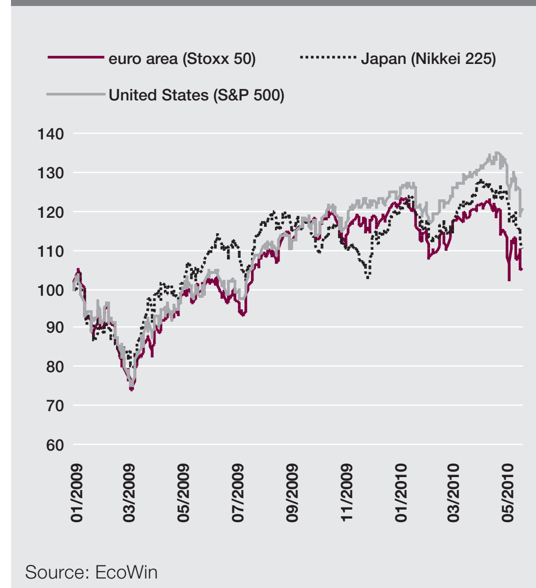
# I FINANCIAL MARKETS

## GLOBAL FINANCIAL MARKETS[1]

The decline in major **stock markets** that stemmed from the financial and economic crisis bottomed out in March 2009. Further developments gave rise to two distinct periods. Until mid-April 2010, the markets mainly experienced an upward trend, as the stabilisation of the financial sector and economic revival was accompanied by investors' growing optimism and desire to invest into the stock market. An increase in stock prices was fostered by extraordinarily low key interest rates and improving future outlooks (see Figure 1). In the middle of April 2010, however, stock markets resumed their decline due to the rapidly deepening debt crisis in some euro area countries. Therefore, the risk appetite of investors decreased and stock indices shrank all over the world. In conclusion, during the observed period the stock indices of the G3 countries changed as follows: by –6.2% in the euro area (Stoxx 50), by –2.5% in Japan (Nikkei 225) and by +5% in the USA (S&P 500).

**Figure 1. Stock indices in the euro area, Japan and in the United States (1 Jan 2010 = 100)**

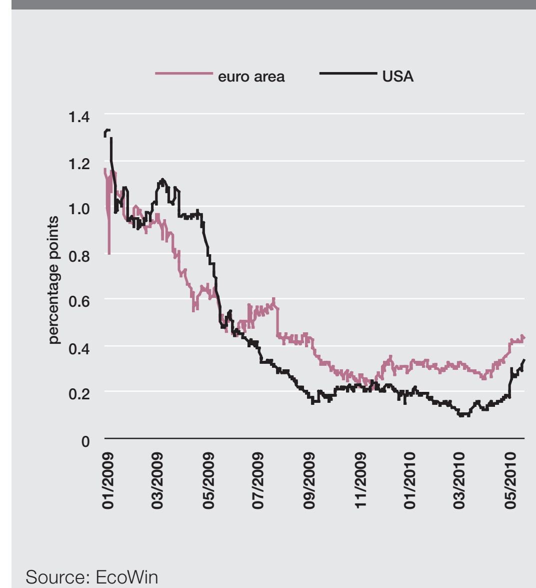



Source: EcoWin

Developments in **bond markets** were also affected by two contradictory factors. The first half of the monitored period was dominated by the effects of economic recovery: growth accelerated, corporate profits increased and unemployment rates stabilised. This exerted pressure on the interest rates on government bonds to rise. In some advanced economies, central banks started to curb monetary policy stimuli: for instance, the Australian central bank raised the key interest rate by 100 basis points to 4.25%, and the Norwegian central bank by 50 basis points to 1.75%. Other central banks kept the key interest rates low at 1% in the euro area and at 0.0–0.25% in the USA.

Due to the economic revival and the stabilisation of the financial sector, the supply of liquidity was also reduced. The US Federal Reserve closed

**Figure 2. Spread between interbank money market interest rates and government bill interest rates in the USA and euro area**




Source: EcoWin

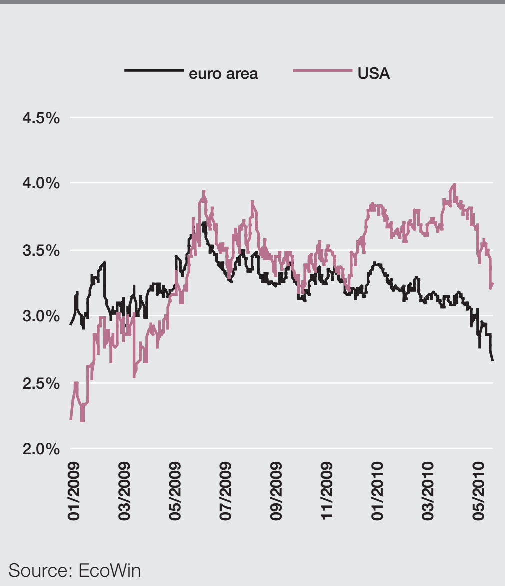
[1] The Review covers the period from 31 October 2009 to 21 May 2010.

most of the liquidity channels opened specially to alleviate the financial crisis; the European Central Bank put an end to the auctions of liquidity instruments with 6-month and 12-month maturities. As a result, the three-month Euribor remained relatively stable and decreased by 4 basis points. In the USA, where the economic recovery was more dynamic, the three-month Libor rose by 22 basis points. The spread between interest rates in the interbank money market and government bonds remained relatively stable until the debt crisis in some euro area countries started to deepen, exerting upward pressure on the interest rate spread. In the USA the spread rose by 10 basis points and in the crisis-stricken euro area by 18 basis points (see Figure 2).

