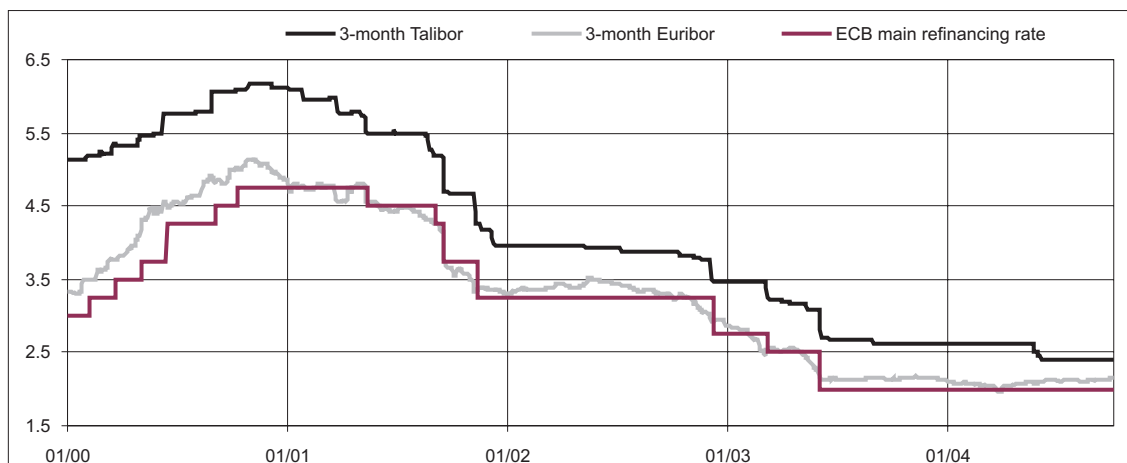


## IV. SECURITIES AND MONEY MARKET

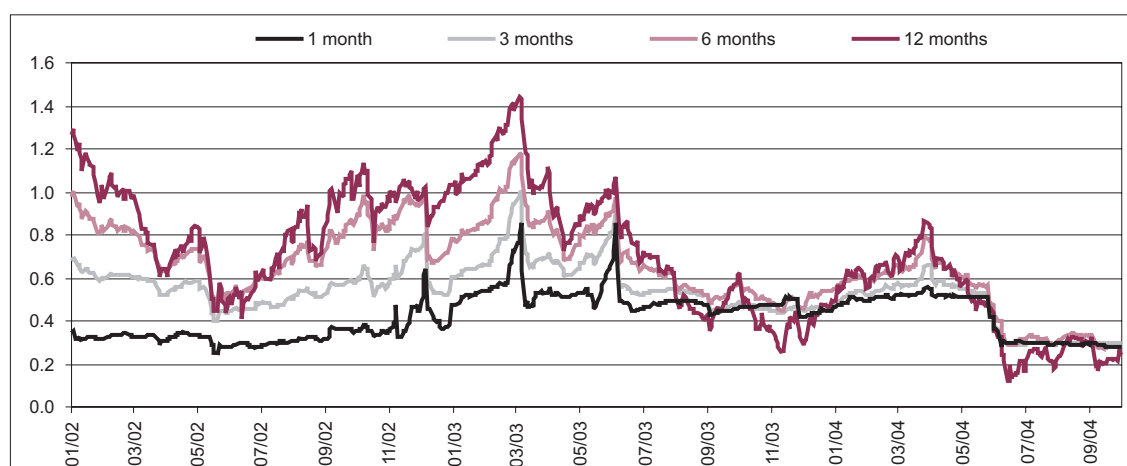
### ■ Money Market

Euro area interest rates have remained at a low level ever since the middle of 2003. Therefore also Estonia's **short-term kroon interest rates** have been very low throughout 2004 (see Figure 4.1).



