value added, wage growth and room for generating profit

The rise in value added and developments in wage costs created room for maintaining profitability

Gross domestic product grew in current prices as well, by as much as 10.3%. This growth has created room for a rapid rise in income and profits. In assessing this growth, however, developments in wages and taxes have to be taken into account. Taxes on production (net product taxes) grew slower than value added, while the growth rate of gross value added exceeded 10%. From this point of view it is important that despite the rapid growth in average nominal wages in 2004 (of as much as 10.2%), their growth was approximately in line with the growth in productivity, and, therefore, wages did not reduce the room for growth in profits. In 2003, the volume of wages increased by 8.2%, nominal gross domestic product by 9.3% and gross value added by 10%. In 2003, the development of wages created room for growth in profits and profitability. In 2004, the volume of wages rose by 10.5% and gross value added by 10.6%. This means that the volume of wages grew approximately at the same rate as the (gross) value added, and, therefore, the development of wages created room for an increase in profits and for maintaining profitability.

Table 2.3 **Growth in income and wages (%)**

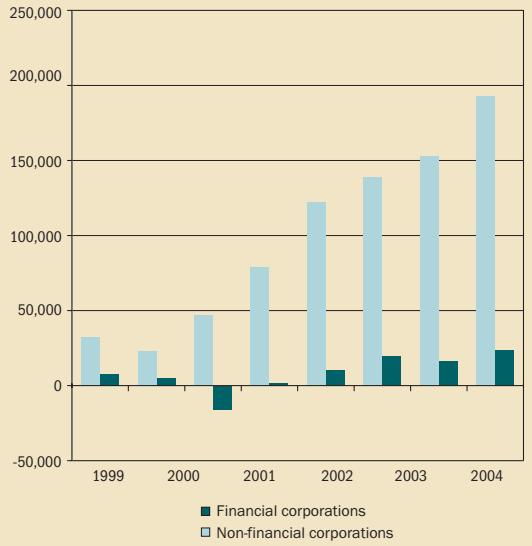
	2003	2004
Growth in employment[1)]	1.8	0.3
Growth in nominal wages (based on annual average)	6.3	10.2
Growth in nominal GDP	9.3	10.3
Growth in gross value added	10.0	10.6

Source: Statistical Office of the SR.
1) Selective Labour Force Determination, based on annual average.

Profits of financial and non-financial corporations continued to grow

Starting from their historical low levels in the period of the stabilization and restructuralization of the banking and corporate sectors in 1998, profits of non-financial corporations have been gradually growing. Conducive to this was the wage policy, when unit labour costs (the share of wages in nominal output) influenced also by market conditions, did not grow. Another contribution to this growth was provided by the rehabilitation of the banking sector and by cuts in interest rates, which lowered the financial costs of companies. Following the rehabilitation of the banking sector, the profits of financial corporations rose as well. This has created favourable conditions for their stability. The loss of the NBS was caused by the strengthening of the exchange rate and foreign exchange interventions against inappropriate exchange rate strengthening as well as by sterilization costs of excessive liquidity. However, the process of re-structuralization has been slower in certain corporations in recent years, and their performance has been negatively influenced by the strengthening of the exchange rate. Nevertheless, even in those corporations, profits have mostly been generated[6].

Chart 2.8 **Developments in profits[1)] of financial and non-financial corporations (SKK millions)**



Source: NBS.
1) Profit/loss.

In the long-term horizon, developments in unit labour costs are determined by labour market conditions, primarily by the level of unemployment. The assumed reduction in the unemployment rate is expected to reduce the room for generating profit

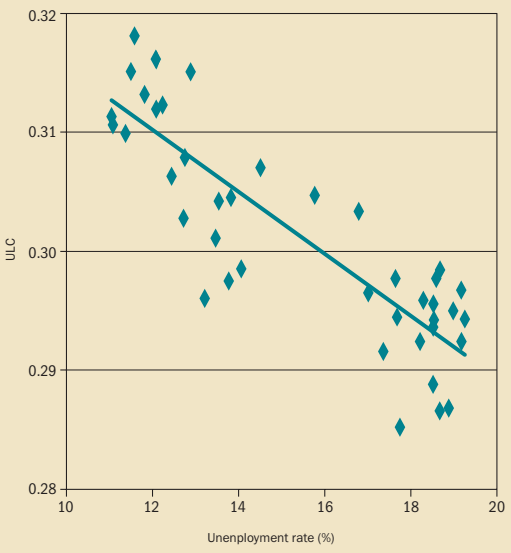
[6] *This refers primarily to companies that export their production to the EU countries and create a lower value added.*

As follows from the long term relation between the unemployment rate and unit labour costs, the presumed decline in the unemployment rate could pose a certain risk for development in unit labour costs and, therefore, also for the development of profitability in the economy. A decline in the unemployment rate of 1% in the past caused (ceteris paribus) an increase in unit labour costs by 0.3-0.4%. Room for generating profit and profitability sank approximately by the same extent. The present rate of unemployment in Slovakia is still high. The high growth rates in the economy expected in the future would, in the long term, create conditions for a decline in the unemployment rate. A decline in the unemployment rate by 5 percentage points (approximately as much as assumed in the Convergence Program for the Period between 2004 and 2010) would, according to this long--term relation, bring about an increase in unit labour costs and a 1.2-2% reduction in the room for generating profit (of output).

Developments in wage costs shape the room for generating profit in the long term and are crucial for maintaining future profitability. However, as seen in the long-term relation determining unit labour costs, the development of (nominal) unit labour costs in Slovakia, i.e. the share of wages in value added, related significantly to changes in unemployment.

In addition to developments in wages and unit labour costs, other factors will be responsible for future developments in profits and profitability. Even now it is evident that production facilities and activities related to DFI in Slovakia create prerequisites for rapid growth in value added and productivity, and, therefore, for rapid growth in profits. This fact should have a positive impact on the generation of own resources in the economy, including the creation of provisions for risks and losses. Utilization of these resources also for the reinforcement of economic and financial stability should be a matter of the business policy of banks, risk management and supervision.

Chart 2.9 **Relation between unit labour costs and the unemployment rate**



Source: NBS calculations based on Statistical Office of the SR data.
Notes: ULC – ratio of the nominal wage to the labour productivity from nominal GDP (unit labour costs). The unemployment rate according to Selective Labour Force Determination, seasonally adjusted.

2.4 Developments in the household sector[7]

Despite a rapid rise in loans to households in previous years, the ability of households to meet their obligations is satisfactory. Households are able to generate satisfactory income for loan repayments and hold a significant volume of liquid financial assets.

Assets and liabilities of households

Our assessment of financial assets and liabilities of households was based on available data up to 2003. In addition to savings, non-financial assets, primarily real estate, account for a significant part of assets held by Slovak households. Therefore, the household sector is to a large extent exposed to the falling asset value risk, in the event of a fall in real estate prices[8].

[7] *Households including sole traders (S14 sector in the ESA 95 methodology).*
[8] *The impact of real estate prices on financial position of households is dependent on the households' preference of real-estate possessing over leasing.*

Step by step, the attitude of households to the management of their financial assets is becoming more active. As a result, the structure of these assets is changing

The step-by-step approximation to EU standards was reflected in the financial assets of households as well. In the past, the management of assets by households was mostly reduced to depositing money in banks and investing in residential real estate. In recent years, certain behavioural changes have been observed, as households have striven to manage their assets more actively. Since 2001, this has primarily been manifested in the gradual decline in bank deposits and the increased attractiveness of life insurance, mutual funds and other investments. In 2003 cash and bank deposits accounted for the largest share in financial assets (77%), followed by insurance technical reserves, mainly life insurance and pension funds, (10%), shares and mutual funds (5%), securities other than shares (2%), and other investments (6%).[9] Taking the data available for 2004 as a starting point, we can assume that changes in the above structure were only insignificant, and were in favour of the higher weighting of shares and mutual funds[10].

Compared to the EU, the volume of financial assets per capita in Slovakia is low

At the end of 2003, the volume of financial assets per capita stood at Sk 120,000 (EUR 2,915)[11]. Compared to the EU, this figure is very low (in the EU-15, financial assets per capita stood at EUR 41,628 in 2003)[12]. This difference is primarily caused by the fact that whereas the main source of financial assets in Slovakia is the current income of households, the size of financial assets in the EU states is made up of wealth accumulated over generations.

Financial liabilities are rapidly growing. However, compared to the EU, their volume is low

The financial liabilities of households rocketed by 82% between 2000 and 2003. In 2003, financial liabilities per capita stood at approximately Sk 37,500 (EUR 910). In 2003, bank loans accounted for the largest share of total financial liabilities, namely 62%. Their volume increased by almost 95%, as compared to 2000. In 2003, other loans accounted for 4% and other financial liabilities of households accounted for 34%. Despite the significant rise in financial liabilities of Slovak households, their volume, compared to the EU countries, is negligible (EUR 14,500 per capita in 2003). Since financial liabilities of households are primarily represented by bank loans, it is assumed that, in 2004, the increase in financial liabilities was at least in line with the growth of loans to households in the balance sheets of banks. During the year, their volume increased by 37.25%.

In 2003 the ratio of financial liabilities to financial assets was approximately 31.5%, close to the corresponding EU level

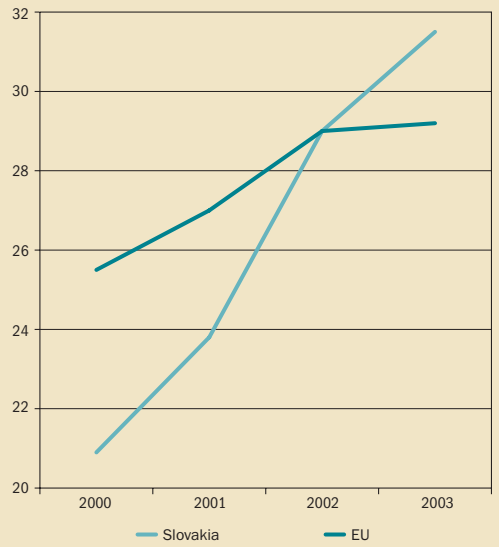
The ratio of financial liabilities to financial assets, which indicates the ability of households to meet their obligations in a short-term perspective, stood at 31.5% in 2003. The level of this ratio corresponds approximately to levels prevailing in the EU. However, compared to the EU, this ratio grew more rapidly in Slovakia, which was primarily caused by the dynamic growth in financial liabilities of households in 2002 an 2003. The increasing trend of this ratio continued in 2004 as well, as a consequence of rapid growth in loans to households. Developments in the financial position of households will require careful observation and deeper analysis in the future.

The rapid growth in the income of households creates favourable conditions for loan repayments

The income of households is their primary source for loan repayments. The increased indebtedness of households raises their vulnerability in the event

[9] *In 2003 deposits and cash accounted for 38%, securities other than shares 9%, share securities 16%, and insurance technical reserves and pension funds 38% in the EU.*
[10] *Bank deposits of households (including sole traders) declined moderately (by 0.4%).*
[11] *In calculations, the year-end SKK/EUR exchange rate was used. Comparable levels were determined using purchasing power parity.*
[12] *Finanční aktíva domácností (Financial assets of households), Bankovnictví, October 2004.*

Chart 2.10 **Household financial liabilities to assets ratio (%)**



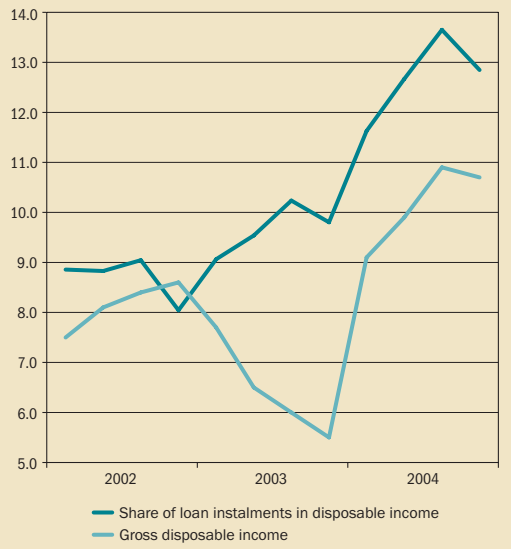
Source: Statistical Office of the Slovak Republic.

of a decline in income. Therefore, developments in income influence the ability of households to meet their financial obligations to a great extent. In 2004, the income of households increased. The highest income of households was registered in the Bratislava Region, which is the explanation for the high ratio of loans to households in this region to total loans to households. The differences in the income of households among individual Slovak Regions and the concentration of loans in the Bratislava Region indicate that, with regard to bank loans, the high-income households are the most indebted ones. The sufficiency of the gross disposable income of households for the repayment of loan instalments results from the ratio of household loan instalments[13] to gross disposable income. The share of loan instalments (interest and principal) in the gross disposable income of households followed an increasing trend in 2004. Despite this, figures close to 10% indicate that the disposable income of households sufficiently covers loan instalments.

In the long term, the gross savings rate of households is declining

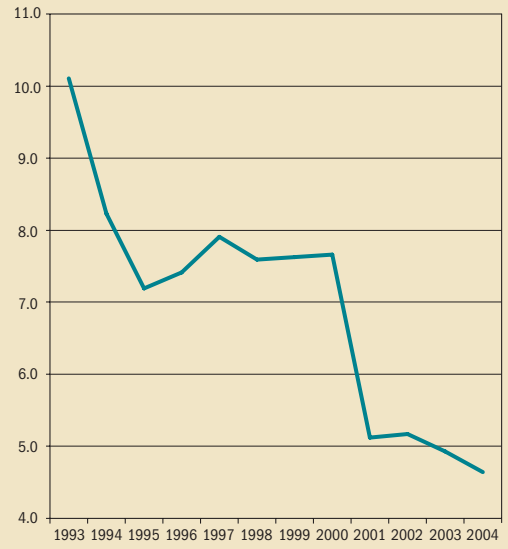
From the financial stability point of view, the household sector is becoming more and more important. The indebtedness of the sector has continued to be

Chart 2.11 **Household loan indebtedness to income ratio (%)**



Source: Statistical Office of the SR.
Note: Gross disposable income is the difference between current income and current expenses.

Chart 2.12 **Gross household savings rate (%)**



Source: NBS calculations based on Statistical Office of the SR data.
Note: The share of gross household savings in current household income.

[13] *Loan instalments of households are calculated on the basis of loans broken down by maturities and their average interest rates.*

low; however, loans to households have recorded a rapid growth. On the other hand, the household savings rate is declining. This declining trend in household savings has been present for some time now. This is documented on the following chart illustrating the share of gross household savings among current household income. As the chart shows, the savings rate defined in this way has been almost continually decreasing to the present level of 4.5%, from 10% in 1993.

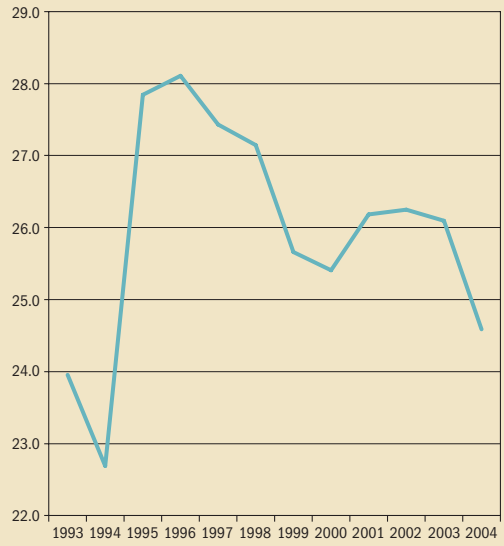
The decline in the gross savings rate was primarily related to the fall in interest rates. In addition to this, the reduction in the tax burden and fund contributions in recent years has also played an important role

This decline was related to developments in household interest income and expenditure:

- The cuts in interest rates and the shift in savings from term and savings deposits to cash and current accounts have reduced the interest income of households, and, in general, their property income,
- The lowering of interest, interest bonuses and home savings deposit subsidies together with frequent buying by instalment have increased the demand for loans. The volume of loans drawn by households and household interest payments and property expenditure is increasing, also as a consequence of increasing real estate prices, improved supply and availability of mortgage loans and sharpened competition in the banking sector following its rehabilitation and the entry of foreign investors into this sector.

The gradual lowering of interest income has played a more important role in the development of the savings rate for a longer period of time. The second reason, i.e. the increased demand for loans on the part of households and the higher volume of new loans provided, is becoming more important at present and will dominate in the future.

Chart 2.13 **Share of current household expenditure in current household income (%)**



Source: NBS calculations based on Statistical Office of the SR data.

The reduction in the savings rate would have been even more pronounced if there had been no reduction in the household tax burden and fund-contribution burden. The decline in tax burden and fund contributions (current expenditure) of households has released resources for the creation of savings.

The most important factor of the growth in loans to households is the strong economic growth and positive outlook. Another important role has been played by real estate prices

In 2004, the main reasons behind the dynamic growth in loans to households were the positive development in macroeconomic indicators (the growth in GDP, fall in unemployment and growth in disposable income of households), the decline in market interest rates and the easing of bank credit standards. The growth in loans has also been influenced by the growth in real estate prices[14]. Higher real estate prices entail the so-called wealth effect, since the growth in real estate prices is paralleled by the growth in the present value of future cash

[14] *Data on real estate prices provided by the National Association of Real Estate Agents are available for 2002 and 2003 only. According to incomplete data, a partial correction in the real estate market took place in 2004, as the expectations concerning real estate price growth in the period preceding Slovakia's entry into the EU were not fulfilled.*

flows from the leasing and sale of real estate. The growth in real estate prices has been reflected in the growth in the value of loan collateral as well. The high share of housing loans among total loans to households increases the necessity to monitor and analyze the real estate market.

Box 2.1 Observations form an analysis of gross household savings

We have identified a long-term relationship according to which households behaved between 1995 and 2004. According to this, the share of gross savings among the total income of households followed the same pattern as the share of net property income (primarily household interest income and expenditure). The changes in the share of current expenditures among total income of households provided short-term impulses for developments in the savings rate. The following relation is valid:

$$d(qHUSP_t) = -0.32 - \underset{(3.4)}{1.03}*d(qYBE\check{Z}_t) - \underset{(7.6)}{0.90}*d(qHUSP_{t-1} - \underset{(5.8)}{1.17}*q\check{C}DM_{t-1} - 1.72),$$

where
qHUSP – share of gross savings of households among total gross income of households, in %
qČDM – share of net property income (primarily interest income minus interest payments) among total gross income of households, in %
qYBEŽ – share of total current expenditure of households among total gross income of households, in %.

Values in brackets are t-values. Seasonally adjusted quarterly data for the period Q2 1995 to Q4 2004 were used for the estimate.

The relationship in brackets, the so-called long-term relation, is important. As the long-term relation shows, the measure of gross savings (qHUSP) was related to the development in net property income, primarily the net interest income of households (qČDM). The reduction in the tax and fund-contribution burdens, which determines the current expenditure of households (qYBEŽ), provided positive impulses for the development of gross savings of households. The parameters in the long-term relation say that the savings measure (the share of savings among the total gross income of households) changed (fell) practically at a one-to-one proportion to the share of net property income (net interest income) among the gross income of households, and almost at a one-to-one proportion to changes (cuts) in the tax and fund-contribution burdens of households. Developments in savings were determined by those two factors in the period analyzed (1995-2004).

The measure of gross household savings recorded an extraordinary decline in 2001; in the short term, it was reduced by 2% by a stabilization policy. Changes in net property income, which is dominated by the interest income of households, were more of an exogenous nature in the past, as they were influenced by developments in interest rates. At present, the reaction of households and banks to interest rate cuts plays a role as well. Shifts within the money supply to current accounts reduce the interest income of households even more. Growth in the volume of loans drawn by households increases their interest payments.

3. Banking Sector

The domestic banking sector in 2004 was favourably influenced by the economic environment, both external and internal. The banks' fears of increased competitive pressure following accession to the EU were not confirmed.

Banks recorded notable structural changes in their liabilities. The share of household deposits fell, while the share of deposits from financial and non-financial companies and public sector deposits rose. The volume and share of interbank deposits also rose, as did the volume and share of bills of exchange. The share of mortgage bonds grew only slightly. On the assets side fast growth was recorded in bank assets at the central bank, koruna loans to households and foreign currency loans to financial and non-financial companies. Concentration in the provision of loans was high, particularly in household lending.

The off-balance-sheet items of banks operating in Slovakia have been growing for a long time and at several banks the size of the off-balance-sheet accounts now exceeds that of the balance sheet. The most important features in the development of off-balance-sheet accounts are growth in receivables from guarantees, which banks accept in the framework of trades with the NBS or clients, the high value of interest-rate and foreign exchange instruments, dynamic growth in options and permanent growth in receivables from future loans.

The banking sector's net profit in 2004 grew on a year-on-year basis by 14%, benefiting from both growing interest revenue from household[15] lending and interest revenue from the NBS. Growth in the share of non-interest revenue in total income from banking activities – bank revenues from client fees and trading income continued to grow. On the other hand, activities directed towards households led to higher operating costs. Despite this, the banking sector raised its operating efficiency in 2004. Revenues from the reversal of reserves were lower.

High capital adequacy, at 19% at the year-end[16], created the conditions for growth in higher-risk assets, in particular loans. Particularly in the second half of the year, they grew faster than own funds, as a result of which the banking sector's capital adequacy fell. The banking credit risk was influenced in particular by the high growth in household lending and foreign exchange credit to businesses. With the growth in household lending, the volume of classified loans to households also increased. However, at the same time, growth was seen in the volume of assets with a zero risk weighting, in particular reverse repo trades with the NBS.

The interest-rate risk for banks fell, influenced mainly by a shortening of the period of interest-rate fixation in the case of loans, securities and the growth in assets at the NBS. The results of stress scenarios indicate that the banking sector is exposed to risk in the case of a growth in interest rates. The foreign exchange positions of banks changed under the influence of foreign exchange funds from foreign banks. At branches of foreign banks, growth was seen in short-term foreign exchange deposits, where this was connected with the growth in domestic currency assets. At other banks it was connected with a growth in foreign exchange lending. Banks, especially larger ones, used off-balance-sheet operations to actively manage foreign exchange risk. Smaller and medium sized banks mostly had a closed balance-sheet

[15] *The household sector includes both the public and unincorporated sole traders.*
[16] *There were differences in capital adequacy levels between banks. For a more detailed description see Part 3.6.*

position and, under the influence of selected operations, an open off-balance-sheet position.

Generally, it may be said that the maturity mismatch between assets and liabilities in the banking sector widened in 2004. This is connected with a growth in long-term loans, and a shift in deposits from savings and term deposit accounts into mutual funds and current accounts. At several banks the sensitivity to the potential withdrawal of interbank deposits by a foreign bank increased. A further problem is that the actual liquidity of government bonds may be lower than presumed.

The growing exposure of banks towards households raises the question of household credit risk. The risk involved in household lending is documented by the fact that the volume of classified loans to households, while small, grew in 2004 by 45%. In the future this may be negatively influenced by a growth in interest rates, since a large share of household loans are provided at a variable interest rate or with short-term interest rate fixation. Mortgage loans grew over the course of the year at all banks and the high concentration of the mortgage market gradually decreased for the second year. Banks may face problems in the form of lower risk premiums and a higher proportion between the level of the loan provided and the value of the property pledged. Credit risk could, on the other hand, be reduced by lower average repayment instalments and shorter maturities on loans[17].

3.1 Competition and concentration in the banking sector

Competition in the banking sector following the SR's entry into the EU did not increase dramatically

Slovakia's accession to the European Union in May 2004 made possible use of the single banking licence. This possibility to conduct banking business under the single banking licence was taken up by two existing branches. As at December 2004 Slovakia recorded 49 foreign banks providing services on a cross-border basis. These banks nonetheless did not contribute significantly to increasing competition in the banking sector.

Competition regarding the share in total assets did not change. Competition is higher in the households sector

Concentration indices from the aspect of banks' shares in total assets of the domestic banking sector over the course of 2004 remained at approximately the same level[18]. These indices bear witness to a relatively high concentration of assets. The concentration of assets in the household sector was higher when compared to the overall concentration of assets. The concentration of assets of domestic banks in the sector of financial and non-financial companies was approximately at the level of the overall concentration.

3.2 Liabilities

Over the course of 2004 several changes occurred in the structure of banking liabilities. The nature and scope of these changes naturally differs from bank to bank, although certain changes may be considered as trends and can be seen in aggregate data. Again in 2004 the most important part of liabilities were client deposits. These funds, obtained almost exclusively from residents, grew slightly in most months and in December formed 66% of all liabilities.

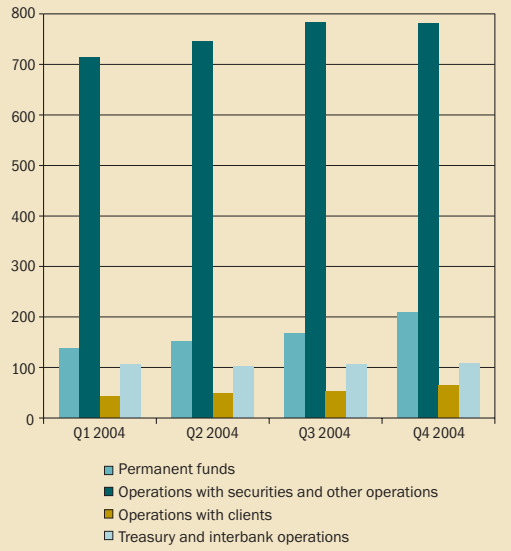
Deposits grew despite the decline in interest rates. The share of deposits from the public sector and financial and non-financial companies rose

Total client deposits, as the largest liability item, grew at most banks over the course of the year, but

[17] *In this regard it is nonetheless necessary to analyse in more depth the burden placed on household income by repayments, since it is probable that nowadays mortgage loans are being taken out by lower-income households.*

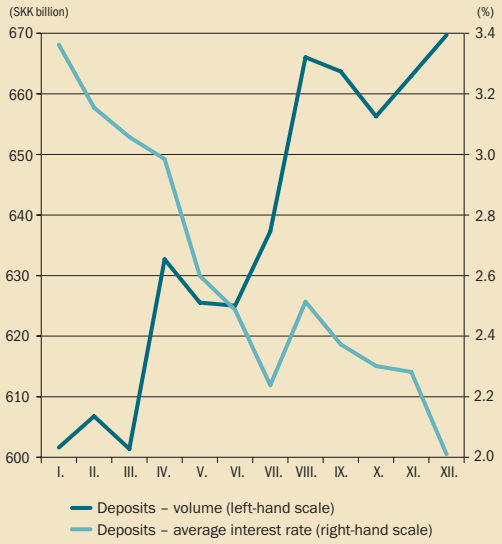
[18] *The share of assets of the three largest banks in the sector (Index C3) during 2004 moved between 51.9% and 54.5%, the share of the five largest banks (Index C5) was at the level 65.6% to 66.6%. The Herfindahl index (HHI) likewise stayed at a relatively stable level, between 1,113 and 1,119. The Herfindahl index is defined as the sum of the squares of shares (in %). It equals 10,000, if concentration is absolute and 10,000/n, if the shares are equal (in %). In the case of there being 21 banks, an equal distribution of market shares would mean an index of 476.*

Chart 3.1 **Composition of liabilities (SKK billion)**



Source: NBS.

