

## VIII. RESERVE MANAGEMENT

**Eesti Pank's foreign exchange reserves serve as the cover of the Estonian kroon and are used to ensure the stability of the kroon.** Pursuant to the principles of the currency board, the foreign exchange reserves must cover all Eesti Pank's kroon liabilities, including the banknotes and coins issued, and the accounts of commercial banks with Eesti Pank. The central bank proceeds from strict risk constraints in investing the reserves, taking into account the primary objectives, namely the **preservation and liquidity of assets**. **Return** comes third on the list of objectives.

### ORGANISATION OF RESERVE MANAGEMENT

#### Structure of Foreign Exchange Reserves

In 2004, no major changes in the structure of foreign exchange reserves took place. The reserve is still divided into two: the **liquidity buffer** and the **investment portfolio**. A small part of the reserves is held in gold.

The **liquidity buffer** accounts for approximately 5% of the total reserves that the central bank can use at any time for Eesti kroon and foreign currency transactions with domestic credit institutions.

Assets of the other larger component of the foreign exchange reserves – the **investment portfolio** – are invested in international financial markets. The objective of investments is to achieve optimum balance of risk and average return above money market interest rates throughout a global economic cycle. The assets of the investment portfolio are mainly invested in the liquid bond markets of leading industrial countries, whereas investments' interest rate, credit, foreign exchange and liquidity risks are constantly monitored and managed. A more detailed overview of risks and risk management is available on Eesti Pank's web site [www.eestipank.info](http://www.eestipank.info).

#### Investment Process

Eesti Pank manages the interest rate risk through the benchmark portfolio by determining the average risk level the bank is ready to take and also the efficiency standard for foreign exchange reserves management. Limits have been set within which the investment portfolio may deviate from the benchmark portfolio.

The Monetary Policy Committee of Eesti Pank considers changing the benchmark portfolio when the average duration of the theoretical and benchmark portfolios differs by more than 10%. Lowering the risk level of the

benchmark portfolio essentially means reducing the average duration of the portfolio: more assets are invested in low-volatility money market instruments providing a stable interest rate. As a result, the accrued interest compensates for potential price fluctuations caused by volatility. In case of increasing the risk level more assets are invested in longer-term instruments, i.e. coupon bonds with the maturity of more than one year.

In addition to earnings from a relatively stable benchmark portfolio Eesti Pank is also actively investing, taking positions in global financial markets. Such investment decisions are taken based on economic analysis, market relationships and other factors. Markets and securities are chosen on the basis of investment concept, presumed duration and anticipated efficiency. The main investment philosophy lies in diversification: the aim is to spread risks and make better use of market opportunities. Therefore, investments in several markets and various instruments are used, as well as positions with different duration and independent decisions are taken. The latter is possible because general risk limit is divided into portions and the use of each portion depends on the decisions taken by its portfolio manager.

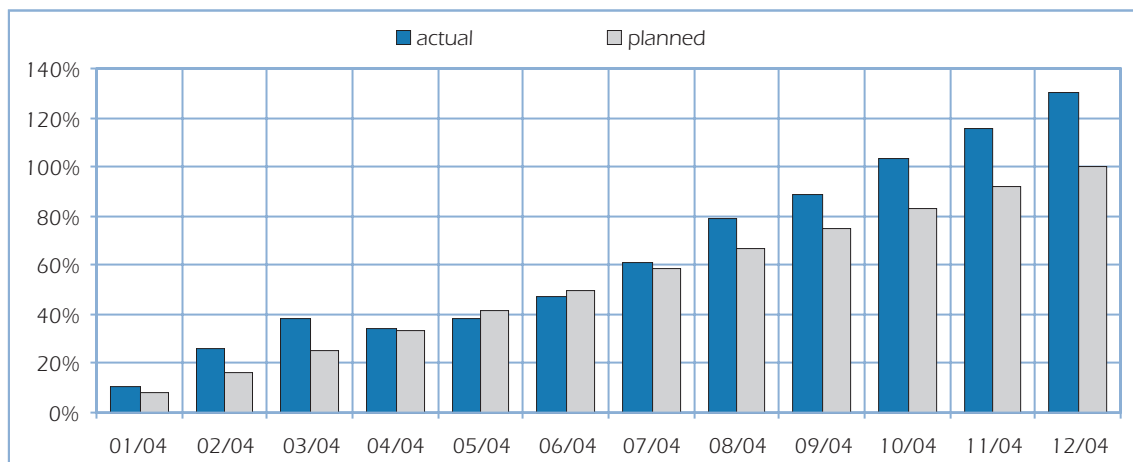
Eesti Pank attempts to keep up with the modern world and discover its niche in today's efficient markets. **In investment decisions two different procedures are applied – subjective and model-based.** The former is based on the qualitative analysis of main economic processes, market psychology and experience of portfolio managers; the latter is based on quantitative market relationships derived from investment models. Combining these two approaches best decisions for investing in money, capital and foreign exchange markets are striven for.