Another, and perhaps a more important factor in the development of bond markets was the changing risk environment that exerted downward pressure on interest rates. The most noteworthy changes were the Dubai debt crisis at the end of 2009 and the debt crisis of some euro area countries that developed from the Greek public debt crisis. Both events, the latter in particular, had a downward effect on long-term interest rates: in the euro area (Germany) the ten-year interest rate dropped by a total of 58 basis points, and in the USA by 15 basis points (see Figure 3).

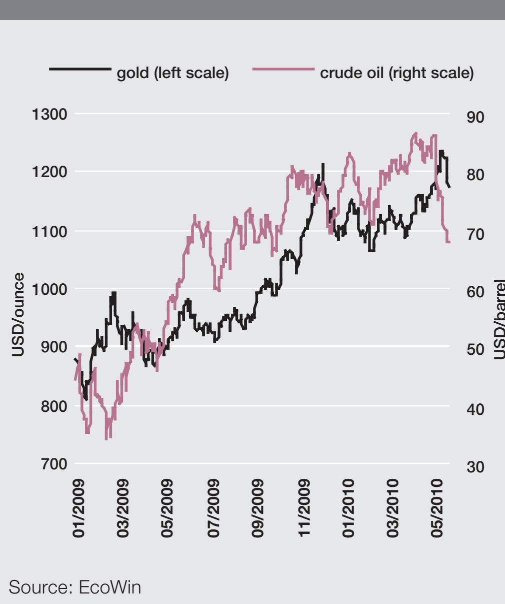
**Foreign exchange markets** witnessed an appreciation of the dollar against the euro in the monitored period. On the one hand, this was related to the greater recovery of the US economy, and on the other, by the debt crisis that struck the euro area, which gave a serious blow to the stability and long-term perspectives of the euro. Consequently, the euro depreciated against the dollar by 14.6% to 1.257. The depreciation in the exchange rate of the yen owing to the dollar's upward trend was offset by a down trend in the stock market at the end of the period, which fuelled risk aversion and buying of the yen

**Figure 3. Ten-year interest rates in the USA and euro area**




Source: EcoWin

**Figure 4. Prices of gold and crude oil (WTI)**




Source: EcoWin

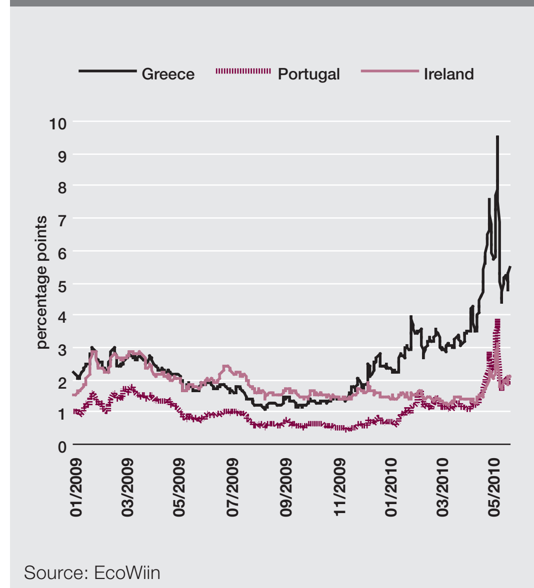
as result of the liquidation of carry-transactions[2]. Thus, the Japanese yen depreciated against the US dollar only by 0.1%.

At the end of the period, the debt crisis also affected significantly developments in **commodity markets**, having a negative impact on the oil price and substantially raising the price of gold as a safe investment. As a result, the price of crude oil dropped by 11.7% to 68 dollars per barrel during the period (see Figure 4). The price of gold soared, owing to the Dubai debt crisis that broke out in November 2009 and also the debt crisis of euro area countries, reaching a record price of 1,236 dollars per ounce (up by 12.5% during the period) in May 2010.

**Primary risks in the near future** are undoubtedly related to whether advanced economies can service their public debts and curb their government deficits. The roots of the problem reach back to the latest economic and financial crisis, as a result of which several countries developed substantial government deficits. Moreover, countries and central banks were forced to employ expensive measures to support their struggling financial sectors. Thus, they assumed a large share of the banks' liabilities, meaning that the financial difficulties of the private sector were transferred to the government sector.

The beginning of 2010 revealed that Greece was unable to finance its government deficit, which had grown up to nearly 14% of GDP. The crisis spread rapidly, also threatening other countries of the euro area that suffered from large government deficits, such as Portugal and Spain. The credit ratings of all these countries were downgraded, which made the refinancing of existing debts even more difficult (see Figure 5). In order to halt the aggravation of the crisis, since it was threatening to destabilise the whole Eurosystem, Greece was compelled to request 110 billion EUR of financial help from the IMF and the European Union. Pursuant to the terms and conditions of the agreement, Greece undertook to implement stricter austerity measures and curb the government deficit to below 3% GDP and to stabilise the government debt at 140% of GDP.

**Figure 5. Spread between 10-year bonds of Greece, Portugal and Ireland with Germany**




Source: EcoWiin

Unfortunately, the aid package brought only temporary relief. The scope and depth of the debt crisis and the lack of a single fiscal policy weakened the confidence in euro, which entailed a rapid depreciation of the single currency against other currencies, including the US dollar. In light of that situation, the European Central Bank decided to interfere and started to purchase the government bonds of struggling countries. In addition, the European Union and the IMF decided to set up a support fund of 750 billion EUR for European countries.

