I. FINANCIAL MARKETS

GLOBAL FINANCIAL MARKETS[1]

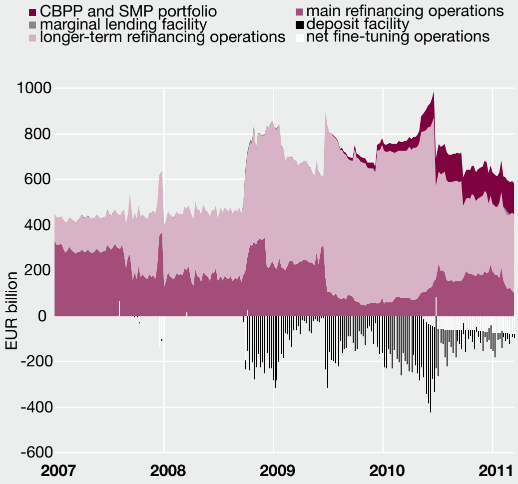
The development of global financial markets was still affected by the expansive monetary environment in the fourth quarter of 2010 and the first quarter of 2011. The risk appetite of market participants was stimulated by the improved economic indicators of the major global economies against the backdrop of lower interest rates. The moderate recovery on the stock and bond market suffered a setback at the end of February 2011, with geopolitical tensions brewing in several countries in the Middle East and North Africa. The natural disaster in Japan in March added to the risks.

The euro area **monetary policy** remained unchanged in the first three months of 2011. The European Central Bank continued offering unlimited liquidity at a 1% interest rate. In early spring, Germany's strong economic indicators and a rise in the inflation level beyond 2% exerted pressure on money market interest rates, convincing the market of an imminent change in the monetary policy. At the beginning of April, the European Central Bank decided to raise the monetary policy rate by 25 basis points. Expectations of a monetary policy tightening have also grown outside the euro area since autumn. The central bank of Sweden, for example, has raised the key interest rate three times since October 2010, by a total of 75 basis points.

The euro area in general saw an improvement in **liquidity conditions** in the first months of 2011, as reflected by the lower reliance on central bank funds (see Figure 1). The interbank money market has remained stable in recent months. Liquidity, however, varies across countries. As the banks of crisis-stricken countries continued having difficulties in engaging funds from the markets, central banks remained the key source of liquidity for them.

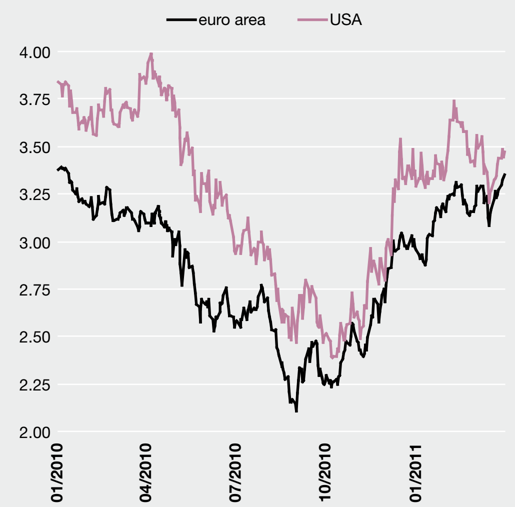
[1] The Review covers the period from 30 September 2010 to 31 March 2011.

Figure 1. Eurosystem's monetary policy operations



Sources: European Central Bank, Eesti Pank

Figure 2. Ten-year interest rates on euro area and US government bonds



Sources: EcoWin, Eesti Pank

The increase in economic activity and the risk of inflation have affected developments in the **government bond market**. Interest rates soared across the yield curve in both the United States and the euro area. The interest rates of ten-year government bonds, which have fallen sharply since the spring of 2010, recovered their previous levels at the end of March 2011 (see Figure 2).

