

RESERVE MANAGEMENT

The foreign exchange reserves of Eesti Pank are backing the Estonian kroon and are used to ensure the stability of the kroon. According to the currency board principles, foreign exchange reserves must fully cover all the liabilities of Eesti Pank, 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.

Structure of foreign exchange reserves

The structure of foreign exchange reserves did not change considerably in 2009. The reserves are still divided into two: the liquidity buffer and the investment portfolio. A marginal part of the reserves is held in gold.

The liquidity buffer accounts for approximately 10% of total reserves and the central bank can use it at any time for Eesti kroon and foreign currency transactions with domestic credit institutions.

Assets of the other major component of the foreign exchange reserves – the investment portfolio – are invested in international financial markets. The objective of the investments is to achieve the optimum balance of risk and average return above money market interest rates over a global economic cycle. Investment portfolio assets are primarily invested in the liquid bond markets of leading industrial countries, while constantly monitoring and managing the interest rate, credit, currency and liquidity risks of the investments. For further information on risk management see the website of Eesti Pank.

In light of the global financial crisis, the Monetary Policy Committee of Eesti Pank revised and implemented a few changes to the investment rules of the foreign exchange reserves in spring 2009. As a result, the credit risk related to foreign

exchange reserves decreased even further and the diversity of investment improved.

Investment process

Eesti Pank manages interest rate risk through the benchmark portfolio. This determines the average risk level the bank is ready to accept, and it is also used for performance measurement purposes in reserve management. The benchmark portfolio does not include currency risk. Limits have been set for the allowed deviation of the actual investment portfolio from the benchmark portfolio.

The decisions regarding changes in the risk level of the benchmark portfolio are made by the Monetary Policy Committee of Eesti Pank. Lowering the risk level of the benchmark portfolio essentially means reducing the average duration of the portfolio: more assets are invested in low-volatility financial instruments providing more stable yields. As a result, the accrued interests offset the potential price fluctuations caused by market volatility. In the case of increasing the risk level, more assets are invested in longer-term instruments; that is, government bonds with the maturity of more than one year.

In addition to earning on a relatively stable benchmark portfolio, or passive investment, Eesti Pank is also engaged in active investment, taking positions in global financial markets. Such investment decisions are taken based on economic analyses, market relationships and other factors. Markets and securities are chosen on the basis of the concept, expected horizon and efficiency of the investment. The main investment philosophy lies in diversification: the aim is to spread risks and make better use of market opportunities. Strategies utilise primarily fixed income and interest rate markets and exchanges of the world's developed economies. Portfolio managers make investment decisions independent of each other. This is possible because the overall risk limit is divided

into portions and the use of each portion is up to its portfolio manager.

Eesti Pank tries to keep up with the times and find its niche in today's relatively efficient markets. Two different approaches are applied in making investment decisions: the subjective approach and the model-based approach. The former is mainly based on the qualitative analysis of economic processes, market psychology and the experience of portfolio managers. The latter is based on quantitative market relationships derived from investment models. The best decisions for investment in money, capital and foreign exchange markets are made by combining these two approaches.

External asset managers also have a role in active investment. At the end of 2009, Eesti Pank had three external asset managers. Informed Portfolio Management started cooperation with the central bank in 2007. BlackRock has been investing Eesti Pank's assets since 2006 and PIMCO since 2005. The external asset management programme is based on overlay mandates and the managers express the majority of strate-

gies through derivative instruments.

In 2009, active investment resulted in 69 basis points of excess return over the benchmark portfolio.

Results and determinants of investment in 2009

The foreign exchange reserves of Eesti Pank totalled 43.26 billion kroons as at the end of 2009, having decreased around 2% from 2008. The excess reserve accounted for nearly 12% (5.3 billion kroons) of total reserves.

Investment income remained positive in 2009, though it was lower than expected. The global economy hit the bottom at the beginning of 2009 and started to regain momentum in the second half of the year. This brought about a rapid rise in stock prices. The yield, on the other hand, remained broadly unchanged. This stemmed from low inflation, continuous uncertainty about growth in economic activity and the historically lowest levels of key interest rates.