**Figure 4.1. Money market interest rates of the Estonian kroon and the euro (%)**

At the end of May and beginning of June 2004 the effective **spread between euro area interest rates** and short-term Estonian kroon interest rates decreased significantly (approximately by 25 basis points), and so did the difference in interest quotations which forms the basis for forward difference (see Figure 4.2). While in the spring of 2004 the difference between the money market interest rates in Estonia and the euro area was approximately 53–55 basis points, by mid-October the difference had shrunk to 25–29 basis points.



**Figure 4.2. Difference between money market interest rates of the Estonian kroon and the euro (percentage points)**

It is possible that such developments reflect market players' belated response to Estonia's accession to the EU. Moreover, it cannot be excluded that they anticipated the positive effects of Estonia's joining the ERM II<sup>1</sup>. Leaving aside the impact of increased credibility resulting from becoming a member of the European Union,

<sup>1</sup> Estonia joined the European exchange rate mechanism (ERM II) on 28 June 2004.

other shifts in the spread between Talibor and Euribor during the past six months have above all reflected the dynamics of Euribor against the background of slowly changing Talibor quotations.

Movements in the yield of the five-year eurobond issued by the Estonian government in international markets have been in line with the yields of the bonds issued by the euro area governments. However, here too the spread between interest rates compared to the euro area has declined by five basis points in the second half of 2004. The yield of Estonian eurobonds exceeds that of German bonds with comparable maturity by 18–20 basis points, while the difference with comparable Austrian bonds is just 9–10 basis points. Therefore, market participants consider also Estonia’s long-term credibility to be very high.

The turnover of FX derivative transactions in the Estonian money market has been somewhat bigger in the past six months compared to the same time a year ago. Most of the turnover in the Estonian kroon futures and swap market – approximately 83% – comes from risk-hedging transactions between the Estonian kroon and third currencies (mainly the US dollar). Thus, for non-bank kroon liquidity management the money market remains more important than the FX swap market, at least as far as the turnover is concerned. The purchase-sales turnover in the central bank’s “forex window” has been in balance also during the ERM II period, i.e. there has been no pressure for the exchange rate of the Estonian kroon either to strengthen or to weaken (see Figure 4.3).

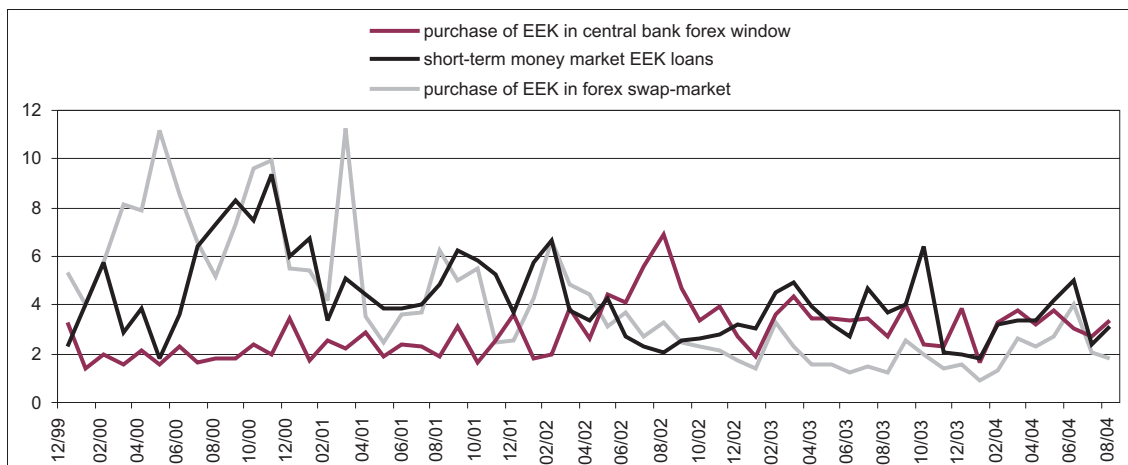


Figure 4.3. Supply of the Estonian kroon liquidity in Estonian money markets (quarterly turnover; EEK bn)