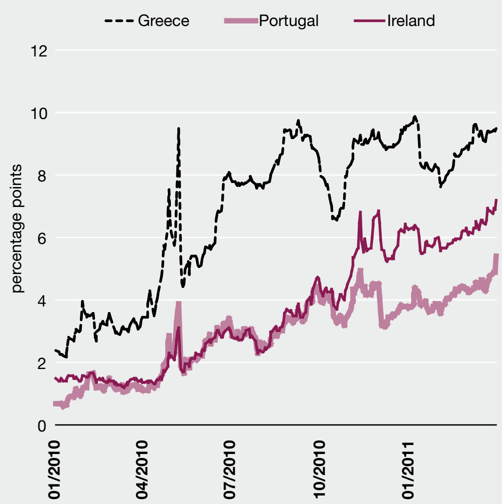
The **debt crisis** affecting some euro area countries showed no signs of receding in the first months of 2011. In addition to Greece, who was forced to request help in the first half of 2010, an 85-billion-euro bailout package was approved for Ireland in November. This stabilised the markets only temporarily. At the end of March, the yield spread between the ten-year government bonds of the three countries with the sovereign debt problems (Greece, Ireland and Portugal) and those of Germany was significantly higher than six months ago[2] (see Figure 3). At the beginning of April, the Government of Portugal asked the European Union for financial assistance to fund the government debt and support banking.

Major **stock markets** experienced a growth from the end of September 2010 to the middle of February 2011. The accumulation of risks at the end of February and in March caused an abrupt and extensive drop in all major stock indices, which recovered to some extent by the end of the first quarter. By the end of March, the stock indices in the euro area, the United States and Japan had fallen by 5%, 1% and 10%, respectively, from their peak in the middle of February (see Figure 4).

The **primary risk to global financial markets** in the near future is a sovereign debt crisis in some countries in the euro area. The overcoming of the debt crisis will depend on numerous

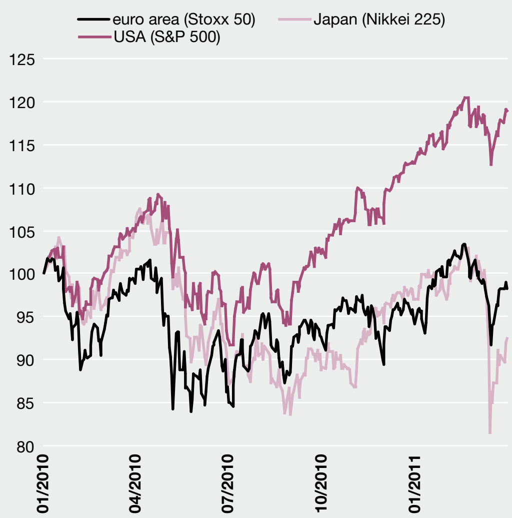
[2] The interest rate spread widened by 119 basis points in Greece, 267 in Ireland and 130 in Portugal.

Figure 3. Spread between 10-year bonds of Greece, Portugal and Ireland with Germany



Sources: EcoWin, Eesti Pank

Figure 4. Stock indices in the euro area, Japan and the USA (1 Jan 2010 = 100)



Sources: EcoWin, Eesti Pank

factors, such as reforms designed to bolster economic growth, cost-cutting in the public sector, enhancement of the scope and efficiency of collective bailouts, and strengthening of the uniform fiscal policy in the euro area. In response to the deepening crisis, leaders of euro area countries resolved to expand the European Financial Stability Facility (EFSF) from 250 billion to 440 billion euros. The leaders also agreed on the European Stability Mechanism's (ESM) lending capacity of a maximum of 500 billion euros from 2013.

The **global economic outlook** is tempered, on the one hand, by the potential effect of suspension of the financial sector support measures and, on the other hand, by macro-economic events such as oil price hikes and the natural disaster in Japan. Oil prices cannot be expected to stabilise until political tensions in oil-producing countries subside, with the economic-political measures against overheating of the economy, taken by developing countries, also playing an important role.

ESTONIA'S FINANCIAL MARKETS

Bond and stock markets

The Estonian **bond market** has been very passive in the conditions of an economic decline in recent years. The volume of new bond issues has fallen several times (see Figure 5). The monthly average volume of issuance for the past six months was 4.2 billion euros – more than four times lower than the average for the last three years. The bond market volume shrank by almost 40% in the last two years, amounting to 4% of GDP at the end of December 2010.