As regards the future outlook, it must be noted that the rising debt burden is also stirring up

[2] Trading strategy in the case of which differences between interest rates of two currency areas are exploited. In particular, loans are taken in currency with lower interest rate and invested in currency with higher interest rate and thereby carry is earned.

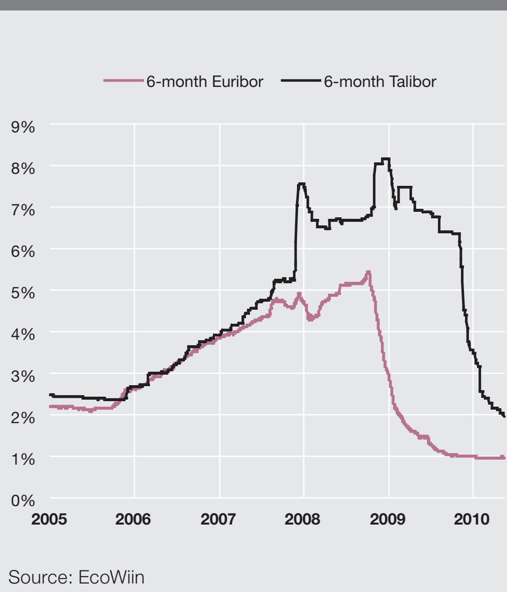
problems in major economies such as the USA, the UK and Japan, where the government deficit exceeded 10% of GDP in 2009 (the total of the euro area was "only" 6.3%). Thus far, the euro area struggling with the debt crisis remain the weakest link, as the region does not have a single fiscal policy, but the crisis has already seriously affected the prospects of global recovery, on which all the struggling countries relied on to decrease their fiscal deficits. How will the crisis develop further in Europe, to what extent will it spread to other countries and how will the economic recovery continue? These are the key issues currently troubling investors and economic policy institutions. There is a real threat that the extensive government deficit and public debt may entail higher interest rates in advanced economies and seriously hinder the recovery in advanced economies as well as in the rest of the world.

## ESTONIA'S FINANCIAL MARKETS

### Money market

The sovereign debt crisis in some of the euro area countries, which brought along higher uncertainty in the global financial markets, failed to have much effect on the risk assessments towards Estonia by the middle of May. The **quotations of money market interest rates (Talibors)** for the Estonian kroon declined further. By 17 May, the three-month Talibor had dropped to 1.72%, being 140 base points lower than at the beginning of the year (see Figure 6). The actual money market transactions were concluded at interest rates significantly lower than the Talibor. While some recovery in transaction volumes could be seen in the Estonian kroon money market at the beginning of 2009, in the first quarter of 2010 the turnover of the interbank money market dropped to an extremely low level.

**Figure 6. Money market interest rates in Estonia and the euro area**




Source: EcoWiin

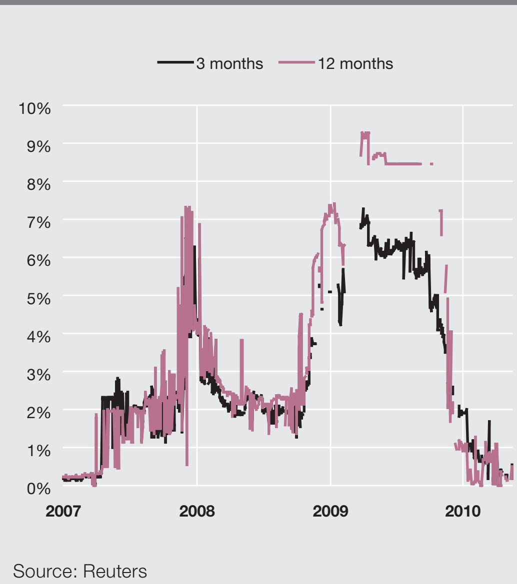
Even though the crisis which hit the bond markets of some euro area countries is bound to cause uncertainty about the near-term developments of money market indicators, the money market quotations for the Estonian kroon are rather expected to show a downward trend in the near future. In the middle of May, the spread with euro quotations was still nearly 80 basis points wider than at the beginning of 2007.

Ever since the beginning of the year, the **forward premiums of the Estonian kroon** against the euro have remained low, but have still been volatile due to very little transaction activity (see Figure 7). At the start of 2010, market participants had generally low interest in hedging the Estonian kroon risk, and no heightened activity is to be expected in the second half of 2010 either.

The only financial market segment that seemed to be affected by the public finance problems of certain euro area countries was the **credit default swap (CDS) market**. Similar to other European countries, Estonia saw a temporary increase in CDS spreads at the beginning of May (see Figure 8). Being one of the lesser trends, it soon receded. In general, CDS spreads have

shown a clear downward trend in Estonia in the past six months, with a speed greater than that of the neighbouring countries. However, the economic essence of the indicator is purely speculative. For instance, in Estonia the instrument has no underlying assets, and as such can be considered a kind of a cyclical confidence indicator.