Chart 3.2 **Development of koruna deposits to interest rates in 2004**



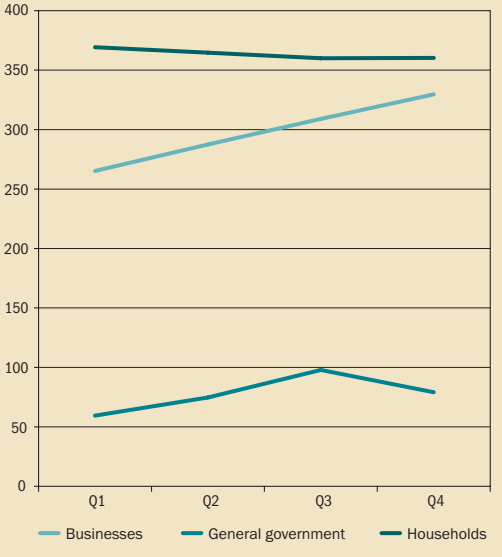
Source: NBS.

their structure changed. The volume of koruna deposits grew even despite the decline in average interest rates and the lower interest paid. As regards the sectoral structure of deposits (households, businesses and general government), the most significant growth in deposits occurred in general government (in connection with the State Treasury's activity), the volume of household deposits fell slightly and the volume of funds on business accounts grew. A marked feature in the development of households and business koruna deposits was the decline in household koruna deposits in term deposit and savings accounts. The structure of their koruna deposits changed in favour of non-term deposits, in which current accounts dominate.

Household deposits declined slightly. The volume and share of current account balances grew

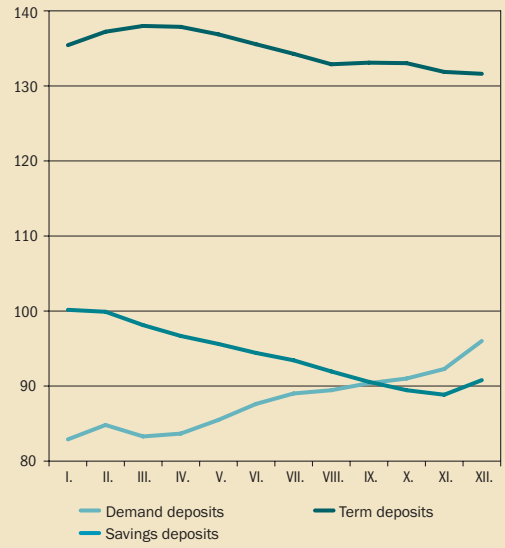
Over the course of 2004, total – koruna and foreign exchange – household deposits fell slightly, from SKK 375.9 billion in 2003 to SKK 360.3 billion at the end of the year. This decline was caused by foreign exchange deposits. Their koruna value, under the influence of the strengthening of the koruna exchange rate against the euro and dollar, fell by up to 16%. The share of koruna deposits in the population's total deposits consequently rose from 86% to 88%. More significant changes occurred in the structure of koruna deposits. Savings and term deposits fell, while non-term deposits grew on a year-on-year basis by 15.8%. Even despite the decline, term deposits have the greatest weighting in the structure. The mentioned changes were seen most clearly at large and medium-sized banks. Practically all banks recorded a decline in the household foreign-exchange deposits.

Chart 3.3 **Sectoral distribution of deposits in 2004 (SKK billion)**



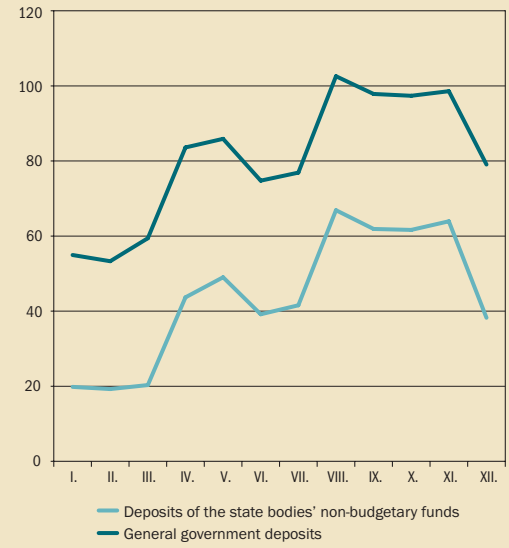
Source: NBS.

Chart 3.4 **Change in the structure of household koruna deposits in 2004 (SKK billion)**



Source: NBS.

Chart 3.5 **General government deposits in 2004 (SKK billion)**



Source: NBS.

Changes in the structure of household deposits are connected with the fall in interest rates and strengthening of the koruna exchange rate. Mutual funds are replacing savings accounts and term deposits

Households behaviour may be partially explained by the fall in interest rates. Over the course of the year, interest rates fell in all categories of deposit products. Savings accounts and term deposits reacted to their decline. Current accounts were practically unaffected by the fall in interest rates, since the primary aim of entrusting these funds to banks is not their appreciation, but the execution of payments. The decline in savings accounts and term deposits was accompanied by a growth in mutual funds, offering higher appreciation than bank deposit products.

In contrast to household deposits, koruna and foreign exchange deposits of businesses grew

Business deposits were formed almost exclusively by residents, where koruna deposits represented an 85% share of them. In contrast to household deposits, koruna and foreign exchange deposits of businesses grew, at the same rate, of approximately 24%. Business term deposits also grew on a year-on-year basis. Similar to the case of households, demand deposits grew fastest. Deposits of the business sector grew at all large and medium-sized banks. The volatility at banks strongly connected to their own financial groups is higher.

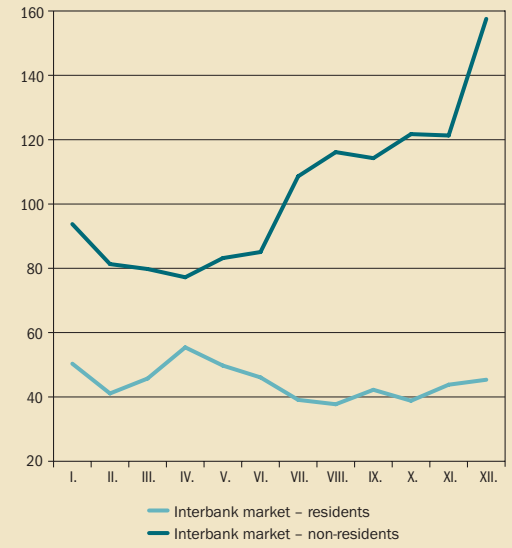
Changes in the management of public finances (establishment of ARDAL) caused a growth in the deposits on general government accounts

General government significantly contributed to the overall growth in client deposits in 2004. The non-budgetary financial resources of central government bodies in particular, comprising primarily the deposits of the State Treasury realized by ARDAL, and the deposits of the State Fund for the Decommissioning of Nuclear Energy Facilities, Handling Burnt Fuel and Radioactive Wastes were determining factors in the development of general government deposits. Over the course of several months the banking sector received up to SKK 66 billion of these funds, most of which was deposited in term deposits with a maturity of one month.

The share of funds from the interbank market in banks' liabilities grew

Funds gained from the interbank market in 2004 were the second largest liability item after client deposits. Their share in liabilities grew from 14% to

Chart 3.6 **Funds from domestic and foreign interbank market in 2004 (SKK billion)**



Source: NBS.

Chart 3.7 **Development of mortgage bond issues and unpaid principals from mortgage loans in 2004 (SKK billion)**

Source: Register of mortgage loans.

17.4% of total liabilities. This growth was exclusively caused by funds from the foreign interbank market (over the course of the one year their volume grew from SKK 94 billion to SKK 158 billion).

Foreign-currency-denominated funds affect liquidity and foreign exchange risk

At the end of the year, funds in foreign currency formed 72% of the total funds from the foreign interbank market. Their inflow into the banking sector over the course of the year represented SKK 40 billion. With regard to their prevailingly short-term nature they were invested largely on the interbank market, or in reverse repo trades with the NBS. These funds also have an influence on liquidity and exchange rate risk. Resources gained from foreign banks come into the Slovak banking market particularly via branches of banks and banks strongly connected to their own financial groups.

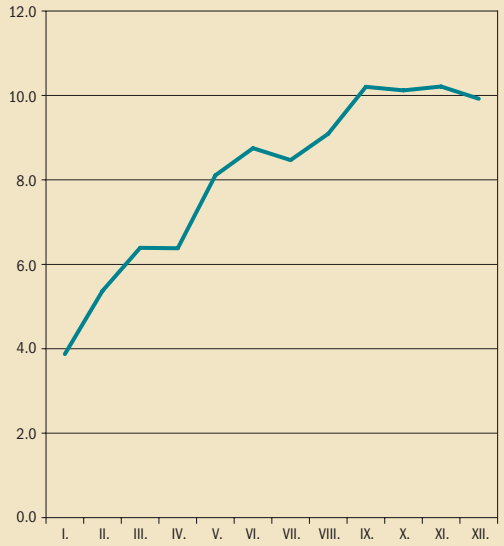
Mortgage bonds are being bought by banks themselves. They do not play a significant role in the structure of liabilities

Apart from mortgage bonds, Slovak banks do not issue any long-term securities. In comparison with client deposits and funds from the interbank market, financing via mortgage bonds, despite a growth in their volume, is not significant in the structure of liabilities. Over the course of 2004, the share of mortgage bonds in liabilities rose from 1.7% to 2.6%, representing a growth from SKK 14.7 billion to SKK 30.1 billion. As at December 2004, the coverage of mortgage loans by mortgage bonds was 74%. By the end of 2006, banks will have to achieve 90% coverage. Mortgage bonds are an expensive source of funds[19]. With regard to the lower coupon compared to the case of government bonds, they are purchased by banks themselves, where they own more than half of the issues. One of the causes of this situation lies in the low net spread in mortgage banking. In the case of the future 90% share of mortgage bonds in mortgage lending, the total average margin on mortgage business will be further reduced, since in contrast to the present situation, banks will no longer be able to obtain cheap resources for financing mortgage lending.

Over the course of the year the volume of issued bills rose, bringing banks several benefits

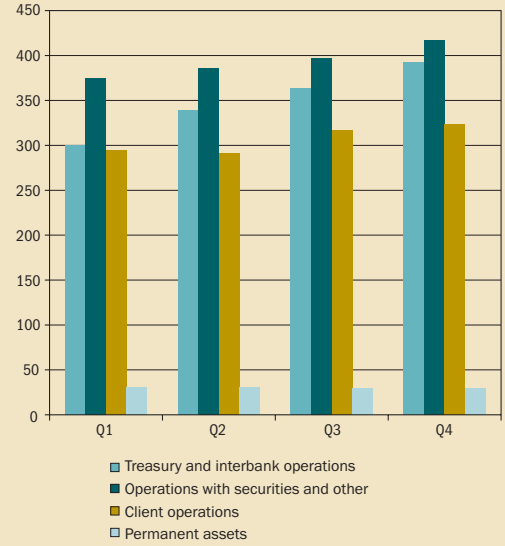
[19] *The level of the coupon on mortgage bonds in 2004 ranged from 4.4% to 5.1%, and thus was slightly lower than that for government bonds (4.8% to 5.3%) The level of the yield however depends also on the sale price of the mortgage bond upon issue.*

Chart 3.8 **Development of bill issues in 2004 (SKK million)**



Source: NBS.

Chart 3.9 **Development of the structure of assets in 2004 (SKK billion)**



Source: NBS.

Bills are the only debt security, besides mortgage bonds, issued by banks. Their investors are almost exclusively residents, where 85% of the bills are denominated in Slovak koruna. Bill issues bring a reduction in payments to the Deposit Protection Fund and lower compulsory minimum reserves. Banks can therefore provide the investor more advantageous interest on their investment. A disadvantage for the investor is a higher credit risk than in the case of deposits, while an advantage is their transferability, allowing the time for which the investors resources are tied up to be shortened.

The development of liabilities differed across bank groups

The development at large banks determined the overall trend in the sector. The decline in household deposits was most significant with them; the growth in the deposits of businesses and general government corresponded to aggregate development. To a large degree, medium-sized banks mirror large banks. ARDAL trading had an influence on several banks. Mortgage bond issues grew at all bank groups. Client deposits dominated at medium-sized banks, but an increased orientation on funds from foreign banks could be seen. Banks and branches of banks strongly tied to their own financial groups remained dependent on interbank market funds (prevailingly foreign) and client deposits (prevailingly those of businesses). In accordance with the mission of building societies, koruna deposits from households dominated in their liabilities, where these deposits, as at the year-end, had grown at all three building societies. Their business was adversely influenced by a reduction in the state bonus and the environment of low interest rates, supporting the taking on of debt rather than saving.

3.3 Assets

The most important component of assets in 2004 was client lending, forming 36% of the balance-sheet total. In 2004, the volume of loans to households (mainly long-term housing loans) and financial companies increased and the volume of koruna loans to non-financial companies decreased. Interbank assets recorded high growth. Banks placed funds primarily in the form of reverse repo trades with the NBS. In the first half of the year, demand on the government securities market came from non-residents and therefore the volume of government securities in assets at domestic banks fell, though it grew again in the second half of the year. Throughout the year, investment volume rose in securities other than government

securities, primarily in mortgage bonds issued by domestic banks.

The structure of client lending changed significantly in 2004

Significant changes occurred in the structure client lending. The share of loans to households increased, as did the share of foreign currency loans to businesses; the share of loans to state-owned non-financial companies decreased.

Interbank assets grew in particular via sterilization of excess liquidity

The share of interbank assets and treasury operations in total assets grew from 30% to 33.8%[20]. These assets grew as a result of the growth in the volume of funds deposited at the NBS in the form of reverse repo trades. In December, these were 5.3 times higher than the volume of funds on the domestic interbank market.

Government securities and mortgage bonds increased the volume of funds in bank portfolios

In 2004, the volume of government securities in domestic bank portfolios increased (by as much as SKK 20 billion in the third quarter of 2004). The volume of securities also grew due to the permanent and gradual growth in the purchasing of mortgage bonds issued by other banks.

Low interest rates and a low initial rate of the household indebtedness are creating the conditions for fast growth in loans to households

For two years now, fast growth in loans to households has been noticeable. The volume of these loans grew in 2004 on a year-on-year basis by 37.2%. Their growth at individual banks corresponded to the size of their branch networks[21].

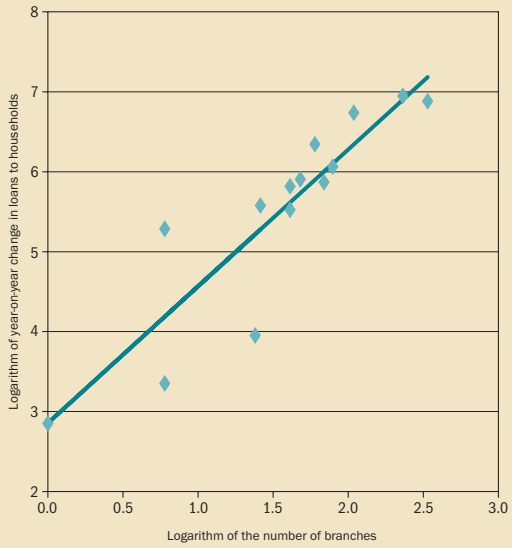
The high rate of growth in lending to unincorporated sole traders and households results from the low initial level of the debt in the household sector. It is also connected with the growth in real wages and decline in interest rates for loans and deposits. Households (sole traders and households) predominantly draw koruna loans. Although foreign currency loans to households – sole traders grew in 2004 by almost 170%, the volume of foreign currency loans to the household sector (sole traders and households) represented only 0.2% of the total volume of loans.

The households drew loans mostly for housing. The maturity of loans were extended and the need for long-term funds for their financing is growing

Housing loans formed the largest share in lending to households. The high growth in housing loans is causing the term structure of loans to change at the same time. The share of long-term loans in total loans grew by 6 percentage points. This trend however forces banks to increase their share of long-term funds, unless they wish to expose themselves to higher liquidity risk.

The quality of the credit portfolio of loans to financial and non-financial companies improved.

Chart 3.10 **Growth of loans to households at individual banks and the size of their branch network**



Source: NBS.

[20] *Treasury and interbank operations include also NBS bills and treasury bills intended for sale or trading.*
[21] *Indirectly there is also a relationship with the size of the bank.*

Table 3.1 **Development of the structure of loans to households provided in SKK**

	Volume in SKK billions		Share in %	Growth in %
	Jan. 04	Dec. 04	Dec. 04	
Current a/c overdrafts	2.9	5.9	5	105
Consumer	12.8	19.7	17	53
Housing loans	65.1	81.9	70	26
– mortgage	25.6	38.9	33	52
– building	34.3	37.3	32	9
Other	4.7	8.9	8	92
Total	85.5	116.4	100	36

Source: NBS.

The volume of koruna loans to non-financial companies decreased; the volume of foreign currency loans increased. Loans to financial companies grew quickly

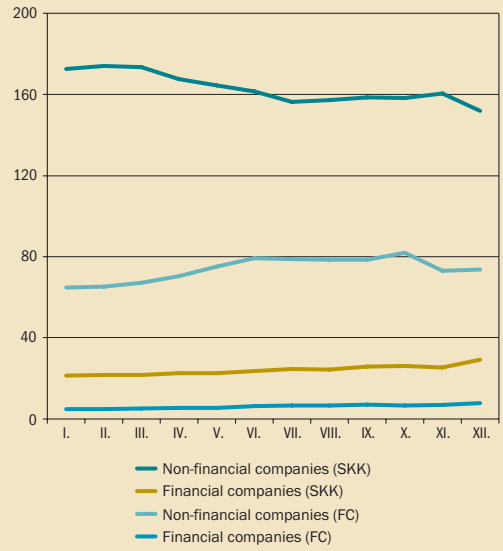
The better quality of loans was evidenced by a reduction in the gross value of sub-standard loans, which banks provided to state-owned non-financial companies. Their value declined on a year-on-year basis from SKK 23.7 billion to SKK 3.2 billion[22]. Overall, the level of koruna-denominated loans provided to non-financial companies fell by 12%. This was despite the fact that interest rates on loans provided to businesses were gradually decreasing; one reason may be the bad experience from providing loans to businesses in the past. Foreign exchange loans are to some degree replacing koruna loans. This may be because the loans provided in a foreign currency in the current environment of a strengthening domestic currency are advantageous to debtors. However, it is also necessary to take into consideration the increasing cross-border activity of Slovak businesses, particularly in connection with the inflow of foreign investment. The balance of loans to financial companies, in both Slovak and foreign currencies, rose from SKK 28 billion to SKK 37 billion. The quality of these loans is for the time being good.

Lending to general government leapt at the end of the year

Loans provided to the general government, which had been more or less stable over the previous year, grew sharply in December 2004 from SKK 22.7 billion to SKK 36.5 billion. This increase comprised koruna-denominated short-term loans totalling SKK 10.5 billion and long-term foreign exchange loans of SKK 3.3 billion, both to the central government.

Lending to households is strongly concentrated in a small number of banks. Lending to companies is less concentrated

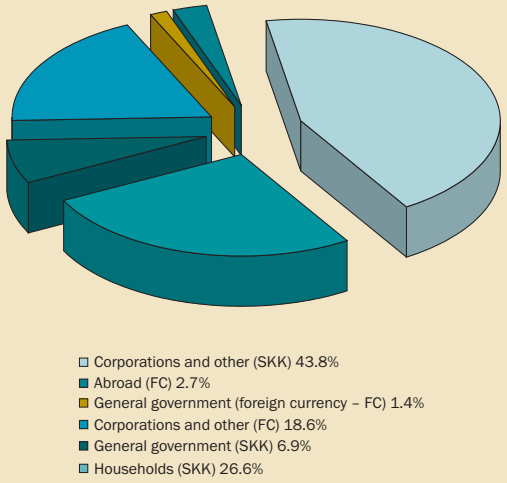
Chart 3.11 **Development of loans to financial and non-financial companies (SKK billion)**



Source: NBS.

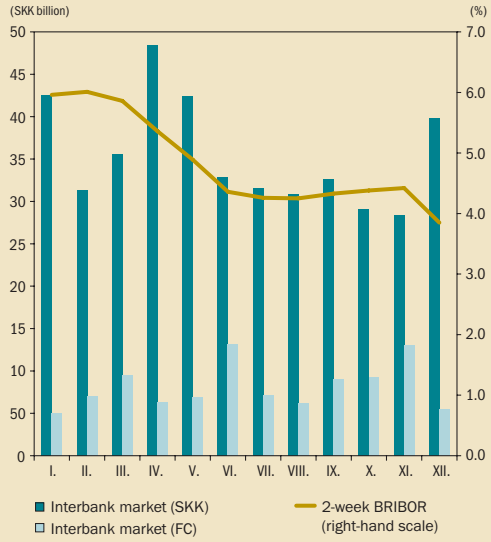
[22] *Of this reduction, SKK 10 billion represents reclassified loans at one bank, from the category "sub-standard loans" into the "standard" category. The remainder of the reduction was directly due to a reduction in the level of loans provided to state-owned non-financial companies, applying the state guarantee for a loan provided to the Slovak rail company, ŽSR, a.s.*

Chart 3.12 **Structure of loans (gross values)**



Source: NBS.

Chart 3.13 **Development of the domestic interbank market in 2004**



Source: NBS.

The concentration of loans, measured by the Herfindahl index[23], at the end of the year, was higher in the market for lending to households. Their development over time was however varied: the concentration of loans to businesses did not display any clear trend. At the end of the year the index value for this concentration stood at 953. The concentration index of loans to households gradually fell, from 1937 to 1721. On the other hand, the C3 index, expressing the aggregate share of the first three largest banks in loans to households, rose from 44% to 51%. From this it may be said that an ever greater share of loans to households has been gained by the three largest banks. However, the distribution of the market share between them is relatively balanced.

Sterilization in reverse repo trades with the NBS grew by almost SKK 100 billion. The cause is a strengthening of the exchange rate and the differential of the interest-rate conditions between banks and their parent companies

The largest share in the growth of assets in interbank operations is comprised by the high growth in funds banks sterilize in reverse repo trades with the NBS. Their volume grew mainly over the course of the first three quarters from SKK 112 billion to SKK 219 billion. This growth occurred despite a reduction in NBS key rates over the course of 2004 by 2 percentage points. It may be presumed that a significant part of these funds originated from parent companies aboard. Even despite the decreasing interest-rate differential these investments were advantageous, particularly due to the strengthening of the domestic currency. The distribution of profits between the bank and the company providing the funds depends on the currency and rate in which these funds were provided.

The volume of assets in NBS bills decreased

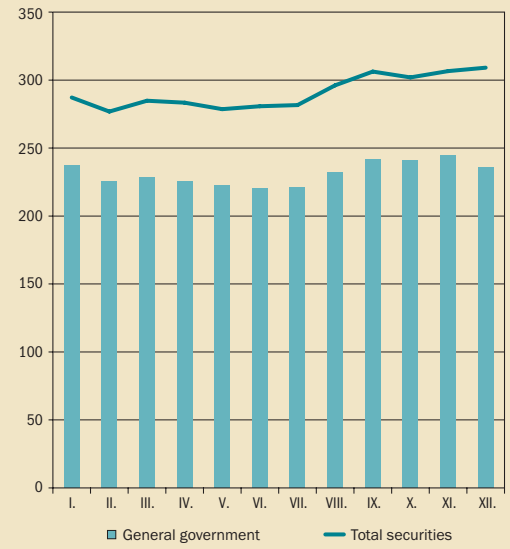
The volume of NBS bills, which banks allocated for sale or trading, fell over the year from SKK 95 billion to SKK 71 billion. This fall was a consequence of pursuance of monetary policy objectives on the part of the NBS (concerning 3-month funds).

Interbank assets are concentrated in large banks and banks focusing on this type of business

The highest daily volume on the domestic interbank market in the Slovak koruna was achieved by banks for which this activity forms a significant

[23] *The definition of the Herfindahl index is given in the footnote no. 18.*

Chart 3.14 **Development of government securities in the bank portfolios in 2004 (SKK billion)**



Source: NBS.

Chart 3.15 **Development of securities other than government securities in bank portfolios in 2004 (SKK billion)**

Source: NBS.

part of their banking activity, i. e. large banks and banks providing funds from their client deposits to other banks. Another reason for trading on the interbank market was the fact that several banks were actively trading with their parent bank, providing them funds exactly in the amount and structure for the banks to be able to perform all activities while not exposing themselves to foreign exchange or liquidity risk.

Government securities dominate in the securities held in bank assets. The share of mortgage bonds is also increasing

Government securities formed the largest share of securities (76%) held by banks. Banks were not deterred from buying them even at a lower yield, though the volume in the portfolio fell from SKK 261 billion to SKK 252.2 billion at the year-end[24]. The volume of government securities held to maturity increased. Government securities play an important role in credit risk management.

The volume of securities issued by domestic and foreign companies in bank assets grew

Growth in other bonds in bank portfolios was caused by a large one-off purchase of foreign-currency-denominated bonds issued abroad and the purchase of mortgage bonds issued by domestic commercial banks in Slovak currency; the volume of the latter grew from SKK 6.4 billion to SKK 17.1 billion. The share of foreign-currency-denominated securities in the total value of securities fluctuated (excluding the stated individual purchase) between 7.5% and 10%. In an environment of an appreciating domestic currency yields from these securities are exposed to foreign exchange risk.

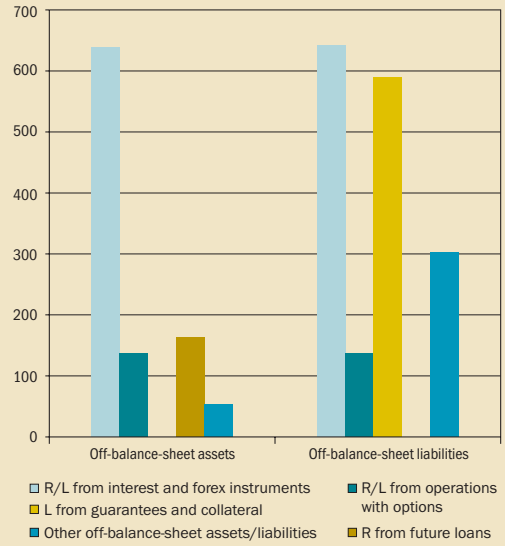
The development of assets differed across bank groups

Lending to households in particular among the group of large and medium-sized banks grew. Smaller banks do not focus on lending to households. The decline in loans to non-financial companies was not seen in the group of medium-sized banks (indeed, these loans grew in this group by 3%). However, loans at these banks to financial companies did have a slower rate of growth. Interbank assets grew, particularly among the group of large banks

[24] *The volume of government bonds grew slightly (from SKK 228.3 billion to SKK 229.8 billion), conversely the volume of Treasury bills fell (from SKK 32.7 billion to SKK 22.4 billion)*

and the group of banks and branches strongly interconnected to their own bank groups. The rate of growth in interbank assets among the group of medium-sized banks was slower. Interbank assets even fell gradually over the course of the year at building societies. Sudden growth was recorded only in December. Growth in the volume of securities in the second half of 2004 can be seen in practically all groups of banks other than building societies. However, banks and branches strongly connected to their own bank groups and building societies invested to only a small degree in mortgage bonds.

Chart 3.16 **Structure of the Slovak banking sector's off-balance-sheet accounts (SKK billion)**



Source: NBS.
Note: "R" stands for receivables, "L" liabilities.