The Estonian kroon money market is comparatively low in liquidity compared to the respective money market segments in the member states of the euro area and the liquidity management of Estonian banks is mostly carried out in international markets. Therefore the transactions of non-residents play an important role in the Estonian money market (see Figure 4.4). In the past year residents have accounted for nearly

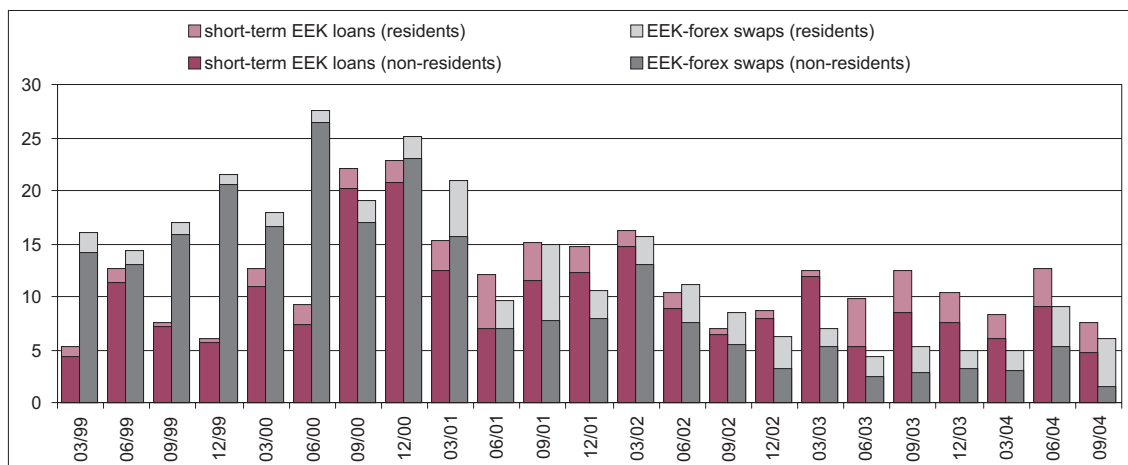


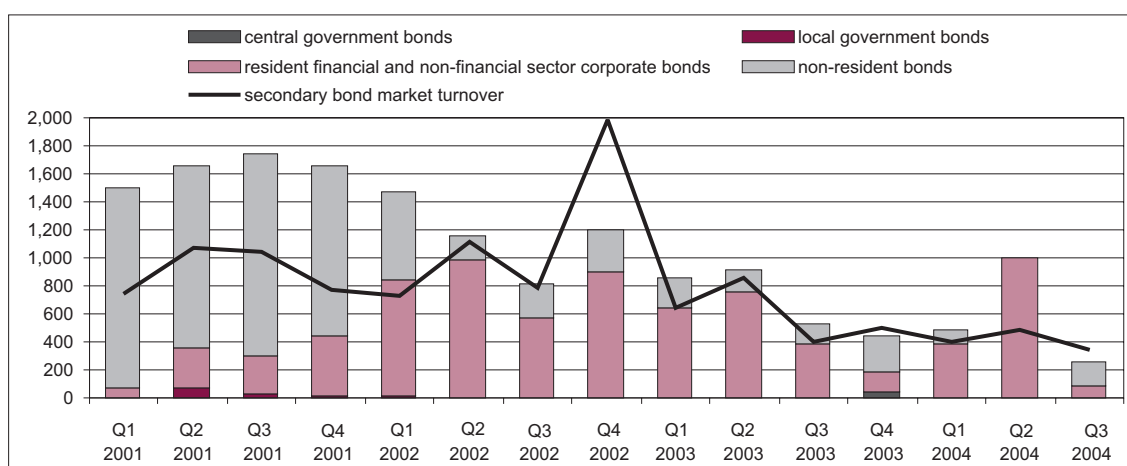
Figure 4.4. Turnover of EEK loans vs turnover of EEK-forex swap transactions (EEK bn)

one third of **short-term kroon loans** and 40–50% of foreign currency swaps. The most active participants in the short-term kroon loans markets have quite expectedly been Finnish, Estonian and Swedish banks. Non-resident credit institutions participate in the market of short-term loans in Estonian kroons mainly through risk-hedging transactions carried out on behalf of their clients.