The secondary bond market remained passive in the last six months, with the monthly average turnover amounting to 1.8 million euros; that is, more than eight times lower than the average for the last three years.

Figure 5. Bonds issued and secondary bond market turnover on a quarterly basis

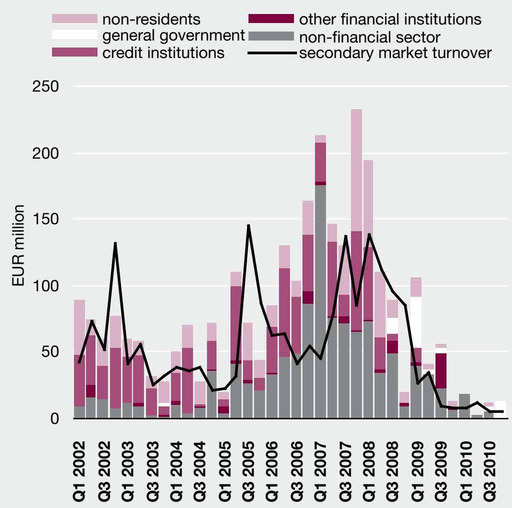
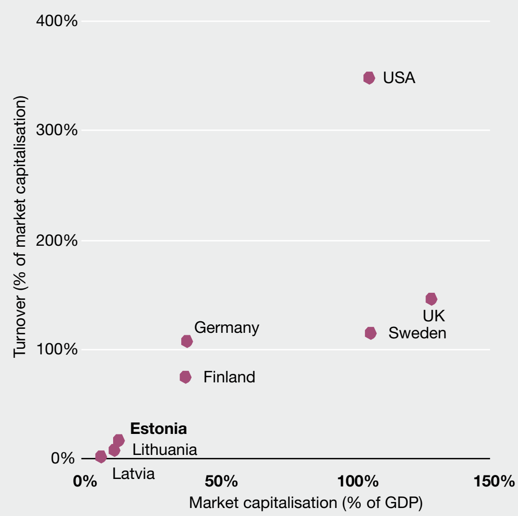


Figure 6. Tallinn Stock Exchange compared to global stock exchanges in 2009



Source: World Bank

The **Estonian stock market** is very small. Both the capitalisation and turnover of the Tallinn Stock Exchange are significantly lower than the stock exchanges of other countries (see Figure 6). So, the Tallinn Stock Exchange only has a minor influence on the Estonian financial system.

The year 2011 began in a positive mood on the Tallinn Stock Exchange. With Estonia joining the euro area, the OMX Tallinn (OMXT) advanced by nearly 10% in the first week of January. Uncertainties pertaining to the earthquake in Japan and the tensions brewing in the Middle East and North Africa at the beginning of March brought down stock prices all over the world. The Tallinn Stock Exchange was no exception. Even though by the end of March the OMXT had retreated from its peak, it had still advanced by 6%, compared to the beginning of the year.

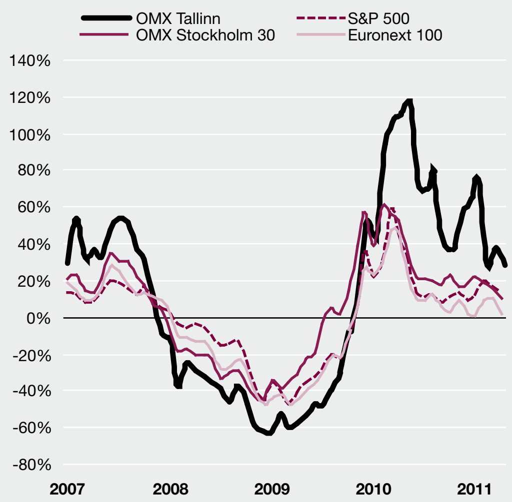
Stock prices have been highly volatile on the Tallinn Stock Exchange in recent years. In the last four years, the OMXT has shown a much more significant 12-month movement than the global stock markets (see Figure 7).