3.4 Development of off-balance-sheet accounts

The value of receivables from guarantees and collateral represents more than half of the sector's balance-sheet total

Receivables from guarantees and collateral recorded by the banking sector in its off-balance-sheet accounts comprise more than half of the overall balance-sheet total. The amount of these guarantees grew on a year-on-year basis by approximately one third. This growth is connected on the one hand with the growth in reverse repo trades with the NBS, in which banks receive securities as collateral, and on the other hand with the high growth in housing loans (primarily mortgage lending), where banks require real estate property as a guarantee.

The value of interest rate and currency instruments represents roughly a half of the banking sector's balance-sheet total. The share of instruments from abroad is growing

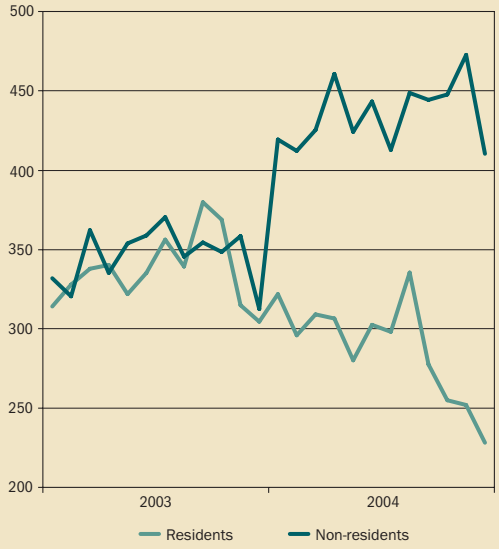
Interest-rate and currency instruments represent the second largest part of the off-balance-sheet total and their value[25] comprises roughly half of the banking sector's balance-sheet total. This is true for both receivables and liabilities, which are almost equal[26]. Although due to the significant volatility it is difficult to speak of trends, it may still however be said that the value of interest-rate instruments in 2004 grew (though at a slower rate than in 2003), while the value of currency instruments stagnated, or slowly declined. Of the total value, futures make up the majority (approximately 85% – 95%). The remainder comprises spot instruments with a short period of realization, or settlement. A clear trend is represented by the increase in the share of instruments from abroad. While at the end of 2003 their value was approximately balanced, at the end of 2004 the value of domestic instruments represented only 36% of the total value of interest-rate and currency instruments.

Operations with options are almost exclusively currency options. Since 2003 they have grown dynamically. In 2004 this growth reached 81%

In 2004, operations with options represented roughly 12% of the overall balance-sheet total of the banking sector[27]. Receivables and liabilities are

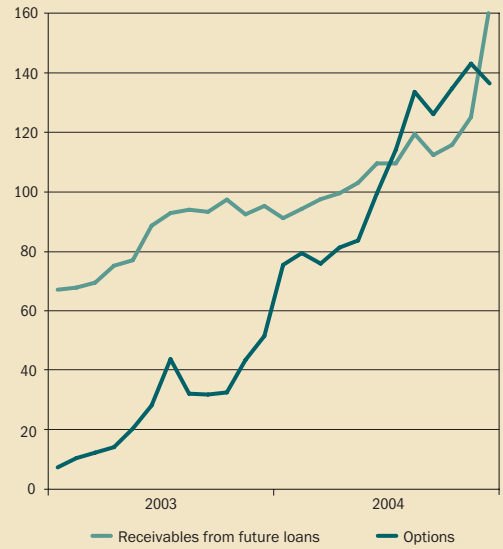
[25] *The value of interest-rate instruments is expressed at the agreed price of the trade, without revaluation to their real value. The value of currency instruments is revalued according to the current level of the exchange rate.*
[26] *We shall therefore deal further with an analysis of receivables from interest-rate and currency instruments. We would however reach very similar conclusions for liabilities.*
[27] *By the value of operations with options we mean the real value of financial instruments to which the given options relate.*

Chart 3.17 **Value of domestic and foreign interest-rate and currency instruments (SKK billion)**



Source: NBS.

Chart 3.18 **Development of operations with options and receivables from future loans (SKK billion)**



Source: NBS.

almost equal and for the past two years have grown consistently and dynamically. Over the course of this period, they grew from SKK 7 billion to SKK 136 billion, with a year-on-year growth in 2004 of 81%. Of the total volume of operations with options, up to 99% of these are currency options. Domestic operations with options in a foreign currency and foreign operations with options in the domestic currency comprise the largest share.

Receivables from future loans grow quickly

Receivables from future loans represent 14% of the banking sector's overall balance-sheet total and recorded a year-on-year growth of 78%. Banks do not report any liabilities from future loans. This item therefore contributes to the opening of a long, or closure of a short liquidity position or foreign exchange position in the off-balance-sheet accounts.

3.5 Profitability

Net interest revenues grew thanks to a reduction in interest costs

Net interest revenues in 2004 again formed the main part of gross bank revenues. Despite a year-on-year growth in net interest revenue, its share in the banking sector's gross revenue fell on a year-on-year basis by 10 percentage points to 70%. The growth in net interest revenues in the sector was caused by a marked reduction in interest costs compared to the reduction in interest revenues. This is connected with interest policies, where a reduction in interest rates on the interbank market was manifested more significantly, mainly on the liabilities side. Interest rates on loans, especially in the last quarter of 2004, fell.

The net interest-rate margin grew among the group of large banks having a dominant position in the household sector

The fall in interest rates was also manifested in net interest-rate margins[28]. In December 2004, the banking sector achieved a net interest-rate margin of 2.84%. This represents only a slight decrease, by 0.1 %, on a year earlier. This slight sectoral decrease conceals significant differences between banks. The decrease was recorded largely among

[28] *The net interest rate margin is defined as the share of net interest revenues in the average value of assets.*

Table 3.2 **Year-on-year changes in the basic revenue categories**

	Volume in SKK millions		y/y change in %
	31.12.2003	30.12.2004	
Net interest income	29,541	31,427	6.39
– interest costs	28,949	26,583	-8.18
– interest revenues	58,490	58,010	-0.82
– of which interest revenues from securities	21,518	20,368	-5.34
Net non-interest income	7,088	11,504	62.28
– revenues from equities and business shares	799	281	-64.77
Net income from fees	7,606	9,378	23.29
Net income from trading	2,099	5,952	183.57
Other net operating incomes	-3,415	-4,108	-20.26
Gross income	36,629	42,931	17.21
Total operating costs	25,550	26,319	3.01
Purchased performances	10,925	11,123	1.81
Staffing costs	10,067	10,695	6.24
Other operating costs	4,558	4,501	-1.26
Net income	11,079	16,611	49.94
Creation of provisions and reserves	277	-1,872	-774.63
Extraordinary result and taxes	-334	-1,407	-41.13
Net result	11,316	12,932	14.28

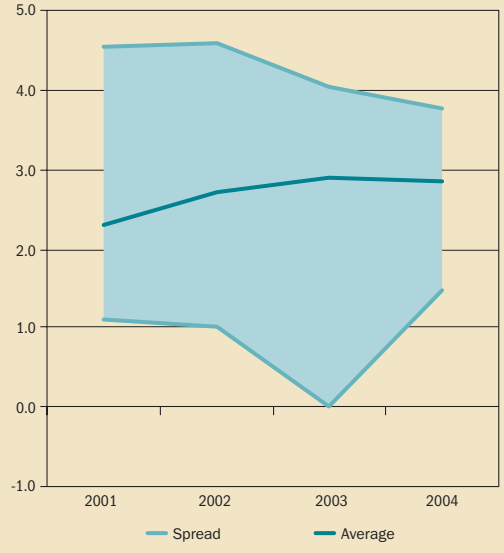
Source: NBS.

smaller and medium-size banks. On the other hand, growth in the net interest-rate margin was recorded particularly by banks with a dominant position in the market for deposits and household lending.

Interest yields in the banking sector declined as a result of the decline in interest yields from securities

The year-on-year decline in interest revenues was caused in particular by the decline in interest yields on securities. Interest revenues from activities other than securities (mainly from loans) increased on a year-on-year basis by almost 2%. This was supported by banks dominant in the household market. These banks had a dominant standing in terms of the volume of loans provided to clients and at the same time, a minimal decline in interest rates on loans to clients was seen over the course of 2004. Interest revenues from the NBS increased on a year-on-year basis by 8%. Banks increased the volume of loans to government bodies, which was manifested in the growth of interest revenues from these loans (a year-on-year growth of 35%). Several banks, particularly medium-size banks, which asserted themselves in the loan market with some difficulty, increased the volume of securities despite the decline in their own interest yield and thereby ensured a growth in interest revenues from securities.

Chart 3.19 **Development of interest-rate margin in the banking sector (%)**



Source: NBS.

Banks reacted to the fall in interest rates by a reduction in interest costs

The decline in interest rates in the banking sector was reflected in a reduction of interest costs. Despite the growth in the volume of client deposits, banks paid out less interest to their clients for deposits (a year-on-year fall in interest costs by 21%), with the smallest interest being paid on term deposits (a decline in costs of 18%). The growth in deposits of government bodies was manifested in a growth in interest costs on central government deposits by almost 62%. Interest costs paid to foreign banks also grew markedly (by 26%).

Non-interest revenues grew significantly over the course of 2004

Banks increased their revenues primarily through securities trading. Net income from these trades grew on a year-on-year basis in the sector by almost SKK 4 billion. The net income from derivatives operations negatively correlated with the net income from foreign exchange operations, indicating the use of derivative operations for securing open foreign exchange positions. The aggregate net income from derivatives and foreign exchange operations in the banking sector was almost unchanged on a year-on-year basis.

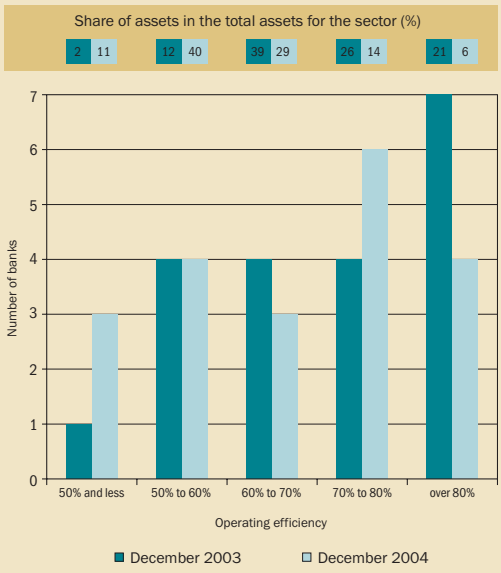
Net revenues from fees grew by 24%

The main part of non-interest income was formed by net revenues from fees, which increased on a year-on-year basis by almost 24%. The largest growth in fee income was recorded by banks in which the volume of loans to households rose significantly and among the banks with the highest client fees in the sector.

Operating efficiency rose thanks to gross revenues growing faster than operating costs

The growth in bank assets towards households was manifested in increased operating costs and purchased goods and services in the banking sector. These grew for almost all banks[29]. The probable reason for their sporadic reduction was the drive by banks to increase operating efficiency. The number of employees was reduced slightly. Concurrently, costs per employee rose. The cost-to-income ratio was reduced on a year-on-year basis from 70% to 61%. A notable factor contributing to the year-on-year growth in the banking sector's operating efficiency was the 18% growth in gross income in comparison with the 3% increase in operating costs.

Chart 3.20 **Distribution of operating efficiency in banking sector**



Source: NBS.

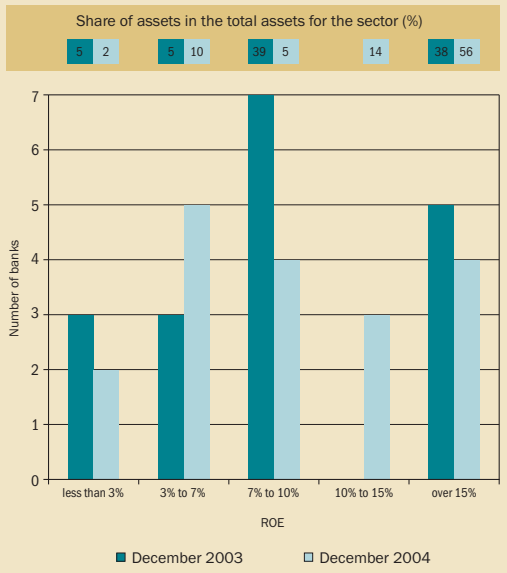
The banking sector's net profit rose by 14%, ROE reached 16.5%

Final net profits were influenced by the creation and use of provisions and reserves and tax expenses. Compared to 2003, income from the cancellation of reserves[30] decreased significantly (a year-on-year decline in the sector of almost SKK 6.5 billion). At the end of 2004, the use of provisions in the sector exceeded their creation by almost SKK 4.8 billion. The higher use of provisions was mainly

[29] *The number of branches and lower organizational units rose on a year-on-year basis by 56.*

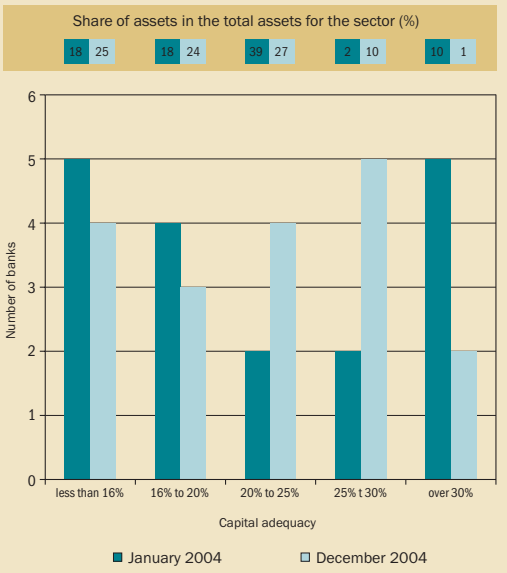
[30] *According to the Methodological Instruction of the Ministry of Finance No 658/2003-92 bank reserves should appear in balance by December 31, 2003 as retained profit from previous years. According to NBS Regulation No. 1/2004 (applicable from January 31, 2004) reserves are to be used gradually, at most over the period of four years, by a minimum by 25% of their balance as at December 31st of each year.*

Chart 3.21 **Distribution of the ROE indicator in banking sector**



Source: NBS.

Chart 3.22 **Distribution of capital adequacy in banking sector**



Source: NBS.

connected with the growth in writing off receivables towards clients. The volume of tax expenses in the sector increased. Net profits grew on a year-on-year basis by more than 14%. The growth in the net profit was also seen in an increase in the banking sector's net return on equity (ROE), which at the end of 2004 reached 16.5% as opposed to 15.5% in 2003 (Chart 3.21). There were marked differences between the ROE values across banks (2.3% to 21.8%).

3.6 Capital adequacy

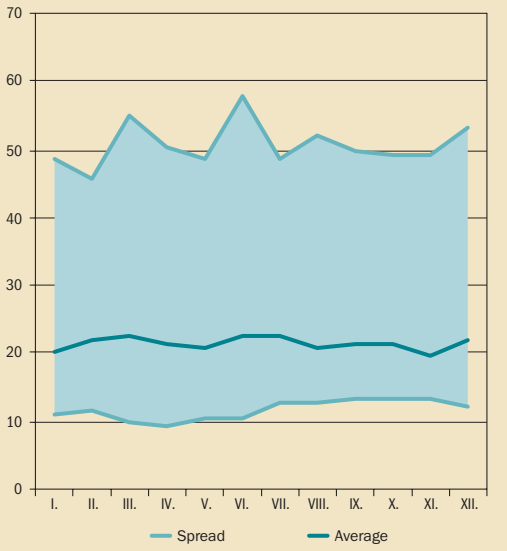
Capital adequacy in 2004 fell to 19% yet remains high

In December 2004 capital adequacy for the banking sector stood at 19%, with a marked decline in the second half of the year. Although in January the share of banks with capital adequacy below 20% made up 36% of the sector's assets, in December this share was already 49%.

Changes in capital adequacy were particularly influenced by changes in the volume of risk-weighted assets and partially by changes in the volume of banks' own funds

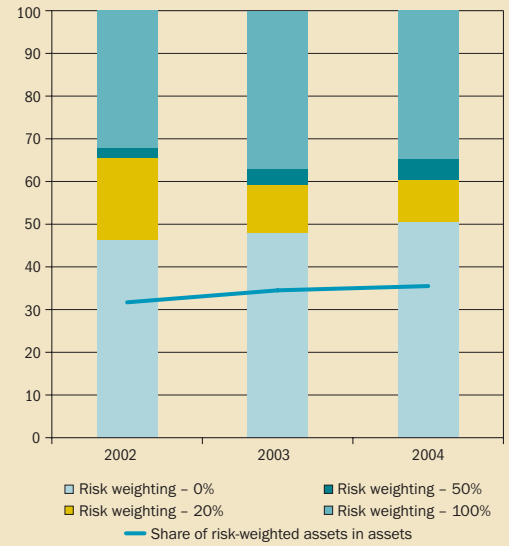
The volume of risk-weighted assets in 2004 grew by almost 12% (almost SKK 44 billion). The level of own funds rose at most banks, and at an overall rate of 5%. The growth in own funds was particularly connected with the decline in unsettled losses from past years (a fall of SKK 2.7 billion). A contributory factor to this was the slight increase

Chart 3.23 **Development of capital adequacy in banking sector in 2004 (%)**



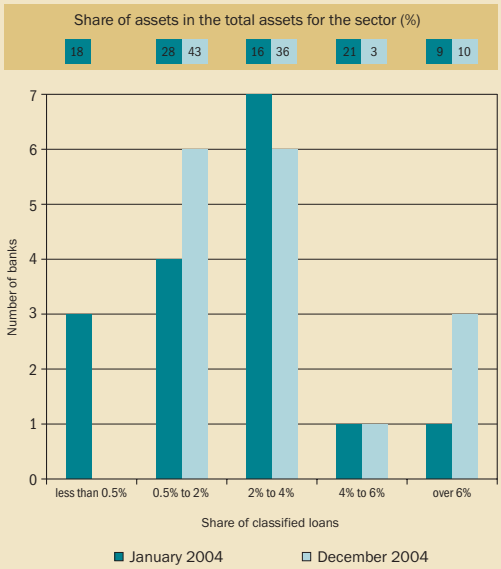
Source: NBS.

Chart 3.24 **Structure of assets by risk weighting** (%)



Source: NBS.

Chart 3.25 **Distribution of the share of the gross classified loans to households in the total lending to households**



Source: NBS.

in paid-up registered capital (an increase of SKK 1 billion) and the growth in reserve funds and other funds created from profits (a growth of SKK 2 billion). The quality of own funds in 2004 was high – the share of registered own funds among the total of own funds was almost 100%. Capital in the sector was mainly made up of paid-up registered capital (51% of capital), retained profits from previous years (32%) and in part by reserve funds and other funds created from profits (14%).

3.7 Risks in the banking sector

Credit risk

The share of risk-weighted assets among total assets did not change

The share of risk-weighted assets among total assets over the course of 2004 ranged around the level of approximately 36% (in January standing at 36%, and in December at 35.5%). This stable development was a result of countervailing changes – an increase in the volume of the most risky assets with a 100% and 50% weighting, which was compensated for by an increase in the volume of assets with a 0% risk weighting.

The share of risk-free assets increased to 51%; at the end of 2004, the share of assets with a 100% risk weighting was 35%

Assets with a zero risk weighting – assets towards the government and central bank – grew from the start of the year by more than SKK 180 billion and in December 2004 formed 51% of total risk-weighted assets. The growth in loans was manifested in a growth in assets with a 50% and particularly a 100% risk weighting. From the start of the year assets with a 100% risk weighting grew by approximately SKK 92 billion and at the end of 2004 formed 35% of risk-weighted assets.

The volume of loans to households grew by 37.3% and represented one quarter of the total volume of loans

Loans to households in the banking sector as a whole at the end of 2004 formed a 27% share of total loans, where in January this share stood at 22%. From the start of 2004, loans to households grew by more than 37%. The majority of loans to households in 2004 were provided in domestic

currency. Banking sector loans to households in foreign currency at the end of 2004 totalled SKK 310 million.

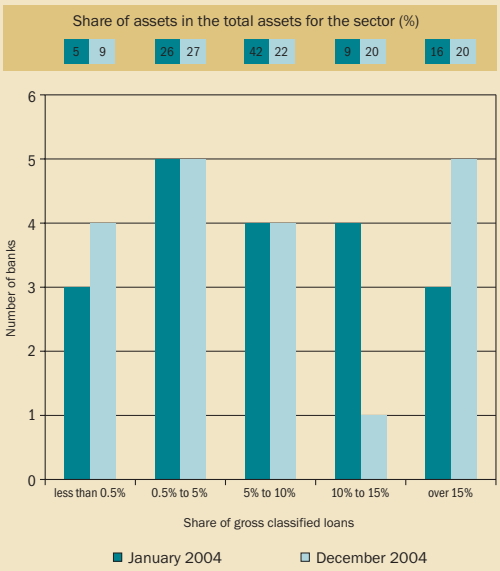
The volume and share of classified loans[31] to households grew. The low percentage of classified loans is also a consequence of fast growth

In December 2004, the share of gross classified loans to households in the domestic currency among the total gross loans to households for the banking sector hovered around the level of 2.7% (in January 2.5%). Banks with a dominant position in the market for loans to households nevertheless reported low values for this indicator, where over the course of the year, in the case of these banks, their slight growth was recorded. Favourable values of the share of classified loans among total loans were also achieved (statistically) thanks to the fast growth in the volume of loans. Classified loans themselves to households in the sector grew by 45%. Significant growth in the volume of classified loans was seen from the start of the year.

The share of loans to financial and non-financial companies in total loans fell to 65%. The volume of koruna loans to financial and non-financial companies fell by 5%; the volume of foreign currency loans grew by 17%

Despite the significant growth in loans to households, loans to financial and non-financial companies in 2004 formed the largest share of credit portfolios. However, their share in the total volume of loans fell from a January figure of 72% to 65% in December 2004. The total volume of loans to companies in 2004 increased by 1.3%. This slight growth hides within it a decline in koruna-denominated loans and a growth in foreign-currency-denominated loans. From January to December 2004, the volume of loans to companies in domestic currency fell by more than 5% and at the end of 2004 formed approximately 67% of total loans to businesses. Loans in domestic currency are broken down into wholesale, retail and hotels & restaurants (23% of the volume of loans to companies), industrial production (22%), financial intermediation (15%),

Chart 3.26 **Distribution of the share of gross classified loans to businesses as at 31.12.2004**



Source: NBS.

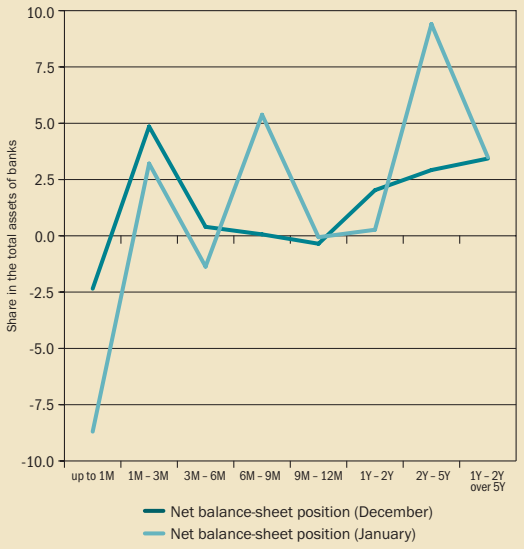
and the production and distribution of gas, water and electricity (11%). With regard to the growth in the investments of financial and non-financial companies in foreign currencies, as well as with regard to the Slovak koruna's strengthening, it was more advantageous for Slovak companies to borrow in foreign currencies. In 2004, foreign exchange loans drawn by them grew by more than 17%.

The quality of the portfolio of loans to companies improved in 2004

Several banks, in particular those which in the past had suffered under a high share of classified loans towards businesses, attempted to clean up their business loan portfolio. Over the course of 2004 this resulted in a reduction in the volume of classified loans by almost 20%. The share of gross classified loans among total gross loans to businesses fell from a January figure of 10.9% to 9.9% in December 2004. This decrease was mainly recorded in the volume of classified loans to businesses in public ownership. A significant decline in the volume of classified loans was also recorded by most large and medium-sized banks.

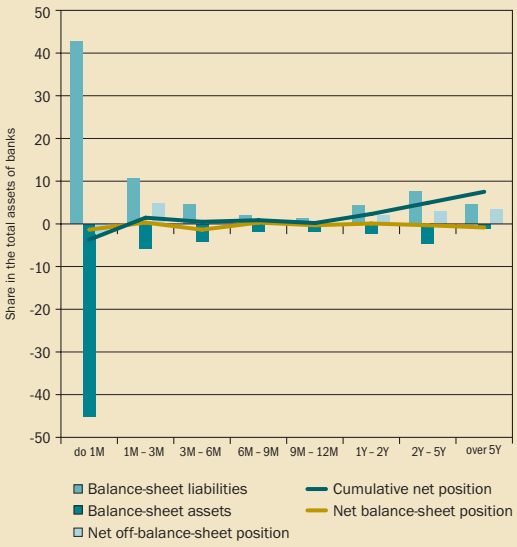
[31] *Classified loans represent the sum of doubtful and loss-making loans. Their decisive feature is that they are more than 90 days after their due repayment date.*

Chart 3.27 **Net balance-sheet position in 2004** (%)



Source: NBS.
Note: The share of the banks analyzed in December 2004 was 94% in the sector's assets, in January 62%. The net balance-sheet position is defined as the difference between balance-sheet assets and liabilities. In the case of interest-rate risk the net balance-sheet position in individual maturity ranges is defined as the difference of interest-rate-sensitive liabilities with the residual period to revaluation of the interest rate or maturity of the given item in the given maturity range.

Chart 3.28 **Term structure of interest-rate-sensitive items of the balance sheet and off-balance-sheet accounts in SKK in December 2004** (%)



Source: NBS.
Note: The share of the banks analyzed in December 2004 was 94% in the sector's assets. The net (off-) balance-sheet position is defined as a difference between (off-)balance-sheet assets and liabilities.

Interest-rate risk

General interest-rate risk in banks' trading books rose

Over the course of 2004 the general interest-rate risk in the trading book rose and capital requirements for a general interest-rate risk rose from SKK 523 million in January to SKK 973 million in December 2004.

The maturity mismatch between interest-rate-sensitive assets and liabilities in the banking book decreased[32]

The banking book recorded a fall in interest-rate risk, due in particular to harmonisation of interest-rate-sensitive assets and liabilities. On the liabilities side client deposits in one- to six-month maturity ranges fell, while client deposits in the shortest maturity range grew. The growth of client deposits in the maturity range of up to 1 month is connected with the fall in interest rates, which was manifested in decreased interest among clients in term deposits and their increased interest in current accounts. The volume of assets in maturity ranges of up to three months increased. This was caused mainly by a growth in trades with the NBS, which in December comprised as much as 53% of the interest-rate-sensitive assets of up to one month. The increase in assets of shorter maturity ranges was the result the growth in loans with the fixation of interest-rates to three months. In this way banks transferred the interest-rate risk onto clients. In this case however, with the decline in banks' interest-rate risk, their credit risk grows, since a growth in interest rates can negatively influence the ability of households to repay their liabilities.

Banks reduced interest-rate sensitivity in securities, where their volume in maturity ranges above one

[32] *In interpreting the results it is necessary to take into consideration the fact that the share of analyzed banks in the sector's assets over the course of 2004 ranged from 40% to 94%.*

year declined and the volume of securities having the shortest maturity range increased.