The Estonian kroon liquidity environment has remained stable and there have been no major obstructions in kroon liquidity in the financial sector. The banks' settlement buffers with the central bank have been considerably larger than the mandatory daily minimum reserve and meeting the mandatory reserve requirement does not pose any difficulties for the banks.

## ■ Bond Market

The turnover of the bond market was more modest, compared to the same period of 2003 (see Figure 4.5). **The volume of bonds issued in the primary market** continued to decline, amounting to 38% and bringing the market capitalisation again down to 2.9 billion kroons (2.2% of GDP) by the end of September 2004, despite an increase in the meantime. The reason behind market contraction is the decline in the value of bonds issued by non-residents. Meanwhile, the value of bonds issued by local financial and private sector companies has increased. The volume of bonds issued by banks has increased by nearly 25% in the past six months, accounting for almost a half of the bond market capitalisation by the end of September.



**Figure 4.5. Volume of quarterly issued bonds and secondary bond market turnover (EEK m)**

Even though issuers used the bond market primarily for flexible attraction of short-term capital, the share of long-term bonds has slightly increased. Approximately 80% of the bonds issued mature in less than a year; nearly 15% of these were with a maturity up to three months.

A large share of bonds are bought for holding, therefore bond trading in the **secondary market** was moderate (see Figure 4.6). Along with the contraction of the primary market in the past year, the secondary market turnover fell as well, amounting to an average of 6.5 million kroons per day.

In 2003 **bonds** were again **listed** on the Tallinn Stock Exchange. By the end of the third quarter of 2004 bonds issued by four companies with a market value of 422 million kroons, i.e. 14% of the total value of the bond market, had been listed on the stock exchange. Listed bonds are mainly purchased for holding, therefore the turnover of these instruments on the stock exchange has remained comparatively small: the average daily turnover in 2004 has been approximately 450,000 kroons. The structure of investors placing capital into bonds has not changed. Bonds in a few companies should be added to the stock exchange list in the near future, which might make the so far sluggish trading somewhat brisker as a result of higher yields.

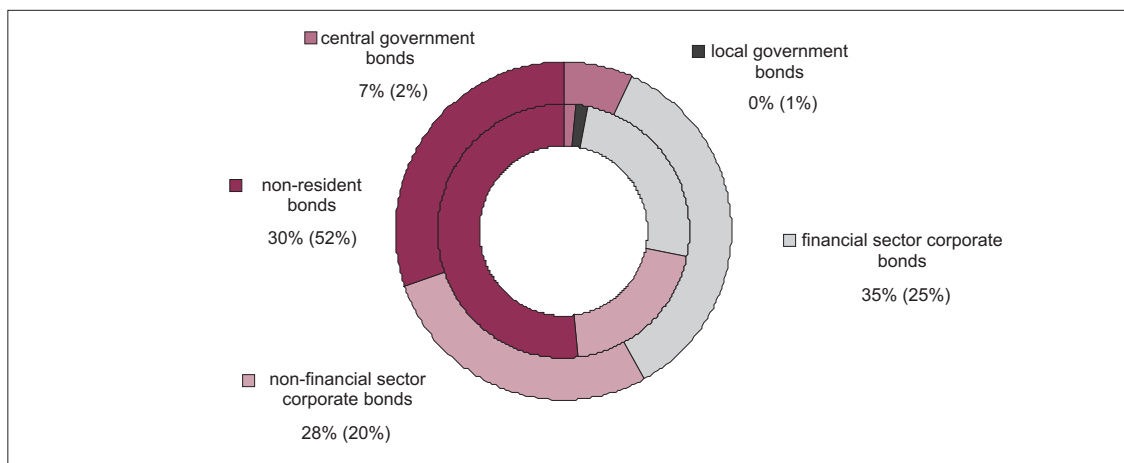


Figure 4.6. Structure of secondary bond market turnover from October 2003 to September 2004 (October 2002-September 2003 structure in brackets)