Buoyed by a share price increase, the stock market capitalisation grew by 22% in six months, amounting to 12% of GDP. The listed shares of four of the largest companies contribute over two-thirds of the total capitalisation (see Figure 8).

Liquidity of the Tallinn Stock Exchange has showed no major changes in recent months. Some increase in trading could be seen at the beginning of 2011 along with an increase in stock prices. By the end of March, however, the average daily turnover of the Tallinn Stock Exchange dropped below its 12-month average. The 12-month average daily turnover was 1 million euros at the end of March.

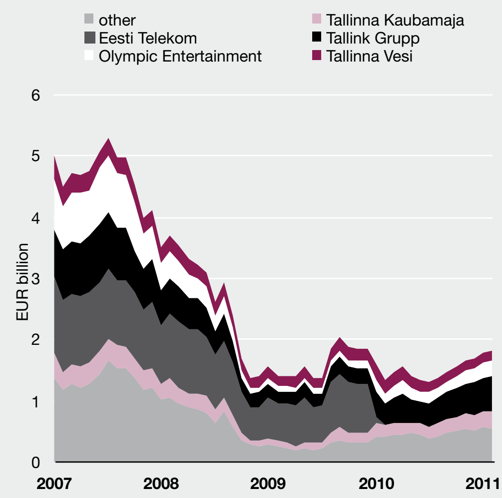
The introduction of the euro did not have much effect on the structure of stock investors.

Figure 7. Average annual yield of OMX Tallinn compared to global indexes



Sources: Bloomberg, Eesti Pank

Figure 8. Market capitalisation of shares listed on the Tallinn Stock Exchange



The share of non-resident investors remained unchanged, compared to the end of 2010. Non-residents held close to 37% of the shares at the end of February 2011.

Investment funds

The **yield** of investment funds continued to grow, albeit at a slower rate. While the prices of investment fund shares have risen, they still fall short of the pre-crisis levels (see Figure 9). In the last 12 months, the prices of interest fund share rose by an average of 8.8% and equity fund shares by an average of 16.8%.

The prices of higher-risk second-pillar pension fund shares have reached the level of the second half of 2008, still one-fourth lower than before the crisis (see Figure 10). The prices of pension fund shares invested in bonds, on the other hand, have surpassed the pre-crisis level. The EPI index reflecting the prices of the second-pillar pension funds advanced by almost 10% in 2010.

The **assets** of investment funds grew by 30 million euros in the last 12 months, totalling 592 million euros. Growth has been affected by a positive yield and changes in net capital inflows. The enhanced risk appetite has had an effect on the structure of contributions to the investment funds. The percentage of monthly capital inflows to equity funds has grown from 47% to 85% in 12 months. Supported by yield growth and capital inflow, the assets of equity funds grew by almost 24%, while capital outflow and liquidation of three interest funds reduced the assets of interest funds by 44%.

Regardless of suspension of state contributions, yield growth boosted the assets of the second-pillar pension funds by around 119 million euros to 1,071 million euros in 2010. Scheduled to enter into force in August 2011, the amendment of the Funded Pensions Act will allow pension

Figure 9. Changes in the average price for investment fund units since early-2007 (1/1/2007=100)