The overall balance-sheet position in EUR and USD was of a liability-sensitive nature

The term structure of interest-rate-sensitive items in EUR and USD was influenced by the growth in short-term deposits in these currencies. Client loans were dominant on the assets side, having mostly a short-term nature. In December the volume of assets in EUR in a maturity range above five years increased. The overall balance-sheet position in EUR and USD, i.e. the significant short position in up to one month and long position in the longer maturity ranges had a liability-sensitive nature (in the case of USD, the position in longer maturity ranges was balanced).

Interest-rate risk in 2004 did not represent a significant threat for banks

The net off-balance-sheet positions in SKK attained only low values and perhaps only in some banks did they serve for securing open balance-sheet positions. Their overall position in SKK, i.e. the balance-sheet and off-balance-sheet position, was more or less closed, indicating a low level of credit risk. In December 2004, the banking sector reported a short position in the band of up to one month (at the level of 3.7% of the value of assets) and a long position among longer maturity ranges (the size of the open position in these maturity ranges did not exceed 3% of total assets). The liability-sensitive structure of interest-rate-sensitive items in SKK in general exposes banks to a negative impact in the case of a growth in interest rates, though with regard to the low values of open positions the

Table 3.3 **Simulation of an impact of changes in interest rates to the economic value of the banks' capital[1)]**

	Share of a change in the economic value of own funds among own funds in %				
(SKK)	I.04	III.04	VI.04	IX.04	XII.04
par (+2)	-7.52	-5.27	-4.80	-6.19	-3.72
par (–2)	8.09	5.67	5.18	6.68	4.12
short (+2)	-0.77	-0.52	-0.34	-0.44	-0.36
short (–2)	0.78	0.53	0.35	0.45	0.36
long (+2)	-6.79	-4.77	-3.32	-5.76	-3.44
long (–2)	7.27	5.13	3.58	6.21	3.74
butterfly (+1 –1)	3.17	2.2	2.19	2.82	1.64
butterfly (-1 +1)	-3.07	-2.17	-2.11	-2.71	-1.58
(EUR)	I.04	III.04	VI.04	IX.04	XII.04
par (+2)	-0.647	-0.628	-1.010	-0.937	-0.829
par (–2)	0.704	0.683	1.087	1.005	0.876
short (+2)	-0.022	-0.019	-0.015	-0.011	-0.008
short (–2)	0.023	0.019	0.015	0.011	0.008
long (+2)	-0.626	-0.610	-0.774	-0.927	-0.822
long (–2)	0.806	0.837	1.079	1.163	0.896
butterfly (+1 –1)	0.321	0.315	0.524	0.488	0.434
butterfly (-1 +1)	-0.308	-0.302	-0.502	-0.468	-0.416

Source: NBS.
1) The share of the assets of the analyzed banks in the sector's assets over the year ranged from 40% to 94%.
Note 1: – par () – parallel shift of all points on the yield curve by the set value
– short () – shift of points on the yield curve in short maturity ranges
– long () – shift of points on the yield curve in long maturity ranges
– butterfly () – shift of points on the yield curve in short and long maturity ranges
Note 2: The table does not give results of stress scenarios in USD and CZK, since their impact was minimal.

negative impacts did not represent any significant threat for banks in 2004.

The results of stress testing showed that banks are sensitive, particularly to changes in long-term interest rates

The open position in individual maturity ranges exposed the banking sector to the risk of negative impacts in the case of interest rate changes. The results of the impacts of various simulations of interest rate movements in SKK and EUR are shown in Table 3.3. Banks had the largest open interest rate positions in Slovak koruna. The liability-sensitive term structure of interest-rate-sensitive items in Slovak koruna exposed the banking sector to the risk of a decline in the real value of own funds in the case of a growth in interest rates. Among the possible stress scenarios of interest rate movements, the worst impact over the course of 2004 was had by a parallel growth in interest rates by 2 percentage points. This is connected with the banking sector's long position in the maturity range from one to three months and in maturity ranges from one year and above. From the results of the scenarios, it ensues that the banking sector would be negatively influenced particularly by scenarios of growth in long-term interest rates. The negative impact of an increase in interests rates over the course of the year decreased, which is connected with the changes mentioned earlier in the term structure of interest-rate-sensitive items.

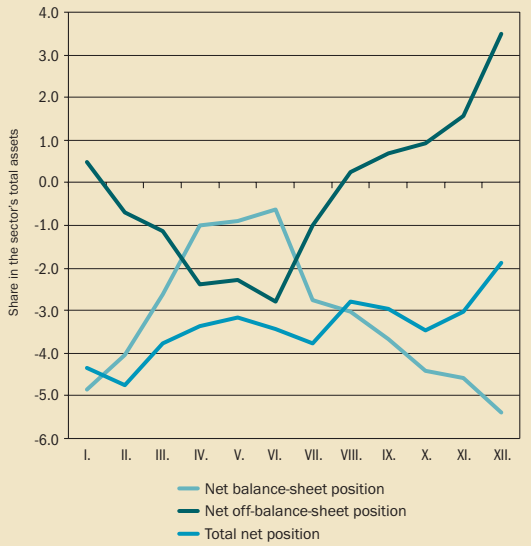
Similarly, as in the case of Slovak koruna, banks in the case of foreign currencies had, over the course of the year, a liability-sensitive structure of interest-rate-sensitive assets and liabilities. With regard to their volume, the negative impact of possible changes in interest rates was substantially lower. In the case of interest-rate positions in EUR the sector was negatively sensitive in particular to the growth in long-term interest rates.

Foreign exchange risk

The koruna's appreciation had a positive impact on most banks' results

The overall open position of the banking sector in foreign currencies throughout 2004 was short.

Chart 3.29 **Development of the share of open foreign exchange positions among assets in 2004 (%)**



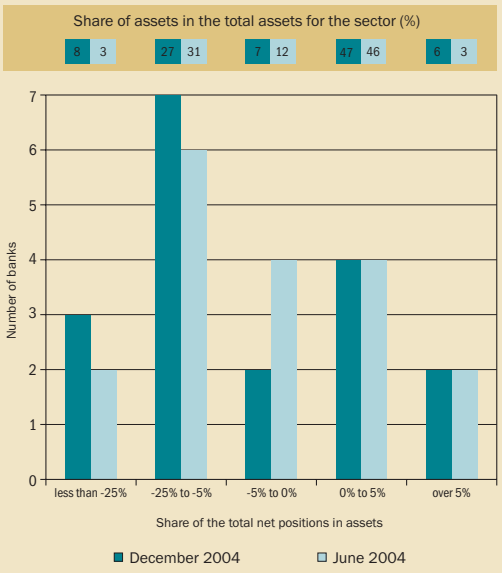
Source: NBS.
Note: The net forex (off-) balance-sheet position is defined as a difference between forex assets and liabilities in the (off-)balance-sheet accounts. The total net position is defined as a sum between net balance-sheet and net off-balance-sheet position. A short (long) position is a position in which the volume of assets is larger (smaller) than the volume of liabilities.

The domestic currency's appreciation thus had a positive influence on most banks' results. Conversely, the short position exposed the banking sector to the risk of a loss in the case of the Slovak koruna's depreciation. The size of the short position was decreased from January onwards and in December stood at 1.9% of assets.

The foreign exchange position was determined by growth in the volume of foreign exchange funds from banks, growth in the volume of foreign exchange loans, growth in the volume of foreign-currency-denominated securities and the securing of the foreign exchange position

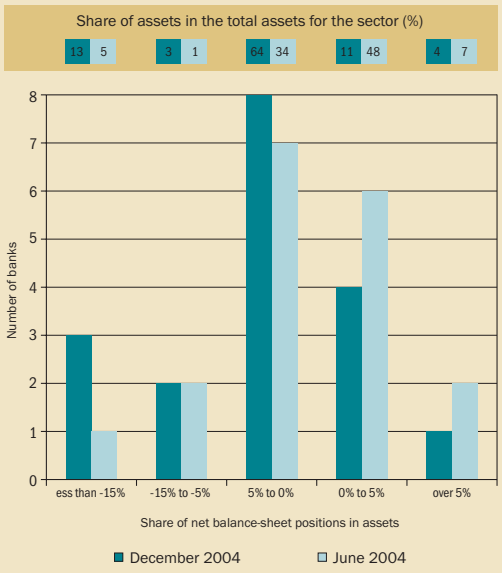
Foreign exchange funds from banks grew significantly in the balance sheet from mid-2004. Among some banks the increase in foreign exchange funds led to a significant growth in the short balance-sheet position. The growth in funds from some banks was connected with a growth in foreign exchange loans, or the purchase of foreign-currency-denominated securities, which as a rule merely reduced the growth in the short balance-sheet position. In par-

Chart 3.30 **Distribution of shares of total foreign exchange positions in banks' assets (%)**



Source: NBS.

Chart 3.31 **Distribution of shares of net balance-sheet positions in banks' assets (%)**



Source: NBS.

ticular, banks active in futures and options used off-balance-sheet operations to actively managing foreign exchange risk. Smaller and medium-sized banks mostly had a closed balance-sheet position and, under the influence of certain operations, an open off-balance-sheet position.

Short balance-sheet position increased

The growth in foreign exchange funds in the banking sector in the second half of 2004 was caused by an increase in the short balance-sheet position. This concerned certain banks in particular. The open balance-sheet position in December 2004 represented 5.4% of the sector's total assets.

Growth in banks' foreign exchange deposits increased their share in banks' liabilities to 43%

With the growth in banks' foreign exchange liabilities, their structure also changed. In June, deposits of natural and legal persons (53% of foreign exchange liabilities) and banks' deposits (21%) formed the largest part of foreign exchange liabilities. The growth in foreign exchange deposits in banks in the second half of 2004 increased their share in liabilities to 43% and the share of client deposits fell to 40%. Other liabilities formed 13% in liabilities (representing funds entrusted to a branch from the parent bank). The foreign exchange deposits of banks were prevailingly of a short-term term deposit nature. Up until May they declined under the influence of a fall in the interest-rate differential. From May 2004 through to December, deposits again grew by approximately SKK 59 billion. The reason for the renewed growth was the expected strengthening of the Slovak koruna. In 2004, the decline in legal and natural persons' foreign exchange deposits continued (from the start of the year falling by almost 9%). Under the influence of the low interest yields on foreign exchange funds and the appreciation of the Slovak koruna, the foreign exchange deposits of natural persons fell by 16%. Legal persons' foreign exchange deposits tracked a more volatile course and from January to December recorded a slight increase.

Foreign exchange assets grew by 16%

Foreign exchange assets also recorded a growth, albeit at a slower rate than liabilities (from January they increased by 16%). Almost 60% of foreign exchange assets were formed by foreign exchange loans provided to natural and legal persons. Increased interest in foreign exchange loans, in particular in the case of legal persons, resulted in

a 17% growth from the start of the year. In December, the volume of foreign-currency-denominated securities increased by SKK 13 billion. As at the end of the year, the share of securities in foreign exchange assets stood at 24%. Deposits and loans at other banks represented an approximate 11% share in assets. These assets were marked by a relatively high volatility and were used for liquidity management.

VaR represented 0.1% of own funds

The growth in the open balance-sheet position was also manifested in the VaR[33]. The VaR for the banking sector stood at 0.1% of own funds.

The off-balance-sheet foreign exchange position for the banking sector at the end of 2004 formed 3.5% of assets. These were comprised of futures and options

The off-balance-sheet foreign exchange position for the banking sector developed from the start of the year in a mirror image to the open balance-sheet position. Its size at the end of 2004 reached 3.5% of assets. The open off-balance-sheet position changed significantly over the year, where until June the banking sector reported a long position and from August onwards a short position. Off-balance-sheet operations were made up of futures and options. Banks used these activities for securing open balance-sheet positions. Almost 75% of off-balance-sheet assets were comprised of receivables from futures and options. The remaining part of off-balance-sheet assets were comprised of receivables from guarantees provided against securities and real-estate, and receivables from guarantees and future loans. Liabilities from futures and options formed approximately 67% of total off-balance-sheet liabilities. Almost 10% of off-balance-sheet liabilities were formed by liabilities from guarantees accepted on real estate and securities. A part of liabilities was formed by liabilities from future loans and from guarantees.

3.8 Liquidity

Immediate liquidity of banks (other than building societies) worsened

Despite the higher volatility of the immediate liquidity[34] index, there may be discerned a worsening trend at several banks. Nor can we speak of any clear improvement in this indicator in even one case. Building societies are an exception here, having only a small volume of highly volatile funds. On the other hand, the indicator of fixed and illiquid assets[35] over the course of the year did not change significantly.

The liquidity of securities was connected with the use, nature of issue, volume and time of the sale

Securities could be used for securing the drawing of non-interest-bearing overnight loans at the NBS, and government bonds are generally considered a liquid asset. The liquidity of government bonds was connected with two factors: the nature of the issue and its volume and the time in which a bank needed to obtain liquidity. In the first half of 2004, investors showed greatest interest in 3-year bonds with a zero coupon and 5-year bonds with a fixed coupon. In the second half of the year when banks already had bonds with the preferred maturities and yield structure in their portfolios, interest grew in bonds with a variable coupon and a maturity of 10 and 5 years. Another factor is the direct proportionality between the volume which a bank needs to exchange for liquidity and the respective time needed so as to not suffer trading losses. This relation changes depending on the current situation in the capital market.

The cumulative discordance of current liquidity deepened

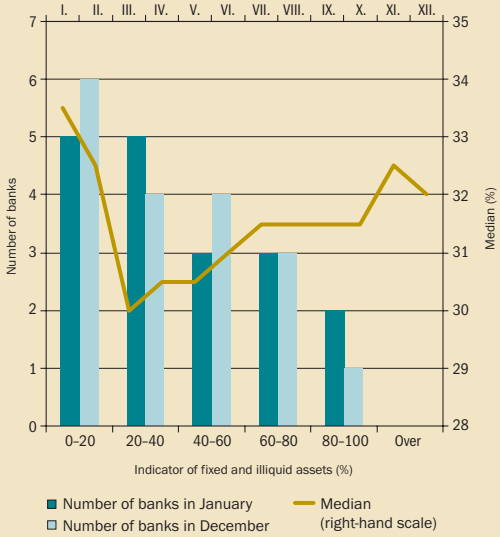
We monitored the deepening of the discordance between the maturities of assets and liabilities

[33] *Value at Risk (VaR) is defined as the loss in a portfolio which with 99% probability will not be exceeded during one day. Historical simulation was used in calculating the VaR.*
[34] *Immediate liquidity is defined as a proportion of immediately liquid assets and highly volatile funds.*
[35] *The indicator was introduced through a regulation on liquidity of banks and liquidity of branches. It is defined as the proportion of fixed and illiquid assets to selected items of liabilities approximately equaling own funds and it should not exceed 1.*

Chart 3.32 **Immediate liquidity indicator and development of medians over 2004**

Source: NBS.
Note: Median is defined as the average of immediate liquidity indicators.

Chart 3.33 **Indicator of fixed and illiquid assets and median's development in 2004**



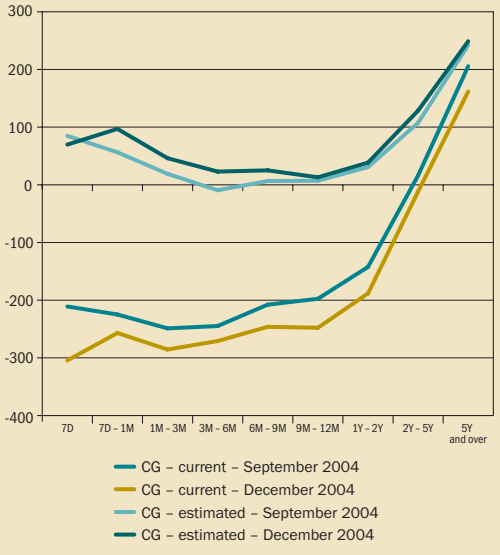
Source: NBS.
Note: Branches not calculating the indicator of fixed and illiquid assets are not included.

throughout the year, particularly those in the period from August to December. The reason is that we classify government bonds in the shortest time interval of current liquidity. The banking sector's position in maturities up to 7 days shortened between September and December by SKK 93.4 billion. This difference determines the shift in the whole curve, and it changes only in a maturity above one year. A question remains the reflection of this change in estimated liquidity, where this actually improved in the shortest band against September. The fact that a negative gap in estimated liquidity was recorded in December at several banks in several times bands is noteworthy.

Liquidity on the interbank market was improved by NBS sterilization

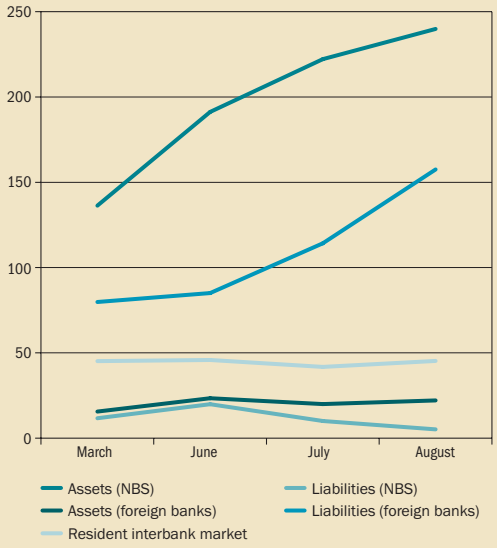
We can draw two conclusions regarding liquidity on the interbank market from the development of the cumulative gap and the development on the interbank market. The first is the fact that over the course of the year the volume of funds sterilized by the National Bank of Slovakia rose, where these are relatively liquid, thus creating a strong protective cushion. On the other hand the negative position in the shortest maturity of the cumulative gap opened even further, since short-term funds grew faster than short-term assets. In other words, though the protective cushion provided to banks in the form of deposits at the NBS increased, it was nonetheless insufficient to maintain the rate of growth in short-term funds.

Chart 3.34 **Change in the cumulative gap of the current and estimated liquidity in the banking sector between September and December 2004** **(SKK billion)**



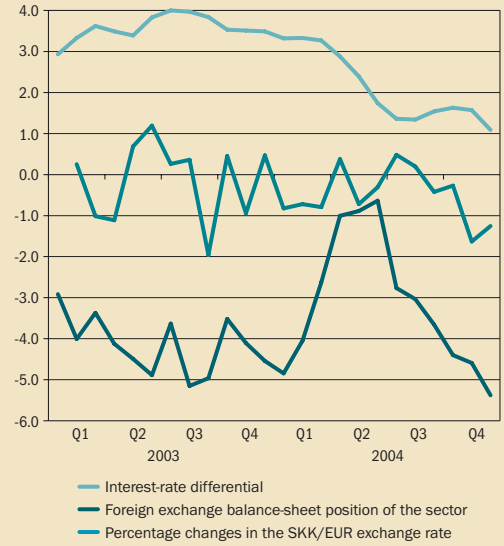
Source: NBS.
Note: CG stands for cumulative gap.

Chart 3.35 **Interbank market in 2004 (SKK million)**



Source: NBS.
Note: The chart does not include securities (NBS bills).

Chart 3.36 **Growth in foreign exchange deposits of foreign banks in connection to the strengthening Slovak koruna and the interest-rate differential (%)**



Source: NBS.
Note: Interest-rate differential stands for difference in the three-month interest rates between the EMU and Slovak money markets; foreign exchange rate for percentage month-on-month changes in SKK/EUR; foreign exchange position for share of balance-sheet foreign exchange position in assets.

Incomplete sterilization of foreign banks' deposits increases the interbank market's sensitivity to the behaviour of foreign banks

The structure of the interbank market changed over the course of 2004. The cumulative position of domestic banks on the interbank market did not change. Loans from the NBS and loans provided to foreign banks fell, or grew only to a small degree. On the other hand, the growth in foreign banks' deposits in the second half of the year was higher than the growth in active trades with the NBS (in particular reverse repo trades), whereby the Slovak banking sector's sensitivity to the behaviour of foreign banks was increased, thereby raising the contagion risk from the euro area.

Banks' liquidity was improved by the deposits of own financial groups. In 2004 this was connected with, inter alia, the (expected) strengthening of the koruna exchange rate

A factor which cannot be ignored in banks' liquidity is that of deposits from own financial groups. In order for liquidity from the euro area to be borne over to the Slovak interbank market, the profitability conditions of this operation had to be fulfilled – in particular expectations of the Slovak koruna's strengthening and an interest-rate differential. Over the course of 2003 the foreign exchange position was open primarily under the influence of the interest-rate differential. In the first quarter of 2004 the foreign exchange position closed alongside a decline in the differential. A further opening of the foreign exchange position in the third and fourth quarter was no longer connected with the interest-rate differential on the money markets, but the growing strengthening of the Slovak koruna.

4. Domestic Financial Markets

The financial market of the Slovak Republic has the characteristics of an emerging market. It is small, and foreign investors typically perceive it as part of the V4 regional market. The most important segments – the money market, the foreign exchange market, and the government bond market – are able to perform their expected functions. The stock market is stagnant and does not fulfil its role to a sufficient extent. We assume that the development potential of the capital market will revive in connection with the pension reform. The establishment of pension fund management companies and the respective supervisory institutions began in 2004. We expect that this will enable an expansion of services and investment opportunities through a combination of various investment products.

On the other hand, as a result of the successful restructuring and privatization of banks, Slovakia's membership in the EU and its progress towards joining the euro area, the financial market is already integrated into the wider EU market and the euro area. The development of the financial market in 2004 was marked by a strengthening of the Slovak koruna exchange rate and growth in the volume of free liquidity. This has recently been changing and hindering the conditions for the conduct of monetary policy. The characteristics of the domestic financial market have become slightly less stable and the predictability of their development more difficult. They are increasingly affected by the circumstances and conditions of the external environment – the foreign and global financial markets. Since the domestic financial market is small, it is exposed to the activity of external influences which seem random and unpredictable. The main risk to its stability is posed by larger movements of short-term speculative capital.

The development of the domestic financial market in 2004 was most decisively influenced by Slovakia's accession to the European Union in May of that year, the accelerated inflows of foreign direct investment and the decision to join the euro area with the entry date planned for January 1, 2009. These circumstances, taken together with the regional factors of the V4 market, significantly contributed to the appreciating pressure on the Slovak koruna and to growth in free liquidity. The NBS reacted to this development by cutting key interest rates several times, altogether by 2 percentage points. Another important factor was the intensified activity of the State Treasury (ŠP) and the Agency for Debt and Liquidity Management (ARDAL). Large resources were concentrated in the ŠP accounts, especially after the incorporation of tax offices. ARDAL became an influential player in the money market. Banks became dependent on ARDAL-administered resources, and ARDAL significantly affected price conditions on the treasury bills market. The government securities market was also influenced by an amendment to the tax legislation.

During 2004, the NBS decided to tackle the appreciating Slovak koruna by reducing or not accepting demand from banks in an auction of NBS bills. The use of such a method is not without risks, though in this case the operation of the financial market was quickly restored. Option transactions may be deemed a clearly positive change to the interbank foreign exchange market (IFEM). The market in foreign exchange conversions did not grow more sharply in 2004 and it may be assumed that the growth of this market in coming years will be moderately linear. The utilization of derivative transactions on the financial market began to provide significant information on the participant's interest-rate expectations. Besides this more sophisticated transactions are an important factor in the maturity of the country's domestic market and a not insignificant factor in its integration.

In 2004, the Securities Centre was transformed into the Central Securities Depositary (CDCP). The transformation should have laid the organizational and technical bases for trading on the securities market. However, deficiencies in the CDCP's operation emerged in 2004 which had a negative effect on the functioning of the domestic financial market, though they did not pose a threat to its stability.

4.1 The interbank money market

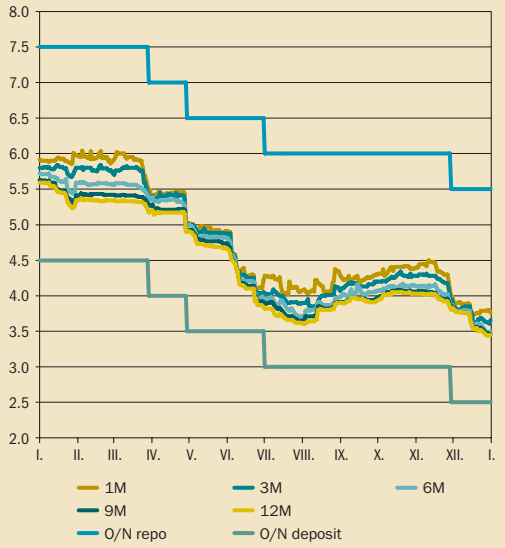
Money market interest rates fell steadily. The NBS adopted measures to reduce interest rate volatility

Over the course of 2004, the National Bank of Slovakia (NBS) made several changes in order to reduce the volatility of money market interest rates. The first change allowed for the drawing of interest-free intraday credit at the NBS, secured by securities registered in the Central Register of Short-Term Securities and maintained by the NBS. The use of intraday credit helped smooth the progress of the payment system and reduced unnecessary demand pressure for deposits in the event of low interbank liquidity on a given day. The second change involved abolishing the daily interest calculation for compulsory minimum reserves (CMR) on balances in clearing accounts, and introducing average balances of these accounts for the period under review. Like the first change, this reduced the concentration of demand for short-term deposits, in this case as a result of meeting regulatory requirements.

The Agency for Debt and Liquidity Management had a growing influence on the money market

The influence of the Agency for Debt and Liquidity Management (ARDAL) grew steadily, notably in the shortest sector of the money market. This process was apparent, for example, in April, after the tax offices were incorporated into the State Treasury, whose funds are administered by ARDAL. The progressive transfer of public finance accounts maintained by the NBS to the State Treasury (ŠP) continued to increase the influence of the ŠP and ARDAL on the money market. This was reflected by the fact that the banks became dependent on the funds administered by ARDAL, which led to a trend of higher prices for overnight deposits in the event of a daily liquidity surplus.

Chart 4.1 **Domestic money market interest rates (BRIBOR) in 2004** **(% p.a.)**

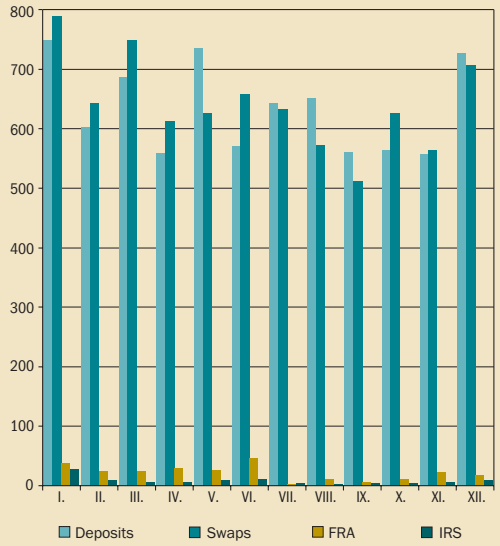


Source: NBS.

Development of interest rates and the yield curve influenced exchange rate expectations, gradually lowering NBS key interest rates and reducing demand in sterilization operations

The correlation between the expected development of the exchange rate and interest rates was seen right at the beginning of the year when foreign banks opened koruna positions, affecting longer term interest rates in particular. The most significant influence on the further development of money market interest rates was the progressive reduction of key interest rates by the NBS and, in particular, market expectations for the further development of the exchange rate and NBS key interest rates. Money market trading was significantly influenced by the partial rejection of demand in repo tenders and in an issue of NBS bills during June. This approach, taken in an effort to curb appreciation of the exchange rate, substantially limited trading in the short-term, and banks responded to the uncertainty over the NBS next steps by widening the spread between the buying and selling price to 50 basis points. The situation

Chart 4.2 **Transactions on the interbank money market in 2004 (SKK billion)**



Source: NBS.

stabilized at the end of July and banks adjusted their deposit listings to a standard spread of 30 basis points.