## Stock Market

The Central and Eastern European stock markets that began to rise again at the beginning of 2004 have taken a major leap in the first nine months of the year, especially compared to the markets in developed countries. The rise in Central and Eastern European stock markets has been recently particularly fast also in global comparison. While the growth rate of euro area stock indices has remained under 5%<sup>2</sup> since the beginning of the year, the stock exchanges in Latvia, Hungary and the Czech Republic have increased by over 30%, and in Estonia and Lithuania by 27% and 28%, respectively (see Figure 4.7).

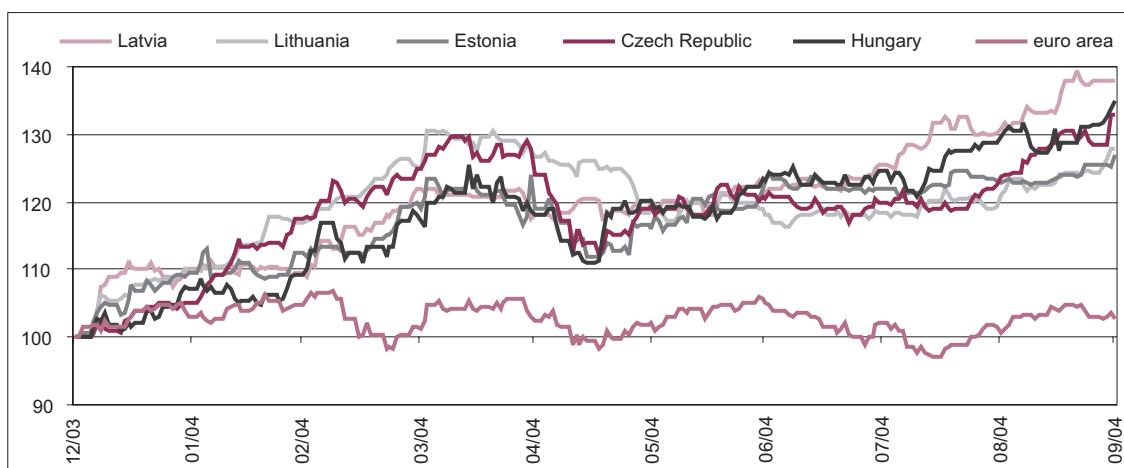
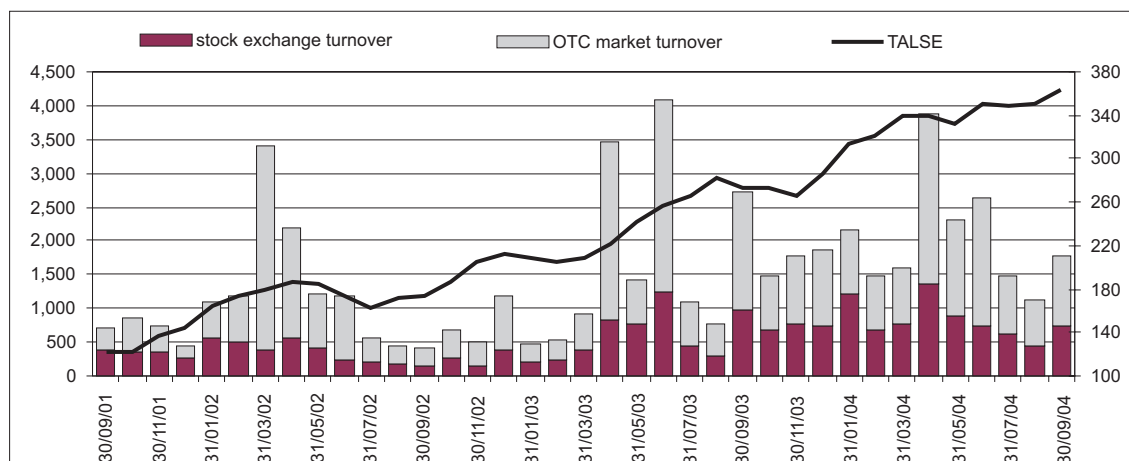