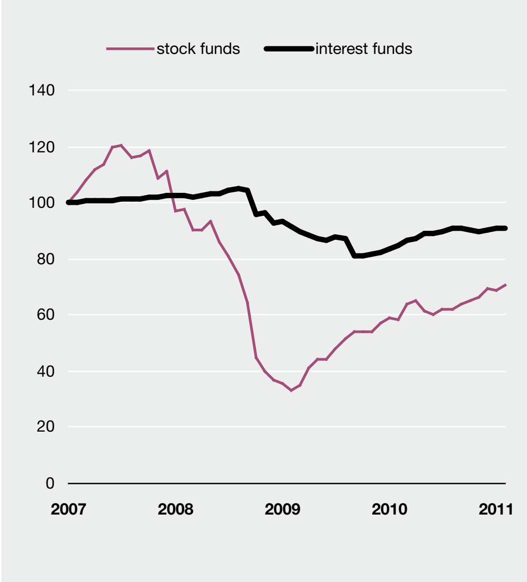
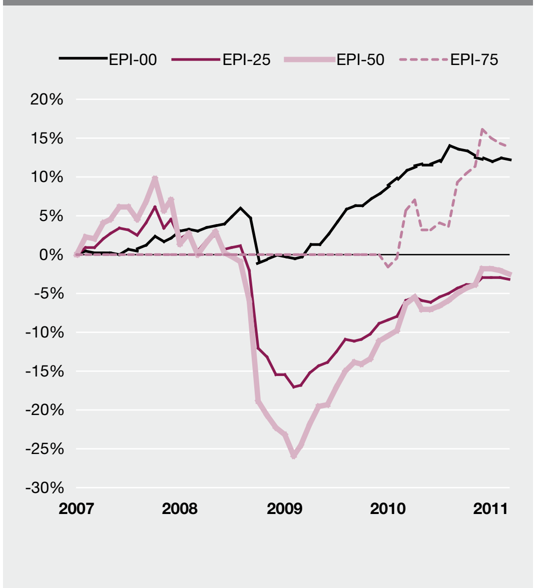


Figure 10. Changes in second-pillar pension fund indexes since early-2007



fund holders to change funds more frequently. The frequency of the change of pension funds may add to the liquidity risk of the pension funds' management companies. With the restoration of state contributions, the assets of pension funds are expected to show a quicker growth in 2011 than in 2010.

As at the end of February, the assets of third-pillar funds amounted to almost 91 million euros. The loss of confidence stemming from the global financial crisis has reduced contributions to third-pillar funds by about 40% in two years.

The share of external assets in the **investment structure** of the investment and pension funds has grown in the past 12 months (see Figure 11). At the end of February 2011, external assets contributed 87%. The share of equities and equity funds in the total assets of the investment and pension funds has grown, compared to the beginning of 2010. At the end of January, they made up nearly a half of the total assets. The volatility of global markets may consequently have a somewhat greater effect on the value of assets invested in funds in the near future.

MARKET-BASED FINANCING OF BANKING GROUPS

Financial strength of the groups of parent banks

With the increase in net interest income, conditioned by a rise in interest rates, the revenue of parent bank groups operating in Estonia has grown in the last two quarters. The positive development of stock markets has boosted the volume of assets under management. This, in turn, has added to the revenue of banking groups from commission fees.

Even though **profitability** and development vary by banking groups (see Figure 12), profitability has improved in the last two quarters, supported

Figure 11. Structure of investment and pension fund assets and the share of foreign assets

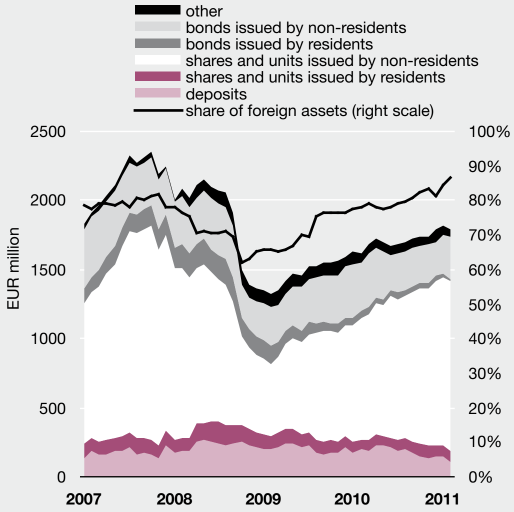
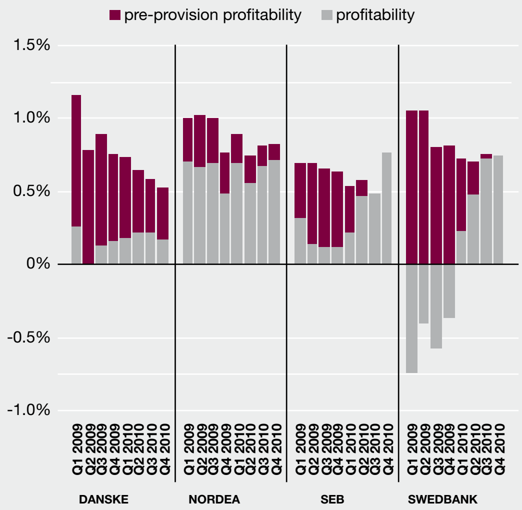


Figure 12. Profitability of banking groups



Sources: public reports of banks, Eesti Pank by the increase in income and decrease in loan provisions.