Implied expectations of a further fall in interest rates receded towards the year-end

The second half of 2004 was marked by foreign players closing koruna positions, influenced above all by the publication of Slovakia's trade figures, the interest rate increases by the central banks of Poland and the Czech Republic, and the foreign exchange interventions by the NBS. The rise in the long end of the yield curve thus lowered expectations of a further fall in NBS key interest rates. The narrowing of spreads between individual maturities prior to the reduction of NBS key interest rates (in November 2004), together with a reduction in the price of money, reflected the banks' expectations that the NBS would adjust key rates sooner rather than later. When the NBS did cut the rates, the market reaction was therefore limited, and when at the year-end the money market yield curve became less steep, expectations moved away from a possible further reduction of interest rates. These did not indicate, even for the next nine months, a reduction of more than 33 basis points.

Trading in the interbank market experienced no substantial changes in 2004 – transactions with foreign banks were predominant, consisting mostly of currency swaps and short-term deposits with a maturity of up to one-week. The NBS began systematic tracking of market expectations

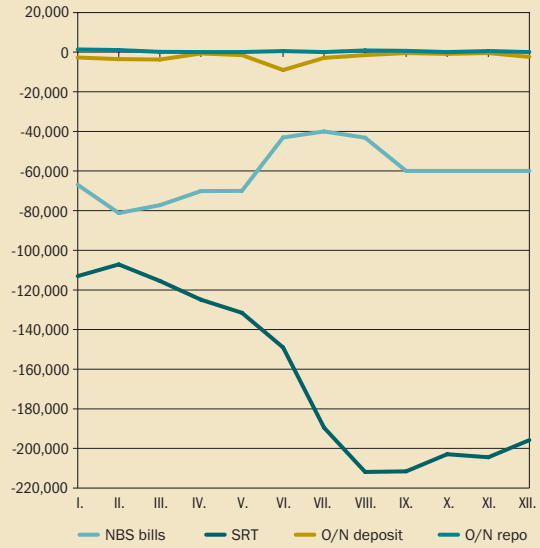
As far as interbank transactions were concerned, there were no substantial changes between 2004 and the previous year. Transactions with foreign banks predominated and these were significantly focused on interest-rate swaps (IRSs) and currency swaps. The NBS began to track money market derivatives – forward rate agreements (FRAs) and IRSs – and so gained a better overview of expectations for the money market. Deposit trading occurred mainly at the short end of the yield curve; transactions in deposits maturing within one week accounted for 89% of the total transactions and transactions in two-week deposits exceeded 95%.

The use of NBS bills in open-market operations was limited, the valuation of securities was standardized, and a haircut system was introduced. The use of government bonds in repurchase transactions was suspended temporarily as a result of problems with the launch of the Central Securities Depositary

There were no systemic changes in the monetary instruments used in open-market operations in 2004. There were changes in the share of main instruments in the total sterilization of surplus liquidity. At the beginning of the year, the Bank Board of the NBS decided to limit NBS bills as a share of total sterilization operations to approximately 25%. The reason for this was growth in demand for NBS bills[36], which are not considered by the NBS to be a suitable monetary instrument for a situation in which interest rates are expected to fall. Another partial and temporary change was the expansion of the circle of entities that may participate in auctions of NBS bills to include the Ministry of Finance, represented by ARDAL. A theoretical price and a haircut system for collateralized securities were introduced in order to standardize the methodology used for valuing securities offered as security for

[36] *3-month NBS bills*

Chart 4.3 **Individual transaction types used in the open market in 2004 (SKK million)**



Source: NBS.

repurchase transactions. A temporary suspension of government bonds caused by problems with the Central Securities Depositary limited the supply of securities acceptable for repurchase transactions. This situation did not give rise to any problems since there were sufficient Treasury bills and NBS bills that could be used in repurchase transactions with the NBS.

The volume of sterilization operations grew to SKK 226.2 billion mainly as a result of foreign exchange interventions

Funds used for sterilization operations, expressed in terms of a daily average, rose in 2004 to SKK 226.2 billion (SKK 162.7 billion in 2003). As for individual instruments, repo tenders accounted for 72%, NBS bills 27%, and overnight transactions 1%. Expansion of the money supply in 2004 was achieved mainly through repeated foreign exchange interventions by the NBS (SKK 68.6 billion), the transfer of funds of the State Fund for Decommissioning of Nuclear Power Plants and Management of Burnt Nuclear Fuel and Radioactive Waste (ŠFL JEZ) from accounts maintained at the NBS to the banking sector (SKK 10.8 billion), and a reduction of the CMR at the beginning of the year (SKK 6.3 billion).

4.2 The market in short-term government bonds

The Agency for Debt and Liquidity Management (ARDAL) became a key entity on the government securities market. With regard to changes in the taxing of yields, Dutch auctions started to be used for Treasury bills

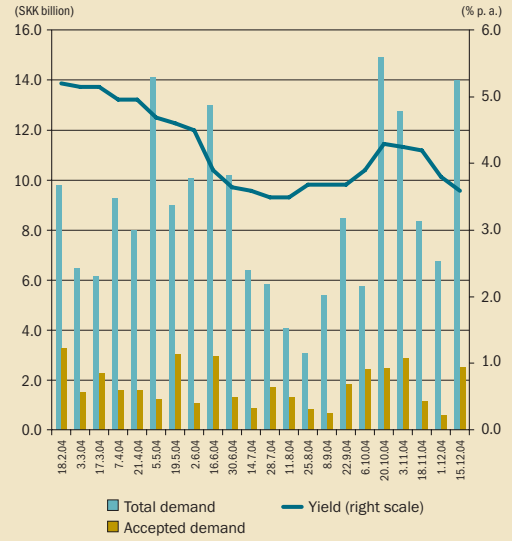
Since 2004, ARDAL, on behalf of the Ministry of Finance, has been deciding on the conditions for issuing government securities and on the results of their auctions. By issuing Treasury bills in February, ARDAL wished to avoid a concentration of issues towards the year-end that would create pressure for yield growth. In the 2004 issue calendar, ARDAL planned to issue only Treasury bills with a maturity of one year, but in October it shortened the maturity on all outstanding issues to three months. The American auction system which had been used to date was replaced with the Dutch auction. A change in the form of primary sales required an amendment to the Tax Act[37].

Good results for the SR State Budget, surplus liquidity, a fall in NBS key interest rates, and the State Treasury's own funds caused a reduction in Treasury bill yields, which were on average 16 basis points lower than the BRIBOR rates

A significant feature of the primary issues of Treasury bills was the low accepted demand in auctions (20%). To finance the deficit, ARDAL used more external credit sources as well as financial resources operated by the State Treasury on the basis of a

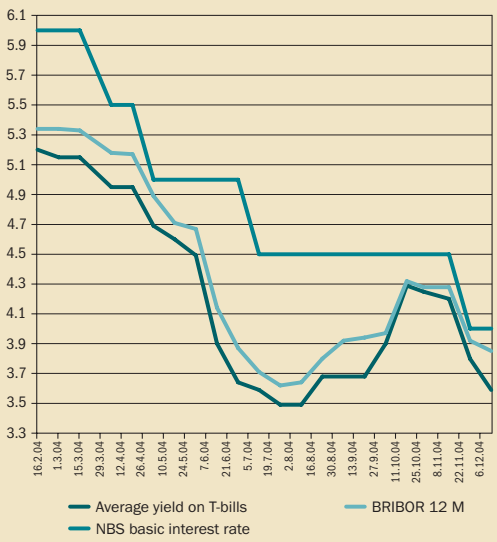
[37] *The substance of the Tax Act amendment (Act No. 595/2003 on Income Tax as amended) is based on the fact that yields and income arising from the sale of securities are, in general, from January 1, 2004, included in the income tax base. Income from these securities is taxed by the withholding method only if it accrues to natural persons, taxpayers neither founded nor instituted to do business, the National Property Fund, or the National Bank of Slovakia. Prior to 2004, any owner of securities was subject to withholding tax on income from securities. The withholding tax system is also used for Treasury bills, and it would not be possible in an American auction to quantify their yield on the maturity date and thus to ensure deduction of tax by the withholding method.*

Chart 4.4 **Treasury bill auctions during 2004**



Source: NBS.

Chart 4.5 **Comparison of the yield on primary market Treasury bills with the 12-month BRIBOR (% p.a.)**



Source: NBS.

systemic change. It was therefore possible to issue Treasury bills at yields significantly lower than the BRIBOR for the respective maturity.

The difference between the accepted interest rates on Treasury bills and the BRIBOR reached an average of 16 basis points. The reduction of yields reflected not only the consistently low demand on the primary market in Treasury bills and the high supply (permanently free liquidity), but also a reduction in key interest rates by the NBS, limits put on repo tenders by the NBS, and the non-acceptance of demand in an auction of NBS bills. Fluctuations in yields on Treasury bills were connected above all with interest rate movements on the interbank money market and expectations regarding the deficit of the SR State Budget.

As a result of the amendment to the tax legislation, the participation of foreign investors in the government securities market was less speculative. They competed with domestic investors by means of lower required yields

The Tax Act amendment made it realistic for foreign investors to participate in the primary and secondary market for Treasury bills. Whereas in the past their participation in auctions and increased trading reflected mainly speculation related to the different tax burden on domestic and foreign investors, their participation now reflects a real interest in Treasury bills. The interest rates which this group of investors sought in auctions were lower than the yields required by domestic commercial banks, which were frequently of a speculative character. This is borne out by the fact that the share of satisfaction among foreign investors in Treasury bill auctions reached 71% in 2004.

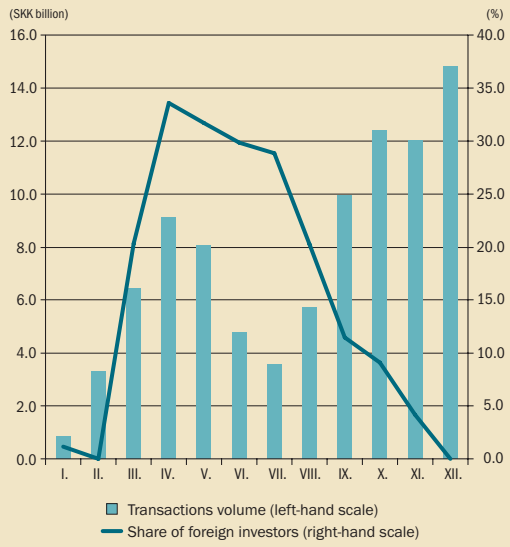
Low issue activity and a high frequency of Treasury bill primary issues kept trading on the secondary market subdued. The activity was influenced by expected changes to interest rates

Given the low issue activity and the high frequency of auctions for the year under review, trading on the secondary market in Treasury bills was not very active (secondary transactions in 2004 had a total value of SKK 91 billion). Most activity on the secondary market during this period came from foreign investors, amid strengthening expectations that the NBS would reduce key interest rates.

4.3 The capital market

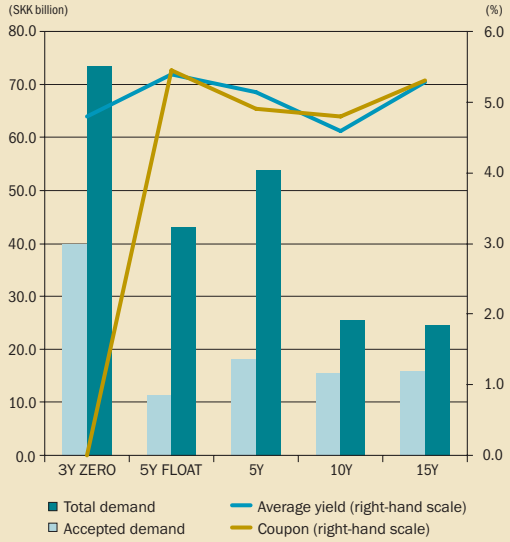
In formulating its aims for primary market issues of government bonds in 2004, ARDAL took into

Chart 4.6 **Development of the Treasury bills secondary market in 2004**



Source: NBS.

Chart 4.7 **Development of the primary market in government bonds in 2004**



Source: NBS.

account the ideas and expectations of investors. It will increase the volume of issues, introduce new products, and extend the yield curve to 15 years

The prepared concept was based on the principle of making the market more attractive. The proposed issue program was consulted with the most active investors before its publication and the final version took into account their comments and requests. During the period under review, five new issues consisting of several tranches were introduced to the market through American auctions. Besides classic products with a fixed coupon, ARDAL also issued 5-year government bonds with variable yield and, very successfully, 3-year zero coupon bonds. This issue became a benchmark and the second most traded issue on the Bratislava Stock Exchange (BCPB) in 2004. ARDAL also issued a first 15-year government bond; in this case, the yield itself was less important to ARDAL than its desire to supplement the benchmark with an untried longest-ever maturity, which was purchased mainly by insurance companies. The primary market in government bonds was adversely affected by operational problems at the Central Securities Depositary of the Slovak Republic, a.s.

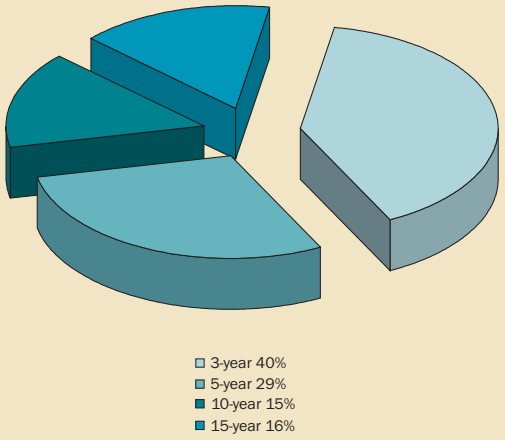
An issue of eurobonds on the foreign market made it possible to extend the yield curve under favourable conditions

Besides domestic activities in 2004, ARDAL decided to place a 10-year eurobond issue in the amount of EUR 1 billion on foreign markets despite a high liquidity surplus. It did so because of the suitable conditions for extending the yield curve of eurobonds, and, in particular, doubts about the absorption capacity of the domestic capital market at an acceptable yield.

Government bond yields fell in 2004, reflecting high demand from investors, a rating improvement for Slovakia, strengthening of the koruna, an expected reduction in NBS key interest rates, and falling yields on the markets of neighbouring countries

Yields declined on government bonds that were issued during the reviewed year on the domestic market. Government bond yields were influenced similarly as Treasury bill yields, and additionally by the yield parameters in the euro area, especially in Germany and the V4 countries. The decline in yields was also supported to a large extent by the issue of Slovak government bonds on foreign

Chart 4.8 **Individual maturities as a share of the primary market in government bonds in 2004**



Source: NBS.

markets. The downward pressure on yields was also caused by increased demand for government bonds from foreign investors, on both the primary and secondary markets. This was conditioned by Slovakia's entry into the European Union, the multiple increase in the country's rating, notably in connection with the potential for reform and investment, the strengthening of the Slovak koruna throughout the year, including the predicted continuation of this trend, as well as the domestic interest-rate differential with regard to comparable investment opportunities abroad. Reduction of NBS key interest rates had less of an effect on the bond market than did the expectation of reduction, which was incorporated into prices in advance.

The bid prices of foreign investors reflected the market situation more realistically than did the bids of domestic investors

As much as 84% of foreign investor demand was accepted at government bond auctions. As with auctions of Treasury bills, the bid prices of foreign investors reflected the price level on the market more realistically than did the bids of domestic investors. As a result, foreign investors acquired as much as 8% of the primary purchase while accounting for 4% of the demand on the primary market.

The yield curve for benchmark government bonds declined

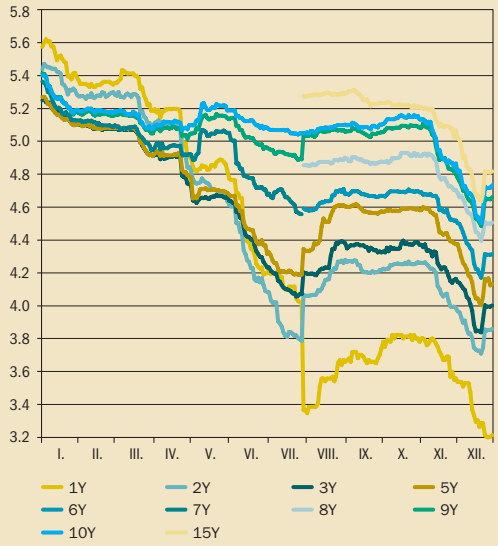
Since the beginning of 2004, a fully functional listing for benchmark government bonds has operated at the NBS within the Reuters system, in which contributors, the banks, list daily, on a voluntary basis, selected government bonds with a maturity of 1 to 15 years. These prices are used by the banks to value their portfolios of government bonds for the purpose of measuring the adequacy of their own funds. Although the volume of benchmark stock-exchange transactions is small, these listings have the greatest capacity to indicate yields on the bond market.

Table 4.1 **Basic parameters of benchmark government bonds as at December 31, 2004**

Maturity	Government bond	Issue amount (SKK billions)	Maturity date	Residual maturity (year)	Coupon (%)	Duration (year)	Modified duration (year)
1 year	12M BRIBOR/BRIBID recalculated at conversion 30/360						
2 year	200	40.000	14.1.2007	2.04	0.00	2.04	1.96
3 year	191	15.000	5.3.2008	3.18	4.95	2.91	2.80
5 year	203	18.221	14.4.2009	4.29	4.80	3.86	3.71
6 year	133	7.120	17.8.2010	5.63	8.50	4.68	4.49
8 year	174	8.310	13.3.2012	7.20	7.50	5.66	5.42
9 year	199	7.844	2.7.2013	8.51	4.75	7.04	6.74
10 year	202	15.516	11.2.2014	9.11	4.90	7.28	6.96
15 year	204	15.932	12.5.2019	14.37	5.30	10.22	9.77

Source: NBS.

Chart 4.9 **Development of benchmark government bonds** **(% p.a.)**



Source: NBS.
Note: The growth of yields in August occurred as a result of a technical change in the benchmark system and slowing appreciation of the Slovak koruna, which investors took as a signal to sell government bonds in their portfolios. Most notable in this regard were government bonds with a maturity of up to five years. Yields in December were artificially increased by the banks, because the prices of benchmark issues at the end of the year (2004) were used for official revaluation and comparison of profits from transactions in 2005. In January 2005 yields again returned to the level recorded prior to the stock-exchange holidays.

The strengthening of the koruna and the subsequent increase in demand for assets denominated in the domestic currency, the rating upgrade, and expectations of changes and actual changes in the NBS key interest rates caused yields to decline.

Clearing and settlement through the CDCP caused problems on the secondary market on the Bratislava Stock Exchange. Activity fell substantially, however, as a result of the new tax legislation and the decrease in the number of takeover bids

The Bratislava Stock Exchange (BCPB) operated for 245 working days in 2004. Problems for market participants were primarily caused by the fact that the clearing and settlement of securities were transferred from the BCPB to the CDCP. At the time of transforming the Securities Centre into the CDCP, the module for securities clearing and settlement was not adequately prepared, and, as a result, it was necessary to use the BCPB clearing and settlement system. This situation lasted half a year. Also in 2004, the prevalence of direct transactions over benchmark transactions continued, as did the prevalence of bond transactions in comparison with share transfers. The total value of transactions in comparison with 2003 fell by 60.6% to SKK 432.4 million. The decline in BCPB activity against 2003 was caused by legislative changes, specifically those regarding income tax; from January 2004 this legislation restricted the transfer of securities to foreign entities for the purpose of tax advantages prior to coupon payment, something which in the past had resulted in an artificial increase in the number and value of transactions.

Trading on the secondary market was dominated in particular by government bonds. The market capitalization of government bond issues reached SKK 362.3 billion and the SDX index made an annual gain of 8.6%

Trading on the BCPB continued to be dominated by government bonds. Their share of total bond transactions ranged from 95.1% to 99.9%. The total sum of accepted debt securities represented SKK 109.7 billion, of which government bonds made up 92%. Of total trading in 2004, non-residents accounted for 48.7%, or SKK 200.0 billion (purchases 52.4%, sales 44.9%). Market capitalization of debt issues at the year-end stood at SKK 362.3 billion, which in comparison with 2003 represents growth of 9.2%. Of this amount, SKK 340.1 billion pertained to listed issues. The SDX component for bonds of banks and corporations closed the last trading day in 2004 with an annual gain of 8.6%. Since September 2004, the BCPB has published the new price indicator SDX Group. This is a proportional index based upon a comparison between the current capitalization of a bond and its initial value. The initial value of the index, equal to 100 points, is tied to January 7, 2004. The index has two components, price and development. The price index compares the market prices of a selected set of debt issues (basic titles) with the market prices of the same set at the initial date. In addition to market prices changes, the development index monitors the capital yields of the set of the index's basic titles, and compares them to the value at the initial date of introducing the index.

Table 4.2 **Most traded shares in 2004**

Name of issuer	Value of transactions (SKK billion)	Number of transactions	Share of total transactions (%)
Nafta	2.51	264	37.61
Slovnaft	1.73	662	54.57
Zentiva	0.36	67	7.83
VÚB	0.26	913	5.35

Source: Bratislava Stock Exchange.

Trading on the equity market continued to decline. On the other hand, the market capitalization grew and the prices of traded titles rose

The volume of trading on the equity market represented SKK 21.4 billion, including takeover bids, while the volume of trading year-on-year declined by 12.2%. Equity trading may be described as very weak. The total value of benchmark transactions stood at SKK 8.4 billion, representing 37.8% of all benchmark transactions performed on the BCBB in 2004. The Slovak Share Index (SAX)[38] strengthened year-on-year by 83.9% to 326.6 points, an appreciation of 149.01 points. The market capitalization, expressed in terms of shares in which at least one benchmark transaction was made, excluding investment funds and mutual fund certificates, grew by 40.0% and reached SKK 125.6 billion on the last day of trading. The increase in the market capitalization of the listed market indicates an appreciation of existing listed titles.

The volume of compulsory takeover bids grew significantly

The Bratislava Stock Exchange recorded a significant increase in compulsory takeover bids, whose total volume reached an all time high of SKK 8.3 billion, accounting for 38.9% of total share transactions. The growth in transactions was caused by transactions related to the takeover bid for shares of Slovnaft a.s. and by the increased interest of issuers in stopping their shares from being traded on the stock exchange.

Collective investment, especially in the form of mutual funds, was the fastest growing segment of the domestic financial market in 2004

The inflow of financial resources into collective investment funds in 2004 increased the net value of their administered assets by 1.8-fold and in absolute terms by SKK 27.8 billion. The net value of assets administered by domestic open-end funds stood at SKK 61.7 billion, while that of domestic closed-end funds stood at SKK 1.8 billion. Money funds were the most active, becoming an alternative to the low-interest yielding bank deposit products. This fact was influenced mainly by the continuing decline in interest rates on term deposits. During the course of 2004, koruna money funds reported yields ranging from 3.97% to 4.96%, while the average interest rates on koruna deposits moved in a band of between 2.01% and 3.36 %, and term deposits yielded interest in a range from 2.88% to 4.53%. Interest in the usually attractive bond trusts was dampened due to their initial weaker performance.

At present, money funds have probably exhausted their yield potential. Banks are therefore preparing for a possible outflow of resources from money funds by creating, for example, structured deposits. These offer the possibility of making a profit on an increase in share price, but at the same time protect the client from a fall in value below the level of the initial investment.

Domestic asset management companies accounted for as much as 90.4% of the total net sales of open-end funds

[38] *The SAX index shows the total change in equity effected by investment in shares listed in the index. Besides prices, the index includes dividend yields and income related to changes in the size of share capital, i.e. the difference between the current market price and the subscription price of new shares.*

Table 4.3 **Overview of invested assets in domestic and foreign collective investment funds (in SKK billions)**

	31.12.2002	30.12.2003	30.12.2004
Open-end funds	14.3	33.8	61.7
Closed-end funds	1.9	1.9	1.8
Foreign open-end funds	1.5	4.6	8.8
Funds total	17.7	40.3	72.3

Source: Association of Asset Management Companies.

In 2004, total net sales of open-end funds stood at SKK 30.61 billion, of which SKK 27.32 billion was accounted for by eight domestic asset management companies administering 39 open-end funds. The number of open-end funds grew sharply over the course of 2004. This was influenced by the entry of foreign asset management companies into the market, which had been made simpler by Slovakia's accession to the European Union. But although they outnumber domestic asset management companies by six to one, their share of the administered assets is only 12.2%. They have thus confirmed expectations that Slovakia's entry into the European Union would not cause a fundamental change in this part of the market. This is due to the conservatism of Slovak savers and their preference for traditional financial institutions connected with banks that have a large distribution network.

4.4 The foreign exchange market

Slovak koruna appreciated against the euro and the dollar in 2004

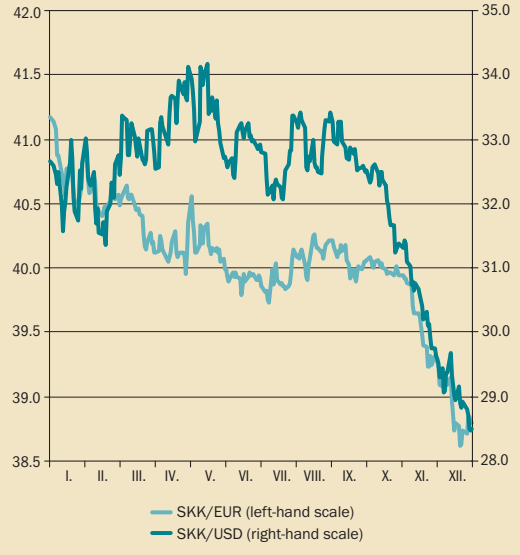
During 2004, the exchange rate of the Slovak koruna against the euro appreciated by 5.75% (against the dollar, by 13.44%). Its average exchange rate against the euro for the year strengthened by 3.5% year-on-year (against the dollar, by 12.3%). Over the course of the year, the exchange rate of the Slovak koruna against the euro appreciated by 5.75% (from 41.161 SKK/EUR to 38.796 SKK/EUR). The average level of the exchange rate was 40.045 SKK/EUR, representing a difference of 3.5% compared with 2003. Against the US dollar, the Slovak koruna's exchange rate appreciated by 13.44% (from 32.920 SKK/USD to 28.496 SKK/USD). The average level of the exchange rate was 32.255 SKK/USD (an appreciation of 12.3% compared to 2003). Against the Czech koruna, the Slovak koruna weakened by 0.47%. Foreign exchange conversions have a substantial influence on the exchange rate.

The Slovak koruna's strengthening against the main currencies was contingent on several factors, in particular Slovakia's positive macroeconomic development, the similar perception of the whole Central European region and its currencies (the Czech crown, Polish zloty, and Hungarian forint), the euro's appreciation against the main world currencies, and weak growth in euro area countries.

The total volume of foreign exchange conversions grew by 10.3% with the US dollar predominating

The total volume of transactions involving foreign exchange conversions, foreign exchange swaps,

Chart 4.10 **Development of the Slovak koruna exchange rate (daily data)**



Source: NBS.

and forward transactions on the interbank foreign exchange market, excluding foreign exchange interventions by the NBS, totalled USD 441,297.8 million, and in comparison with 2003 increased by 10.3%. USD transactions accounted for 83.3%, EUR transactions 13.1% and transactions in other currencies 3.6%. In the breakdown of transactions by type, currency swaps accounted for 91.2% (91.0% in 2003) of the total, followed by spot transactions 8.7% (8.9%) and forward transactions 0.1% (0.1%).