**Figure 7. Forward premiums of the Estonian kroon against the euro**




Source: Reuters

### Bond and stock markets

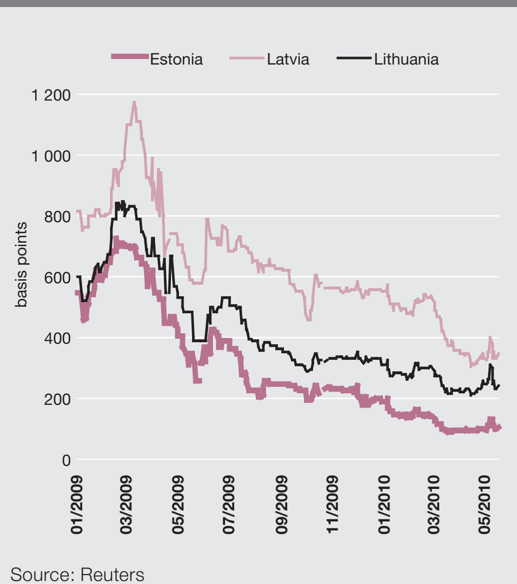
The banking sector, which operates on a strong set of foundations, plays the predominant role in Estonian financial intermediation, and thus the local **bond market** has been an alternative channel for market participants mainly for hedging kroon risk and for channelling financing to higher-risk investments. As the investor risk appetite fell sharply during the recession, the bond market contracted by several fold in the second half of 2008, compared to the pre-recession period (see Figure 9). The majority of the bond issues in the last six months comprised bonds issued by resident non-financial sector companies with the total volume of 492 million kroons.

The secondary bond market has never before been as passive as in the past six months. The average daily turnover amounted to a mere 2 million kroons, which is 15 times less than in the same period in 2008.

While bond market capitalisation decreased by approximately 1 billion kroons to 9.3 billion kroons (4.4% of GDP), the structure of issuers witnessed no major changes. Local non-financial companies continue to account for the majority, approximately 75%, of total bond market capitalisation, with the coupon interest rate of around 50% of the bonds being higher than 8%.

The structure of bond investors has also remained unchanged. Resident investors hold 70% of the issued bonds, with non-financial companies, credit institutions and insurance companies contributing 28%, 24% and 10%

**Figure 8. Credit default swap spreads of the Baltic countries**




Source: Reuters

respectively. Among non-resident investors, credit institutions have been the most active in investing into bonds issued in Estonia – their total investments account for 16% of total bond market capitalisation.

The **Tallinn Stock Exchange** has witnessed several events over the last six months. Eesti Telekom, who had accounted for around 44% of total stock market capitalisation, was delisted in January 2010. In March, Automotive Holding made a takeover bid for Norma's shares. The stock capitalisation of Arco Vara was reduced, and supplementary Ekspress Group shares were listed. At the beginning of May, the shares of Premia Foods were listed on the main list of the Tallinn Stock Exchange.

Against the backdrop of improved economic outlook, the Tallinn Stock Exchange index OMXT grew over 50% by mid-April, as compared to the beginning of the year, reaching the level of spring 2008 (see Figure 10). After that, stock prices fell across Europe as well as on the local Estonian market. By the second half of May the OMXT had retreated close to 14% from its April highs.

**Figure 9. Bonds issued and secondary bond market turnover on a quarterly basis**

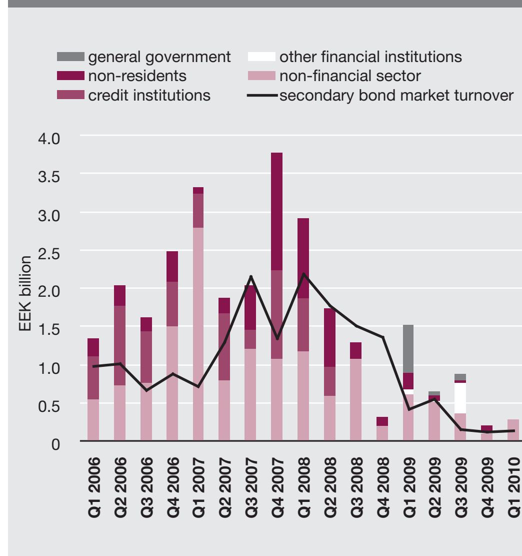



**Figure 10. Tallinn Stock Exchange index OMXT**

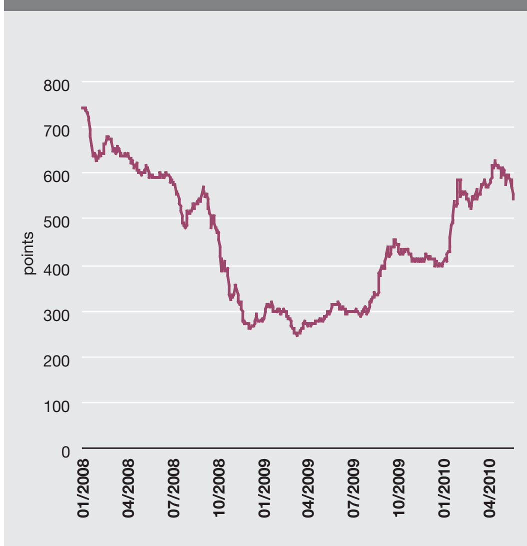
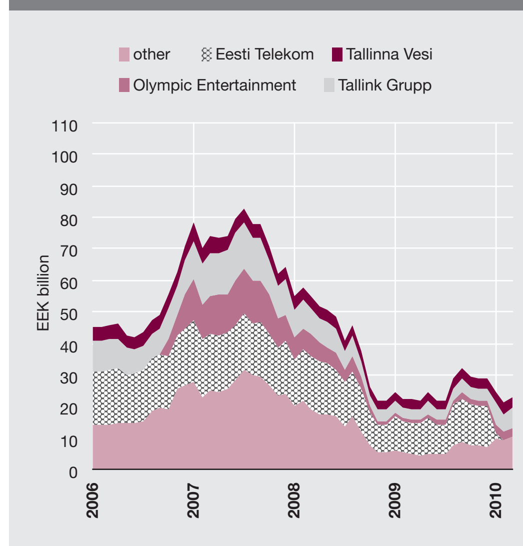