Figure 4.7. Dynamics of stock exchange indices of the new EU Member States and the euro area (31 December 2003 = 100)

Source: EcoWin AB

Even though there was a certain correction in the spring of 2004, the growth rate of the Tallinn Stock Exchange index **TALSE** has remained unchanged compared to the level of 2003 (see Figure 4.8). By the end of September index TALSE had grown by 363 points and was 33% higher, compared to the same time of 2003. As a result of such developments the market value of the companies listed on the stock exchange increased by 10.9 billion kroons in the first nine months of 2004. **Stock market capitalisation** rose to 58 billion kroons, i.e. to 44% of GDP (40% in September 2003).

<sup>2</sup> E.g. the FTSE Euro 100 index has grown 3%.



**Figure 4.8. Monthly stock turnover on the Tallinn Stock Exchange and OTC market (EEK m; left scale) and Tallinn Stock Exchange index TALSE (points; right scale)**

Increased market activity was particularly noticeable in the four months prior to the EU accession, when the **average daily turnover** reached 45 million kroons. Trading was most active in April, when the daily turnover amounted to 57 million kroons. In the summer months, stock market activity was traditionally more moderate, which dropped the average daily turnover to 35 million kroons in 2004. Thanks to new stock price records in September and October, the Tallinn Stock Exchange got over a standstill by the end of October. 96% of the stock market turnover came from trading in the shares of two companies: 71% accounted for the trade in the shares of Hansapank and 22% for the shares in Eesti Telekom. The price rise of Hansapank's shares is the result of the positive attitude of investors – successful bond issue serves as an example of that. Since September trading in the third largest listed stock, Norma, has become more active. At the end of June, Estiko left the stock exchange. Some companies have declared their intention to enter the stock exchange at the beginning of 2005.

The share of non-resident investors in the stock market capitalisation rose to 83% by the end of September. Resident investors were predominantly financial and non-financial sector companies that controlled listed shares with the value of 8 billion kroons, i.e. 14% of the total stock exchange turnover. Retail investors held 1.8 billion kroons worth share holdings, i.e. 3.1% of the total value of listed shares. Since the second half of 2003, mandatory pension funds have invested into stocks; meanwhile their share has not risen above 0.5% of the total capitalisation of the local stock market.

**Concerning the integration of the Nordic and Baltic stock markets**, mainly the aspects related to unifying the trading environment have been implemented in the past six months. In April the Tallinn Stock Exchange together with the stock exchanges in Riga and Helsinki became a member of the alliance between the Nordic and Baltic stock exchanges – NOREX<sup>3</sup>. In September the co-operation progressed to adopting a common trading environment SAXESS (see also background information *Securities Market Infrastructures in Estonia against the Background of Integration with the European Union*). By adopting a common trading system the stock exchanges hope to lower investment barriers by simplifying access of the investors interested in the three Baltic markets and reduce differences between Estonian, Latvian and Lithuanian markets. In order to integrate the Baltic markets the Baltic list was extended to all the shares quoted in the main lists of Estonian, Latvian and Lithuanian stock exchanges as of 1 July 2004, and a common index BALTIX is calculated<sup>4</sup>. As at 30 June 2004 the market value of the Baltic list was 5.09 billion euros (79.64 billion kroons). In addition to the common trading system, which Lithuania is to adopt later, trading rules between Estonia, Latvia and Lithuania have been unified.