In spot foreign exchange transactions, the euro reference currency was predominant. The activity of foreign banks increased

The spot market had an average daily turnover in the value of USD 151.0 million. Since the euro is the reference currency, it dominated the trading and accounted for 96.8% of the total. Trading on the spot market among domestic banks, and between domestic banks and foreign banks, confirmed the trend that foreign banks are increasing their activity (domestic banks accounted for 17.4% of the turnover and foreign banks 82.6%). Transactions between foreign and domestic banks in 2004 resulted in a positive balance (USD 243.9 million). Foreign banks were mostly purchasing foreign currency and selling the Slovak koruna. They provide such services to domestic banks and enterprises, mainly for large foreign exchange conversions. The resulting balance of transactions between foreign banks and domestic banks therefore does not reflect the inflow of foreign exchange resources into the domestic foreign exchange market, nor their outflow from the domestic foreign exchange market.

In transactions among domestic banks and between domestic and foreign banks, the US dollar and foreign exchanges swaps were predominant

Swap operations have for some time now had a large share in the interbank foreign exchange market (IFEM). This is related to their use mainly by foreign banks as a substitute for a deposit market, where swap operations are, from the credit aspect, less risky, are thereby more acceptable, and give practically the same yield as making a term deposit. In addition, the most used maturities are the shortest (O/N to one week), which are continuously renewed and significantly increase turnover on the IFEM.

Transactions between domestic banks increased by 2.2% to USD 76,841.2 million. The US dollar had the largest share in the transactions, 78.7% (79.4% in 2003), followed by the euro, 20.4% (20.0% in 2003), and other currencies, 0.8%. As for the types of transactions among domestic banks, swap operations accounted for 88.4% (85.9% in 2003) and spot foreign exchange conversions for 8.0% (14.1% in 2003). Trading with foreign banks recorded year-on-year growth to USD 364,706.6 million (12.3 %). Trading in US dollars predominated with a share of 84.3% (78.8% in 2003), followed by trading in euros, 11.6% (12.1%), and other currencies, 4.1%.

Prevailing expectations of appreciation increased interest in currency options; these also influenced the introduction of new products for households, but at the same time made the koruna exchange rate more volatile

Amid strongly prevailing expectations that the Slovak koruna would appreciate in 2004, currency options began to be used to a greater extent, with investors seeking to secure a profit on option premiums in the event of stable appreciation of the exchange rate. The popularity of currency options was exploited by commercial banks in new products offered to households: high yields on term deposits were made contingent on the exchange rate developing within a fixed range. A similar principle served as the basis for many transactions made by foreign banks and their clients, as well as by exceptionally solvent domestic investors.

The greater number of concluded options meant that banks in a debt position had to buy the underlying asset, the Slovak koruna, when the exchange rate reached a certain level and appreciated. In the event that several such options are accumulated at a certain exchange rate, market participants could be forced to buy the koruna, leading to a fast change in the exchange rate (this is what happened at the end of 2004). An accompanying effect of the concluded options is to raise the volatility of the

Table 4.4 **Overview of trading on the foreign exchange market in 2004**

	SPOT			FORWARD			SWAP			Total	
	Volume		No. of trans-actions	Volume		No. of trans-actions	Volume		No. of trans-actions	Volume	No. of trans-actions
	USD mil.	%		USD mil.	%		USD mil.	%		USD mil.	
Domestic bank transactions without foreign bank	8,936.9	11.6	5,913	1.7	0.0	4	67,845.5	88.4	4,014	76,784.1	9,931
Domestic bank transactions with foreign bank	29,254.1	8.0	14,160	547.4	0.2	167	334,712.2	91.8	20,873	364,513.7	35,200
SR foreign exchange market (excluding NBS)	38,191.0	8.7	20,073	549.1	0.1	171	402,557.7	91.2	24,887	441,297.8	45,131

Source: NBS.

underlying asset. In the financial market analysis for 2003, it is stated that the volatility of the Slovak koruna is very low. In our opinion, the increase in exchange rate volatility in 2004 can be ascribed to the option transactions concluded.

Besides the assumption that concluded currency options increase the volatility of the exchange rate, option transactions have another related effect. The market participant with the option obligation must hedge against it through so-called delta hedging. This often means that the participant must buy more korunas, the more the currency strengthens, which leads to accelerated appreciation of the koruna. We do not know how to quantify the effect of this qualitative IFEM change (the structure of foreign exchange products used), since the data on currency options will not be available for statistical purposes until after 2005.

The volume of foreign exchange interventions grew; their effectiveness declined

In 2004, the NBS intervened on the IFEM market with the sole aim to weaken the exchange rate, or slow its excessively fast appreciation. Through direct foreign exchange interventions and individual transactions, it purchased in total EUR 1,730 million, of which individual transactions accounted for EUR 564 million.

In comparison with 2003, when the NBS bought EUR 658 million on the IFEM by means of foreign exchange interventions, there was a noticeable difference in the effectiveness of foreign exchange interventions made in 2004 (the effectiveness of a foreign exchange intervention is understood in terms of the weakening/strengthening of the exchange rate and its continuance above or below the intervention level for at least several weeks). In May 2003, the NBS made a direct foreign exchange intervention in the amount of EUR 250 million, and between then and the end of the month it purchased EUR 143 million through individual transactions at the level of 40.800 SKK/EUR. As a result, the exchange rate depreciated for approximately three months, down to the level of 42.380 SKK/EUR. Although the koruna strengthened gradually over subsequent months, it was not until January 2004 that it finally broke through the level at which the NBS had intervened. In somewhat simplified terms, it is possible to say that the effect of the NBS intervention lasted approximately eight months. The first direct foreign exchange intervention made by the NBS in 2004 came in July. As in 2003, the exchange rate reacted by weakening, strengthening and eventually breaking through the intervention level, but in this case over a shorter period of three months. The effect of the NBS intervention in December (on December 22nd and 23rd, in the amount of EUR 600 million) lasted for only two weeks, and the NBS intervened again

Table 4.5 **The change in volatility of the SKK/EUR exchange rate (10-week volatility)**

Year	Volatility in %
2000	7.5
2001	4.96
2002	4.33
2003	2.21
2004	2.97

Source: Bloomberg.

on 10 January. Even if the December and January interventions are treated as one intervention, the time spread between them being interrupted for several days by the Christmas holidays, their effect would only be extended for one month, to January 26th, when the level 38.500 SKK/EUR was eventually breached. From this it is possible to conclude that, compared to 2003, IFEM participants had fundamentally different reasons for purchasing the domestic currency in 2004.

Short-term investors were motivated to profit from the strengthening of the exchange rate

In 2003, and to an even greater degree in previous years, when the difference between koruna interest rates and interest rates for the euro and US dollar was greater than now, the interest rate differential was the main motivation for short-term investors. Despite its significant reduction, interest in investing in the Slovak koruna did not wane, but on the contrary rose. This reflects the fact that short-term investors are no longer betting to such a degree on the interest-rate differential, but are rather looking to profit from the Slovak koruna's strengthening.

The strengthening of the Slovak koruna may also be influenced by non-delivery forwards. These are transactions where a bank client deposits the required collateral and instructs the bank to buy or sell the selected currency on the IFEM. In the event that the client is successful, the bank pays the client the gain on a regular basis. Since the long-term trend of the koruna's strengthening is generally considered to be clear, clients use the strategy of selling euros and buying Slovak korunas. Since such investment operations are also performed by extraordinarily solvent clients, the influence of this type of transaction is not insignificant. The bank continuously monitors the success of the client's strategy, and if the client makes a loss, it will consider raising the collateral. If the client is not able to realize the collateral, the bank is entitled to use it.

Another and perhaps the most fundamental qualitative change on the IFEM is the natural growth in the number of market participants buying Slovak koruna. This concerns mainly two categories of entities. First, exporters, who are unwilling to hold on to a currency (foreign exchange) after collecting it for exported goods; since the currency is a depreciating asset, they sell it for the domestic currency immediately, or even through a forward transaction. The second group comprises foreign investors who, in the context of the investment process, need to operate with the domestic currency and acquire it by selling foreign exchange.

5. Institutions and Entities in the Capital and Insurance Markets

Despite the fact that in Slovakia it is now possible to pursue business in the capital market in a standard legislative and institutional environment, the market still lacks sufficient liquidity and efficiency, and does not offer investors a wide range of investment instruments for concluding trades or securing positions. However, capital market institutions are reporting improving economic results and good financial stability.

For insurance companies falling under the domestic supervision of the Financial Market Authority, 2004 was a positive year from the aspect of financial stability conditions. The profitability of the sector as a whole continued to improve, the volume of trade grew, and the loss ratio fell slightly. Solvency indicators of individual insurance companies stood at favourable levels. The situation in 2004 in the domestic insurance sector can thus be said to have supported overall financial stability.

2004 saw the first phase of pension reform, its material and legislative preparation, aimed at creating a second capitalization pillar in the pension system. The new system began to work in practice from the start of 2005, whereby significant changes occurred in the financial system of the Slovak Republic. The launch of pension reform gave rise to new financial, informational and legislative links and a new market for pension saving with its market participants. Their activity as well as their links to the framework of the financial system are subject to independent supervision.

5.1 The stock market

One licensed stock exchange, the Burza cenných papierov v Bratislave, a. s. (BCPB or Bratislava Stock Exchange), operated in the Slovak Republic in 2004.

The BCPB was established through its entry in the Companies Register on March 15, 1991. Its commercial activity began on April 6, 1993. On June 1, 2004 it became a full member of the Federation of European Stock Exchanges (FESE), associating European regulated markets in securities and derivatives. The registered capital of BCPB is SKK 113,850,000 and is divided into 11,385 registered shares, each with a nominal value of SKK 10,000. The largest BCPB shareholders are the National Property Fund of the SR and several large domestic financial institutions. As at December 31, 2004, the BCPB had 29 full members entitled under stock-exchange rules to conclude stock-exchange trades on the Bratislava Stock Exchange. In addition to these members, the National Bank of Slovakia is also entitled to trade on the Bratislava Stock Exchange. Over the course of 2004 there were no changes in the number or composition of BCPB members. The "Unified Code for Company Administration and Governance", which the Financial Market Authority helped to prepare, is part of the Rules for the Acceptance of Shares on the Listed Main and Parallel Stock Exchange Market of the BCPB Stock Exchange. The Code's aim is to raise the transparency of company governance in Slovakia. Issuers whose shares are listed on the Bratislava Stock Exchange are obliged to state in their annual reports to what degree they fulfil the principles of the Code. Here, the principle is "comply or explain".

31 new issues of domestic securities, with a total nominal value of SKK 113.6 billion, were accepted onto the Bratislava Stock Exchange markets over the course of 2004

Table 5.1 **Development in the number of stockbrokers**

	31.12.2001	31.12.2002	31.12.2003	31.12.2004
Stockbrokers – banks	15	14	13	14
Branches of foreign stockbrokers – branches of foreign banks	2	2	2	1
Other stockbrokers	112	34	28	25
Other branches of foreign stockbrokers	1	0	1	1
TOTAL	130	50	44	41

Source: Financial Market Authority.

The value of the new share and mutual fund certificate capital accepted for trading on the Bratislava Stock Exchange in 2004 was SKK 3.96 billion, of which SKK 2.24 billion was in 13 new issues of shares and mutual fund certificates (5 issuers) and SKK 1.72 billion in 6 issues of 5 issuers, raising their registered capital. The total amount of new capital issued by means of debt securities represented SKK 109.7 billion. Over the course of 2004, the BCPB accepted 5 issues of government bonds in a nominal value of SKK 101.0 billion, 10 issues of mortgage bonds in a nominal value of SKK 6.7 billion and 2 issues of corporate bonds in a nominal value of SKK 2.0 billion.

On the last trading day of 2004, the total market capitalization of securities registered on the BCPB markets stood at SKK 502.5 billion, which, compared to the same period of the previous year, represents a growth of 13.7%

The market capitalization of all tradable issues of asset securities registered on the stock exchange markets grew on a year-on-year basis by 27.7% to SKK 140.1 billion. The real market capitalization, i.e. the market capitalization of those shares in which at least one price-setting trade was made, with the exception of investment fund shares and mutual fund certificates, grew by 40.0%, and on the last day of trading represented SKK 125.6 billion (9.47% of GDP). The market capitalization of the listed market represents SKK 68.6 billion (5.18% of GP), with a 62.4% year-on-year strengthening, proving, even despite the departure of two large listed issues, a significant appreciation of existing listed titles over the course of 2004. This fact was also shown in the growth of the SAX index. The market capitalization value of debt issues on the last trading day of 2004 stood at SKK 362.3 billion (a growth of 9.2% on an annual basis). Of this volume, listed issues form SKK 340.1 billion, representing a growth of 18.9% against 2003.

5.2 Stockbrokers

As at December 31, 2004, there were 41 stockbrokers operating in the Slovak Republic

Of this number 14 were banks, 1 foreign bank operating in the Slovak Republic via a branch, 25 non-bank stockbrokers (of which 2 were traders licensed under Act No 600/1992 Coll.) and 1 foreign stockbroker acting via a branch. The development in the number of stockbrokers and foreign stockbrokers, banks, or branches of foreign banks over the past calendar years and for 2004 is shown in Table 5.1. A breakdown of stockbrokers by license type and minimum registered capital under the Securities Act is given in Table 5.2.

Since the Slovak Republic's accession to the EU, the European single passport system has begun to apply to the capital market

The single passport system enables a financial institution licensed by the supervisory authority of its respective Member State to provide its services in other Member States of the European Union within the scope of this license. On the basis of notifications from respective supervisory authorities of Member States, as at December 31, 2004, a total of 90 foreign stockbrokers and 57 foreign stockbrokers, which are concurrently foreign banks, were authorized to provide investment services in the Slovak Republic. Of this number,

Table 5.2 **Stockbrokers by licence type and minimum registered capital as at December 31, 2004**

Stockbrokers		Number	Total
Entities licenced for the provision of investment services			
Min. registered capital	Type of subject		
35,000,000 SKK	Stockbrokers – banks	14	28
	Branches of foreign stockbrokers – branches of foreign banks	1	
	Other stockbrokers	13	
	Other branches of foreign stockbrokers	0	
6,000,000 SKK	Stockbrokers	10	11
	Branches of foreign stockbrokers	1	
2,500,000 SKK		0	0
Entities licensed under Act No 600/1992 Coll.		2	2
TOTAL		41	41

Source: Financial Market Authority.

2 foreign stockbrokers and 2 foreign banks had, by December 31, 2004, expressed an interest in performing investment services via their branches on the basis of the single licence. Three domestic stockbrokers and one bank expressed an interest in providing investment services within the scope of their license for providing investment services on the basis of the right to freely provide services in host Member States.

Stockbrokers which, in providing investment services, are authorized to invest the financial resources and investment instruments of their clients, are obliged to comply with capital rules and stockbrokers' capital adequacy rules[39]

The proportion of own funds to minimum registered capital which a stockbroker may have for the scope of activities licensed by the Authority, ranges from 1,681% to 44,080%, in the case of banks, while for non-bank stockbrokers with a registered capital of at least SKK 35 million, this proportion lies within the range from 105% to 629%. In the group of non-bank stockbrokers with a registered capital of at least SKK 6 million, the figure lies within the range from 111% to 705%.

Pursuant to the provision of Article 74 (1) of the Securities Act, a stockbroker is obliged to maintain capital adequacy of at least 8%

The capital adequacy of bank stockbrokers in 2004 was stable, at an average level of 22%. In the case of non-bank stockbrokers with a registered capital of at least SKK 35 million, the capital adequacy indicator recorded significant fluctuations over the course of 2004. The capital adequacy of non-bank stockbrokers with a registered capital of at least SKK 6 million in 2004 was generally stable (apart from one company, whose capital fell from 665.78% as at the end of the first quarter of 2004 to an end-of-year level of 265.96%, and another company which at first recorded a growth in this value from 42.88% as at the first quarter of 2004 to 64.02% as at the third quarter of 2004; by the end of the year the figure fell to 17.85%).

[39] *Based on respective legal standards the Financial Market Authority monitors and assesses the own funds and their adequacy only of stockbrokers which are not banks. The own funds and their adequacy of bank stockbrokers is monitored and assessed pursuant to NBS Regulation No. 4/2004 by the National Bank of Slovakia. Pursuant to Article 74 (4) of the Securities Act, stockbrokers' own funds may not fall below the level of the minimum value of registered capital set for individual types of stockbrokers, depending on the scope of investments services provided, by Article 54 of the Securities Act. Under Article 74 (6) of the Securities Act a stockbroker's own funds may not fall below one quarter of its average general operating costs for the previous calendar year; if a stockbroker has been established for less than one year, its own funds may not fall below one quarter of the general operating costs stated in its business plan.*

5.3 Investment Guarantee Fund (IGF)

As at December 31, 2004, forty entities had the obligation to participate in the protection of clients and pay contributions into the IGF

The Investment Guarantee Fund gathers financial resources from stockbrokers, foreign stockbrokers and fund management companies providing selected investment services for the purpose of providing compensation for inaccessible client assets accepted by a stockbroker, foreign stockbroker or fund management company for performing an investment service. The IGF invests the financial resources received in accordance with the Securities Act. Necessary legislative changes, which entered into force in 2004, improved the IGF's standing. In addition to a change in the proportional representation on the IGF's board of directors and supervisory board, the range of options for drawing funds in the case of paying out compensation was expanded. Furthermore, a substantial change was made in the manner of assessing annual fees, which also enables IGF to asses the fees from the volume of client assets. The level of compensation for inaccessible client assets in 2004 was set by law at EUR 10,000. The level of compensation per client should reach its final level of EUR 20,000 in 2007.

5.4 Central Securities Depository

The Securities Act allowed for the establishment of several central securities depositories, realistically though this possibility is significantly limited by capital market possibilities and needs

The establishment of a central securities depository created the conditions for the introduction of a two-level register operated by the central securities depository on a membership principle, as well as for the implementation of a new real-time clearing and settlement system of securities trades. With the commencement of the Central Securities Depositary's (CSD) activities, there arose from the Securities Act the possibility of trading outside the stock exchange in the form of over-the-counter (OTC) trades, where transfers between individual owners of securities are made directly without using the stock-exchange trading system. This does not then represent a standard securities market, since the Central Securities Depository does not organize a market in securities on the basis of anonymous offers and bids; direct transfers of securities occur on the basis of agreement between contracting parties.

Bank members of the CSD however repeatedly stated that the new system does not fulfil their expectations as regards convenience, efficiency and primarily security

A solution to this adverse state was found in the form of ensuring the operation of a new CSD system using technical elements of the original Bratislava Stock Exchange system – on the basis of a contract on cooperation of March 31, 2004. At the same time this solution enabled the further testing of the originally designed system for clearing and settling trades and for the securities register. With regard to the unsatisfactory results of the tests for the clearing and settlements module, in which the CSD, CSD members and the Bratislava Stock Exchange participated, following an agreement between the parties involved, the original transitional period was twice extended to September 30, 2004. On October 1, 2004, the CSD began to perform its activity in a production system including an innovated module of the new register and an innovated clearing and settlements module, whereby routine operations began.

With the establishment of the central depository, costs for trading in investment instruments have risen

Along with the change of the Security Centre's activity within the CSD and the above mentioned technical problems, it was also shown that the launch of the new system in practice had an impact on the prices of services provided, making investment instruments particularly low-volume trades, significantly more expensive, which could then lead to a further reduction in the already limited retail trading and possibly its complete termination. This could have serious consequences especially in connection with investing in pension funds in the framework of the capitalization pillar for pension security. For this reason, an expert group was formed with the aim of preparing and analyzing pos-

Table 5.3 **Volume of assets administered in mutual funds in the Slovak Republic (in SKK thousand)**

	31.12.2002	31.12.2003	30.6.2004	31.12.2004	Change 2003/2004
Open	14,293,111	33,843,217	44,539,095	61,695,553	82.30%
Closed	1,879,723	1,858,433	1,793,560	1,793,708	-3.48%
Special	0	50	0	0	-100.00%
Total	16,172,834	35,701,700	46,332,655	63,489,261	77.83%

Source: Financial Market Authority.

sible alternatives for the future organizational arrangement of the integrated system of services for the Slovak capital market, with a view to mitigating the current state. From the submitted alternatives for the future organizational arrangement for providing investment services, the Ministry of Finance chose a solution where the state would take 100% shareholding in the CSD via the National Property Fund, as a non-financial contribution to the Bratislava Stock Exchange's registered capital, which would then become the direct owner of the CSD. This solution was approved by the Government of the Slovak Republic on October 13, 2004.

5.5 Collective investment

Similar to last year, collective investment[40] continued its trend of a rapidly developing financial market segment

Over the course of 2004, the volume of net assets managed in mutual funds (in SKK terms) grew by 77.83%, where the volume of assets in open mutual funds grew by 82.30%. As at December 31, 2004, domestic fund management companies administered assets totalling SKK 63.49 billion in 91 mutual funds, and SKK 17.707 million in 3 open mutual funds in forced administration. Table 5.3 illustrates the development of assets in the mutual funds of domestic fund management companies from 2002 to 2004. The shares of individual types of funds on the Slovak market are depicted in Chart 5.1.

The prevailing majority of newly-invested resources in collective investment business entities were deposited in money market funds and bond funds

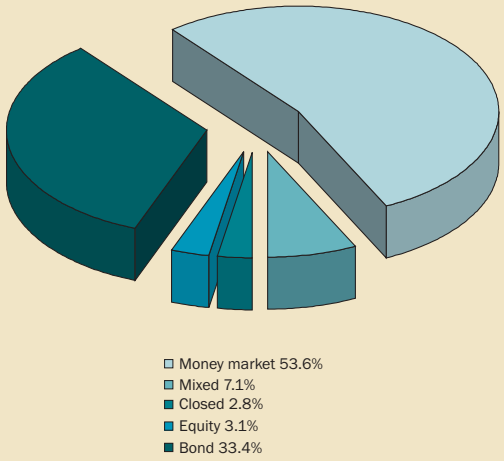
Total net sales in 2004 reached SKK 30.61 billion, of which sales of domestic funds represented SKK 27.32 billion and sales of foreign funds SKK 3.29 billion. A total of SKK 28.72 billion was invested in money market funds and bond funds, which forms a 93.80% share of all newly invested resources. In the case of the remaining types of funds, the low share of net sales for other types continued in 2004. Net sales of mixed funds reached a positive value of SKK 0.771 billion. The further decline in the share of net sales continued in equity funds, where only SKK 1.026 billion was invested; and only SKK 0.101 billion was invested in funds of funds.

Under the transitional provisions of the Collective Investment Act, fund management companies were obliged to adapt their activity to this Act by December 31, 2004

Of the total number of 10 fund management companies, 6 adapted to the Collective Investment Act by the end of 2004 and 3 fund management companies were granted a license for the es-

[40] *On the basis of the Collective Investment Act the basic subject of collective investment is a fund management company operating as a joint-stock company which may create and administer mutual funds. Mutual funds have no legal personality and may be open, closed or special mutual funds. Licences for the establishment and activity of a fund management company and licences for creating a mutual fund are issued by the Financial Market Authority. Collective investment in the Slovak Republic since 1 January 2004 has been governed by the new Act on Collective Investment, which has among others enable fund management companies to perform also other activities.*

Chart 5.1 **Structure of domestic mutual funds**



Source: Financial Market Authority.

tablishment and activity of a fund management company in 2004, while 1 fund management company adapted to the Collective Investment Act at the start of 2005. After proving their adaptation to the Collective Investment Act, the activities of fund management companies are considered to be harmonized with Council Directive No 85/611/EEC as amended (the UCITS III Directive).

The results of domestic fund management companies were favourable. Concentration in the collective investment segment is high

Table 5.4 shows the economic results of individual domestic fund management companies achieved as at December 31 2004 (management of own assets). In 2004, three fund management companies continued to dominate the mutual fund market in Slovakia (Asset Management of Slovenska sporitelna, VÚB Asset Management and Tatra Asset Management). Their net sales of mutual fund certificates totalled SKK 24.829 billion, representing an 81.10% market share. They are subsidiaries of banks registered in Slovakia and actively use the support of the branch networks of their parent companies in selling mutual fund certificates. At the same time, they administered mutual fund assets in the volume of almost SKK 56.295 billion, representing an almost 88.67% share of total administered net assets in domestic mutual funds. The average yield on bond funds over 2004 was 4.36% and the average annual yield on market funds was 2.56%. The average yield on equity open mutual funds as at December 31, 2004 was 6.89% and the average annual yield on mixed funds reached 2.94%. The yield on funds invested on foreign markets was also influenced by the development of assets abroad, since the koruna exchange rate continued to strengthen against the EUR and USD during 2004.

5.6 Insurance market entities

The trend of mergers among insurance companies and their incorporation into large financial

Table 5.4 **Economic result and profitability indicators of individual fund management companies as at December 31, 2004**

Fund management company	Total assets in SKK thousand	Registered capital in SKK thousand	Equity in SKK thousand	Economic result in SKK thousand	ROA in %	ROE in %
Investičná a Dôchodková	71,137	62,000	68,500	149	0.21	0.22
AMSLICO AIG Funds	55,440	82,500	51,041	1,265	2.28	2.48
ISTRO ASSET MANAGEMENT	64,168	70,000	58,788	5,448	8.49	9.27
PRVÁ PENZIJNÁ	92,092	50,000	68,430	3,198	3.47	4.67
Tatra Asset Management	152,283	50,000	113,105	48,066	31.56	42.50
VÚB Asset Management	88,872	50,000	63,480	6,655	7.49	10.48
Asset Management Slovenskej sporiteľne	167,096	50,000	115,559	44,548	26.66	38.55
ČSOB Asset Management	69,210	60,000	68,752	2,750	3.97	4.00

Source: Financial Market Authority.

concerns continued in 2004. The free cross-border provision of services in the EU has not yet significantly influenced the domestic insurance market

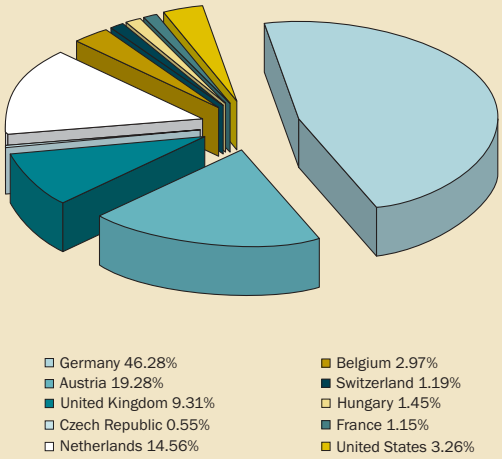
As at December 31, 2004, the Slovak insurance market comprised 25 insurance companies (of which 16 were universal, 5 life and 4 non-life insurance companies) and the Slovak Office of Insurers. Concurrently, a branch of a foreign insurance company also operated in the insurance market, which on May 1, 2004, in accordance with the Act on the Insurance Industry, was transformed into a branch of an insurance company from another Member State, falling under the supervision of this insurance company's home Member State. The declining number of insurance companies is directly connected with mergers taking place throughout the EU. Two mergers were made in the Slovak insurance market in 2004, where two insurance companies were wound up without liquidation. No applications for licences to perform insurance activity in life, or non-life insurance were submitted in 2004. In connection with Slovakia's accession to the EU and on the basis of the free provision of services, insurance companies from other Member States began to perform activities connected with the provision of insurance services, which however has not yet brought about any significant changes in the structural breakdown of the insurance market. The operation of these entities in the future may lead to increased competition in the insurance sector.