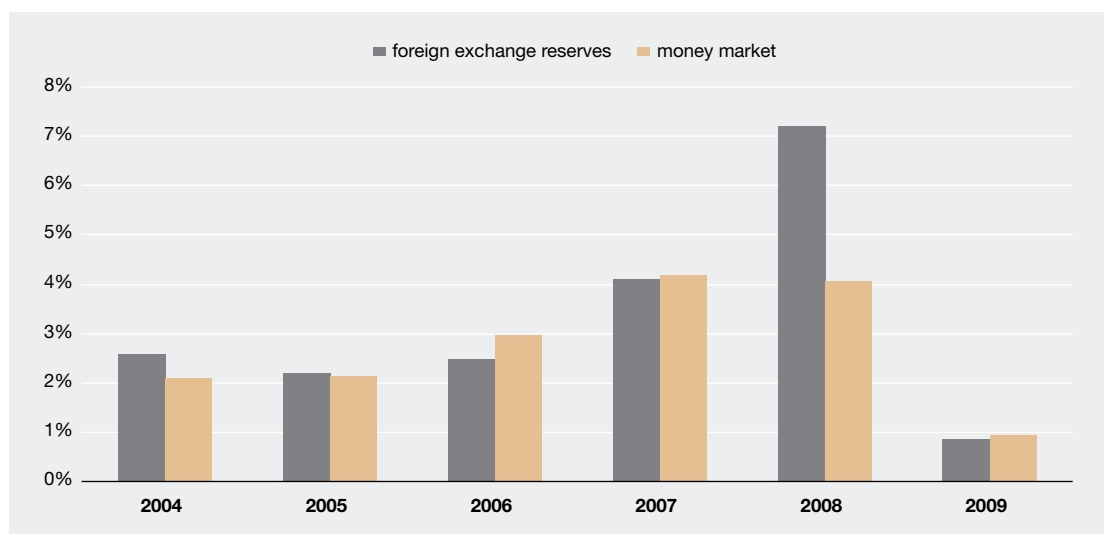


Figure 1. Return on foreign exchange reserves compared to return on money market

Given the continuous low interest rates, also the return on foreign exchange reserves was extremely low and very similar to the return on money market (see Figure 1).¹

Changes in the benchmark portfolio in 2009

As of November 2008, the investment horizon of the benchmark portfolio is 1.5 years. The interest rates on bonds dropped at the beginning of 2009 owing to the high degree of uncertainty on the markets. In April and May, however, markets started to gain some optimism and bond interest rates began to increase. Therefore, the Monetary Policy Committee of Eesti Pank decided to reduce the duration of the benchmark portfolio. Table 1 shows the benchmark portfolio with the duration of 0.6 years valid until end-2009.

Asset management services provided to the public sector

Eesti Pank has been cooperating with various public sector institutions for years already. In order to cut down on resources, the risk management contract with the Estonian Unemployment Insurance Fund was terminated. Eesti Pank continued to provide the full package of asset management services to the Guarantee Fund, whose investment portfolios totalled 2.2 billion kroons at the end of 2009.

Table 1. Structure of the benchmark portfolio

| | 3 months | 1 to 3 y | 3 to 5 y | 5 to 7 y | 7 to 10 y | 10+ y |
|-----------|-----------------|-----------------|-----------------|-----------------|------------------|--------------|
| Euro area | 88.05% | 5.26% | 2.71% | 1.86% | 1.37% | 0.76% |
| USA | 92.79% | 3.50% | 1.65% | 1.18% | 0.89% | |

¹ Until 2007 the Citigroup's indices of three-month return on euro money market were used as the return on money market, calculated based on three-month interbank euro deposit rates. However, since this instrument includes considerable credit risk, which has been significantly minimized by Eesti Pank in recent years as regards foreign exchange reserves investment, in 2008 and 2009 the return on money market is calculated as the return on three-month repos.