The groups' **capitalisation** has remained stable in recent quarters. As at the end of 2010, the capital adequacy ratio of all major parent bank groups exceeded 11%.

Considering the events of recent months, the banks' profitability can be expected to grow in the near future, with the loan provisions further reduced and the increase in net interest income supported by higher interest rates. Exiting the state guarantee programme will help the banks to cut costs further.

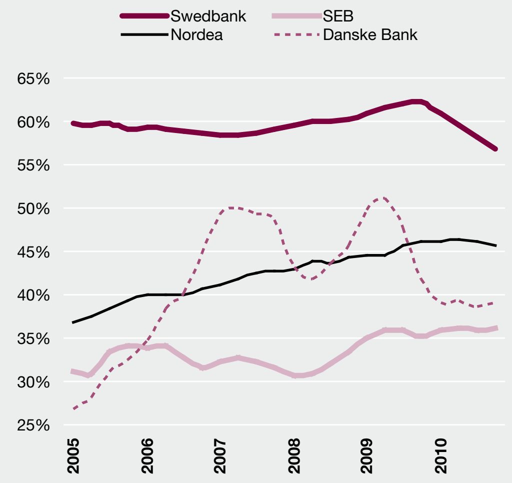
As the total assets of the four largest banks in Sweden exceed the GDP about four times, the Swedish Financial Supervisory Authority has decided to establish higher capital requirements for major banks in order to mitigate potential risks. The capital adequacy of banks is expected to reach 15–16% in the upcoming years, of which 10–12% should consist of Core Tier 1 capital. This scenario foresees a much quicker change in capital requirements than prescribed by the new Basel framework. However, considering the relatively high capitalisation of Swedish banks, the banks are already quite close to fulfilling the new requirements.

Funding of parent banks

The funding of Nordic banking groups continues to depend largely on market-based financing (see Figure 13). At the same time, the deposit volumes of some banking groups have grown in recent quarters. The **need for financing** has been reduced by the quicker depreciation of previously issued loans against new loans.

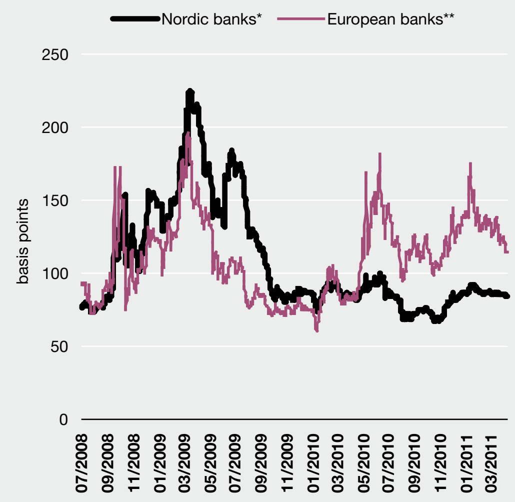
Investors' risk assessments of Nordic banks have not changed in recent months. Nordic banks are still deemed less risky than other European banks. The credit default swap (CDS) spreads of

Figure 13. Banking groups' share of wholesale funding in total loans (4-quarter moving average)