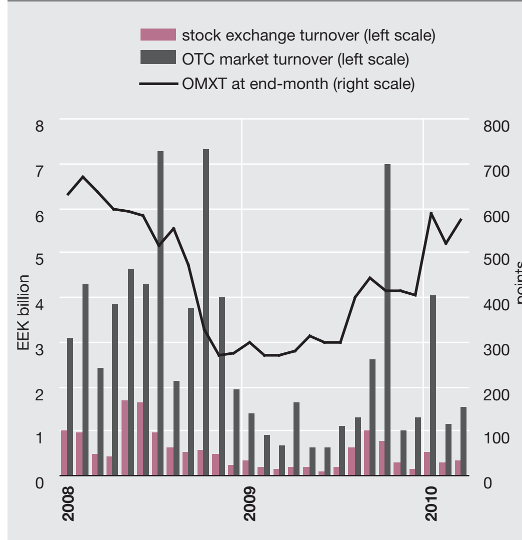

**Figure 11. Market capitalisation of shares listed on the Tallinn Stock Exchange**



The delisting of the largest publicly traded company further reduced the size of the Estonian stock market, which was already only one-third of its former size due to the global financial crisis. At the end of March, the capitalisation of 15 companies totalled 22.8 billion kroons, or 10.8% of GDP (32 billion kroons in September 2009; see Figure 11). After the delisting of Eesti Telekom and the takeover of the shares of Norma, the share of resident investors grew to 64% by the end of March.

The stock market's liquidity remained low in the last six months, the average daily turnover being 19 million kroons (see Figure 12). The shares of Tallink Group and Olympic Entertainment Group had the highest trading volumes, accounting for 22% and 17% of total turnover respectively.

**Figure 12. Stock turnover on the Tallinn Stock Exchange and OTC market and Tallinn Stock Exchange index OMXT**




## Investment funds

The **annual yield** of investment funds has risen rapidly due to the low reference base in the past year, increasing from –63% in February 2009 to 89% at the end of March 2010 (see Figure 13). The annual yield on interest funds rose to –3%.

**Figure 13. Average annual yield of investment funds**

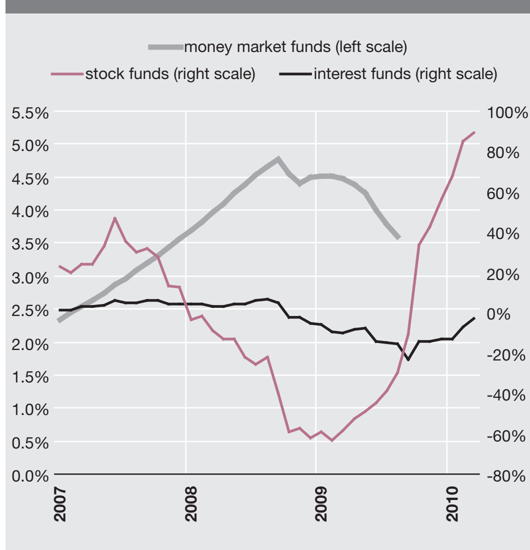
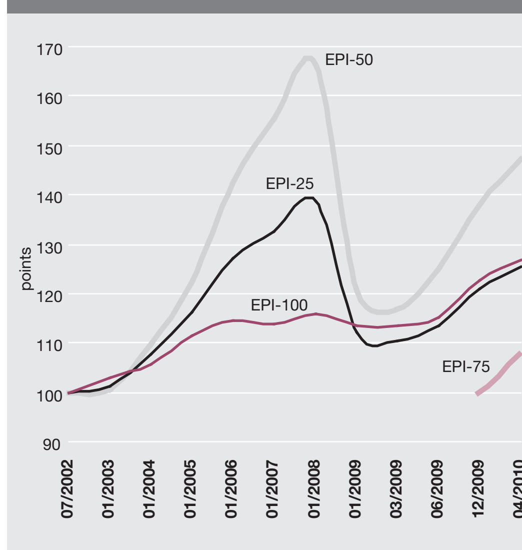



**Figure 14. Second-pillar pension fund indices**



In general, the annual yield of the funds has fluctuated widely: starting in early 2007 the average annual yield of equity funds and interest funds has been 8% and –5% respectively.

The average yield of high-risk second pillar pension funds rose to 28% by the end of March, while the annual yield of third-pillar pension funds improved by 55 percentage points to 37% by the end of March. The yield on pension funds has grown 8–47%[3] since they were established (see Figure 14).

Even though the annual yield of investment funds has risen rapidly, **funds' assets** remain low at around 50% of the pre-crisis levels (see Figure 15). In the last six months, only the assets of equity funds grew by 1.2 billion kroons. The total assets of investment funds increased by around 780 million kroons to 9.6 billion kroons.

The assets of second-pillar pension funds grew by about 1.4 billion kroons in the last six months to 15.6 billion kroons, reaching a historical high at the end of March (see Figure 16). Growth stemmed primarily from an increase in the assets of higher-risk second pillar pension funds (1.1 billion kroons). The total assets of third-pillar pension funds amounted to 3.6 billion kroons at the end of March, of which 34%, or 1.2 billion kroons, comprised assets invested into the funds.