5.7 Registered capital of insurance companies

Over the course of 2004, the total registered capital of insurance companies increased by a significant SKK 764 million and at December 31, 2004 it stood at SKK 12,491 million

The total level of registered capital of insurance companies grew on a year-on-year basis by 6.51% and since 2001 has grown on average by 9.13%. 2004 saw a slight growth in foreign capital. The volume of foreign capital invested in the Slovak insurance industry grew on a year-on-year basis by SKK 833,840,000 to SKK 11,331,481,000, which represents a 7.93% growth and was caused by an increase in registered capital at eight Slovak insurance companies, where in two cases this increase was caused by a merger with another insurance company. Graf 5.2 depicts the share of individual states in foreign capital.

Chart 5.2 **Territorial structure of foreign shareholders in insurance companies**



Source: Financial Market Authority.

The share of foreign capital in the total registered capital of domestic insurance companies was more than 90%

Of the total number of 25 insurance companies, 23 insurance companies are partially foreign owned, and in 21 of those cases foreign shareholders hold a prevailing, or 100% stake. Two insurance companies are in the exclusive ownership of Slovak entities, and one of these is owned indirectly by a foreign shareholder. The total share of foreign capital in the registered capital of all insurance companies as at December 31, 2004 was 90.83%, representing a year-on-year growth of 1.19%. By including foreign indirect investment, this share grows to 94.68%. The high share of foreign capital invested in the insurance industry has influenced the insurance market, in particular through its contribution of international experience, know-how, the introduction of new insurance products and an improvement of economic strength in the insurance sector. The entry of foreign shareholders into insur-

Table 5.5 **Operating costs (relating to concluding and administration of insurance policies) in relation to the premium underwritten for 2001 – 2004 (in SKK thousand)**

Year	Insurance type	Gross premium underwritten	Acquisition costs in insurance policies	Share in premiums in %	Net amount of operating costs	Share in premiums in %
2001	Life insurance	13,779,658	2,454,539	17.81	4,508,545	32.72
	Non-life insurance	18,338,276	2,760,641	15.05	4,810,270	26.23
	Total insurance	32,117,934	5,215,180	16.24	9,318,815	29.01
2002	Life insurance	15,753,313	3,137,505	19.92	4,960,415	31.49
	Non-life insurance	20,868,163	3,050,162	14.62	5,246,205	25.14
	Total insurance	36,621,476	6,187,667	16.90	10,206,620	27.87
2003	Life insurance	17,343,922	3,087,854	17.80	5,304,010	30.58
	Non-life insurance	25,073,380	2,456,501	9.80	4,887,468	19.49
	Total insurance	42,417,302	5,544,355	13.07	10,191,478	24.03
2004	Life insurance	19,311,862	2,701,231	13.99	5,317,814	27.54
	Non-life insurance	28,776,174	2,683,829	9.33	5,100,373	17.72
	Total insurance	48,088,036	5,385,059	11.20	10,418,187	21.66

Source: Financial Market Authority.

ance companies was also a benefit from the aspect of the insurance sector's adaptation in connection with Slovakia's membership in the EU.

5.8 Economic results of insurance companies

Over the past years changes in economic conditions and legislation have strongly influenced the economic results of insurance companies

Insurance companies in 2004 reported a total profit of SKK 2,201,741 000, representing a year-on-year growth in profits of SKK 817,005,000 (60%). 16 insurance companies reported profits and 9 reported losses. The losses of the insurance company with the highest losses were the result of increased indemnity costs. Losses at the other insurance companies were caused by a growth in costs related to establishing subsidiary pension fund management companies and mergers, as well as limited insurance portfolios and high operating costs. The losses of one insurance company were due to topping-up technical reserves for life insurance due to a decline in revenues from investment. Relatively high operating and acquisition costs in relation to the premium underwritten were recorded by insurance market entities licensed in 2002 and 2003. Even here, however, significant differences may be seen, primarily influenced by the insurance company's background, advertising campaign, overall policy, and its start in performing insurance activity. An overview of the net operating costs and insurance policy acquisition costs, as reported in the financial statements of insurance companies, is given in Table 5.5.

5.9 Premium underwritten

The year-on-year growth in the level of the premium underwritten for the insurance market as a whole in Slovakia has stabilized at around 15% over the past five years

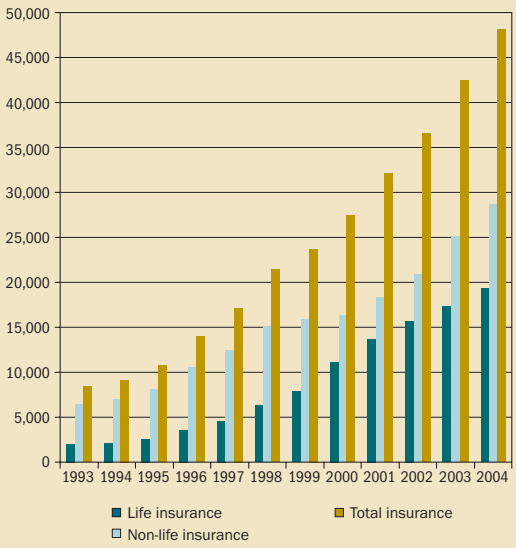
The total premium underwritten in 2004 grew on a year-on-year basis by SKK 5,670,734,000 (13.37%) to SKK 48,088,036,000. The premium underwritten in life insurance grew on a year-on-year basis by 11.35% (SKK 1,967,940,000) to SKK 19,311,862,000. The premium underwritten in non-life insurance reached SKK 28,776,174,000, which represents a year-on-year growth of 14.77% (SKK 3,702,794,000). This increase resulted to a large extent from the growth in the premium underwritten in compulsory third-party liability insurance for motor vehicles (CLIMV) with a share of up to 40.65% in the premium underwritten in non-life insurance, which at the year-end represented

27.50%. Non-life insurance, excluding CLIMV, grew on a year-on-year basis by only 7.42%.

Since 2000, the share of the premium underwritten in life insurance has stabilized slightly at above 40%

In 2004, the share of life insurance in the total premium underwritten stood at 40.16% (Chart 5.3). This state was caused in particular by the significant growth of CLIMV in non-life insurance. In the future however we predict an increase in the share of life insurance, particularly with regard to the probable continuing economic growth, improvement in the attractiveness of life insurance through tax and pension reform and the gradual stabilization of rates in CLIMV.

Chart 5.3 **Structure of insurance by the level of premium underwritten (SKK millions)**



Source: Financial Market Authority.

Concentration in the insurance market as a whole is high

More than 60% of the insurance market is held by only two insurance companies, where each of them has a share in the insurance market above 10%. As at December 31, 2004, only four insurance companies had a share of more than 5% in the insurance market, where in total they represent a considerable 72.8% of the insurance market (Table 5.6 and 5.7). An even higher market concentration can be seen in the field of non-life insurance, where more than 80% of the premium underwritten is held by only three insurance companies. This fact can be ascribed to the high share of compulsory contractual insurance (CCI) underwriting in the total premium underwritten in non-life insurance

Table 5.6 **Insurance market broken down by the structure of the insurance market share as at December 31, 2004**

		Life insurance			Non-life insurance			Life + non-life insurance		
		Number of insurance companies	Premium underwritten (in SKK thousand)	Market share in %	Number of insurance companies	Premium underwritten (in SKK thousand)	Market share in %	Number of insurance companies	Premium underwritten (in SKK thousand)	Market share in %
Insurance companies (including SKP) with an insurance market share	– above 10%	4	13,574,443	70.29	2	20,770,517	72.18	2	28,880,182	60.06
	– from 5% to 10%	1	1,034,658	5.36	1	2,349,568	8.16	2	6,122,668	12.73
	– from 5% to 10%	9	4,495,619	23.28	6	4,459,841	15.50	10	11,869,609	24.68
	– below 1%	7	207,142	1.07	12	1,196,248	4.16	12	1,215,577	2.53

Source: Financial Market Authority.

Table 5.7 **Development in the share of Allianz-Slovenská Poisťovňa, a. s in the total premium underwritten (in %)**

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Market share[1)]	84.66	83.34	80.92	75.00	70.20	65.82	60.14	55.27	54.44	47.12	44.36	40.57

Source: Financial Market Authority.
1) Insurance market shares in 1993 to 2002 represent sums of market shares of insurance companies Slovenská poisťovňa, a. s. and Allianz poisťovňa, a. s., the market shares in 2003 and 2004 are market shares of the merger Allianz-Slovenská Poisťovňa, a. s.

and the fact that CCI is offered by a fewer number of large insurance companies.

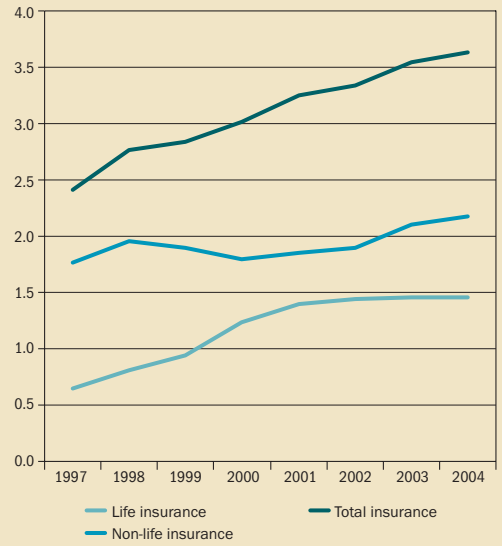
Year 2004 saw an increase in the share of the premium underwritten ceded to reinsurers

With the aid of reinsurance, insurance companies ceded a part of their insured risk to reinsurers, this being a so-called passive reinsurance. Passive reinsurance of Slovak insurance companies is performed by renowned foreign reinsurers. Of the total premium underwritten in 2004, SKK 10,579,173,000 was ceded to reinsurers, which forms 22% of the total premium underwritten. This represents a year-on-year growth of 21.8% against 2003. As in 2002 and 2003, active reinsurance, where insurance companies perform both insurance and reinsurance activity was not reported by any Slovak insurance companies.

The level of insurance in Slovakia is low, but growing

The level of insurance is an indicator measuring the weight of the insurance business in the national economy, expressed as the share of the premium underwritten among the gross domestic product. Despite the fact that this indicator is far below the average for advanced European economies, since 1995 it has grown on average by 0.174% and in 2004 it reached 3.63%. The gradual growth in the level of insurance is depicted in Chart 5.4.

Chart 5.4 **Share of premium underwritten in GDP** **(%)**



Source: Financial Market Authority.

5.10 Indemnity costs

No significant changes in costs for insurance indemnity occurred in 2004

Indemnity costs in life insurance grew on a year-on-year basis by 13.37% to SKK 6,572,919,000, while in non-life insurance indemnity costs reached SKK 10,695,123,000, representing a year-on-year growth of 7.41%.

In 2004, growth was seen in the share of costs for insurance indemnity ceded to reinsurers

Of the total indemnity costs, the share ceded to reinsurers was 19.70%, which in a year-on-year comparison is 32.84% more than in 2003. Reinsurers in the field of life insurance in 2004 bore 2.09% of the indemnity and 30.52% of the indemnity in non-life insurance.

5.11 Loss ratio[41]

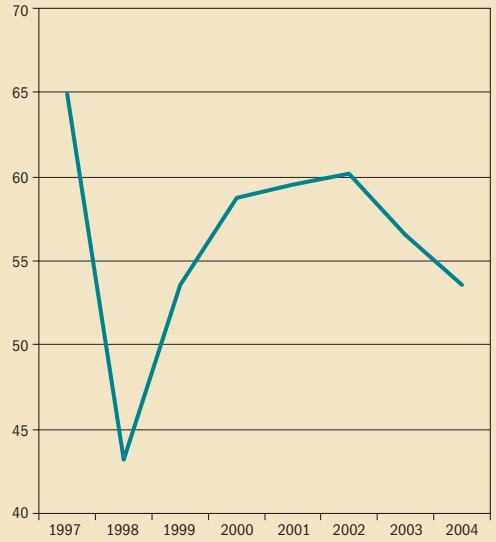
The overall loss ratio for the entire insurance market was 2.35 percentage points lower than that of the previous year

[41] *The loss ratio is calculated as the share: of gross indemnity costs, including changes in the gross technical reserve for insurance indemnity (RII) and of the gross premium underwritten after subtracting the gross technical reserve for insurance premium of future periods (IPFP), the so-called earned premium. The RII influences an insurance company's total indemnity costs in relation to all claims, whether declared and settled or declared and as yet unsettled, or respectively in respect of claims that have arisen, but have not yet been declared. The IPFP influences the level of the premium underwritten, since in an accounting period an insurance company only has part of the premium underwritten due to it available in the given accounting period, i.e. the earned premium. An insurance company's loss ratio is influenced by the structure of its insurance portfolio and the scope of risks it covers. Where an insurance company focuses on a few types of non-life insurance with a narrow insurance portfolio, its loss ratio may be more greatly influenced by a single insured event.*

The highest loss ratio in 2004 was reported by those insurance companies also operating in the B3 sector – insurance of damages to means of land transport other than rail transport, and in B10 insurance – liability insurance for damage caused by the operation of a motor vehicle and to a driver. A low loss ratio was reported by non-life insurance companies not providing motor vehicle insurance and universal insurance, focusing mainly on life insurance and in field of non-life insurance insuring only risks supplementary to life insurance.

The long-term development of the loss ratio in non-life insurance is depicted in Chart 5.5.

Chart 5.5 **Loss ratio in non-life insurance**
(%)



Source: Financial Market Authority.

5.12 Technical reserves of insurance companies

Technical reserves in non-life insurance grew faster than in life insurance, but the volume of technical reserves in non-life insurance is substantially lower than that of life insurance

The net technical reserves (own technical reserves, i.e. excluding the reinsurer's share) as at December 31, 2004 stood at SKK 73,087,142,000, representing a year-on-year growth of 19.15%. Of this, technical reserves in life insurance totalled SKK 55,913,438,000 and technical reserves in non-life insurance totalled SKK 17,173,704,000. Technical reserves in life insurance grew on a year-on-year basis by 16.23%; in non-life insurance, technical reserves grew on a year-on-year basis by 29.76%. Excluding unit-linked[42] reserves, technical reserves created as at December 31, 2004 were recorded in the amount of SKK 68,018,888,000.

Only minimal divergences from the requirements of legal standards occurred in the placing of technical reserve funds by insurance companies

After examining the placing of technical reserve funds, the Financial Market Authority found that, except for two insurance companies, all other insurance companies had placed technical reserve funds in accordance with Regulation No 197/2002 and No 380/2002 and in accordance with the Act on the Insurance Industry. The level of inappropriately invested technical reserve funds was nonetheless very low and in no way endangered the financial stability of the insurance companies involved. Assets representing the coverage of the technical reserves of insurance companies as at December 31, 2004, comprised a 64.69% share in total assets of insurance companies. In 2004, insurance companies invested technical reserve funds in domestic government bonds (45.83%) and term accounts (16.05%) and bonds accepted on the listed stock market (12.47%). Compared to 2003, insurance companies only significantly reduced the level of technical reserve funds invested in treasury bills (Chart 5.6).

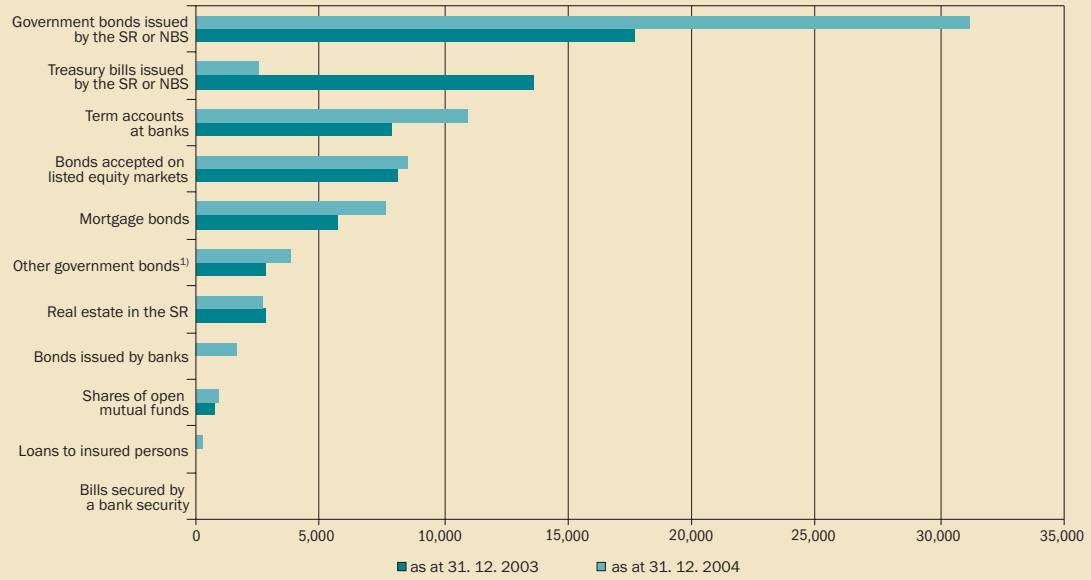
5.13 Solvency of insurance companies

Insurance companies in 2004 satisfied solvency criteria

[42] *This is a technical reserve for covering risks from investing funds on behalf of the insured, where the economic risk of variable yields or the growth of the insured's invested funds is borne by the policy holder, i.e. the person who concluded the insurance policy with the insurance company. For this reason the Financial Market Authority monitors the creation and placing of technical reserve funds after the deduction of unit-linked reserves. This technical reserve is created in life insurance connected with an investment funds in the A4 insurance sector (also investment life insurance or unit-linked insurance).*

Chart 5.6 **Allocation of technical reserves**

(SKK millions)



Source: Financial Market Authority.
1) Government bonds the issuers of which are the Member States of the EU and the European Economic Area or central banks of these states and bonds issued by EIB, EBRD or IBRD.

Insurance companies report the required rate of solvency (RRS), own funds – the actual rate of solvency (ARS), the guarantee fund (GF) and the minimum value of the guarantee fund (MGF)[43]. Of the total number of 25 insurance companies on the Slovak insurance market, all achieved, or exceeded the minimum solvency rate as at December 31, 2004. The actual solvency rate of these insurance companies ranged from 1.21 to 7,110.20 times the required solvency rate. No insurance company reported insufficient solvency in 2004, i.e., the ratio of the actual rate of solvency and the required rate being lower than 1.00 (Table 5.8).

5.14 Pension saving in the 2nd pillar of the pension system

2004 was the year in which preparations for the full launch of pension reform in Slovakia were made

Pension security in Slovakia has been reformed as a part of the social security system reform. The old system of pension security, operating on the basis of a compulsory, public, defined-benefits, pay-as-you-go financial system, was replaced by the new, three-pillar system. Alongside the current (first) pillar of pay-as-you-go pension financing, a new – capitalization pillar was established via the social insurance company. The third pillar is formed by a voluntary system of additional pension insurance, which on the basis of a law enacted in 2004, will be transformed in 2005 into additional pension savings.

The aging of the population is one of the main reasons why Slovakia, along with other European countries, has taken steps to reform its pension system. The main aim of the pension reform is to maintain and at the same time possibly raise the rate of income compensation for pensioners

[43] *Own funds, which represent the actual rate of solvency (ARS), express the level of capital which an insurance company has available for covering its liabilities. For determining the required rate of solvency in non-life insurance the deciding figure is the higher of the values calculated from the level of the premium underwritten and the average volume of gross indemnity costs, usually for three years, after taking account of the required rate of solvency for the preceding calendar year. The decisive indicator for determining the required rate of solvency in life insurance is the level of mathematical reserves and the insurance company's gross risk capital. In life insurance the required rate of solvency for insurance connected with an investment fund and additional insurance is calculated separately.*

Table 5.8 **Breakdown of insurance companies' number by the ARS/RRS ratio**

	Life insurance companies		Non-life insurance companies	
	2003	2004	2003	2004
ARS/RRS ratio[1)]				
– less than 100%	1	0	0	0
– from 100% to 200%	6	4	3	3
– from 200% to 300%	4	4	7	4
– from 300% to 400%	2	3	2	4
– from 400% to 500%	2	1	1	1
– more than 500%	9	9	8	8
Total of insurance companies monitored	24	21	21	20

Source: Financial Market Authority.
1) ARS – actual rate of solvency, RRS – required rate of solvency.

without further raising the contribution obligation, something which can only be achieved by introducing a capitalization pillar. The revenues from this system should be higher than the growth in wages, upon which any increase in pensions in the pay-as-you-go system is conditional. Compulsory payments into the pension savings system will represent approximately 9% of wages. It is estimated that financial resources exceeding 50% of GDP will gradually be accumulated in the funds.

A key factor was the adoption of Act No 43/2004 Coll. on old-age pension savings (OAPS) and on the amendment to certain acts, which introduced the second pillar of pension security – old-age pension saving. The law brings a completely new philosophy of the pension security system by creating a compulsory capitalization, defined-contribution pillar. The second pillar differs from the first in the following principles. Firstly, it is a capitalization system, meaning that compulsory contributions for pension savings which come into the pillar will not be paid out in turn to pensioners, but are invested on the capital markets and yield revenues. Secondly, it is a defined-contribution system, meaning that the level of the pension depends on the amount of money contributed and naturally the revenues flowing from this money.

After certain provisions of the OAPS Act entered into force on February 1, 2004, the current issue became that of the establishment of the individual pension fund management companies, which will actually operate old-age pension savings

Under the OAPS Act, the establishment of these companies is dependent on their being licensed by the Financial Market Authority (FMA). In order for pension reform to proceed smoothly, the first pension fund management companies, in accordance with the OAPS Act, had to be able to begin to advertise old-age pension savings from November 1, 2004. The first licensing applications for the establishment and activity of a pension fund management company (PFMC) were delivered to the FMA at the end of May. Licences for PFMC establishment and activity were issued progressively in September and October. Subsequently eight companies began to operate in the pension savings market. Under the OAPS Act, pension fund management companies were not able to manage investments by the end of 2004, and thus could not receive people's pension savings or begin to create pension funds in this period. Under the Act, pension fund management companies could only begin to perform this activity in 2005.

It is in the interest of each pension fund management company to cooperate with the greatest possible number of intermediaries for the purpose of gaining the largest number of savers and achieve the largest market share

Pursuant to Article 111 of the OAPS Act, an intermediary may only be a natural person licensed by the Authority to perform intermediary activities. One of the conditions for obtaining a licence set by the Act was the applicant's obligation to complete a professional exam. In mid-April 2004, Regula-

tion No 184/2004 Coll. of the Ministry of Labour, Social Affairs and the Family on the professional examination of an old-age pension savings intermediary, laying down the content and manner of performing examinations of old-age pension saving intermediaries, entered into force. Subsequently on April 27, 2004, the Authority announced the first professional examination dates for June 2004. The Authority began the examinations of professional examination applicants on June 28, 2004 and continued to do so at all regional towns until the end of the year. A total of 38 068 applicants underwent the examination in this period, with a pass rate reaching more than 75%.

Laws on the second and third pension security pillars charged performance of supervision to the Financial Market Authority

Under the Act on OAPS, the FMA began to perform supervision on November 1, 2004, when OAPS provisions on the promotion and advertising of a pension fund and on intermediary activity in old-age pension saving entered into force. The FMA gradually began to actively participate in the process of preparing secondary legislation in the field of old-age pension savings, preparing itself for the application of individual legal standards governing the field of old-age pension savings in practice; it also began to prepare for active communication with the public as regards the scope and importance of the pension reform, bringing a completely new view of the pension security system in Slovakia.

Preparation for supervision took place at two basic levels. One of these was the technical arrangement of obligations resulting from the OAPS Act, under which the FMA is entitled to obtain depository data necessary for performing supervision via secure electronic data transfer communication and from a pension fund management company. At the same time, a pension fund management company and its depository are obliged to provide daily information to the Authority on every asset transaction in the pension fund, via secure electronic data transfer communication. The FMA is also entitled to obtain data from the register of savers and insured persons, held by the social insurance company, via secure electronic data transfer communication. Concurrently, the FMA began preparatory work for its own interface necessary for the Authority's electronic communication with the social insurance company and pension fund management companies (see Annex 3).

The second level of preparation was that of personnel preparation for performing supervision and setting the basic criteria for performing supervision. Ensuring the conditions for the effective and transparent performance of supervision is essential for engendering confidence in the new pension system.

6. Payment System of the Slovak Republic

The National Bank of Slovakia provides for the operation of the SIPS interbank payment system where 28 participants are actively involved. In 2004, SIPS operating functions were enhanced by the final and irrevocable settlement of payments in real time. The smoothness of the interbank payment system was supported by the National Bank of Slovakia through the provision of intraday credits and the security of the interbank payment system was strengthened by the introduction of emergency data transfer.

In 2004, the SIPS payment system operated without failure. The number of transactions processed increased by 9.8%[44], and even 44% of the value of all transactions represented priority payments settled in real time. The use of credit cards is growing fast. The volume of transactions through credit cards amounted to 16% of the GDP, of which 90% represented withdrawals.

The National Bank of Slovakia – within its supervision activity over the payment system – analyzed, among other things, the risks and changes in the payment system with the objective of eliminating potential risks of the system. Legislative and institutional changes in the payment system of the Slovak Republic occurred in 2004. Activities related to its integration into a single internal EU market continued.

6.1 The SIPS Interbank Payment System

One of the basic roles of the National Bank of Slovakia in the field of the payment system is to perform supervision of the SIPS interbank payment system. The perfectly and reliably functioning payment system represents an important part of the financial infrastructure of the country. SIPS is the sole interbank payment system in the Slovak Republic and therefore its smooth operation, from the point of view of financial stability, is very important.

Supervision performed by the NBS of the payment system SIPS is mainly aimed at ensuring its smooth operation, with the objective of protecting it against risks (credit, liquidity, operating, system) and to strengthen its effectiveness. When performing supervision, the NBS refers to the internationally recognized standards, the so called "Core principles for systemic important payment systems"[45]. In 2004, the SIPS interbank payment system was operated in compliance with the Core NBS Principles. In 2004, the NBS successfully continued to perform supervision, identified some potential risks that might harm the stability of the payment system and subsequently took steps to remove them. The outcome of this was the implementation of several changes in the SIPS payment system.

The new element of the SIPS payment system is the real time settlement of payments

According to Core Principle IV, the payment system will provide for the immediate final settlement on the valid date of the performance, optimally during the day and minimally at the end of the day. The NBS extended the functionality of the SIPS system by settling the payments in real time. These payments, after their settlement in the SIPS system, are final and irrevocable. Subsequently, after settlement of the payment, the SIPS system sends a message to the recipient of the payment about

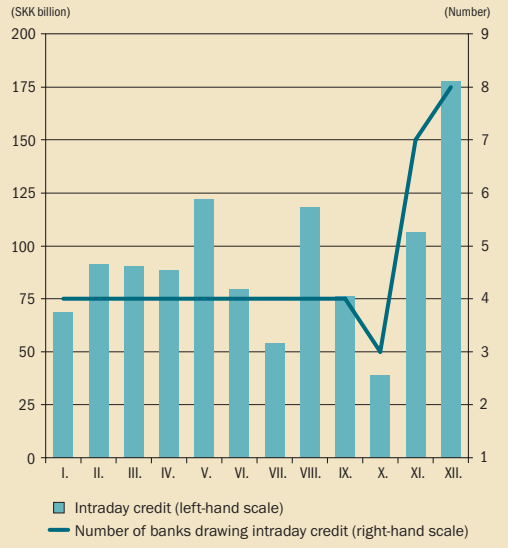
[44] *I.e. approximately by the GDP growth rate.*
[45] *"Core Principles" were issued by the Council for Payment and Clearing Systems of the Bank for International Settlement in January 2001.*

the payment made, and the output clearing file intended for settlement of the payment within the accounting system of the participant in the SIPS system. Introduction of the principle of gross real time settlement had substantially eliminated the possibility of the occurrence of a system risk.