In 2004, the use of external asset managers continued in investing foreign exchange reserves. State Street Global Advisors have invested Eesti Pank's assets since 2002 and ABN Amro Asset Management since 2003. One of Eesti Pank's strategic objectives lies in developing and expanding the system of external asset managers.

The external asset managers use a portion of the risk limit, which is primarily invested in financial derivatives.

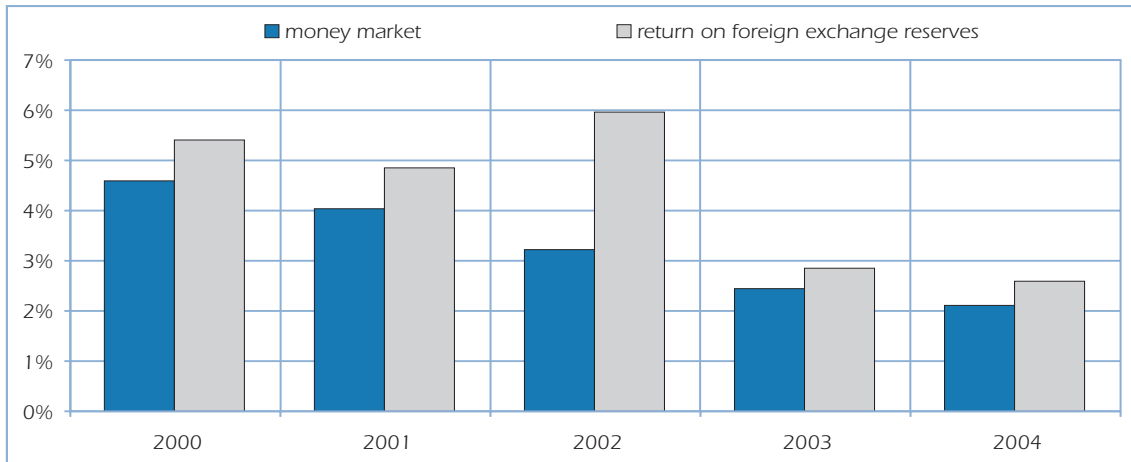
## INVESTMENT RESULTS IN 2004 AND RELATED FACTORS

By end-2004, the foreign exchange reserves reached **20.1 billion kroons**. The annual increase was around 26%. The excess reserve accounted for approximately 17% of the total reserve, i.e. 3.4 billion kroons. **The return on foreign exchange reserve investments was 2.69% in 2004, exceeding the planned level by 25 basis points**, i.e. over 30% in monetary terms. An underlying reason could be extremely fast growing reserves as well as interest movement slightly diverging from the forecast. Both the euro area and the US anticipated an interest rate rise and a flatter yield curve in end-2003. Both yield curves were flatter but an upward cycle of interest rates was delayed (see also Chapter II, *Euro Area*).



**Figure 8.1. Cumulative return on foreign exchange reserve investments in 2004**

In recent years, the return on foreign exchange reserves has exceeded that of the money market; the difference peaked in 2002.



**Figure 8.2. Return on foreign exchange reserves compared to the money market**

## Adjustments in Benchmark Portfolio

Due to the rapid fall of market interest rates in the first quarter of 2004 the duration of the current average benchmark portfolio differed from the optimum benchmark portfolio by more than 10% at the end of March, thus the risk level of the benchmark portfolio had to be reduced. The average duration of the US portfolio decreased by 5% in the new benchmark portfolio: from 0.81 years to 0.78 years. The duration of the euro area portfolio declined by 14%: from 1.2 to 1.04. The average duration of the new benchmark portfolio was 0.93 years. The structure of the new benchmark portfolio, which the Monetary Policy Committee of Eesti Pank endorsed on 1 April 2004, is given in Table 8.1

**Table 8.1. Benchmark portfolio of Eesti Pank's foreign exchange reserve investments**

Economic region	3 month	1–3 years	3–5 years	5–7 years	7–10 years	Over 10 years	Duration
Europe	78.66%	9.34%	4.80%	3.35%	2.46%	1.39%	1.04
United States	83.08%	8.25%	3.80%	2.85%	2.02%		0.78

## Providing Asset Management Services to Public Sector

Eesti Pank continues cooperation with several public sector institutions. The central bank provides its services to the Ministry of Finance in risk management and trade execution for the Stabilisation Reserve. Investment decisions for placement of these funds are still made by the State Treasury. Eesti Pank provides full package of asset management services to the Guarantee Fund.