Based on rough estimates, the assets of investment funds and pension funds have increased since the beginning of 2010, primarily as a result of an increase in annual yield. Only the volume of relatively low-risk second-pillar pension funds grew more as a consequence of capital inflow. During this time, equity fund assets, which have grown by 734 million kroons since the beginning of 2010, experienced an outflow of 3 million kroons.

[3] In 2010, the EPI-75 index of aggressive pension funds was added to the existing indices.

**Figure 15. Value of investment fund assets at end-month**

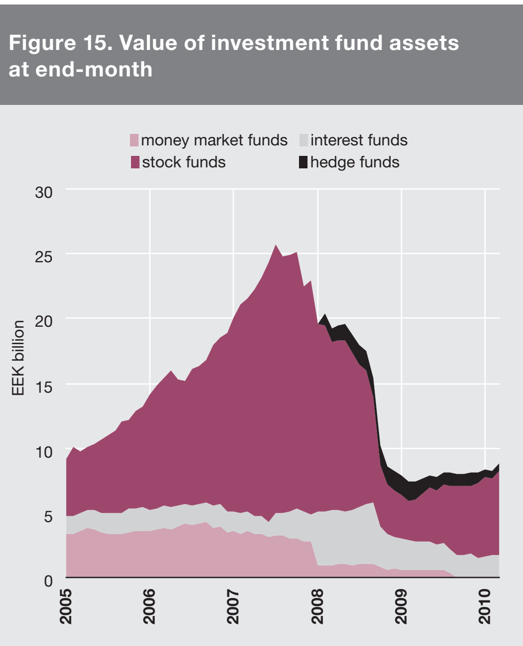
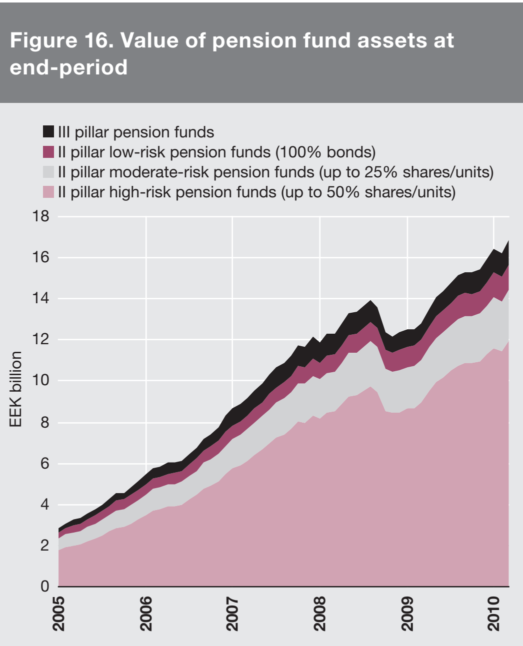


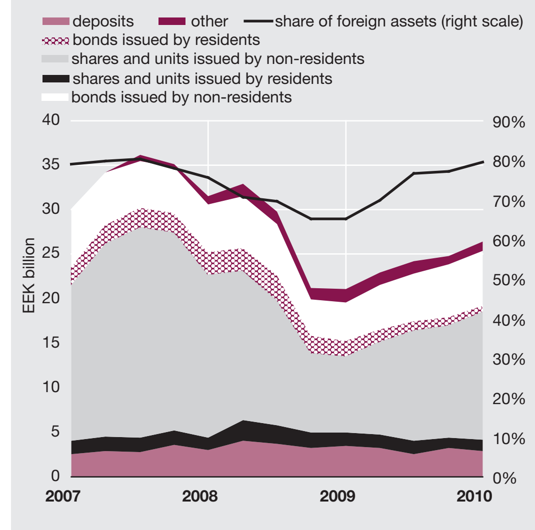

**Figure 16. Value of pension fund assets at end-period**



The share of external assets in investment and pension funds rose during the last six months and reached 79% at the end of March (see Figure 17). Deposits grew by 327 million kroons to a total of 2.9 billion kroons.

Investment strategies have not changed compared to the autumn. Investment in "old" European Union countries amounted to 13 billion kroons, which represents 64% of total external investment, of which 6.7% (1.4 billion kroons) comprised investment in euro area countries suffering public finance problems. The share of investment in "new" European Union countries dropped by 3 percentage points to 12%, while the share of investment in Russia increased by 3 percentage points to 8%.

**Figure 17. Structure of investment and pension fund assets and the share of foreign assets**



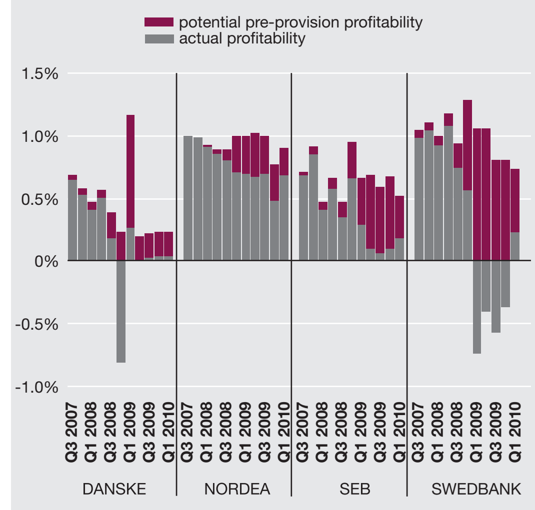

## CROSS-BORDER FINANCING

### Financial strength of the groups of parent banks

Major banks that operate in Estonia belong to international financial groups, and their parent banks have an important role in funding the activities and managing the liquidity of local subsidiaries.