Elimination of liquidity risk – provision of intraday credits

In the event that one or several participants get into financial problems, i.e. they do not have sufficient funds in their accounts for payment of their obligations from the payment system, the other participants of the system are also under the liquidity and credit risk. One of the tools to limit the occurrence of such a situation is the possibility of obtaining liquid funds through the help of the intraday credit. Through the introduction of intraday credits as of January 1, 2004, the NBS significantly contributed to the smoothness and problem-free operation of the interbank payment system. Intraday credits can be drawn by those participants of the interbank payment system who are obliged to create statutory minimal reserves. Intraday credit is provided in the form of overdrafts in the clearing account by setting the maximum debit balance (overdraft). The intraday credit is due only within one business day and must be fully secured by the collateral, i.e. a sufficient amount of securities in the relevant value registered in the central registry of short-term securities maintained with the NBS. The total volume of credit provided in 2004 represented SKK 1,113 billion. Further changes for 2005 are planned in the area of intraday credits, namely, the automation of the process and link to the securities registry.

Chart 6.1 **Volume of intraday credits in 2004**



Source: NBS.

Emergency data transfer in the payment system

The NBS proposed a comprehensive solution for the emergency data transfer in the payment system in the event of a non-standard situation when it will be not possible to use BIPS servers, or the existing infrastructure. A separate application for emergency data transfer was the developed facilitating data encryption and digital signature. This solution provides for complete integrity and protection of the emergency data transfer. The emergency data transfer was successfully tested in December 2004, in cooperation with the participants of the SIPS payment system, and all the participants acknowledged their ability to use the alternative data input. Use of the emergency data transfer was also reflected in the respective operating procedures and contracts on the SIPS payment system.

Complementation of the principles for access to the SIPS interbank payment system

Core principle IX stipulates that the criteria for participation in the system shall be objective, officially publicized and shall facilitate fair and free access. In this connection the access principles were complemented by a new chapter providing for termination of the participation in the payment system. The group of entities which may become its participants was complemented and/or extended. Mainly this included international entities and providers of free cross-border banking services providing their services on the basis of “single licence”. These principles were complemented by the criteria for entry, participation and exit of international entities. The complemented rules of access to the SIPS interbank payment system are available on the NBS internet page.

The number of transactions increased against the previous year by 9.83%. Their value increased by 26.18%

Each year the number and the value of transactions processed by the payment system SIPS is increasing. The higher the value of transactions processed by the system, the more the need for a stable and reliable payment system exists. In 2004, the operation of the SIPS payment system was problem free, approximately 109 million transactions were processed, which represents an increase against 2003 by 9.83%. As for the value of the processed transactions, the growing year-on-year trend was also recorded. The total value of processed transactions increased by 26.18% and represented more than SKK 40,692 billion. In order to have a better idea of these figures, it can be stated that every 8 business days the SIPS system processed and settled payments in the value, expressed as a cumulative figure, almost equal to the gross domestic product of the Slovak Republic in 2004.

Despite that, from the total number of processed transactions, the priority payments represented just 0.065%; the value settled by them represents a bit more than SKK 18,000 billion, i.e. more than 44% of the value of all processed payments. The average value of one priority payment was SKK 254 mil. Normal payments represented more than 99% of the number and approximately 55% of the value of the processed transactions. The average value of one normal payment represented SKK 209,000.

6.2 Payment tools

Payments and electronic payment tools are the most commonly used tools of the non-cash payment system. From among the electronic payment tools, the mostly used are remote access payment tools, mainly the bank payment cards, and last but not least, the payment applications of electronic banking allowing bank clients to withdraw funds from their bank accounts through the help of electronic communication media (e.g. internet banking, home banking or telephone applications).

Debit bank cards prevail, however, the number of bank credit cards increased in 2004 by 51%

As of December 31, 2004, a total of 3,630,309 bank payment cards had been issued, out of which 80.3% were debit cards, 19.5% credit cards and 0.2% charge cards. The growth was observed mainly with credit cards (51% compared to the previous year). This increase was mainly caused by the possibility of drawing revolving loans.

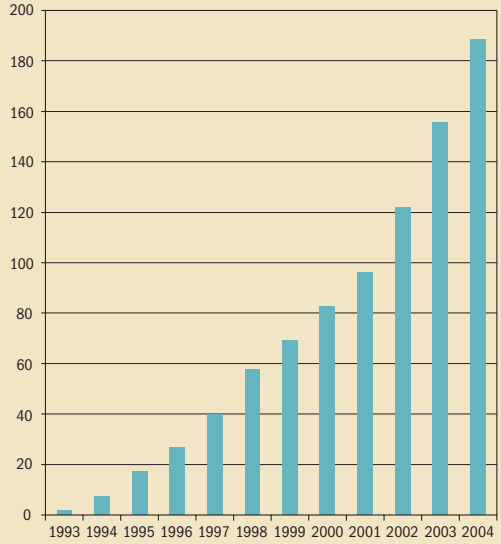
In 2004 the volume of transactions through payment cards reached SKK 210 billion

In 2004 the holders of payment cards made more than 98 million transactions in a total value more than SKK 210 billion. In addition to traditional transactions such as cash withdrawals and payments, bank payment card holders may also make other payment transactions such as entering orders for transfer, cash deposits, transfers to the prepaid programs of mobile operators through ATMs. Based on the above mentioned, the ATMs represent an important distribution payment channel and a marketing tool for the banks to advertise their products and services.

The volume of payments on EFT POS terminals is accelerating

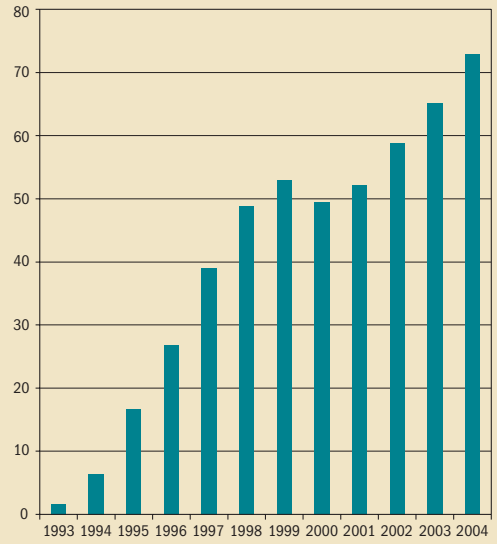
In 2004, the share of cash withdrawals through the payment cards from ATMs against the non-cash

Chart 6.2 **Value of ATM cash withdrawals (SKK trillion)**



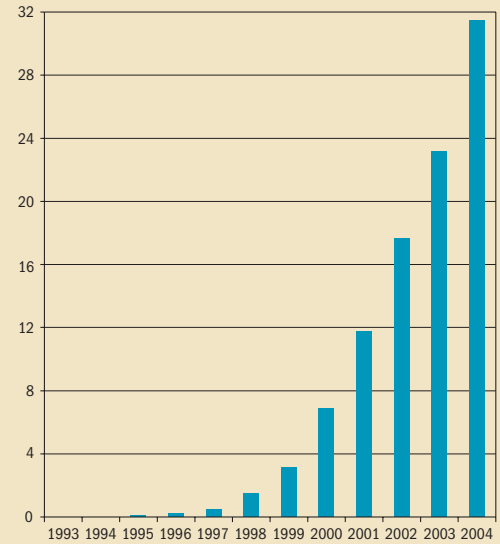
Source: ZBK.

Chart 6.3 **Number of ATM cash withdrawals (million)**



Source: ZBK.

Chart 6.4 **Value of EFT POS payments (SKK trillion)**



Source: ZBK.

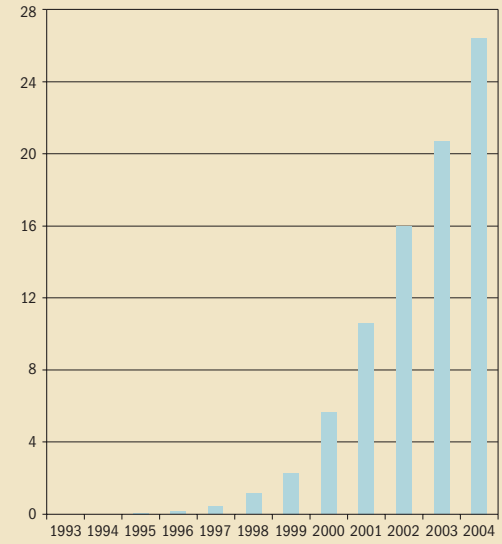
payments by card for goods and services continued to prevail, and thus in respect of the number and value of the given card transactions. However, compared to the previous period, the dynamics of the number and value of cash withdrawals by card from ATMs was lower than through the card payments (data on the value and number of transactions are presented in Charts 6.2 to 6.5). Higher dynamics in the growth of the number and value of card payments is underpinned by the growth of the issued bank payment cards, as well as by the growth in the number of payment terminals. Gradually the habits of the bank card holders are changing, albeit at a relatively slow pace; they are moving from cash to non-cash payments. This is especially conditioned by the existing infrastructure in the area of cards acceptance, which is more supported in cities as opposed to rural areas.

6.3 Legal aspects of the payment system

As of January 1, 2004, the amendment of the law on payment systems became effective. It governs the operation of electronic money institutions

As of January 1, 2004 Act No. 604/2003 Coll., amending and supplementing Act No. 510/2002 Coll. on Payment System, took effect and provided for approximation of European Parliament and EU Council Directive No. 2000/46/EC on taking up, pursuit of and prudential supervision of the electronic money institutions. For that purpose the amendment of the Act on payment system mainly governs the requirements and conditions on licensing, establishment, organization, man-

Chart 6.5 **Number of EFT POS payments (million)**



Source: ZBK.

agement, business, documentation and basic obligations of the electronic money institutions. The term electronic money institutions is understood as a new specific category of non-banking legal persons which will be granted a licence for electronic-money activity by the National Bank of Slovakia; it is exclusively for the issuance and administration of electronic money and payment tools for electronic money. The issuance of electronic money actually entails several risks (e.g. the risk of the establishment of electronic cash without a corresponding counter-value and the risk of modifying the valid values on the electronic payment tool). Due to these risks it is required that the activity and business of the electronic money institutions is appropriately and adequately regulated and supervised. Based on Directive No. 2000/46/EC, the amendment to the Act on payment systems sets out that one of the basic legal requirements for granting the licence to an electronic money institution for electronic-money activity is the requirement of minimum financial investment into share capital of the electronic money institution in the amount of at least EUR 1,000,000.

As of May 1, 2004 some provisions of Act No. 510/2002 Coll. on Payment Systems, as amended and supplemented by certain laws that were tied to the coming into effect of the Treaty on Accession of the Slovak Republic to the European Union. It mainly relates to the provision of cross-border transfers, the right of the authorized bank payment card holder to require the issuer to reimburse the withdrawn funds in the event of abuse by a different person than the authorized holder, notification and the obligation of the participants in the payment systems and of the National Bank of Slovakia.

On January 1, 2004, provisions of Articles 1 and 2 of Decree No. 7/2003 dated December 12, 2003, took effect. It sets out the structure of the bank identification code for the purposes of domestic transfers, the structure of the international bank account number for the purposes of cross-border transfers and details on the issuance of identification code converters. The provision of Article 3 of Decree No. 7/2003 regarding the international bank account number – i.e. IBAN format – became effective as of the date of Slovakia's accession to the European Union.

6.4 Cooperation in building SEPA

Work continues on the establishment of the Single Euro Payments Area

In 2002, the European Payment Council supported by the European banking community declared the vision to establish a Single Euro Payments Area by 2010, where the payments from one member country to another one would be as fast, effective and cheap as the payments within one country. Accomplishment of this vision puts significant requirements on the payment system, which currently is undergoing a period of principal changes in respect of the infrastructure and legislation.

Unification of fees for the cross-border and domestic payments in euro area countries and obligations to inform the client of their level

The European Parliament and Council of EC Regulation No. 2560/2001 on cross-border payments in euro introduces a new legal regulation on cross-border payments in euro within the European Community. Its objective is to introduce the principle of equal fees for cross-border payments up to the amount EUR 12,500 as for analogical payments in euro made within the Member State. Effective as of January 1, 2006, the amount of EUR 12,500 will be increased to EUR 50,000. Regulation No. 2560/2001/EC on cross-border payments in euro sets out the obligation for the institutions to inform the client about the level of the charge for the cross-border payments and the payments made within the Member State. The purpose of the new legal regulation is to facilitate cross-border payments by using international standards, mainly the account number in IBAN format and the bank identification code (BIC). This regulation defines the obligation for the institutions to show on the client account statements the account number in IBAN format and the BIC code of the bank, and cancels the obligation for regular domestic reporting on cross-border payments up to the amount EUR 12,500 for the purposes of the balance of payments statistics.

By the end of 2004 the banks in Slovakia were connected to the STEP 2 system

Implementation of the (EC) regulation No. 2560/2001 provides for the STEP 2 system operation by the Euro Banking Association Clearing Company. It is actually the first pan-European automated clearing system. The requirement of the European Central Bank was to accomplish the resolution of the European Payments Council by the financial institutions of the new Member States of the European Union not later than by the end of 2004. This resolution lays down the obligation for the financial institutions to minimally receive the payments transferred via STEP2 system. Similarly, the banks and the branches of foreign banks in the Slovak Republic were required to declare this ability by the end of 2004.

Further harmonization of the legislation will increase the protection of clients and improve the conditions for the fight against money laundering

The objective of the draft directive of the European Commission on payment services within the internal market is harmonization of the laws of the member countries in the field of providing payment services in the internal market of the European Union. Another of its objectives is to improve the protection of clients and increase the effectiveness and security of payments by removing technical and legal barriers. The given draft governs the rights and obligations of the providers and users of payment services. Cash payment services and checks, which are exempted from this draft, are not subject to the draft legal regulation. The main objective of the regulation of the European Parliament and Council regarding the information on the payer, which is part of the transfer of funds, is to implement the separate recommendation of FATF (Financial Action Task Force on Money Laundering and Terrorist Financing, recommendation No. VII) and ensure the availability of information on the payer to the respective institutions responsible for the fight against terrorism financing. This regulation will become part of Slovak law without the need for its transposition.

7. Annexes

Annex 1

Credit risk of the household sector

Loans to households grew by 36%. Mainly these loans related to housing in the Bratislava region

Within the whole banking sector, the loans to households at the end of 2004 represented a 27% share of the total loans (in January this share was at the level of 22%). A significant determinant of credit risk is the growth rate of loans. Since the beginning of 2004, loans to households increased by more than 36%. As for the type of loans, at the end of 2004, the banks provided households with loans for housing (70% of the total loans went to households), consumer loans (17%), overdrafts on current accounts (5%) and other loans (8%). In 2004, loans for housing increased the most (from January to December an increase of Sk 16.8 billion). Consumer loans increased by Sk 6.8 billion, overdrafts on current accounts by Sk 3 billion and other types of loans by Sk 4.3 billion. The interest of households in foreign currency loans was substantially lower than that of local currency loans. Despite the growth of foreign currency loans to households in 2004 by almost 170%, at the end of 2004, the total volume of the sector represented only SKK 310 million. From the point of view of the regional structure, at the end of 2003,[46] the absolutely largest portion of loans to households was provided in the Bratislava region (73% of the total loan amount). Other regions participated in total loans to households in the range from 2.8% to 4.8%. The clear concentration of loans in the Bratislava region suggests that when analyzing the ability of households to repay their debts it will be necessary to take into account the differences between Bratislava and other regions.

The rapid growth of loans to households statistically decreased the level of classified loans. In some banks, the credit risk of loans to households was quite high

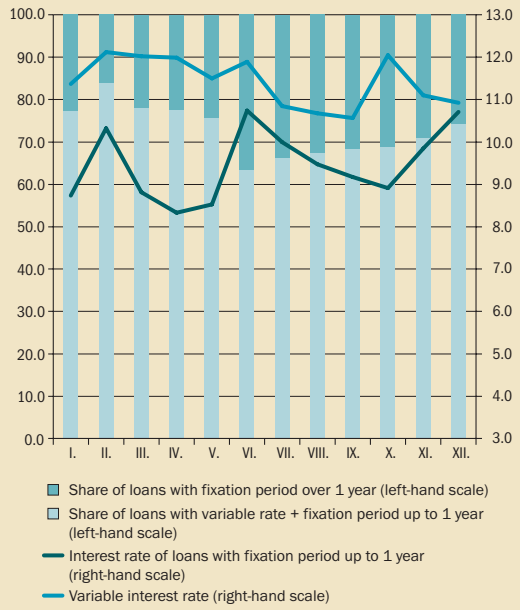
The low share of gross classified loans to households among total gross loans to households was mainly caused by the high increase in the volume of loans granted. At the end of 2004, the share of gross classified loans to households among total loans to households represented 2.7%. From the beginning of the year the indicator had only slightly increased from the value of 2.5%. The classified loans themselves increased in 2004 by 45%. In several banks the share of classified loans to households among total loans reached or exceeded the level of the same indicator for companies. If this trend continues, it is possible that the credit risk of households will be more significant for the banks than the risk resulting from the corporate sector.

Increase in the share of loans to households with variable interest rates

Developments in several EU countries suggest that households, when choosing the term of fixing interest rates, behave short-sightedly. In the event of decreases of interest rates, households automatically assume that the decrease will continue; rarely do they take into account the risk of potential future interest rate increases[47]. Interest rate decreases over recent years in several EU countries have been reflected on the structure of loans provided, when the loans with variable interest rates increased

[46] *Data for the year 2004 are not yet available.*
[47] *Miles, D. (2004), "The UK Mortgage Market: Taking a Longer-term View", www.hm-treasury.gov.uk.*

Chart A.1 **New loans to households by interest rate fixation period** **(%)**



Source: NBS.

substantially. Thus the share of households with the risk of increasing their credit burden, given interest rate growth, rose. As we do not have data regarding the share of loans with variable and fixed rates among the total amount of loans, the share of loans with variable and fixed rate is evaluated only on the newly drawn loans. Throughout all of 2004, Slovak households preferred loans with variable interest rates, i.e. loans fixed up to one year, while their share among total newly drawn loans achieved the level of approximately 73%. The high level of loans with variable rates is mainly connected with the expected decrease of interest rates in the future. It is possible that such a ratio also exists with regard to the total level of loans to households, which might mean a high sensitivity of the households to interest rate changes. For a deeper assessment of the risk resulting from the interest rates changes, it will also be necessary to take into account the conditions under which the loans were granted. In the case of loans with variable interest rates, the risk of interest rate increases can be limited by a cap on the interest rate. The banks may provide the client with the option of making an early repayment, which the clients may use provided the interest rates are decreasing, or other options which can facilitate the adjustment of instalments in the event of interest rate changes.

Interest rate sensitivity of loans to households may represent a problem for their repayment

High indebtedness increases the sensitivity of households to interest rate increases, decreases of household income and unemployment growth. This increased sensitivity of households to macroeconomic shocks may thus deepen even more the spiral of negative trends in the economy. The real indebtedness of households is also influenced by the inflation development. Lower inflation has a positive impact on creditors and a negative impact on debtors. Inflation decreases in the future may thus have a negative impact on the change of the real indebtedness of households. An analysis of household credit risks is even more difficult due to the lack of relevant and up-to-date data. Aggregate data for the whole sector of households provide us with only a rough picture of the risk in the sector. Within the indebtedness of the sector, it is necessary to analyze indebtedness according to individual income groups. The results of the analyses in other countries suggest that most of the indebted households are those with the highest income level and financial assets. The application of aggregate data for households may thus overestimate the credit risk of households.

Annex 2

Mortgage banking

The volume of mortgage loans slowed in 2004. Concentration in their granting continues to be high

Compared to 2003, the growth of mortgage loans slightly slowed in 2004. In addition to the decrease in the government bonuses, this was also connected with the fact that in 2003, mortgage banking development was still influenced by the expansion of the market by new banks. In 2004, we can already observe quite a stabilized development. At the end of the year the month-to-month percentage growth in individual banks was generally at a comparable level. It ranged from -0.1% to 10.6%. In 2004, the volume of granted mortgage loans increased. Concentration in the mortgage market, despite its gradual decrease, is still very high. From January to December, the share of three largest banks decreased from 76% to 71%. The share of the strongest bank did not change during the year (it remained constant at 28%). Mainly those banks whose market share decreased were among the first ones to obtain the licence for mortgage deals.

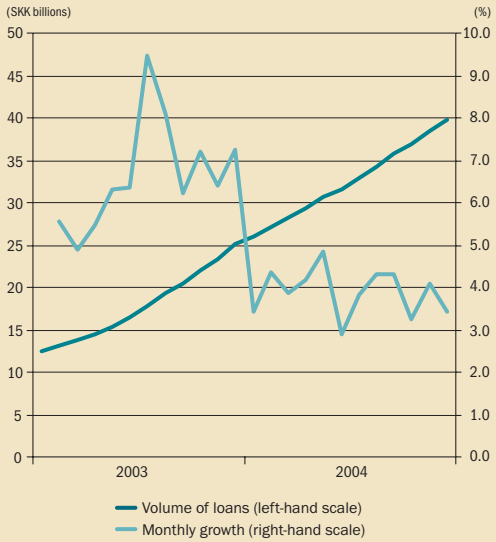
Interest rates on mortgage loans decreased during the year. Competition in their granting is growing

In the analysis of mortgage loans provided in 2004, due to the character of data from the Registry of Mortgage Loans – we are comparing the periods as of June 30, 2004 and as of December 30, 2004.[48] In the second half of 2004 fewer mortgage loans in terms of both volume and number were provided. The average interest rate decreased from 7.63% to 7.31%. The decrease in interest rates is the consequence of the decrease of the basic interest rate on one hand, and partially reflects the situation in the market on the other hand. The decline of concentration and interest rates are also the proof of growing competition. Stronger competition should lead to higher effectiveness. However, at the same time, it also places pressure on the reduction of the risk premium included in the interest rate.

Partial changes were recorded in the level of loans granted, the level of monthly repayment and the maturity. These changes expose the banking sector to a higher risk

In the second half of 2004, the basic parameters of mortgage loans slightly changed in several banks. The average level of loans provided within the sector increased from 925,000 to 1,013,000. In the majority of banks, the average monthly repayments were reduced. This change is connected with lower interest rates. The average maturity of mortgage loans slightly decreased from 17.1 to 16.9 years. The ratio between the amount of the loan provided and the amount of the pledged property increased within the sector from 48.7% to 55%. The increase of the ratio between the amount of the loan provided and the amount of pledged property exposes the banking sector to a higher risk in the event of property price decreases.

Chart A.2 **Development of the granted mortgage loans and their monthly growth**

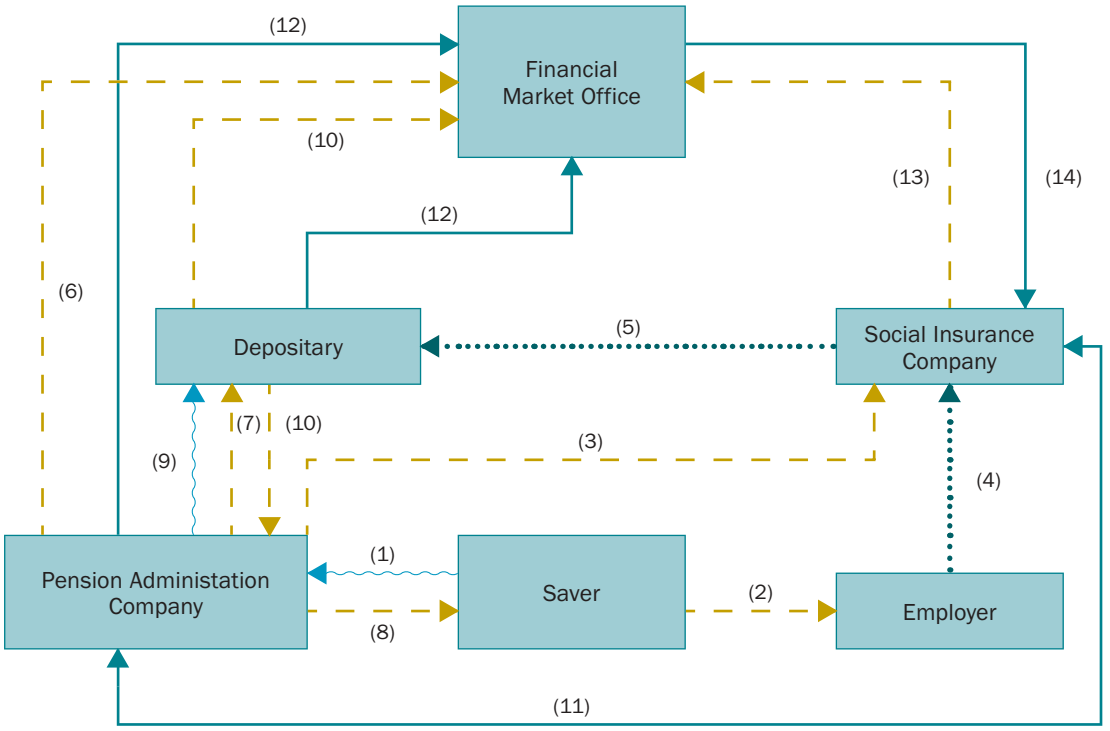


Source: NBS.

[48] *The VÚB bank is not included into the analysis of granted loans in 2004.*

Annex 3

Chart of the pension saving system functioning



Legend:

Legal relations (1, 9)
Financial flows (4, 5)
Electronic data transfer (11, 12, 14)
Obligation of written notification (2, 3, 6, 7, 8, 10, 13)

Additional text:

1. Conclusion of contract on pension saving between the saver and the pension administration company.
2. The saver informs the employer about the fact that he/she is a saver and about his social insurance identification number.
3. The pension administration company shall send to the Social Insurance Company a copy of the contract on pension savings concluded with the saver within 10 days of its signing.
4. The employer pays contributions to those employees who are savers.
5. The Social Insurance Company transfers the contributions to the pension administration company within 5 days.
6. Notification obligation of the pension administration company toward the Financial Market Authority.
7. Information obligation of the pension administration company toward the depositary.
8. Information obligation of the pension administration company toward the saver.
9. Pension administration company concludes the contract with the depositary.
10. Information obligation of the depositary toward the Financial Market Authority.
11. Electronic data transfer between the pension administration company and the Social Insurance Company.
12. Pension administration company and the depositary provide information to the Financial Market Authority about transactions with assets in the pension funds.
13. From the register of the insured, the Social Insurance Company provides electronic information on the savers to the Financial Market Authority.
14. The Financial Market Authority is authorized to obtain information about savers from the register of the insured and savers which is maintained by the Social Insurance Company.

List of charts

List of tables