<sup>3</sup> Among other things the rules and regulations of the Tallinn Stock Exchange have been updated in line with NOREX membership rules that regulate the use of the trading system, requirements set for the members of the stock exchange and brokers operating in the stock exchange as well as trading activities.

<sup>4</sup> The BALTIX index is a capitalisation weighted chain-linked total return index that was launched on 27 September 2004. The index is calculated once a day, using the official closing prices of all the shares quoted in the main lists of the stock exchanges in Riga, Tallinn and Vilnius. The weight of each security in the index is limited to 10%. Weight limitations are applied quarterly in the course of balancing by either decreasing or increasing the volume of shares included in the index. Of the shares quoted on the Tallinn Stock Exchange, Hansapank and Eesti Telekom carry a weight of 10% in the fourth quarter of 2004.

## BACKGROUND INFORMATION

### SECURITIES MARKET INFRASTRUCTURES IN ESTONIA AGAINST THE BACKGROUND OF INTEGRATION WITH THE EUROPEAN UNION

For securities trading and settlement of claims and obligations arising from that, countries have traditionally developed domestic infrastructures that have coincided with the currency area. It is so in Estonia and in other countries and was the case also prior to the adoption of the euro in the member states of the Economic and Monetary Union. Compared to the securities market infrastructure in the United States, the securities settlement systems in the European Union are more fragmented and inefficient due to their historical background. However, ineffective (i.e. costly and complex) securities trading and settlement obstruct the execution of financial transactions. Thus, the European Union has set the aim to establish an integrated and efficient capital market with safe and efficient securities settlement systems offering reasonably priced services as a part of that market. **The issue is important for Eesti Pank since one of its main tasks is to implement monetary policy and strengthen financial stability<sup>5</sup>.**

**The development of the securities market and its infrastructure** in the years following Estonia's restoration of independence has been affected by the following factors:

- The government's conservative fiscal policy and borrowing, which has resulted in modest issuing of government bonds that would create a basis for a broad-based securities market<sup>6</sup>;
- The currency board system – Eesti Pank does not conduct active monetary policy and banks' liquidity management is carried out through international financial structures;
- Since local resources have been more expensive compared to foreign one, foreign direct investments and loans have played an important role in financing Estonia's economy as an alternative to issuing securities (bonds);
- Banking-based financing of the economy (households/companies);
- Ongoing integration of financial markets and their infrastructures in the Nordic and Baltic countries, which above all includes consolidation<sup>7</sup>.

**The securities market infrastructures used in Estonia are as follows:** the only regulated secondary market in Estonia – the Tallinn Stock Exchange, the registrar of the common electronic central securities register – the Estonian Central Register of Securities (ECRS), and international central securities depositories (ICSDs) used for conducting central bank transactions.

The Tallinn Stock Exchange and the ECRS operate as a part of OMX; the largest securities market operator and owner in Northern Europe. OMX consists of two divisions: OMX Exchanges that controls stock exchanges in Stockholm, Helsinki, Tallinn, Riga and Vilnius and depositories in Finland, Estonia and Latvia, i.e. 80% of the securities market in the Nordic and Baltic countries; and OMX Technology, whose main task is to develop, sell and manage technologies needed for the business operations of the stock exchange, depository and settlements within the group as well as for other financial markets.

OMX seeks to implement developments towards a common securities market covering the Nordic and Baltic states step-by-step, starting with unifying the trading environment used by the stock exchanges and then, through common rules, the option to join the settlement systems,

<sup>5</sup> See Financial Stability Review by Eesti Pank, November 2003, 61–64, and the Annual Report of Eesti Pank for 2003, 57–59.

<sup>6</sup> Estonia has the lowest public debt in the European Union: at the end of 2002 the ratio of public debt to GDP in Estonia was 5.8%. In other new Member States the respective indicator ranged from 15.2% (Latvia) to 66.4% (Malta). (ECB. Bond markets and long-term interest rates in EU accession countries. October 2003.)