In recent quarters, the performance of major banking groups operating in Estonia has primarily been shaped by low interest rates, due to which their interest income has declined. At the same time, the profitability of banks has been supported by a decrease in the amount of new loan provisions. All major banks operating in Estonia ended the first quarter of 2010 again with a profit (see Figure 18).

**Figure 18. Profitability of banking groups and potential profitability with loan provisions excluded**




Banks' interest incomes have been curbed by diminishing deposit margins and also by the price of new long-term funds that they have obtained. Although banks have tried to boost their interest incomes by raising the margins on new loans, the demand for new loans remains low and has not yet contributed much to the interest incomes. In some banks, loan contracts allow to change the

interest margins also on performing outstanding loans, should the risk estimates change. However, this option is primarily used in case of customers' loan payment defaults.

Banks have responded to falling incomes by a further reduction of operating expenses. They have cut down on staff and have reconsidered bonus systems. Despite this, the operating expenses of some groups remained high during recent quarters owing to goodwill write-downs and fees for participation in national support programmes. Although by now the national support schemes of the monitored banking groups are about to end and related costs have declined, a new permanent cost item has been added to the interest costs of Swedish banking groups – the so-called stability fund fee.

The capitalisation of monitored groups has remained satisfactory, regardless of the recent losses posted by the four largest market participants in Estonia. In 2009, the stock of own funds was increased through additional equity issues and subordinated loan issues. In addition, banks have ceased to pay dividends or have lowered the dividend rate. Moreover, comparative data on groups show that the adoption of the new methods for calculating capital requirements for credit risk, or the so-called internal ratings based approach, has significantly reduced banks' capitalisation requirement. This means that the change in calculation methods has allowed for additional credit supply.

In general, banking groups tend to presume that the slow recovery of the economy in their primary operation areas will continue in the near term; however, the solvency of customers is not expected to gain momentum soon. Therefore, no major improvements in profitability are expected in the coming quarters.

**Funding of parent banks**

Nordic banking groups have attempted to increase their retail **deposits** again after a decline at the beginning of 2009 (see Figure 19). The competition for stable and relatively cheap deposits, however, is strong and it is difficult for any bank to increase its market share on account of other institutions. The fall in deposits in the first quarter of 2010 can be attributed to the shrinking deposits of institutional investors, who have probably relocated their assets on more productive capital markets.

Given that a large extent (over 40%) of the funding of Nordic banking groups comes from **bond issues**, the capital market developments are crucial for banks. In the past six months, the key ratings of the four banking groups under observation have drawn somewhat closer to each other. Standard & Poor's has downgraded the long-term rating of Danske Bank by one notch and has raised the outlooks of SEB and Swedbank from negative to stable (see Table 1). In November 2009, Moody's took Nordea's ratings under revision for a possible

**Table 1. Ratings of Nordic banks (as at end-April 2010)**

| | Standard & Poor's | | Moody's | | | Fitch | |
|---|---|---|---|---|---|---|---|
| | Long-term | Change* | Long-term | Change* | Financial strength | Long-term | Change* |
| Nordea Bank | AA- | - | Aa2 | ↘ | C+ | AA- | - |
| Svenska Handelsbanken | AA- | - | Aa2 | - | C+ | AA- | - |
| Danske Bank | A | ↓ | Aa3 | - | C | A+ | - |
| SEB | A | ↗ | A1 | - | C- | A+ | - |
| Swedbank | A | ↗ | A2 | - | D+ | | |

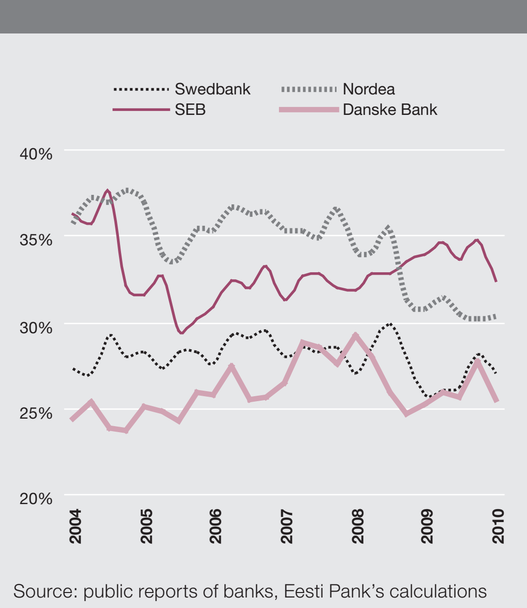
* Change since the last Financial Stability Review (spring 2009). "-" no change, "↓" downgraded by one notch, "↓↓" downgraded by two notches, "↗" rating outlook raised, "↘" rating outlook lowered.

Source: rating agencies

downgrade. Investor sentiment towards banks on the basis of their **stock prices** also vary owing to general differences in economy and banking. In the past six months, the stock prices of Nordic banks have been valued more highly than those of European banks on average (see Figure 20). The more positive attitude towards Scandinavian banks is also reflected in credit default swap (CDS) spreads. In addition, the CDS spreads between Nordic banking groups have declined over the last six months, which means that sentiment towards these banking groups has become more homogeneous.