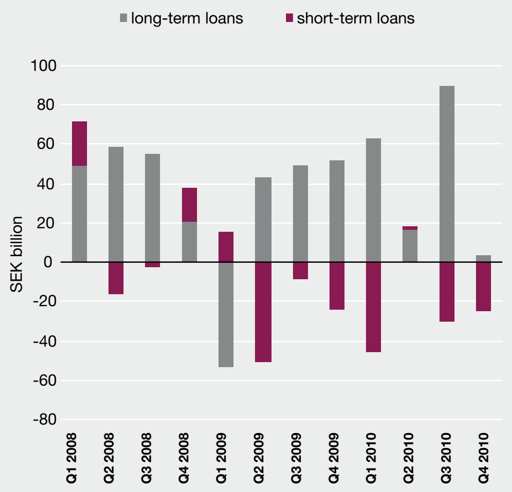
Sources: public reports of banks, Eesti Pank

Figure 14. CDS premiums of Nordic and European banks



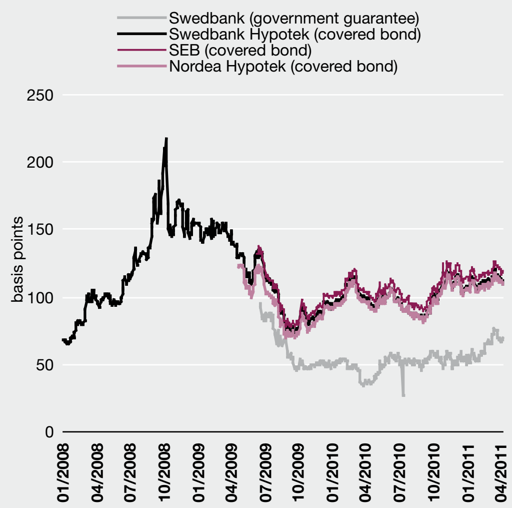
Sources: Bloomberg, Eesti Pank
* Nordic banks: Swedbank, SEB, Nordea, Handelsbanken, Danske Bank; arithmetic average.
** European banks: UBS, Société Générale, HSBC, Deutsche Bank, ING, Barclays, BNP Paribas; arithmetic average.

Figure 15. Net borrowing of Swedish banking groups in SEK instruments



Sources: Statistics Sweden, Eesti Pank

Figure 16. Banks' 4-year bond spreads against Swedish government bond



Sources: Bloomberg, Eesti Pank

Nordic banks have been nearly 40 basis points lower than those of other European banks (see Figure 14).

Favourable market conditions allowed Nordic banks to **lengthen the maturities of liabilities** in 2010. Most of the refinancing and new bond issues took place in the first and third quarter of 2010 (see Figure 15). Due to previously engaged funds and a certain growth in deposit volumes, fewer resources were engaged from the market in the fourth quarter of 2010.

The **bond risk premiums** of banks remained more or less unchanged in the fourth quarter of 2010 (see Figure 16), reflecting the market participants' willingness to serve the banks' need for financing. At the same time, a sudden deterioration of the debt crisis in other parts of Europe or materialisation of the risks involved in the Swedish real estate market may exacerbate the financing options.

The end of the year 2010 reflected the banks' waning interest in loan auctions organised by the central bank of Sweden. The banks have started to prefer market-based financing over the loans offered by the central bank at a relatively higher interest rate.

The financing structure of parent banks is not expected to change significantly in the near future. Nordic groups will continue to depend on market-based financing. Thus, high volatility and uncertainty of the financial markets may have a negative effect on the financing of banks. At the same time, the continued growth foreseen in deposit volumes will allow banks to scale down the uncertainty arising from the market risk.

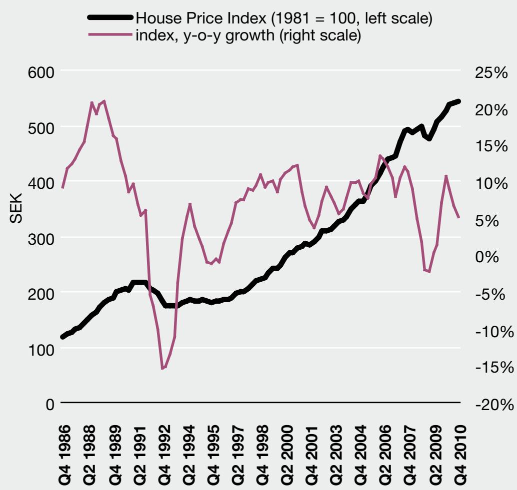
Developments in the Swedish real estate market

Sweden is among the few EU Member States where the global financial crisis did not have a significant negative impact on the real estate market. Indeed, the small adjustment in **real estate prices** was of a short-term nature, with the upward trend resuming soon (see Figure 17). This, however, has fuelled fears of overpricing in the market. In addition to the increase in income and limited supply, the real estate price increase was stimulated by low interest rates and a growth in loan burden, which has exceeded income growth.