<sup>7</sup> Consolidation involves mergers and acquisitions, outsourcing, alliances and joint ventures, and describes the process of concentration in the service providing industry. Consolidation is a key concept for the integration; it may help to reduce the cost of trading, clearing and settlement by making use of scale economies and network externalities. (Padoa-Schioppa, T. Clearing and settlement of securities: A European perspective. September 2001).

etc., moving on to a fully integrated Nordic and Baltic securities market infrastructure. On 27 September 2004 the stock exchanges in Tallinn, Riga and Helsinki adopted the **common trading system SAXESS**, which was already in use in the stock exchanges in Stockholm, Oslo, Copenhagen and Reykjavik (belonging to the alliance of Nordic and Baltic stock exchanges, NOREX) and will also be used by the Vilnius Stock Exchange as of 2005.

If necessary for liquidity purposes the securities settlement systems managed by the **ICSDs**, Euroclear Bank and Clearstream International, are used in collateralised operations with the central bank. Since the Estonian market lacks bonds eligible for central bank collateral, the commercial banks can sell high-quality foreign securities held with ICSDs in order to obtain liquidity from Eesti Pank<sup>8</sup>. According to an assessment carried out by the European System of Central Banks, the infrastructure used in Estonia for transactions with the central bank is a suitable starting point for developing an environment that would comply with the requirements set by the Eurosystem for the use of securities settlement systems in monetary policy transactions of the Eurosystem. In the first stage an intraday liquidity instrument will be introduced, and as a result commercial banks can, in addition to selling, also repurchase eligible securities from the central bank.

### ***Role of Eesti Pank as the Overseer of Securities Settlement Systems***

Being the central bank of Estonia it is important for Eesti Pank that the country's financial system was characterised by stability, efficient monetary policy and smooth currency circulation. From the securities settlement infrastructure point of view, this means that:

- monetary policy transactions are proceeded effectively and safely;
- capital market infrastructures operating in the country do not threaten financial stability, which also means that securities settlement systems do not obstruct the smooth functioning of payment systems.

Thus, operations with ICSDs as well as the domestic infrastructure, i.e. the operation of the Tallinn Stock Exchange and securities settlement system managed by the ECRS must function efficiently, safely and smoothly.

For that reason, the central bank oversees the securities settlement system, which includes the following activities:

- Collection of statistics about systems and system operators – the central bank needs information to gain an overview of the breadth and importance of the systems and instruments;
- Defining of systemically important systems and identifying possible threats and risks of those systems to financial stability<sup>9</sup> – i.e. the systems are assessed against international standards (minimum requirements)<sup>10</sup>;
- As a member of the European System of Central Banks, imposing minimum requirements for securities settlement systems used for conducting monetary policy transactions<sup>11</sup>.

In 2003 Eesti Pank in co-operation with the European System of Central Banks assessed the compliance of the securities systems used in transactions with the central bank against the Eurosystem standards. The summary has been published in the annual report of Eesti Pank for 2003.

<sup>8</sup> Besides that credit institutions can increase liquidity by borrowing money on the interbank money market or by selling currency to Eesti Pank.

<sup>9</sup> Potential risks to the securities settlement systems are described in the Financial Stability Review, November 2003, 63–64.

<sup>10</sup> CPSS-IOSCO Recommendations for securities settlement systems; ESCB and the third-level Committee of European Securities Regulators (CESR) have elaborated standards for the securities settlement systems, namely Standards for Securities Clearing and Settlement Systems in the European Union. Methodology for the assessment against those standards is currently under elaboration.

<sup>11</sup> In 1998 the European System of Central Banks elaborated securities settlement standards that are used for conducting monetary policy transactions in the euro area, namely Standards for the use of EU Securities Settlement Systems in ESCB credit operations.