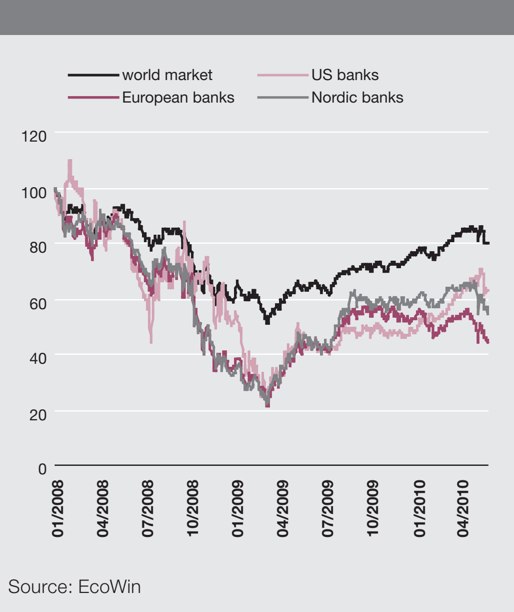
Until May, the developments had been relatively favourable for Nordic countries, contributing to the improved sentiment and risk absorption capacity of investors. Investment was slightly been boosted also by efforts to increase the yield of assets, as interest rates are generally very low. Consequently, the availability of long-term resources for banks continued to improve. Meanwhile, Swedish banking groups attempted to extend the maturities of their liabilities, and upon the maturity of short-term bonds they replaced the majority of them with long-term bonds, mainly by issuing covered bonds (see Figure 21).

**Figure 19. Share of deposits in balance sheets**




Source: public reports of banks, Eesti Pank's calculations

**Figure 20. Stock indices (2/1/2008 = 100)**




Source: EcoWin

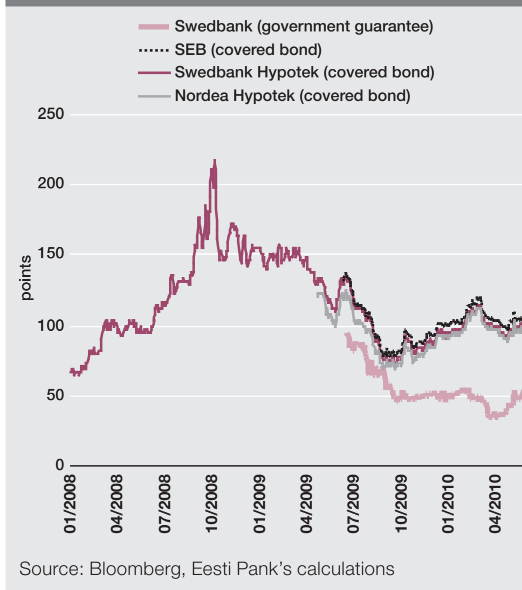
**Figure 21. Net borrowing of Swedish banking groups in SEK instruments**

Source: Statistics Sweden, Eesti Pank's calculations

In the first quarter of 2010, the liquidity of all four monitored banking groups had improved, primarily owing to greater inclusion of long-term funds. During the first three months of 2010, Danske Bank raised 4.4 billion DKK, Nordea 10.4 billion EUR and Swedbank 100 billion SEK worth of long-term loans. However, extending the average maturity of funds has had a negative impact on profitability.

Although the availability of long-term funds was good and had even improved, the interest rates of covered bonds rose in the past six months, compared to the risk-free interest rate of the Swedish government bonds. At the end of May, the spread of covered bonds was nearly 20 basis points higher than in last October (see Figure 22). The spread has been mainly affected by banks' increased demand for long-term resources and, since May, also by heightened concerns in the financial markets stemming from the sovereign debt crisis. Although the situation of capital markets had generally improved and banks have therefore been eager to issue long-term bonds, the developments have by no means been only positive and risks are still present in these segments of the financial sector.

**Figure 22. Banks' 4-year bond spreads against Swedish government bond**




Source: Bloomberg, Eesti Pank's calculations

**Policy measures and risks.** As the macroeconomic situation and outlook had improved, central banks were starting to resume their traditional monetary policies and were adopting exit strategies for crisis-related measures. In April, the Swedish central bank stopped offering loans with 12-month and later also 6- and 3-month maturities due to lack of demand from market participants, replacing them by shorter loans with 28-day maturities.

Nevertheless, the Swedish government's guarantee scheme for banks to facilitate long-term funding from markets was extended until the end of 2010. Major banks to participate in this scheme were SEB and Swedbank, but only the latter actually used this measure, most recently in July 2009. Although with this measure, the bond interest rate was substantially lower for Swedbank than without a guarantee, Swedbank has had to pay a total of around 2.3 billion SEK for participating in the guarantee scheme. Danske Bank paid 0.6 billion DKK for participating in the guarantee scheme of the Danish government in the first quarter of 2010.

Although developments have been favourable for Nordic banks and capital markets until May and it had been easier to raise funds from markets, long-term risks still persist. After a long and relatively rapid surge in stock markets, asset prices are already facing downward adjustments. Interest rates have remained unchanged for quite long. Looking ahead, however, the risks stemming from changes in interest rates may start affecting banks' profitability and availability of funds on the financial markets. The greatest risk is the excessive budget deficits and increasing debt burdens in some countries, which may cause them funding problems on financial markets. Should the debt crisis spread, Nordic banks will be facing a serious risk on the liabilities side of the balance sheet. Namely, if investor confidence on global financial markets deteriorates and their risk appetite is lost, the cost of funding will rise and access to funds for Scandinavian banks will deteriorate.