The monetary policy rates now show an upward trend. By the middle of April 2011, Riksbank had raised the interest rates six times, with the key policy rate standing at 1.75%. This is still a low level in historical comparison, with the rise in interest rates expected to continue in 2011 and the subsequent periods. Considering the rapid recovery of the economy and the risks involved in the real estate sector, the increase in interest rates could be more rapid than expected.[3] The Swedish Financial Supervisory Authority has also established a 85% maximum limit for the loan-to-value ratio. The price increase has slowed since the beginning of 2010, even though in the first quarter of 2011 the annual increase still stood at around 3%.[4]

The real estate price movements also have an effect on the **financing of Swedish banks**. The banks use bond issues to cover a bulk of their funding needs. Approximately 50% of the bonds issued are covered bonds, secured by the housing loans issued. With the rise in real estate prices, the value of the collateral to these bonds increases, rendering the financing option more attractive for both banks and investors. At the end of 2010, the total volume of covered bonds amounted to approximately 1.6 billion Swedish kronor, of which one-third was held by foreign investors.[5]

Figure 17. House price developments in Sweden



Sources: Riksbank, Statistics Sweden

The risk premiums of covered bonds increased after termination of the provision of liquidity loans by Riksbank in the autumn of 2010, stabilising thereafter. According to the assessment of the market participants[6] the risk of a real estate price bubble has abated somewhat, compared to the end of the year, mainly due to the continuing tightening of interest policy by the central bank.

[3] Sources: Riksbank, Bloomberg.

[4] Source: Statistics Sweden.

[5] Source: Riksbank "The Riksbank's inquiry into risks on the Swedish housing market", 2011.

[6] Source: Handelsbanken "Market participant survey", 10 March 2011.

Potential risks

Possible reversal of the real estate price increase would affect the risks faced by the banks in two ways. Firstly, the drop in real estate prices would amplify the credit risk of the loan portfolio. Secondly, the drop in the value of the collateral of covered bonds may condition a rise in risk premium required by the investors.

The continuous price increase has kept the banks' loan losses from the Swedish housing market on a relatively low level. The losses from housing loans have remained modest also during the previous crises. Although the banks' capitalisation is sufficient, a major drop in housing prices may still cause tensions. The capitalisation of Swedish banks is assessed by the stress test of EU banks, in which the risk scenario foresees, among other things, a 4.5% and a 7% drop in housing prices in Sweden in 2011 and 2012, respectively.[7]

The drop in real estate prices may reduce investors' risk appetite and reduce the collateral buffer of covered bonds. Regardless of the fact that only high-quality loans are included among the collateral and that the value of the collateral exceeds the required level, the reduction of the buffer and deterioration in the quality of assets would send a negative signal to investors. Financing may thus become less available and more expensive for the banks, even if the value of the collateral to the bonds does not drop below the required level. In the autumn 2010 financial stability assessment, Riksbank drew attention to the liquidity risk of Swedish banks arising from the financing of long-term assets, that is mainly real estate loans, through short-term bonds on the global market.[8] In addition, the growing share of bonds issued in foreign currency has also magnified the related risks, as these assets are mainly used for financing loans in Swedish kronor.

To sum up, even though the credit risks of parent banks arising from the potential drop in housing prices may not be extensive, the risks to the financing of banks may prove more significant. Should the financing conditions of parent banks deteriorate, it would increase also the liquidity risks of Estonian banks.

[7] Source: European Banking Authority "Macro-economic scenarios for 2011 EU-wide stress test".

[8] Source: Riksbank "Financial Stability Report", 2/2010.